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Presidio Trust Management Plan
Main Post Update

Final Supplemental Environmental Impact Statement

THE PRESIDIO TRUST
NOVEMBER 2010

"As part of the Golden Gate National Recreation Area, the Presidio's significant natural, historic, scenic, cultural and recreational resources must be managed in a manner which is consistent with sound principles of land use planning and management, and which protects the Presidio from development and uses which would destroy the scenic beauty and historic and natural character of the area and cultural and recreational resources."

FROM THE PRESIDIO TRUST ACT (P.L.104-333)

Presidio Trust Management Plan
Main Post Update
Final Supplemental Environmental Impact Statement
The Presidio of San Francisco, CA

This document provides new analysis, information, and changes made in response to public comments on the draft supplemental environmental impact statement (SEIS) and supplement to the draft SEIS (supplement) for the Main Post Update to the Presidio Trust Management Plan (PTMP). The document, together with the accompanying Response to Comments, will be filed as the final SEIS.

Lead Agency

The Presidio Trust (Trust), a federal government corporation and executive branch agency created by Congress in 1996, is the lead agency for the action analyzed in the final SEIS under the National Environmental Policy Act (NEPA). The Trust oversees the interior 1,168 acres (Area B) of the Presidio of San Francisco (Presidio), while the National Park Service manages the 323 coastal acres (Area A) of the former military post. The Trust must preserve and enhance the Presidio as an enduring resource for the American people and be financially self-sufficient by 2013.

Abstract

The purpose of the Main Post Update is to implement the Presidio Trust Management Plan (PTMP) vision of the Main Post as the heart of the Presidio, to update the planning concept for the Main Post district as described in the PTMP, and to add greater detail to the planning for the Main Post than was possible when the PTMP was completed in 2002. In order to realize the PTMP vision of the Main Post, the Main Post Update responds to new opportunities and proposes a number of actions that the Trust intends to pursue. These actions include a free-standing lodge on and south of the Building 34 site, an addition to the Presidio Theatre (Building 99), an addition to the Presidio Chapel (Building 130), and an addition to link Buildings 47 and 48 and provide an entrance for the Presidio Archaeology Center's archaeology lab and curation facilities. The Trust seeks to accomplish the following objectives through the proposed actions: reveal the Presidio's history, welcome the public, and employ 21st century green practices.

Next Steps

The Trust will circulate the final SEIS for at least 30 days before making a decision on a final course of action. Although there is no requirement for the Trust to respond to comments received on the final SEIS, the Trust will consider all comments received during the 30-day wait period. The Trust will determine whether the final SEIS meets the standards for EIS adequacy under the NEPA, the Council on Environmental Quality (CEQ) NEPA Regulations, and its own NEPA regulations, and will reach a decision on the action in a Record of Decision (ROD). The ROD will be a written public record explaining why the Trust has taken a particular course of action and will enable the Trust to move forward to implement the final action.

For More Information Contact

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Presidio Trust Management Plan
Main Post Update

Final Supplemental Environmental Impact Statement

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Summary

This section includes a summary of the underlying purpose and need for the Main Post Update to the Presidio Trust Management Plan (Alternative 2 or mitigated preferred alternative), a summary description of the mitigated preferred alternative and other alternatives considered, areas of controversy (including issues raised by agencies and the public), major conclusions, issues to be resolved, and next steps.

Note: This summary should not be relied upon for a thorough understanding of the alternatives, including the mitigated preferred alternative, or their potential environmental impacts. Refer to Section 1 for a more complete description of the purpose and need, Section 2 for a more complete description of the mitigated preferred and other alternatives, Section 3 for a more complete discussion of the environmental impacts of the alternatives and proposed mitigation measures, and Section 4 for a discussion of public involvement and agency consultation prior to circulation of the final SEIS.

Need for Main Post Update

The Trust intends to implement the Presidio Trust Management Plan (PTMP) vision of the Main Post as the heart of the Presidio, to update the planning concept for the Main Post district as described in the PTMP, and to add greater detail to the planning for the Main Post than was possible when the PTMP was completed in 2002. The Main Post Update is needed because, while a community is growing in the Main Post and visitation has increased, the Main Post has not yet become the "focal point for visitor orientation" and "lively pedestrian district" contemplated in the PTMP. In order to realize the PTMP vision of the Main Post, the Trust is taking advantage of new opportunities and is proposing several actions. These actions include a free-standing lodge to replace Building 34 and occupy more of the site south of Building 34, an addition to the Presidio Theatre (Building 99), an addition to the Presidio Chapel (Building 130), and an addition to link Buildings 47 and 48 in order to provide a climate-controlled entrance for the lab and curation facilities for the Presidio Archaeology Center. The Trust will use the following strategies in undertaking these actions and achieving the vision of the Main Post: reveal and elevate the Presidio's history, welcome the public, and employ 21st century green practices for both historic preservation and park management.

Modifications to the Preferred Alternative

The updated planning concept for the Main Post was initially evaluated as the proposed action (Alternative 2) in a draft supplemental EIS (SEIS) that was filed on June 13, 2008[1] under the provisions of the National Environmental Policy Act (NEPA). The proposed action in the draft SEIS reflected the proposals as they were presented to the Trust. The Trust then identified a preferred alternative, which was the subject of a supplement to the draft SEIS, filed on March 6, 2009.[2] The preferred alternative emerged

[1] *73 FR 33814.*
[2] *74 FR 9817-9818.*

from the Trust's analysis of the proposals and considered public comment on the draft SEIS and consultation to date under Section 106 of the National Historic Preservation Act (NHPA). The Trust then assessed comments received on the supplement, initiated further consultation under Section 106, and developed the mitigated preferred alternative, which is being evaluated in the final SEIS and is the undertaking under the terms of a Programmatic Agreement for the Main Post Update (Appendix B). The following key changes have been made to the proposed action since the release of the draft SEIS and supplement and have been incorporated into the mitigated preferred alternative:

- The museum of contemporary art (CAMP) has been withdrawn from further consideration, and Building 93 (currently the Presidio Bowling Center) would be retained and renovated for another public use. Building 97 would be retained in its current location and would be reused for a public purpose. The tennis court adjacent to the Presidio Bowling Center would remain for active recreational use.
- New construction has been reduced from 265,000 square feet to 147,000 square feet, resulting in less development (maximum building area) than previously foreseen in the PTMP.
- New construction for the Presidio Lodge has been reduced in size to a maximum of 70,000 square feet. New construction would be broken into separate, smaller buildings to resemble the historic pattern of development on the site.
- The Presidio Theatre (Building 99) would be retained as a single auditorium, and new construction, not to exceed 18,000 square feet, would include a transparent connector.
- Parking on the archaeological site of El Presidio would be initially reduced from 252 daily spaces to 75 daily spaces and would ultimately be removed. Removal or relocation of Buildings 40 and 41 from El Presidio would be subject to further consultation under Section 106 of the NHPA.
- New construction at the Presidio Archaeology Center has been reduced from 680 square feet to a maximum of 500 square feet.
- Historic or National Register-eligible Buildings 113, 118, and 386, previously planned for removal in order to expand parking, would be retained.
- The addition to the Presidio Chapel has been reoriented so that it is separated from the primary façade; the amount of allowable square footage has been increased from 3,000 square feet to a maximum of 4,000 square feet.

Alternatives Including the Mitigated Preferred Alternative

The final SEIS evaluates four alternatives, including the mitigated preferred alternative (Alternative 2: Main Post Update or Alternative 2), which were developed and modified with the benefit of public input. The alternatives propose different building uses; different amounts of demolition, maximum new construction, and total building areas; and different parking and circulation improvements for the Main Post. The alternatives are summarized in Table 1 and briefly described below.

1 ALTERNATIVES INCLUDING THE MITIGATED PREFFERED ALTERNATIVE

	Alternative 1: PTMP Visitor and Community Center	*Alternative 2: Main Post Update*	*Alternative 3: History Center*	*Alternative 4: Status Quo*
EXISTING TOTAL BUILDING AREA (square feet)	1,148,000	1,148,000	1,148,000	1,148,000
MAXIMUM BUILDING AREA (square feet)	1,214,500	1,201,000	1,161,000	1,140,000
MAXIMUM DEMOLITION (square feet)	44,000	94,000	64,000	34,000
MAXIMUM NEW CONSTRUCTION (square feet)	110,000	146,500	77,000	26,000
VISITOR-SERVING USES (square feet)	503,000	576,000	464,000	393,000
ANNUAL VISITORS (millions)	1.38-1.57	1.43-1.69	1.22-1.40	1.11-1.27
PARKING SPACES	1,892	1,910	1,892	1,852
PROPOSED PUBLIC USES	Heritage Center in Building 2 / Visitor Center in Building 50	Heritage Center in a portion of Building 50	Visitor Center in a portion of Building 50	Visitor Center in a portion of Building 50
	Bowling Center in Building 93	Public uses in Building 93 at site south of the Main Parade	History Center at site south of the Main Parade	Bowling Center in Building 93
	Presidio Theatre and addition (Building 99)	Presidio Theatre and addition	Presidio Theatre with no addition	Presidio Theatre leased out for the highest and best use or mothballed
	Presidio Archaeology Center at Buildings 44, 47, 48 (with addition), and 49	Presidio Archaeology Center in Buildings 44, 47, 48 (with addition), and 49	Presidio Archaeology Center at Buildings 44, 47, 48, and 49 without addition	Presidio Archaeology Center buildings leased out for the highest and best use or mothballed

	Alternative 1: PTMP Visitor and Community Center	*Alternative 2: Main Post Update*	*Alternative 3: History Center*	*Alternative 4: Status Quo*
	Excavation and commemoration of El Presidio with Buildings 40 and 41 and parking	Excavation and commemoration of El Presidio without Buildings 40 and 41 and limited parking	Excavation and commemoration of El Presidio without Buildings 40 and 41 and no parking	Limited excavation and commemoration of El Presidio and parking
	Lodging in Pershing Hall (Building 42) and dormitory rooms for visitors in Buildings 40 and 41	Lodging in Pershing Hall and at Building 34 site	Lodging in Pershing Hall and B&Bs in upper Funston Avenue Officers' Quarters (Buildings 11-16)	Residences in Pershing Hall and dormitory rooms for visitors in Buildings 40 and 41
	Presidio Chapel and addition	Presidio Chapel and addition	Presidio Chapel with no addition	Presidio Chapel with no addition

ALTERNATIVE 1: PTMP VISITOR AND COMMUNITY CENTER

Under this alternative, the Main Post would remain the heart of the Presidio as described in the PTMP. The district would be a focal point for visitor orientation and a community center where people live, work, and enjoy themselves. The Main Post's rich collection of historic buildings and landscapes would be the backdrop for visitor programs and a setting for businesses, organizations, and Presidio community services. Significant open spaces would be preserved and restored.

ALTERNATIVE 2: MAIN POST UPDATE

Alternative 2 shares the same vision as Alternative 1 for the Main Post to be the heart of the Presidio. The Main Post would be a welcoming place that serves the community, with the Presidio's history visible and interpreted, and with 21st century green practices used to conserve energy and resources and to rehabilitate its buildings. Archaeological excavation of El Presidio would unlock the history of the Presidio's founding; landscape treatment would reflect the structure of the buried site and outline the open space of the original *plaza de armas*. A Heritage Center in the nearby Officers' Club would offer opportunities to explore the history of the Presidio and the American West and would house the education facilities of the Archaeology Center. The new Presidio Lodge would welcome visitors and animate the Main Parade.

ALTERNATIVE 3: HISTORY CENTER

Alternative 3 is based on a proposal from the Presidio Historical Association. A new History Center at the site south of the Main Parade would be the primary interpretive facility, serving as both "an anchor and a portal" to receive and orient visitors to the historic Main Post. Preference would be given to those uses that perpetuate the Presidio's

military legacy and tradition, provide opportunities for joint resource preservation programs, and/or enrich educational and other program elements. Tenants would be selected over the long term based on their ability to support park programs and activities and retain the district's sense of community and the past.

ALTERNATIVE 4: STATUS QUO

Under this alternative, no significant park enhancements or physical change beyond that already permitted or underway would occur in the district, i.e., there would be no further building demolition or new construction, and existing buildings and activities would remain. Buildings would be rehabilitated to meet essential code requirements, consistent with the Secretary of the Interior's Standards, and then leased out for the highest and best use (generally mixed-use office). Tenants that could help fund the preservation and enhancement of the Presidio's resources and meet the community service needs of the park's visitors, tenants, and residents would be sought.

Areas of Controversy

The proposal for a museum of contemporary art (CAMP), withdrawn from further consideration in the final SEIS, had received widespread media attention and excited considerable controversy. Other issues have also been raised during circulation of the draft SEIS and supplement. Whether or not they are considered environmentally significant effects themselves, the following issues have generated interest and debate:

- Departure from the 2002 PTMP for the Main Post district (i.e., increasing amount of demolition and new construction)
- New construction for a freestanding lodge on the Main Post
- Removal of historic Buildings 40 and 41 to commemorate El Presidio
- Increase in visitation to the Main Post and potential for increased traffic and parking demand

Major Conclusions

LAND USE

All alternatives being considered would result in less building area than envisioned in the PTMP. In general, key changes in land or building uses under each alternative, including the proposed Presidio Lodge in Alternative 2 and the proposed History Center in Alternative 3, would change the general density and character of land use within affected portions of the Main Post and substantially intensify current activity levels on the sites. However, consistency with PTMP planning policies and guidelines for buildings and structures, as well as with site-specific project parameters established in the Main Post Update, including limits on building heights and new construction, would ensure compatibility of new construction with the character of adjacent buildings. Surrounding uses and activities would continue on their own sites and would interrelate with each other as they do at present, without disruption from the proposed uses. Changes to building and land use under Alternative 2 would generally be from office and residential to public-serving, which

would increase visitor services and activities, contribute to the mixed-use district, and enhance the Main Post as a destination for park visitors. No conflicts with adjacent building or land uses are expected.

CONSISTENCY WITH THE PRESIDIO TRUST MANAGEMENT PLAN

The PTMP is the Trust's formally adopted statement of land use policy. It provides planning principles and policies that, taken together, guide the Trust's decision-making and actions. The PTMP was intended to be programmatic, rather than prescriptive, to allow consideration of alternative or changed uses, when appropriate.

Alternative 1 reflects the Final Plan Alternative analyzed in the final PTMP EIS, and therefore is consistent with the planning concept and planning guidelines described in the PTMP for the Main Post.

The freestanding Presidio Lodge proposed in Alternative 2 would be inconsistent with the PTMP vision that historic buildings would be used for overnight accommodations, and that public uses would be located mainly in existing structures. Also under Alternative 2, loss of bowling in Building 93 would be inconsistent with the PTMP's commitment to retain facilities for active recreational use. However, the PTMP acknowledges that recreational facilities may be removed or relocated.

Construction of the History Center at the site south of the Main Parade would not be consistent with PTMP objectives that new construction on the Main Post reinforce historic patterns of spatial organization and complement the rehabilitation of adjacent historic buildings. The new construction would also be inconsistent with the PTMP commitment to locate public uses mainly in existing structures. Demolition of the Presidio Bowling Center and adjacent tennis court as required for the History Center would be inconsistent with the PTMP's commitment to retain facilities for active recreational use.

Alternative 4 would only minimally advance the PTMP goal to bring people to the park, as the limited visitor-serving uses and other amenities would not make the park a welcoming place for visitors. Should buildings not be filled and infrastructure systems not be improved, this alternative also would not attain the PTMP goal to preserve and enhance park resources, nor support the PTMP's requirement to provide for the Presidio's long-term management and care.

TRANSPORTATION AND PARKING

Traffic in the Presidio is affected by projects inside the park, as well as trends in regional traffic patterns. Despite the development at the Letterman Digital Arts Center and general growth in the Presidio's population (most of its housing is occupied and about two-thirds of the building space in the Main Post is occupied), total traffic volumes through the nearby gates during the peak commute periods have not changed appreciably over the past eight years. Total PM peak hour gate counts in October 2005 were only slightly higher than those collected in 2000. After adjustments to account for seasonal variation, PM peak hour gate counts in January 2008 were comparable to those collected in October 2005. Traffic counts collected in March 2009 suggest that traffic volumes at the Presidio gates have begun to increase more recently. The increase between January 2008 and March 2009 is likely due to a combination of seasonal variation and increased activity in and near the Presidio.

Alternative 2 would generate 3 percent more traffic to/from the Presidio than anticipated in the final PTMP EIS. Nevertheless, key intersections are expected to operate similarly. All but two of the study intersections that are expected to operate at level of service (LOS) E or F could be mitigated to LOS D or better with implementation of the mitigation measures identified in the final PTMP EIS. The Trust, however, would not install traffic lights in the Main Post because of the potential detriment to its historic character.

Only about one-half of the 2,200 existing parking spaces on the Main Post are currently used on any given weekday. The need for parking would increase with any alternative, and would be similar under each alternative. Alternative 2 would include approximately 1,900 parking spaces. Through the use of parking permits, time restrictions, and paid parking, parking would be managed to reduce demand. The most convenient and proximate parking would be managed for visitors. Employees parking for a longer duration would use more remote parking areas and would have to walk 5 to 10 minutes to their workplace.

Ridership on the PresidiGo downtown shuttle continues to increase, and capacity has been added to keep pace with demand. Demand for Muni and Golden Gate Transit services would also increase in coming years. As Muni undertakes systemic changes as part of the Transit Effectiveness Project, the Trust would work with Muni to maintain transit service in the Presidio and improve connections between PresidiGo and Muni.

AIR QUALITY

The Bay Area Air Quality Management District (BAAQMD) is the primary agency responsible for managing compliance with the ambient air quality standards. The State Implementation Plan (SIP) and the Clean Air Plan (CAP) identify the steps that must be taken to attain and maintain the state and federal standards, and local jurisdictions can cooperate with these efforts by implementing transportation control measures to reduce emissions from motor vehicles. The Trust's transportation demand management (TDM) program implements the relevant transportation control measures consistent with these plans.

With mitigation, none of the alternatives is expected to substantially increase vehicle emissions or emissions of other air pollutants, or generate significant nuisance dust or odors. Alternatives 1, 2, and 3 would temporarily affect air quality because of demolition and construction activities. No notable stationary sources of air emissions would be within the Main Post district, other than small heaters or boilers that are exempt from permitting requirements. Emissions from motor vehicle trips for development under all alternatives would be adequately reduced by maintaining consistency with the regional Clean Air Plan (CAP). Continued implementation of the Trust's TDM program would ensure consistency with the CAP, and conformity with the SIP would be ensured because of the relatively small scale of the proposed demolition and construction activities.

Tenants within the Main Post may be sensitive to air quality impacts during construction and demolition activities. Feasible BAAQMD-recommended control measures for fugitive dust particulate matter would limit adverse effects during demolition and construction activities, and

additional U.S. Environmental Protection Agency-recommended measures would control construction equipment exhaust.

Global climate change is influenced by greenhouse gas (GHG) emissions, including carbon dioxide (CO_2), which occurs with combustion of fossil fuels. The state has identified strategies for managing GHG emissions in California. The Trust would meet state climate change emission reduction targets and would collect emissions data under a voluntary reporting program. To accomplish this, the Trust would develop an inventory of park-based GHG emissions, identify and implement sustainable strategies to mitigate these emissions and adapt to climate change impacts, and educate the public about these efforts. No alternative would cause more than the CEQ's Draft NEPA guidance level of 25,000 metric tons of direct CO_2-equivalent GHG emissions per year.

NOISE

The Main Post is exposed to existing traffic noise, most notably within 200 feet of U.S. Highway 101 (Doyle Drive), where levels are commonly above 67 dBA (A-weighted decibels). These existing levels exceed the Federal Highway Administration (FHWA) Noise Abatement Criterion for recreational areas, parks, residences, hotels, and schools. Additionally, noise levels above 67 dBA occasionally occur adjacent to some of the primary internal roadways of the Presidio (Presidio Boulevard and Lincoln Boulevard).

Noise caused by construction/demolition and increased traffic noise on the Main Post under all alternatives would not exceed applicable standards. Construction and demolition contractors and other equipment operators would comply with the San Francisco Noise Ordinance and Trust-enforced noise standards to minimize noise disturbance. Existing and proposed noise-sensitive uses, such as the lodge and theatre, might experience increased noise because of increased traffic within the Presidio. Traffic noise reduction measures and noise monitoring would be enforced to reduce any impact. None of the alternatives would cause a noticeable change (greater than 3 dBA) when compared to the traffic noise that would occur under the PTMP. The current practice of enforcing noise insulation requirements would provide acceptable interior noise levels.

HISTORIC RESOURCES

The Main Post includes buildings, landscapes, objects, and archaeological sites that represent every epoch of development from the entire long period of significance of the Presidio (1776 through 1945), with additional National Register-eligible resources dating from the Cold War era. Although notable changes were made after 1945, the resources comprising the Main Post retained enough historic integrity to be listed as contributing components to the National Historic Landmark District (NHLD) when the landmark form was updated in 1993.

Alternative 2 would include demolition of historic and non-historic resources, including demolition brought about by the separate Doyle Drive replacement project. Alternative 2 proposes the demolition or relocation (not included in other compliance efforts) of three contributing resources (Buildings 46, 40, and 41). Removal of two World War II-era barracks (Buildings 40 and 41) for the commemoration of El Presidio is proposed under Alternative 2, as under Alternative 3. Under Alternatives 2 and 3, the demolition of the two World War II-era "temporary" type barracks (Buildings 40 and 41) would adversely affect the NHLD.

Relocation of the barracks to another site in the Main Post or elsewhere in the Presidio would adversely affect the buildings but not the NHLD since the overall inventory of "temporary"-type buildings in the Presidio would be unchanged.

Alternative 2 assumes 146,500 square feet of new construction, including the Presidio Theatre addition, the Presidio Chapel addition, the connector for the archaeology lab and curation facilities, and a new Presidio Lodge. New construction would adversely affect Building 46 (a 50-square-foot shed that would be removed to create a secure entrance for the archeology lab and curation facilities), but would not adversely affect other individual historic resources, or the NHLD. Removing non-historic Building 34 and replacing it with 70,000 square feet of compatibly-designed new lodge space under Alternative 2 would have a lesser impact than Alternative 1. Construction of new additions to the Presidio Chapel and Presidio Theatre under Alternatives 1 and 2 would be the same. Impacts associated with new construction under Alternative 3 (i.e., the History Center) would be greater than under Alternatives 1 and 2 as it would involve demolition of a contributing resource (the tennis court) and incompatible siting (in relation to Building 100). Project parameters, design guidelines, and additional consultation would keep the impact of new construction at the Main Post at a less-than-significant level. The impact of traffic, parking, and circulation features under Alternative 2 would also result in the same impact on historic resources as under Alternatives 1 and 3.

ARCHAEOLOGY

The Main Post contains approximately a dozen archaeological sites or features that contribute to the National Historic Landmark District. Projects and programs undertaken to research and better understand these sites and features can inform long-term management and enhance the visitors' experiences. At the same time, construction projects undertaken in the district have the potential to impact archaeological sites or features, depending on the locations specified and the parameters of design.

The archaeology of the Main Post would benefit under Alternatives 1, 2, and 3, all of which provide for an Archaeology Center with a state-of-the-art lab and curation facilities, as well as for landscape treatments that allow visitors to better understand the Spanish Colonial roots and Mexican heritage of San Francisco.

Differences among the alternatives include the levels of traffic and parking on the El Presidio site and the ultimate treatment of Buildings 40 and 41, two World War II "temporary" barracks that were built on top of the original *plaza de armas* of El Presidio. Alternative 1 would maintain existing traffic patterns, parking, and buildings. Alternative 2 would intermittently detour traffic to facilitate programming, permanently reduce the amount parking, and remove or relocate the "temporary" barracks. Alternative 3 would eliminate through traffic, remove all parking from the site, and remove or relocate the "temporary" barracks to create a pedestrian area in the *plaza de armas*.

The removal or relocation of Buildings 40 and 41 in Alternatives 2 and 3 would enhance the character of the open space in the *plaza de armas*, but this action would be undertaken at the expense of the two World War II buildings that also contribute to the NHLD. In short, the alternatives would make enhancement of El Presidio – a unique resource in California and the western United States – a priority, at the expense of a

resource for which other examples exist within the Presidio and the larger Golden Gate National Recreation Area.

New construction under Alternatives 1, 2, and 3 would result in impacts to several NHLD-contributing archaeological features at three locations: the Graham Street corridor, the site south of the Main Parade, and the bluff edge. Alternative 1 would provide for 50,000 square feet of new construction along Graham Street, affecting Spanish-colonial and Civil War-era archaeological features. Alternative 2 would provide for 70,000 square feet of new construction also along Graham Street, but a portion of this square footage would replace the existing Building 34, and therefore the area of impact would be smaller. Furthermore, the new construction would be sited farther north, which would avoid the impacts on El Presidio that would be likely under Alternative 1. New construction for underground parking at the bluff edge in Alternative 2 would also affect NHLD-contributing archaeological resources. Alternative 3 provides for new construction at the site south of the Main Parade, which would have the potential to affect portions of NHLD-contributing archaeological resources.

VISUAL RESOURCES

The Main Post is visually diverse, with a wide variety of architectural styles and building types from every era of its history. The Main Post also offers commanding views across the district and beyond to the bay. In addition, the steeply sloping southern hillsides known as Infantry Terrace provide a dramatic backdrop to the district and striking contrasts to the formal parade grounds. Under Alternatives 1, 2, and 3, existing major view corridors afforded from the Main Parade and El Presidio would be maintained and protected. Rehabilitation of the historic buildings would enhance the visual resources on the Main Post. New construction would be limited, but where allowed, it would be compatible with the visual setting. Under Alternatives 1 and 2, new construction between Graham and Anza streets would reestablish the visual separation that historically existed between the Main Parade and the Old Parade. However, the size of the office building proposed in Alternative 1 would eliminate some internal east-west views. The lodge proposed in Alternative 2 would have less of an impact on east-west views than Alternative 1 but would still block some views. The addition to the Presidio Theatre included in Alternatives 1 and 2 would block views from Moraga Avenue to the bay. This would be a localized impact; the addition would not block any of the key views toward the bay from the Main Parade or from the Officers' Club, which are considered more important. The proposed History Center at the site at the head of the Main Parade in Alternative 3 would partially block some views south toward Infantry Terrace houses. It would also block views from the Officers' Club toward the Montgomery Street Barracks and would block some localized east-west views. Furthermore, its height would be substantially taller than existing Buildings 93 and 97, thereby altering the character of the visual setting.

VISITATION

Alternative 1 would provide a variety of public programs and interpretive and educational opportunities at the Main Post, including a Heritage Center in Building 2. The Main Parade would also create a new focus for visitor activities. Alternative 2 would provide a greater number and variety of facilities for the visiting public than Alternative 1, including an expanded Heritage Center in a portion of Building 50, lodging in a new

building along Graham Street and in Pershing Hall (Building 42), and a more open site at El Presidio. Alternative 3 would provide fewer facilities for the visiting public than Alternatives 1 and 2, with the History Center at the site south of the Main Parade serving as the key visitor facility. The alternatives would be expected to attract between 1.11 million (Alternative 4) and 1.68 million (Alternative 2) visitors annually to the Main Post. Facilities and services would be designed to accommodate these visitation levels on most days. Peak visitor use would occur primarily on summer weekend days and holidays. Implementation of the mitigation measures would ensure that unacceptable impacts on adjacent land uses or on visitor use would not occur. These measures include limitations on visitor opportunities, prohibitions on visitor uses, management controls, conditions for special events, and monitoring of visitor levels to minimize use conflicts.

RECREATION

Alternatives 2 and 3 would convert or remove the Presidio Bowling Center to accommodate new public uses. The Bowling Center could be relocated elsewhere in the Presidio subject to a Request for Proposals and the execution of a lease agreement, as well as any additional site-specific environmental review. Should the Bowling Center not be replaced, its removal would have an adverse impact on current users.

Alternative 3 would also remove the adjacent tennis court. The tennis court could also be relocated to another site within the Presidio as funding permits and subject to site-specific environmental review. Should the tennis court not be replaced, its removal would have an adverse impact on current users.

In accordance with the Trust's vision to maintain or slightly increase the current number of playing fields, Alternative 2 would include an athletic field south of Moraga Avenue. Sufficient parking would be provided to support the use.

WATER RESOURCES

Proposed buildings and parking lots under Alternative 2 would decrease the amount of impervious surface on the Main Post by approximately 187,000 square feet, resulting in a decrease in stormwater runoff compared to Alternative 1. However, the resulting changes to hydrology, groundwater, and wetlands would not be appreciable. The existing trunk systems serving the district have sufficient capacity to accommodate the expected flows. Necessary upgrades to the smaller local systems would be installed to correct identified deficiencies and to facilitate connection to new development. Short-term construction activities, such as excavation, grading, and stockpiling of soil, could temporarily degrade the quality of surface water. Construction site operators of the larger-scaled projects would be required to prepare Stormwater Pollution Prevention Plans (SWPPPs) that would provide for temporary measures to control sediment and other pollutants during construction. Project proponents of building and site projects such as parking lots would be required to develop and implement Stormwater Control Plans that include post-construction Best Management Practices (BMPs) appropriate for development sites to minimize site imperviousness, control pollutant sources, and incorporate treatment and flow-control facilities that retain, detain, or treat runoff and protect water quality.

According to geotechnical investigations done near proposed construction sites south of the Main Parade and along Graham Street, the

groundwater table is expected to be 50 feet below ground surface (bgs). The investigations also encountered perched groundwater at 19 to 25.5 feet bgs south of the Main Parade. Below-grade improvements at the sites under any of the alternatives are not expected to extend to the groundwater table. Improvements at the two sites would affect the perched water table. These impacts would be localized, however, as the perched groundwater would migrate around the below-grade structure.

An active dewatering system consisting of a series of wells would be necessary during excavation at both sites. Any subsurface water encountered during construction would be discharged into the sewer system. A permanent active dewatering system would not be required.

CUMULATIVE IMPACTS

The effects of various past, present, and reasonably foreseeable actions would have a cumulative relationship to the effects of development within the Main Post district under all alternatives. Overall, the incremental impacts associated with any of the alternatives are not expected to be significant, and resources of concern would not be degraded, with the exception of impacts on historic resources and archaeological resources. In several instances, the incremental contribution of the alternatives to the cumulative effect on the Main Post and Presidio would be neutral or beneficial.

By accommodating a variety of land uses, removing pavement, and demolishing buildings at the Main Post, the cumulative actions would result in substantially more open space of higher quality than exists today, with only a slight increase in the overall building square footage. Overall, cumulative actions would expand open space by approximately 20 acres to 48 acres, an approximately 70-percent increase over existing conditions. Removing parking from the Main Parade and relocating it to the perimeter of the Main Post, redesigning and partial tunneling of the Doyle Drive corridor (Doyle Drive), and removing underground pipes and lined channels along the creek system (Tennessee Hollow and the Quartermaster Reach) would provide a more park-like setting, enhance the historic setting, and create more outdoor recreational space. Building space at the Main Post due to the cumulative actions would increase by approximately 6 percent to a maximum of 1.215 million square feet under Alternative 1 (14,000 square feet more than under Alternative 2). However, none of the new buildings would conflict with adjacent building or land uses or compromise the nature and character of the Main Post, the surrounding neighborhoods, or the Presidio at large.

As a result of the increase in the amount of building space, the Main Post would comprise a large portion of the vehicle trips generated by Area B of the Presidio. These trips, along with projected growth in traffic volumes in the area, would affect the operation of some local intersections. Mitigation measures adopted as part of the final PTMP EIS and measures adopted as part of the final SEIS would improve intersection operations to acceptable levels under cumulative conditions. The Trust would not install traffic lights in the Main Post, however.

Parking improvements would include expansions to existing lots, improvements to the efficiency of layouts in existing lots, and some new parking lots. Existing street parking would be preserved, and new street parking would be added. After the decentralized lots and added street parking are complete, approximately 1,817 to 1,910 of the current 2,200 parking spaces would remain in the Main Post (excluding Infantry Terrace). Should total parking demand at the Main Post exceed supply,

the Trust would continue to implement components of its existing transportation demand management (TDM) program within the district and throughout the Presidio or adopt more aggressive strategies, such as requiring tenant participation in more TDM program elements, increasing parking fees, and providing more frequent and/or extensive shuttle service to reduce automobile usage and associated parking demand by all tenants, occupants, and visitors.

Alternative 2 would contribute to the overall level of change in the historic resources within the Presidio since the writing of the 1993 NHL update, inclusive of projects planned within the foreseeable future. The rehabilitation of Crissy Field (completed in 2001) removed 32 historic buildings to restore missing historic and natural features and to introduce parking for recreational activities. The construction of the Letterman Digital Arts Center (completed in 2005) replaced non-historic buildings and a large parking lot with compatibly designed new buildings and landscape. The replacement of Doyle Drive (which began construction in 2009) will replace the historic elevated roadway with a new parkway, remove historic buildings and streets, and alter the appearance of the existing bluff to accommodate the parkway. Alternative 2 would contribute to this cumulative impact by removing or relocating three historic resources, rehabilitating the remaining un-rehabilitated buildings, and adding new elements that would change the appearance of the Main Post.

New construction, building demolition, infrastructure upgrades, creek restoration, environmental remediation, and roadway reconstruction associated with foreseeable cumulative actions, including those at the Main Post, could adversely affect archaeological sites that contribute to the NHLD. At the Main Post, these include contributing archaeological features of the NHLD dating from the Civil War era to the turn of the 20th century. The cumulative actions could also adversely affect unknown sites that may be identified through future research or an unanticipated discovery. Stipulations contained in the programmatic agreement documents developed through the Section 106 NHPA process for the actions would help avoid, minimize, or mitigate potential adverse effects.

The potential loss of the Presidio Bowling Center and three tennis courts in the Presidio, including the tennis court adjacent to the Bowling Center (under Alternative 3) and two removed for development of the Letterman Digital Arts Center within the Letterman district, would decrease active recreational space at the Presidio for bowlers and tennis players. Activities occurring in the city, specifically, the potential short-term unavailability and long-term reduction of public tennis courts in Golden Gate Park, would incrementally contribute to the cumulative adverse impact on existing tennis facilities and programs in the general area that includes the Presidio.

Issues to be Resolved

The following decisions that are beyond the scope of the final SEIS must still be made.

SELECTION OF ALTERNATIVE FOR IMPLEMENTATION

The mitigated preferred alternative (Alternative 2) is the Trust's identified alternative for fulfilling the purpose and need, taking into consideration the Trust's statutory mission and responsibilities, as well as comments received on the draft SEIS and supplement. Identification of

the mitigated preferred alternative does not indicate a final decision or commitment to approve or execute proposals described in the alternative. The alternative that is ultimately selected for implementation may combine various elements of the alternatives, or may fall within the range they represent. Until the NEPA process is completed, no final approvals may be granted and no development agreement or lease may be signed for any of the proposals under review in the final SEIS.

CHOICE OF MITIGATION MEASURES

The final SEIS discusses the full spectrum of appropriate mitigation measures for each environmental impact, including measures outside the jurisdiction of the Trust. The Record of Decision (ROD) will identify which mitigation measures will be adopted as a condition of the Trust's approval of the selected alternative. The ROD will also include a monitoring and enforcement program for each mitigation measure that has been made a condition of project approval. The Trust's Compliance Manager will be responsible for monitoring compliance with the monitoring and enforcement program.

TREATMENT OF HISTORIC PROPERTIES

The Trust initiated National Historic Preservation Act (NHPA) compliance at the beginning of the draft SEIS process (November 2007) and engaged in consultation under Section 106 of the NHPA with the California State Historic Preservation Officer, the Advisory Council on Historic Preservation, the National Park Service, and 17 other consulting parties. The Section 106 consultation stipulates measures to resolve the effects on resources that can be known in advance of proposed work, including project parameters and avoidance measures. Archaeological treatment plan(s) and processes for design review will outline the steps that will be taken to address effects that cannot be fully identified before work begins (i.e., effects on undiscovered archaeological resources). The ROD will conclude the NEPA process and also fully account for the provisions of the Programmatic Agreement for the Main Post Update that resulted from the NHPA Section 106 process (Appendix B).

REVIEW AND INPUT ON DESIGN OF PROJECTS

During scoping for and review of the draft SEIS, the public expressed great interest in the design of any new construction in the Main Post. The Trust will continue to engage the public on this issue. Refinements to preliminary design concepts for proposals during the review process, and as a result of final design development, are expected. The Trust will provide opportunities beyond the NEPA process for public input on the design of all freestanding buildings and major additions to historic buildings, including landscape plans, during one or more public workshops, meetings, or other public forums. The Trust Board of Directors will review and consider all information received before issuing final approval. Any notable modifications to the projects' designs will be analyzed to determine whether it would affect information and analysis contained in the final SEIS.

Next Steps

The Trust will circulate the final SEIS for at least 30 days after filing the final SEIS with the United States Environmental Protection Agency. Although there is no requirement for the Trust to respond to comments

received on the final SEIS, the Trust will consider all comments received as part of its decision-making process. The Trust will determine whether the final SEIS meets the standards for EIS adequacy under the NEPA, the Council on Environmental Quality (CEQ) NEPA Regulations, and its own NEPA regulations (36 CFR 1010), and will make its final decision on the selected alternative in a ROD. The ROD will be a written public record explaining why the Trust has taken a particular course of action. It will allow the Trust to implement the decision, including granting approvals, signing development agreements and leases, and applying adopted mitigation measures.

Purpose and Need

This section briefly describes the underlying purpose and need to which the Trust is responding in proposing changes at the Main Post, and the objectives the Trust intends to achieve. The updated planning concept for the Main Post is described in the Main Post Update (Trust 2010a), the planning document accompanying the final SEIS, and is the mitigated preferred alternative[3] evaluated in the final SEIS. The Main Post Update, if adopted by the Presidio Trust Board of Directors, will amend the provisions for the Main Post district in the PTMP.

1.1 Statement of Purpose and Need

The purpose of the Main Post Update is to implement the Trust's vision for the Main Post as the "heart of the Presidio," to update the planning concept for the Main Post district as described in the PTMP, and to add greater detail to the planning for the Main Post than was possible in 2002 when the PTMP was completed.[4] The Main Post Update is needed because, while a community is growing in the Main Post and visitation has increased, the Main Post has not yet become the "focal point for visitor orientation" and "lively pedestrian district"[5] contemplated in the PTMP. In order to realize the vision of the Main Post described in PTMP, the Main Post Update builds on progress to date, responds to new opportunities, and proposes a number of actions that the Trust intends to pursue. These actions[6], as they relate to the project's purpose, include:

[3] *The mitigated preferred alternative differs from the preferred alternative analyzed in the supplement to the draft SEIS for the Main Post Update (Trust 2009a) in that it avoids, minimizes, or mitigates potential adverse affects on the National Historic Landmark District and responds to most of the concerns raised by members of the public during review of the supplement.*

[4] *The PTMP (Presidio Trust 2002a), adopted in August 2002, is the Trust's comprehensive land use plan, policy framework, and established management direction for Area B of the Presidio.*

[5] *The PTMP, pages 62-63.*

[6] *Certain actions are proceeding outside the PTMP Main Post Update SEIS process. These proposals include the International Center to End Violence (Building 100), upper Tennessee Hollow revitalization, and the Main Parade rehabilitation. In each case, an environmental assessment (EA) was prepared, followed by a finding of no significant impact (FONSI). NHPA compliance was also completed in parallel with the NEPA processes, with findings of no adverse effect for each project. In each case, the Trust also found that those actions were consistent with the PTMP, were independently justified, did not have significant environmental impacts, and would not prejudice other decisions on the Main Post. Nonetheless, the cumulative impacts of these and other reasonably foreseeable actions at or near the Main Post (such as reconstruction of Doyle Drive) are being assessed in the final SEIS as cumulative actions.*

- Maintain the Main Post as the heart of the Presidio through rehabilitation, reuse, and interpretation of the remaining historic buildings, formal historic landscapes, and natural and archaeological resources.
- Preserve and refine open spaces by "greening" the Main Parade, commemorating and interpreting the original El Presidio, and enhancing physical and visual connections to Crissy Field.
- Retain the transit hub at the north end of the Main Post to provide safe and convenient access to transit.
- Retain the Officers' Club as a venue for meetings, cultural events, and community activities, and establish a Heritage Center in a portion of the building.
- Establish an Archaeology Center with a lab and curation facilities in Buildings 44, 47, 48, and 49.
- Continue existing Presidio administrative functions.
- Collaborate with the National Park Service to develop a Visitor Center and support interpretive functions.
- Use the Anza Esplanade as an opportunity to interpret Presidio history.
- Ensure that new construction for the Presidio Lodge, the Presidio Theatre addition, and the addition to the Presidio Chapel is sited to be compatible with the historic district.
- Bring visitor amenities such as lodging and restaurants to make the Main Post the heart of the park.
- Use lighting, signage, and site furnishings to make visitors feel welcome, safe, and comfortable.
- Improve pedestrian access and close portions of Arguello Boulevard and Sheridan Avenue.
- Locate parking on Taylor Street and on Moraga Avenue on the site of Building 385.

1.2 Objectives of Main Post Update

The Main Post Update seeks to achieve the following objectives (expressed as implementation strategies in the Main Post Update) in establishing the Main Post as the heart of the park:

1. Reveal the Presidio's history
2. Welcome the public
3. Employ 21st century green practices

REVEAL THE PRESIDIO'S HISTORY

The Presidio's history is central to the visitor experience at the Main Post. Many of the features that once made the Main Post and its open spaces compelling, however, have been obscured by later additions as well as by building demolition. The site's organization and layers of history are therefore difficult to discern. The historic themes reflected in the district's buildings, landscapes, and archaeology should be revealed and made more understandable to visitors. The Trust expects to accomplish this by rehabilitating the Main Post's historic resources and

by providing innovative programming to introduce the public to the Presidio's heritage.

Context

The Presidio has played an important role in the development of the American West. Founded in 1776, it was the northernmost garrison in Spanish California and effectively the birthplace of San Francisco. It guarded the city's bay through two centuries of growth and after World War I was the U.S. Army's seat of command for the western states. The Presidio's period of historic significance is not limited to one period, but embraces two centuries of change: from 1776 to 1945.

The Main Post is the Presidio's most historic district. Every period of the Presidio's history is reflected in the buildings, landscapes, and archaeological resources that make the Main Post such a rich and important historical site. Successive generations added their mark to the Main Post, leaving layer after layer of architectural and archaeological history, providing a record of what was important at a given time but often obscuring earlier periods.

The PTMP cautioned that the future of the Presidio must respect the material evidence of the past. It also proposed preserving and rehabilitating the landscapes and buildings that define the park's character, and making accessible the stories inherent in archaeological remains that mostly lie beneath the ground.[7]

Strategies

Because many of the Main Post's most compelling features, specifically its open spaces, have become indistinct, the Trust intends to "roll back" some of the late 20th-century additions to the Main Post in order to restore the site's historic organization and to make the many layers of history more visible. The Trust also seeks to establish the Main Post as the heart of the park by making it more welcoming to the public (see below). An understanding of the history and development of the Main Post provides an important context for understanding how the projects and improvements planned for the Main Post can achieve these dual objectives.

WELCOME THE PUBLIC

The Presidio's history at the Main Post is best preserved through reuse of its buildings and landscapes; its historic character is best preserved by bringing people to the Main Post. Visitor amenities and programs should welcome a broad public while ensuring that the Presidio's historic significance is not obscured. The Trust seeks to bring the Trust's vision for the Main Post fully to life by:

- rehabilitating, reusing, and interpreting the Main Post's historic buildings, formal historic landscapes, and archaeological resources
- providing restaurants, lodging, and other visitor-serving uses
- providing innovative heritage programming and site interpretation
- creating a safe, inviting, and comfortable place for the public

[7] *The PTMP, page 3.*

Context

The Main Post was once the bustling center of an important military command. In consideration of its historic character, the Trust envisioned the Main Post as a "focal point for visitor orientation" and as a "lively pedestrian district," as well as a "community center where people live, work, and enjoy themselves."[8] Since adopting the PTMP in 2002, the Trust has been implementing this vision for the Main Post. Important historic resources, such as the Civil War-era Funston streetscape, have been rehabilitated. Remediation of a former U.S. Army landfill (Fill Site 6A) allowed for an important first step in restoring the Tennessee Hollow watershed. Nearly three-fourths of the Main Post's historic buildings have been rehabilitated. Ongoing archaeological investigations of El Presidio have enriched the understanding of life at the Presidio during the 18th- and early 19th-centuries. Educational experiences for children are being developed at the Presidio Archaeology Lab and as part of special cultural exhibits at the Officers' Club. The transit center at the Main Post's north end, which also provides visitor orientation, restrooms, and a restaurant, serves as a hub to the Trust's comprehensive transportation program. The Trust's PresidiGo shuttle bus service, which carries 1,800 passengers daily and connects residents, tenants, and the public to sites throughout the park and to the regional transit system, is a vital component of this program.

Although a community is growing in the Main Post and visitation has increased, the Main Post is not yet the visitor destination foreseen by the Trust in the PTMP. Visitor services and activities for the public are insufficient to draw people to the Main Post and make them feel welcomed. The number of people who live and work in the Main Post has not reached the level that the district experienced when it was the center of a military post; on most days, the Main Post feels empty. The park has no lodging, a traditional way that national parks have welcomed people, both those who visit for a day and those who want the experience of an overnight stay in the park. Key historic buildings, such as the Presidio Theatre, remain un-rehabilitated and vacant. It is also hard to discern the many layers of the Main Post's history and see why the Presidio is so important. A visitor to the Main Post would have difficulty understanding why the Presidio is a National Historic Landmark District (NHLD).

Strategies

The Trust intends to build on all the work that has already been accomplished to make the Main Post more inviting to the public. A Heritage Center would provide visitors with information about the park's history and natural resources, encouraging them to explore the Main Post and the Presidio as a whole as a "museum without walls." An Archaeology Center would be relocated to a prominent place in the Main Post adjacent to a more apparent and recognizable El Presidio. The Presidio Theatre and Presidio Chapel would be rehabilitated and reused for their original purposes, and expansions would allow for enhanced programming. Public-serving uses would occupy the ground floors of the Montgomery Street Barracks buildings. Construction of the Presidio Lodge would welcome visitors and animate a transformed Main Parade and new pedestrian walkway, the Anza Esplanade. Parking would be relocated from the Main Parade to the perimeter of the Main Post to

[8] *PTMP, pages 62-63.*

better serve access points and the post's buildings. The Trust is proposing these and other changes in the Main Post Update to advance its vision of making the Main Post a visitor destination befitting a premier national park site.

EMPLOY 21ST CENTURY GREEN PRACTICES

Rehabilitation of buildings, operation of utilities, and daily maintenance of structures and grounds keep the park functioning smoothly. Many of the Presidio's infrastructure systems need significant upgrading or replacement, thus providing an opportunity to employ 21st century "green" practices. During planning, design, and management of the district, up-to-date, environmentally favorable practices should be used to rehabilitate the NHLD and make the historic Main Post a "greener" place. The Trust proposes to accomplish this by integrating such practices into all relevant Main Post actions.

Context

The Trust has a capital investment program designed to bring the Presidio infrastructure up to current standards so that it may serve new land and building uses. The PTMP identifies safety, efficiency, and long-term sustainability as primary objectives for park operations and infrastructure.[9] Since 2002, the Trust has broadened the concept of sustainability to include both historic preservation and park operations, not just building materials or maintenance of facilities. Sustainable design criteria are being applied to new construction as well as to historic facilities, integrating sustainable materials and systems to the extent feasible.

Strategies

At the Main Post, new construction and building rehabilitation would be designed to achieve a Leadership in Energy and Environmental Design (LEED) Silver rating or better. Sustainable design features such as green roofs and photovoltaic panels would be carefully located to avoid detracting from the historic character of the Main Post. The lawn of the Main Parade and other landscapes would be plumbed for irrigation with reclaimed water. Stormwater runoff would be reduced and cleaned with features such as bio-swales and permeable pavement. Integrated pest management and green waste composting would reduce the environmental impacts of park maintenance. The Main Post's transportation network would support pedestrians and cyclists, and provide alternatives to automobiles. The PresidiGo shuttle system would be expanded to serve more Main Post employees and visitors. Transportation demand management and parking management programs would encourage the use of alternative transportation and reduce the number of single-occupancy vehicle trips. Electric vehicle (EV) and plug-in hybrid electric vehicle (PHEV) charging infrastructure would be available at major parking lots to encourage the use of low- and no-emission vehicles. The Trust intends to pursue this wide array of Main Post projects and initiatives to prevent pollution, reduce waste, and promote alternative modes of transportation and fuel.

[9] *PTMP, page 54.*

1.3 Purpose and Contents of Supplemental Environmental Impact Statement

The Trust has determined that new information pertinent to the Main Post may have a bearing on the planning concept or its impacts as identified in the PTMP and final PTMP EIS (Trust 2002b), thereby warranting supplementation consistent with the NEPA.[10] The Trust has prepared the final SEIS to disclose:

- Alternatives to the planning concept analyzed in the final PTMP EIS
- The environmental impact of the alternatives, including the mitigated preferred alternative
- Any adverse environmental impacts that will be unavoidable
- Appropriate mitigation measures not already included in the final PTMP EIS that could alleviate the potential environmental effects of the alternatives
- The relationship between local short-term uses of the environment and the maintenance and enhancement of long-term productivity
- Any irreversible and irretrievable commitments of resources resulting from implementation of the alternatives

This document, together with the accompanying Response to Comments, will be filed as the final SEIS. The final SEIS has been developed to be accessible to the general public, with the goal of "good analysis and clear presentation of the alternatives including the proposed action."[11] It has been formatted in accordance with the CEQ's NEPA Regulations[12] and the Trust's policies and procedures on environmental quality and control.[13] The document provides new analysis, information, and changes made in response to public comments on the PTMP Main Post Update Draft SEIS (Trust 2008b), which was circulated for public review and filed in June 2008. The final SEIS incorporates the entire draft SEIS, as well as the entire PTMP Main Post Update Supplement to the Draft SEIS (Trust 2009a), which was circulated and filed in March 2009. The final SEIS also incorporates by reference the Main Post Update, which is analyzed as the mitigated preferred alternative in the final SEIS.

The final SEIS tiers[14] from the final PTMP EIS and analyzes several actions involving new freestanding buildings or building additions that required "more specific planning"[15] and environmental review as foreseen in the PTMP. In tiering from the final PTMP EIS, the final SEIS summarizes and incorporates by reference the information and

[10] *See 40 CFR 1502.9 (supplementation).*

[11] *See 36 CFR 1502.10.*

[12] *See 40 CFR 1502.10 (recommended format).*

[13] *See 36 CFR 1010.9 (preparation of an EIS).*

[14] *See 40 CFR 1502.20 and 40 CFR 1508.28 (tiering). The final PTMP EIS can be viewed at the Presidio Trust Library or on the Trust's website at* http://www.presidio.gov/Trust/Documents/Environmental Plans/.

[15] *The PTMP states that actions involving new construction "whose potential effects are either uncertain or potentially significant will be subject to public notice, outreach and consultation, public 'scoping', and public review of specific design guidelines and/or schematic design, and environmental documents prior to any decision about whether to implement the project" (page 131).*

analysis presented in the final PTMP EIS and provides site-specific analysis for the following actions:

- The free-standing Presidio Lodge on the site of the Presidio Trust Headquarters (Building 34) and the area south of Building 34
- An addition to the Presidio Theatre (Building 99)
- An addition to the Presidio Chapel (Building 130)
- An addition to link Buildings 47 and 48 and provide a public entrance to the archaeology lab and curation facilities

Concurrently with the SEIS analysis, the Trust also provided for the review of the proposals under the consultation process required by Section 106 of the NHPA.[16] This process identifies the historic resources that may be affected by an undertaking, assesses the effects on historic resources through a Finding of Effect (FOE), and then looks for ways to "avoid, minimize, or mitigate" the effects identified in the FOE. The final FOE was circulated on July 1, 2009 (Presidio Trust 2009b). The Section 106 consultation has included the National Park Service, the State Historic Preservation Officer, the Advisory Council on Historic Preservation, and other consulting parties. Table 2 shows the process for coordinating the NEPA and NHPA as explained by draft guidance provided by the Council on Environmental Quality (CEQ) (first two columns of table), and documents compliance steps taken by the Trust (third column). The NEPA process will conclude in a record of decision (ROD) that will fully account for the provisions of the Programmatic Agreement for the Main Post Update (PA-MPU) (Presidio Trust 2010b) that concluded the NHPA process. A copy of the PA-MPU is provided in Appendix B.

[16] *Section 106 provides an opportunity for members of the public with a demonstrated interest in the project to participate in the process as consulting parties. Many community members participated in the consultation process. A list of the consulting parties to the process is provided in the final FOE and the PA-MPU.*

REFERENCES

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_____. 2010a. *Final Main Post Update.* Dated November.

_____. 2010b. *Programmatic Agreement Among the Presidio Trust, the Californian State Historic Preservation Officer, the National Park Service, and the Advisory Council on Historic Preservation, for the Main Post Update to the Presidio Trust Management Plan, Presidio of San Francisco National Historic Landmark, San Francisco, CA.*

2 COORDINATING THE NATIONAL ENVIRONMENTAL POLICY ACT WITH THE NATIONAL HISTORIC PRESERVATION ACT FOR THE MAIN POST UPDATE

	NEPA Guidance	*NHPA Section 106 Guidance*	*Presidio Trust Compliance Steps*
STEPS TAKEN TO DATE			
1	Identify project objectives and scope	Establish "undertaking" • Notify appropriate SHPO • Plan to involve the public • Identify other consulting parties	Notice of Intent sent to consulting parties (ACHP, SHPO, NPS, NTHP, PHA), October 23, 2007 NEPA scoping initiated with Notice of Intent, October 29, 2007
2		Finding • Undertaking is type that might affect historic properties; or • Project is covered by an existing PA	Section 106 consultation package sent to ACHP, SHPO, NPS, NTHP, and PHA, November 11, 2007
3	Identify social, economic, and environmental constraints	Through consultation: • Identify historic properties • Evaluate historic significance • Resolve eligibility disputes	NEPA scoping continues; public meeting November 28, 2007 1st Section 106 consultation meeting, December 11, 2007 Scoping ends December 15, 2007
4		Finding • Historic properties affected Time to resolve disputes/objections early in the process, in consultation with SHPO and other consulting parties	2nd consultation package sent to consulting parties, January 28, 2008 2nd consultation meeting, February 26, 2008
5	Develop preliminary alternatives		Alternatives, including publicly-suggested Alternative 2A, developed
6	Analyze the impacts of the alternatives	Through consultation, assess adverse effects by applying Criteria of Adverse Effect	Draft SEIS prepared Draft FOE prepared

	NEPA Guidance	*NHPA Section 106 Guidance*	*Presidio Trust Compliance Steps*
7		Finding • Adverse effects Time to resolve disputes/objections	3rd consultation package mailed to consulting parties, March 18, 2008
8	Incorporate alternatives analysis in the NEPA document, and circulate document for comment	Through consultation, consider comments and negotiate mitigation measures	Draft SEIS available for comment, June 13, 2008 Public tours, June, July, August 2008 1st Public Trust Board of Directors (Board) meeting, July 14, 2008 Public Transportation Workshop, July 28, 2008 Draft FOE available for comment, August 8, 2008 3rd consultation meeting, September 16, 2008 Alternatives Workshops, September 25, September 28, October 2, 2008 Public meeting on Conforming New Construction, November 19, 2008
9	Incorporate comments into the identification of a preferred alternative	"Avoid, minimize, mitigate" adverse effects through additional consultation and pursue: • MOA • PA • Other program alternative Time to resolve disputes/objections	Identification of Preferred Alternative, December 5, 2008 4th Section 106 consultation meeting, December 5, 2008 2nd Public Board meeting, December 9, 2008 Supplemental draft SEIS and revised draft FOE available for comment, February 2009 5th Section 106 consultation meetings, April 21-22, 2009 Public comment on all draft documents extended through June 1, 2009, 90 days after release of supplemental draft SEIS/revised draft FOE Release of final FOE, July 1, 2009 6th Section 106 consultation meetings, August 18-20, 2009 Release of first draft PA-MPU, November 17, 2009

	NEPA Guidance	NHPA Section 106 Guidance	Presidio Trust Compliance Steps
			7th Section 106 consultation meeting, January 26, 2010
			Release of second draft PA-MPU, March 16, 2010
			Release of third draft PA-MPU, August 13, 2010
			8th Section 106 consultation meeting to review draft PA-MPU, September 14-15, 2010
			Release of final, executed PA-MPU, November 2010
			Release of final SEIS for public review, November 2010
NEXT STEPS			
10	Issue FONSI/ROD	File final PA with signatory and consulting parties; include copy in FONSI/ROD	Adopt ROD for public review

Sources: CEQ 1981 and 1986, ACHP 2002, CEQ 2008

Notes: ACHP = Advisory Council on Historic Preservation
CEQ = Council on Environmental Quality
EIS = Environmental Impact Statement
FOE = Finding of Effect
FONSI = Finding of No Significant Impact
MOA = Memorandum of Agreement
NEPA = National Environmental Policy Act
NHPA = National Historic Preservation Act
NPS = National Park Service
NTHP = National Trust for Historic Preservation
PA = Programmatic Agreement
PHA = Presidio Historical Association
ROD = Record of Decision
SEIS = Supplemental Environmental Impact Statement
SHPO = State Historic Preservation Officer

See Glossary for proposed action, preferred alternative, and undertaking

The following describes the range of alternatives being evaluated, including the mitigated preferred alternative, and those that have been eliminated from detailed study. A comparison of the alternatives is provided in Table 3.

2.1 Alternative 1: PTMP Visitor and Community Center

This alternative represents the Final Plan Alternative analyzed in the final PTMP EIS and reflects progress made in implementing the PTMP since it was adopted in 2002. The alternative would rehabilitate and reuse buildings within the Main Post consistent with land use assumptions in the final PTMP EIS. Alternative 1 is the required NEPA "no action" alternative[17] that serves as a benchmark for comparison among alternatives and allows the public to understand the extent to which other alternatives are consistent with the adopted management approach and intensity of land use provided for in the PTMP.

CONCEPT

The Main Post would remain the heart of the Presidio; it would be a focal point for visitor orientation and a community center where people live, work, and enjoy themselves (Figure 1). The Main Post's rich collection of historic buildings and landscapes would be the backdrop for visitor programs and a setting for businesses, organizations, and Presidio community services. Significant open spaces would be preserved and restored. Preferred building uses would include mixed uses with a focus on visitor programs (such as the Archaeology Center), community and related activities, and services including a mix of cultural and educational programs, lodging, offices, and other uses.[18] The Presidio Theatre would be reactivated as a venue for film or performing arts. Finally, the Presidio Chapel would be expanded slightly to accommodate accessibility and to support a broader range of programs.

PUBLIC USES

Visitor-serving uses would be accommodated in approximately 41 percent (503,000 square feet) of the building space in the district and would include a variety of cultural and educational uses, small-scale lodging, and other amenities. Cultural and educational facilities and programs would include a Visitor Center in the Officers' Club (Building 50), a Heritage Center (Building 2), an Archaeology Center (Buildings 44, 47, 48, 49, and part of 50), the Presidio Theatre and addition, the Presidio Chapel and addition (Building 130), Herbst International Exhibition Hall (Building 385), the Walt Disney Family Museum (Buildings 104, 108, and 122), the Bay School of San Francisco (Building 35), and the Presidio Child

[17] *See CEQ's Forty Questions No. 3.*

[18] *See pages 62-69 of the PTMP for a complete description of the PTMP Visitor and Community Center.*

3 COMPARISON OF ALTERNATIVES

	Alternative 1: PTMP Visitor and Community Center	*Alternative 2: Main Post Update*	*Alternative 3: History Center*	*Alternative 4: Status Quo*
EXISTING TOTAL BUILDING AREA (sf)	1,148,000	1,148,000	1,148,000	1,148,000
MAXIMUM BUILDING AREA (sf)	1,214,500	1,201,000	1,161,000	1,140,000
PROPOSED BUILDING USES (sf)				
Industrial/Warehouse/ Infrastructure	42,000	67,000	42,000	42,000
Office	436,000	391,000	488,000	510,000
Retail	77,000	59,000	42,000	42,000
Lodging[1]	43,000	110,000	49,000	16,000
Conference	25,000	25,000	25,000	25,000
Recreational	34,000	21,000	21,000	34,000
Cultural/Educational	324,000	361,000	327,000	276,000
Residential	234,000	167,000	167,000	195,000
MAXIMUM DEMOLITION (sf)	44,000	94,000	64,000	34,000
MAXIMUM NEW CONSTRUCTION (sf)	110,000	146,500	77,000	26,000
PROPOSED PUBLIC USES	Visitor Center in Building 50 and Heritage Center in Building 2	Heritage Center in Building 50	Visitor Center in Building 50	Visitor Center in Building 50
	Bowling Center in Building 93	Public uses in Building 93 at site south of the Main Parade	History Center at site south of the Main Parade	Bowling Center in Building 93
	Presidio Theatre and addition (Building 99)	Presidio Theatre and addition	Presidio Theatre with no addition	Presidio Theatre leased out for the highest and best use or mothballed

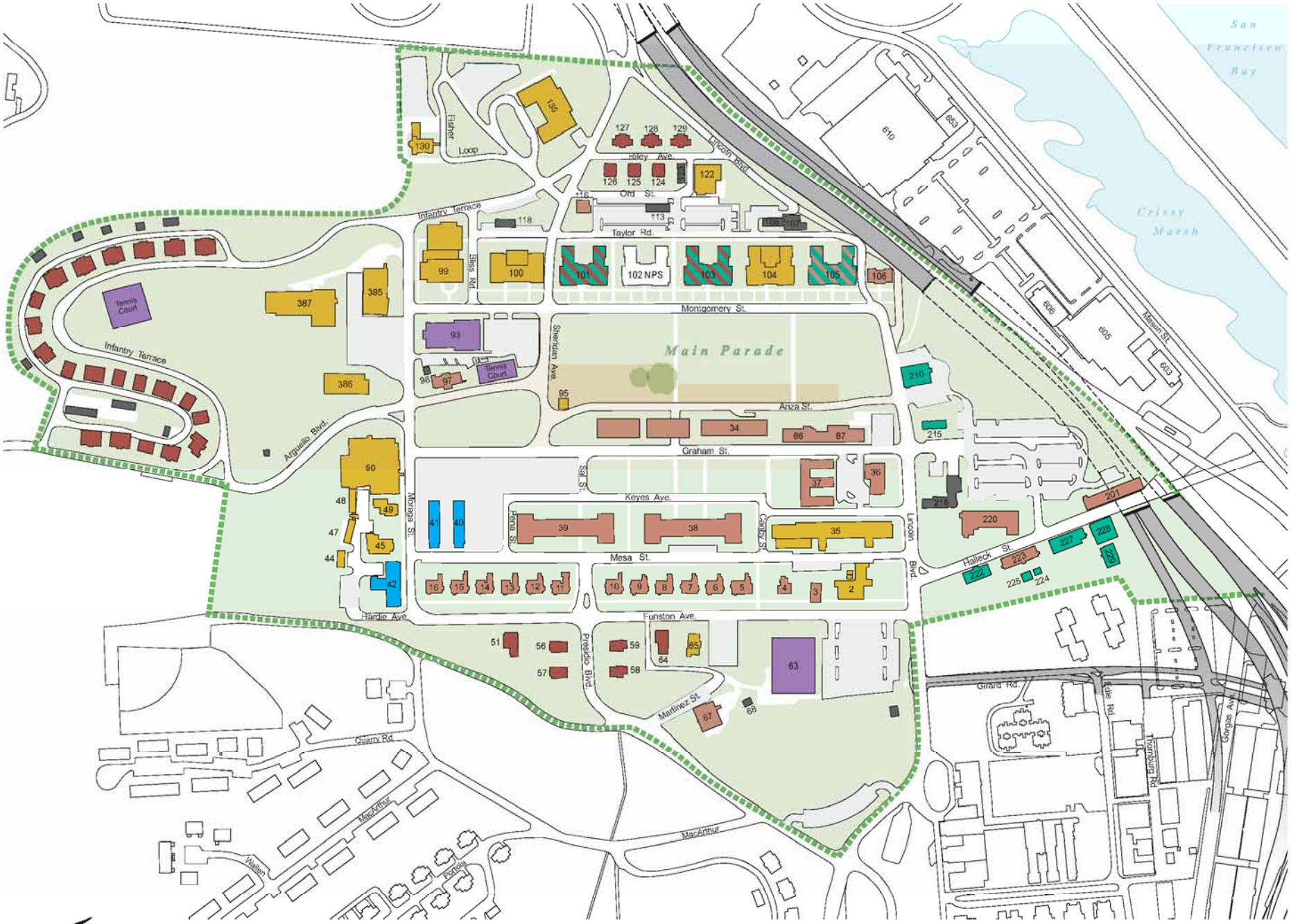
	Alternative 1: PTMP Visitor and Community Center	*Alternative 2: Main Post Update*	*Alternative 3: History Center*	*Alternative 4: Status Quo*
	Archaeology Center at Buildings 44, 47, 48 (with addition), and 49	Archaeology Center at Buildings 44, 47, 48 (with addition), and 49	Archaeology Center at Buildings 44, 47, 48, and 49 without addition	Archaeology Center buildings leased out for the highest and best use or mothballed
	Excavation and commemoration of El Presidio with Buildings 40 and 41 and parking	Excavation and commemoration of El Presidio without Buildings 40 and 41 and limited parking	Excavation and commemoration of El Presidio without Buildings 40 and 41 and no parking	Limited excavation and commemoration of El Presidio and parking
	Lodging in Pershing Hall (Building 42) and dormitory rooms for visitors in Buildings 40 and 41	Lodging in Pershing Hall and at Building 34 site	Lodging in Pershing Hall and B&Bs in upper Funston Avenue Officers' Quarters (Buildings 11-16)	Residences in Pershing Hall and dormitory rooms for visitors in Buildings 40 and 41
	Presidio Chapel and addition	Presidio Chapel and addition	Presidio Chapel with no addition	Presidio Chapel with no addition
PARKING SPACES[2]	1,817	1,910	1,892	1,852
GUEST ROOMS	22	130	58	None
RECREATIONAL FACILITIES	Infantry Terrace tennis courts	Infantry Terrace tennis courts	Infantry Terrace tennis courts	Infantry Terrace tennis courts
	Main Post tennis court	Main Post tennis court	YMCA Fitness Center	Main Post tennis court
	Bowling Center	YMCA Fitness Center		Bowling Center
	YMCA Fitness Center	Athletic field		YMCA Fitness Center

[1] *Square footage calculations for lodging and conference were previously combined into one category. They have been broken up into two categories here to provide additional specificity.*

[2] *Excluding Infantry Terrace residential neighborhood.*

sf = square feet

TBD = to be determined



Source: Presidio Trust 2010

Development Center (Building 387). Existing meeting facilities in the Golden Gate Club (Building 135) would be retained. To support the Presidio's visitors and its tenant community, approximately 77,000 square feet of food and retail services would be provided, including a bank, post office, cafes, transit center, and restrooms. Additional community services would be located primarily along Halleck Street. More information on proposed public uses of note is provided below.

Visitor Center (Building 50)

A Visitor Center would provide information on Presidio history and points of interest in the park. In addition to rotating exhibits, the Visitor Center would house a bookstore.

Heritage Center (Building 2)

While not specifically identified in the PTMP, a small (approximately 13,500-square-foot) Heritage Center at the former Presidio Army Museum (Building 2) would provide visitors to the Presidio with orientation services, including opportunities to view exhibits, films, audiovisuals, and other media that describe the Presidio's resources and available activities. Important historical features existing at the Presidio would be interpreted for the public.

Archaeology Center

The Presidio Archaeology Lab is currently housed in Building 230 and will be displaced by the reconstruction of Doyle Drive. An expanded facility, the Presidio Archaeology Center (Archaeology Center), would be relocated to Buildings 44, 47, and 48 (three historic garages), Building 49 (a small historic residence), and the open space between the buildings. The Archaeology Center would include a lab and curation facilities. A small (500-square foot) addition would link two of the garages (Buildings 47 and 48) to create an accessible, climate-controlled lobby between the conservation lab and the curatorial storage facility. All archaeological work at the Presidio would be directed from the Archaeology Center and would provide the source material for youth-focused education as well as for adult volunteer programs. The programs would focus on the ongoing excavation and interpretation of the Spanish colonial El Presidio site.

Lodging

Pershing Hall (Building 42) would be rehabilitated to provide park visitors the experience of staying overnight in an historic building. The existing floor plan would be retained, requiring minimal changes to the building. The facility would include 22 rooms, a lobby, docent/meeting room space, kitchen and dining room, disabled access and two accessible units, and exterior patio on the southeast corner. The non-historic fire escape on the front of the building would be removed due to changes to the building interior that would provide a second means of egress. Buildings 40 and 41 would be used as dormitory-type accommodations for visiting students and others.

Presidio Theatre and Addition

The Presidio Theatre (Building 99) would be reused for its original purpose as a venue for performing arts and/or film. The historic building would be rehabilitated as a single auditorium, retaining its historic orientation to Moraga Avenue. A new addition of up to 18,000 square feet on the west side of the building would include two small theaters, new accessible restrooms, an office, and a lobby. The addition would be separated from the historic building by a transparent connector, and no

part of the new addition would extend higher than the eave of the existing structure.

Presidio Chapel and Addition

As an interfaith center and venue for ceremonies and commemorations, the historic Presidio Chapel (Building 130) would remain open as a public resource for special events and community use. A 4,000-square-foot addition (maximum) would be built on the west side of the building to provide new exhibition gallery and meeting space, accessible public restrooms, and an elevator to improve circulation between the addition, sanctuary, and basement. The addition's height would be limited to the sills of the west elevation windows, and its orientation would be perpendicular to the west wall of the sanctuary, allowing the majority of the west wall to be visible.

BUILDING CONSTRUCTION AND DEMOLITION

Building area in the district would increase from 1.148 million square feet (existing) to 1.215 million square feet. New construction would include a 50,000-square-foot office between the Old Parade and Main Parade south of Building 34, and 24,000 square feet of construction that has occurred since the PTMP was implemented in 2002. Demolition would include Building 211, buildings demolished since the PTMP was implemented (2,263 square feet), and buildings to be demolished for replacement of Doyle Drive[19] (32,259 square feet). Figure 2 illustrates building construction and demolition under Alternative 1.

Office (South of Building 34 Site)

The 50,000-square-foot office building between the Main Parade and Old Parade would align with Buildings 86 and 87. The building would be broken into two volumes of 120 feet in length, which is the same length as both Buildings 86 and 87. The southernmost building would be two stories tall, and the northernmost building would be three stories tall, with a maximum height of 45 feet (comparable in height to Buildings 35, 38, and 39.

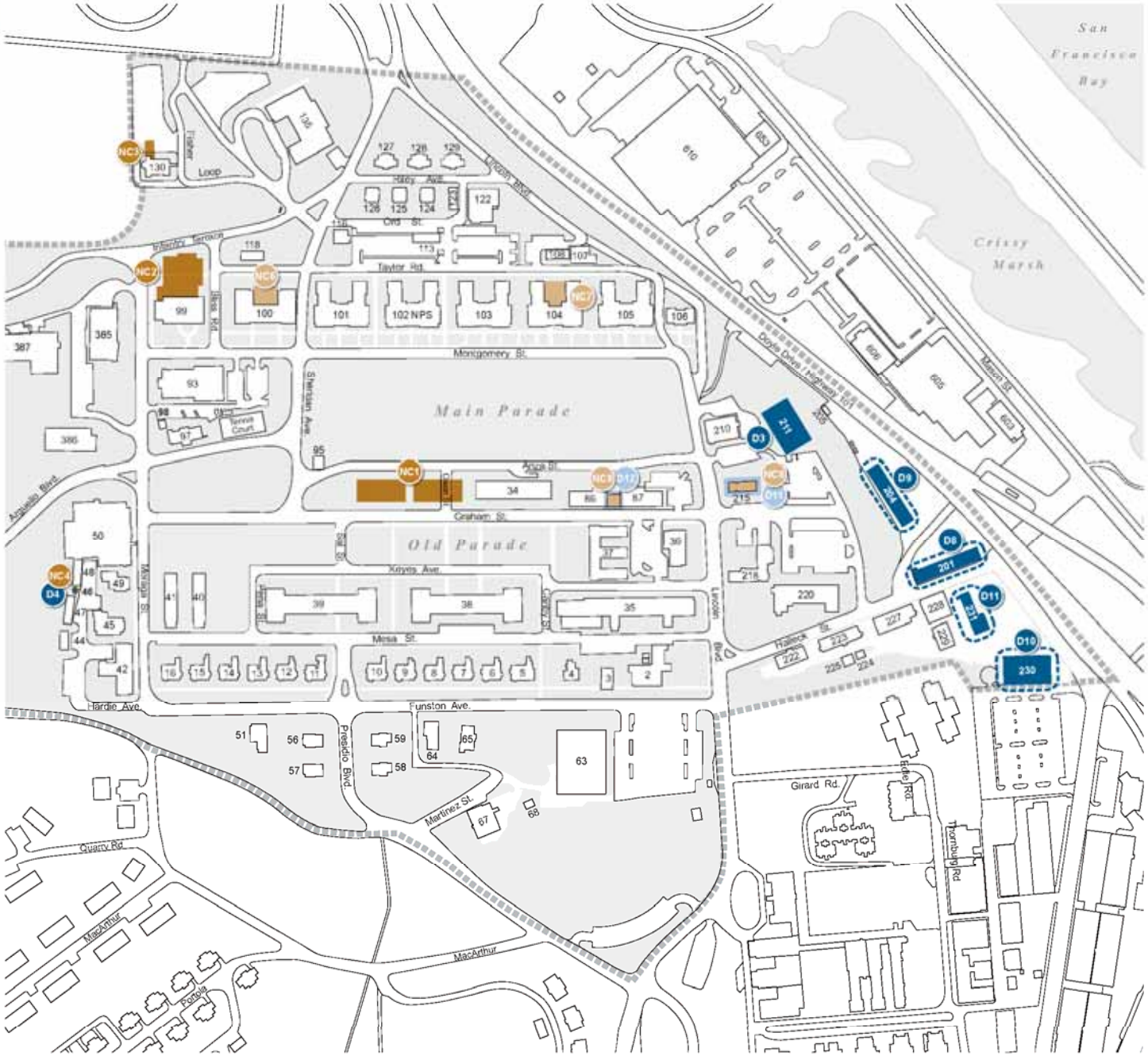
[19] *Doyle Drive is a critical section of U.S. Highway 101 that connects San Francisco to the Golden Gate Bridge along the Presidio's*

(continued)

northern waterfront. Originally constructed in 1936, the roadway is nearing the end of its useful life. The Federal Highway Administration, the California Department of Transportation, and the San Francisco County Transportation Authority are improving the roadway's seismic, structural, and traffic safety while better incorporating the roadway into the setting of the Presidio as a national park. The project will replace Doyle Drive with a parkway placed in cut-and-cover tunnels at two critical points to reopen Presidio vistas and reconnect the waterfront to the Main Post and the rest of the Presidio. The final environmental impact statement/report (EIS/R) was circulated in September 2008 (San Francisco County Transportation Authority 2008). Construction began in the fall of 2009.

Proposed New Construction (NC)	
NC1 Offices	50,000 SF
NC2 Presidio Theatre	18,000 SF
NC3 Presidio Chapel	4,000 SF
NC4 Heritage Center / Arch Lab	500 SF
Incidental New Construciton	8,000 SF
Total	**80,500 SF**
New Construction Since PTMP	
NC5 Int'l Center to End Violence	3,000 SF
NC7 Disney Family Museum	18,000 SF
NC8 Transit Center	2,000 SF
NC9 Buildings 86 / 87 Infill	1,000 SF
Total	**24,000 SF**
TOTAL	**104,500 SF**

Proposed Demolitions (D)	
D3 Building 211	9,294 SF
D4 Building 46	50 SF
Total	**9,344 SF**
Buildings to be Demolished for Doyle Drive	
D8 Building 201 (half)	6,164 SF
D9 Building 204	12,193 SF
D10 Building 230	10,060 SF
D11 Building 231	3,842 SF
Total	**32,259 SF**
Buildings Demolished Since PTMP	
D11 Building 215	1,848 SF
D12 Building 85	415 SF
Total	**2,263 SF**
TOTAL	**43,866 SF**



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Source: Presidio Trust 2010

OPEN SPACE

The Main Parade would be rehabilitated to establish the parade ground as the Presidio's central gathering place, to improve both its appearance and accessibility, and to enhance its connection to the park as a whole.[20]

Other historically significant open spaces and designed landscape features such as the Old Parade, Pershing Square, the Alameda entrance, the Presidio Chapel landscape, and streetscapes (Infantry Terrace, Halleck Street, Montgomery Street, and Funston Avenue) would be enhanced. As described in the final Doyle Drive Environmental Impact Statement/Report (EIS/R), the reconstruction of Doyle Drive would add 10 acres of open space to the north end of the Main Post. This additional open space would contain lawns and other landscaping, trails, and passive recreational opportunities. Pedestrian and visual connections to Crissy Field would link the Main Post to the waterfront. Paths and walks on the new slope would reconnect the Main Post to Crissy Field. Surface drainage and native riparian habitat would be restored in Tennessee Hollow on the eastern edge of the district.

El Presidio

The historic Spanish and Mexican quadrangles of El Presidio would be delineated to commemorate the archaeological site. Buildings 40 and 41 and existing parking would remain.

RECREATIONAL FACILITIES

Existing facilities, including the Presidio Community YMCA Fitness Center (Building 63), Presidio Bowling Center (Building 93), and Infantry Terrace and Main Post tennis courts would be retained for active recreational uses. A network of pedestrian and multi-use trails through the Main Post would be constructed as part of continuous corridors. The Anza Esplanade, stretching from the Officers' Club to Crissy Field, would create a new pedestrian corridor linking key Presidio visitor destinations in the Main Post and Crissy Field districts and several major Presidio trails (Golden Gate Promenade/Bay Trail, Presidio Promenade, and Ecology Trail). The Presidio Promenade would generally follow Lincoln Boulevard to connect the Main Post to the Golden Gate Bridge/Coastal Trail to the west and the Lombard Gate and the Letterman district on the park's eastern edge.

CIRCULATION AND PARKING

Lincoln Boulevard and Arguello Boulevard would be maintained as the primary entrance roads to the district. Several measures would be taken to simplify the roadway network, clarify vehicular circulation, and improve pedestrian circulation at the Main Post. Anza Street would be converted into the pedestrian Anza Esplanade. Sheridan Avenue between

[20] *The Trust's Main Parade project will rehabilitate the existing seven-acre surface parking lot into a major new park landscape to reinforce the Main Post as the "heart of the Presidio." The project will reveal and "green" the parade ground to create a new venue for public uses, including performances, special events, and everyday activities. The project includes conversion of historic Anza Street into the Anza Esplanade, which will serve as a pedestrian walkway connecting landscaped terraces that incorporate new venues for interpretive features that tell the story of the Presidio's history, and special events. The esplanade will maintain the historic width and alignment of Anza Street and use historically compatible paving materials so that it still "reads" as a roadway. The environmental assessment for the project was completed in November 2007.*

Montgomery Street and Graham Street and Arguello Boulevard between Sheridan Avenue and Moraga Street would be closed to vehicles as well and used as pedestrian circulation routes.

The large, central parking lot on the Main Parade would be replaced with smaller, peripheral parking lots to better serve the district. Existing street parking would be preserved and new street parking would be added. Parking for an estimated 1,800 cars would be maintained in the new lots (excluding Infantry Terrace). The number of district parking spaces would be reduced from current levels by approximately 200 spaces. Parking on El Presidio would remain. With few exceptions, tenants would share available parking and would not receive "assigned" parking spaces. Each tenant's parking would be located within a reasonable walking distance (typically 1,500 feet or a five-minute walk). Sufficient parking would be provided for tenants and visitors, but the parking supply would be regulated with fees and time restrictions. Proposed circulation and parking are shown in Figure 3.

2.2 Alternative 2: Main Post Update (Mitigated Preferred Alternative)

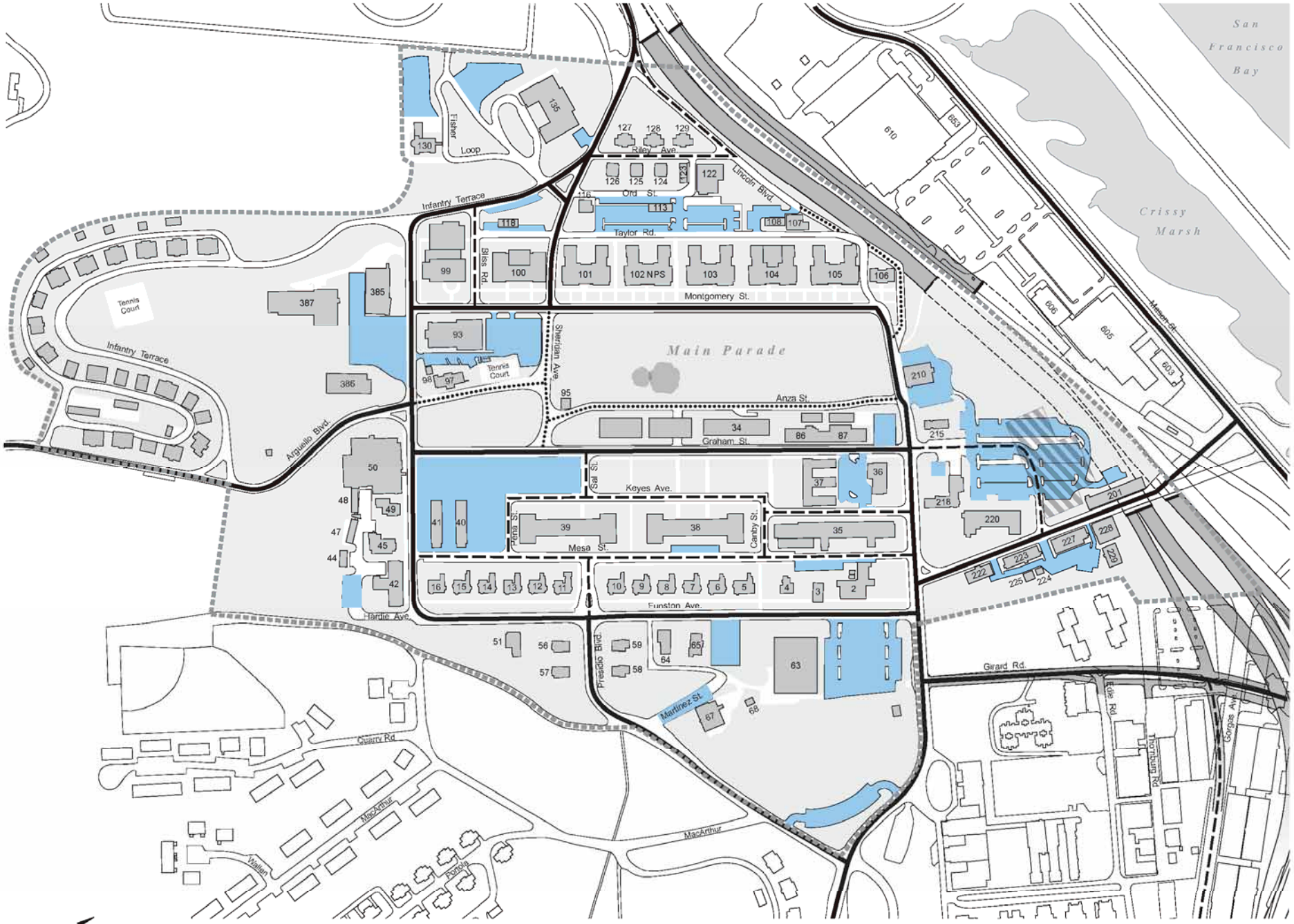
The Trust has identified the mitigated preferred alternative as the alternative that best fulfills the vision of the Main Post as the heart of a great national park site, which the Trust articulated in the PTMP. In developing the mitigated preferred alternative, the Trust has taken into account public and agency comments received on the draft SEIS that was issued in June 2008, and the supplement to the draft SEIS that was circulated in March 2009, and has incorporated "modifications to the undertaking" brought about through the consultation process required by Section 106 of the NHPA.

The mitigated preferred alternative carries the Trust's vision forward with greater specificity but makes some changes to both the amount of building demolition and new construction, with the net effect of reducing the amount of built space in the Main Post from that called for in the PTMP. It also changes the distribution of land uses, with more public uses and less office and residential uses.

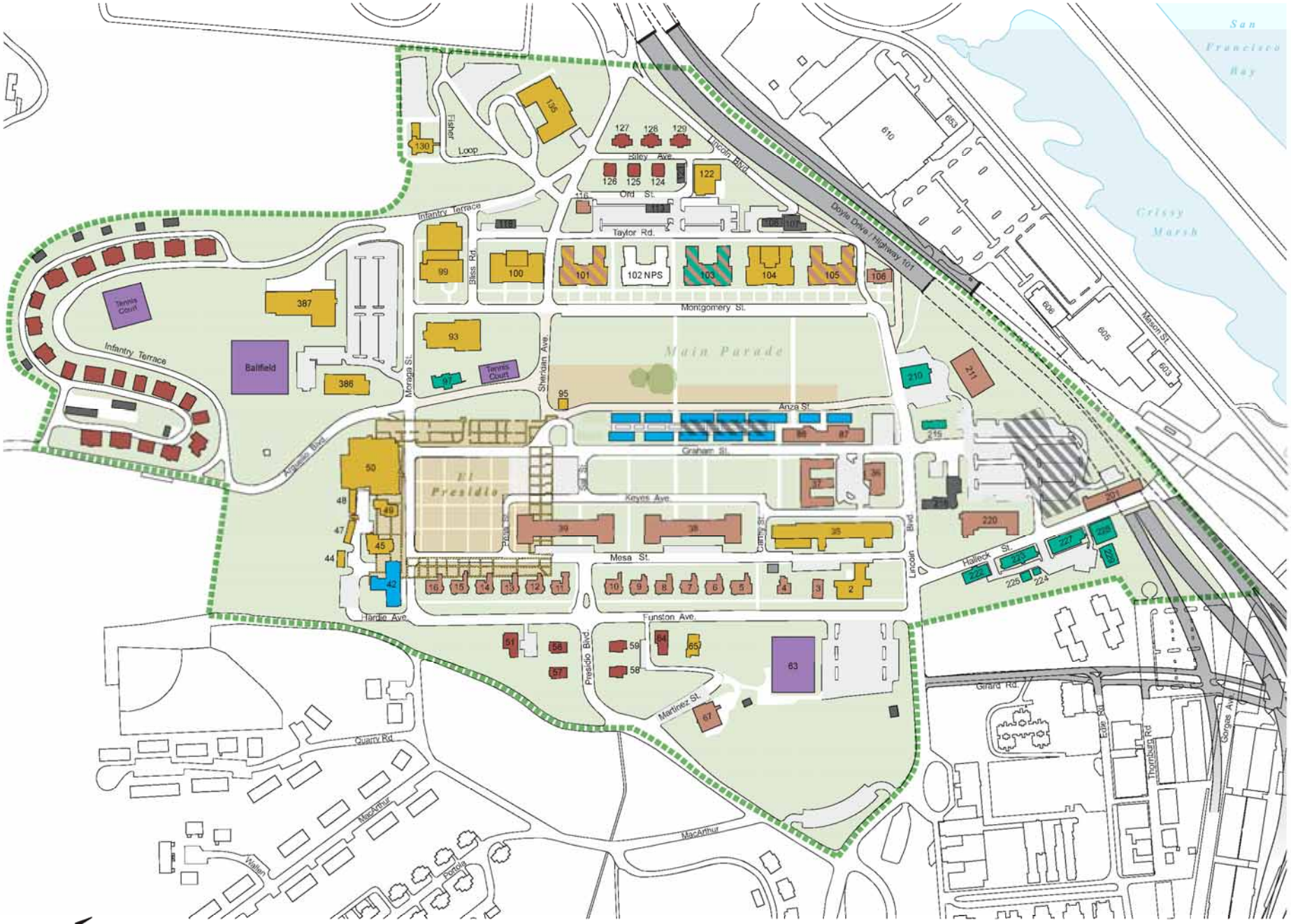
While the Trust believes the mitigated preferred alternative is the one that would best fulfill its statutory mission and responsibilities, the agency has not made a final decision nor committed to approve or execute proposals described in the alternative. The alternative that is ultimately selected for implementation may combine various elements of all the alternatives, or may fall within the range they represent. The final decision will be presented in a record of decision (ROD), which is the culmination of the NEPA process. Until the NEPA process is concluded, no final approvals may be granted and no development agreement or lease may be signed for any of the actions under review in the final SEIS.

CONCEPT

Under this alternative, proposals and improvements would be undertaken to achieve the Trust's vision of the Main Post as the heart of the Presidio (Figure 4). The Main Post would become a welcoming place that serves the community, with the Presidio's history visible and interpreted, and with 21st century green practices used to conserve energy and resources and to rehabilitate its buildings. Archeological excavation of El Presidio would unlock the history of the Presidio's founding; landscape treatment would reflect the structure of the buried site and outline the open space of



Source: Presidio Trust 2010


Main Parade
El Presidio
Ballfield
Tennis Court
Infantry Terrace
Fisher Loop
Biley Ave.
Old St.
Taylor Rd.
Bliss Rd.
Montgomery St.
Sheridan Ave.
Moraga St.
Anza St.
Graham St.
Keyes Ave.
Mesa St.
Funston Ave.
Hardie Ave.
Presidio Blvd.
Lincoln Blvd.
Doyle Drive / Highway 101
Mason St.
Hallerck St.
Girard Rd.
Edie Rd.
Thornburg Rd.
Gorgas Ave.
Martinez St.
MacArthur
Quarry Rd.
Wallen
Pontola
San Francisco Bay
Crissy Marsh
102 NPS
0
400 FT
Source: Presidio Trust 2010
Main Post Planning District
Paved Pedestrian Area
Retail
Office
Residential
Recreation
Lodging
Infrastructure
Cultural / Educational
NPS
Surface Parking
Below-Grade Parking

the original *plaza de armas*. A Heritage Center in the nearby Officers' Club would offer opportunities to explore the history of the Presidio and the American West and would house the education facilities of the Archaeology Center. The new Presidio Lodge would welcome visitors and animate the Main Parade.

PUBLIC USES

Approximately 48 percent (576,000 square feet) of the building space in the district, including the first floors of the Montgomery Street Barracks (Buildings 100, 101, 103, 104, and 105)[21], would be devoted to public uses. Cultural and educational facilities and programs would include the Presidio Theatre (Building 99) and addition, the Presidio Chapel (Building 130) and addition, a Heritage Center in the Officers' Club (Building 50), the Presidio Archaeology Center (Buildings 44, 47, 48, and 49), the site south of the Main Parade (Building 93), the Walt Disney Family Museum (Buildings 104, 108, and 122) and the Presidio Child Development Center (Building 387). Existing meeting and special event facilities would be retained in the Golden Gate Club (Building 135) and in a portion of the Officers' Club. Approximately 59,000 square feet of food and retail services would be provided, including a bank, post office, cafes, transit center, and restrooms. Additional community services would be located along Halleck Street. A new park lodge (Presidio Lodge) between the Old and Main Parade grounds would provide overnight accommodations (up to 110 rooms) for guests as well as amenities for all visitors. More information on proposed public uses is provided below.

Lodge (On and South of Building 34 Site)

The Presidio Lodge would be located on the site occupied by Building 34, between the Old Parade and the Main Parade, bounded by Graham Street on the east and the proposed Anza Esplanade on the west. Building 34 would be demolished and replaced with no more than 70,000 square feet of construction. The building footprint would approximate the pattern of the historic barracks that once occupied the site between Graham Street and Anza Street. The lodge would have a maximum height of 30 feet above existing grade, and may have one basement level below grade at the Building 34 site for underground parking. The southern edge of new construction would be set back at least 150 feet from Building 95. Public spaces on the ground floor such as a lobby, bar, restaurant, and outdoor terraces would be open to the public. Recently rehabilitated Buildings 86 and 87 may be converted from offices and incorporated into the lodge. Currently vacant Building 42 (Pershing Hall) would also be rehabilitated as lodging.

Heritage Center (Building 50)

A Heritage Center located in the Officers' Club (Building 50) would be a destination for visitors to learn about the history of the Presidio and the American West. Exhibition space would display permanent and changing exhibits, and a small theater in a non-historic portion of the building would feature a film about the Presidio's history. Visitors would be encouraged to explore the entire Main Post as a "museum without

[21] *Building 102 is under the jurisdiction of the National Park Service (NPS). The NPS manages the 323 coastal acres (Area A) of the Presidio.*

walls."[22] A variety of interpretive media would be developed to engage diverse audiences. New meeting spaces would allow the Officers' Club to continue to be available for a variety of public uses. The building would be brought into compliance with accessibility and life-safety codes, as well as current energy conservation standards.[23] Accessibility upgrades would improve functionality and make the building more welcoming to the public. Selective demolition of non-historic elements would reveal more of the historic building. Confusing circulation patterns and obsolete non-historic features would be eliminated.

Site South of the Main Parade

The Presidio Bowling Center (Building 93) and the former Red Cross building (Building 97) would continue to be used for public purposes. The tennis court adjacent to the Presidio Bowling Center would be retained for active recreational use. Building 98 would be removed.

Other Public Uses

The Presidio Archaeology Center, Presidio Theatre and addition, Presidio Chapel and addition, and Pershing Hall would be the same as under Alternative 1.

[22] *A description of the Heritage Center is provided in the draft Presidio Heritage Program: A Museum without Walls (Frankel 2008) available in the Presidio Trust Library.*

[23] *Green building practices would achieve a LEED Silver rating or higher.*

BUILDING CONSTRUCTION AND DEMOLITION

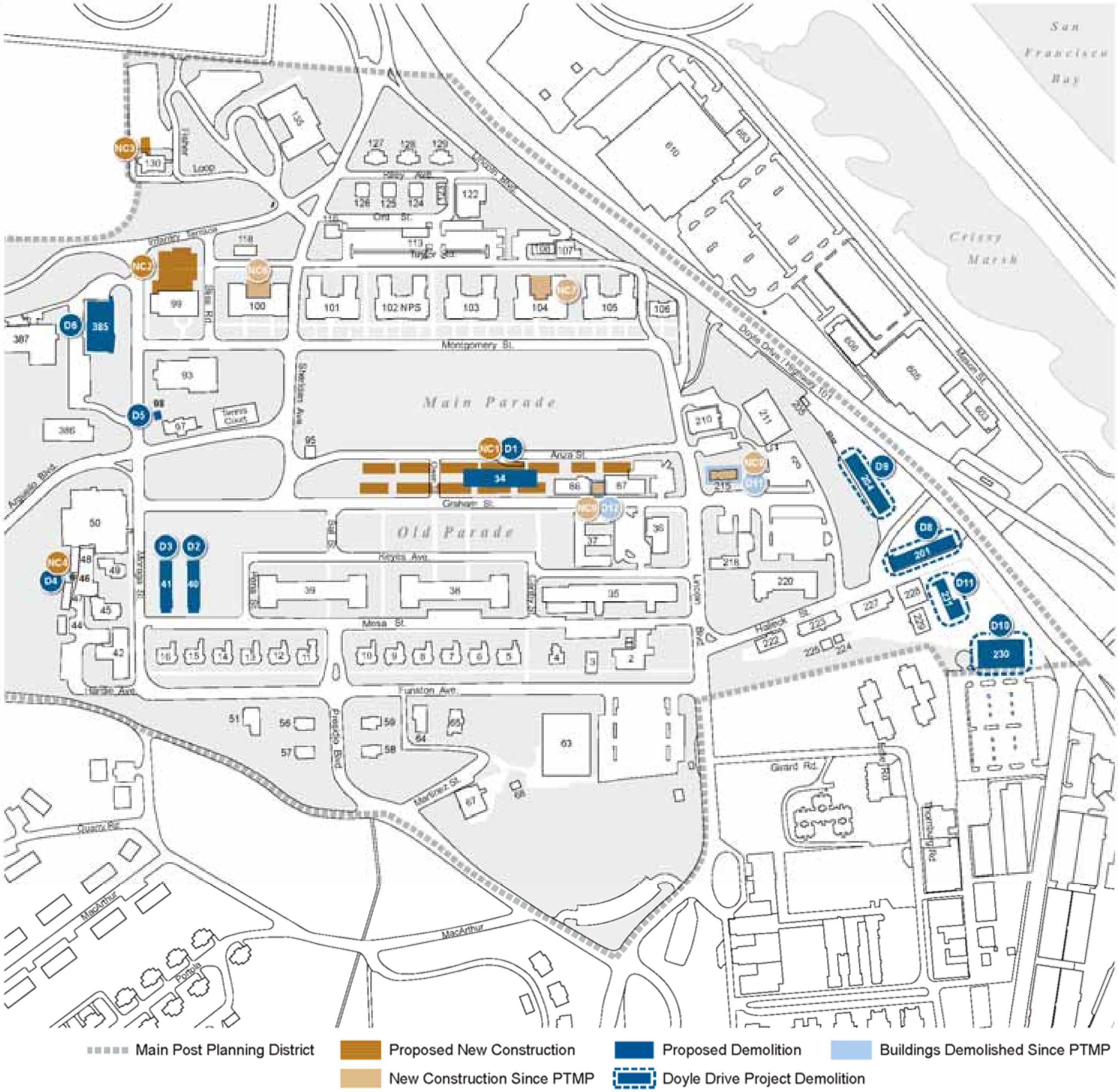
Under this alternative, building area in the district would decrease from 1.215 million square feet (under the PTMP taking into account building demolition required for the Doyle Drive project) to 1.201 million square feet. New construction would include the 70,000-square-foot Presidio Lodge, a 500-square-foot addition for the archeology lab and curation facilities, building additions to the Presidio Theatre (18,000 square feet) and Presidio Chapel (4,000 square feet), and 30,000 square feet of incidental new infill construction or new construction to support the rehabilitation of historic buildings. Up to 94,000 square feet of buildings would be demolished, including Building 34 (31,824 square feet) and Building 385 (10,580 square feet), buildings demolished since the PTMP was implemented (2,263 square feet), and buildings to be demolished for replacement of Doyle Drive (32,259 square feet). Buildings 40 (8,216 square feet) and 41 (8,298 square feet) would be removed or relocated pending further consultation under the NHPA Section 106. Figure 5 illustrates building construction and demolition figures under Alternative 2.

OPEN SPACE

As analyzed in the Main Parade environmental assessment, the historic Main Parade will be rehabilitated as a public open space and parking will be located around the periphery, further increasing the district's open space. Other historically significant open spaces and designed landscape features would be retained and enhanced. The reconstruction of Doyle Drive would create additional open space along the bluff at the Main Post's northern edge. Restoration of Tennessee Hollow on the district's

Proposed New Construction (NC)		
NC1	Lodge	70,000 SF
NC2	Presidio Theatre	18,000 SF
NC3	Presidio Chapel	4,000 SF
NC4	Heritage Center / Arch Lab	500 SF
	Incidental New Construction	30,000 SF
	Total	**122,500 SF**
New Construction Since PTMP		
NC6	Int'l Center to End Violence	3,000 SF
NC7	Disney Family Museum	18,000 SF
NC8	Transit Center	2,000 SF
NC9	Buildings 86 / 87 Infill	1,000 SF
	Total	**24,000 SF**
	TOTAL	**146,500 SF**

Proposed Demolitions (D)		
D1	Building 34	31,824 SF
D2	Building 40	8,216 SF
D3	Building 41	8,298 SF
D4	Building 46	50 SF
D5	Building 98	449 SF
D6	Building 385	10,580 SF
	Total	**59,417 SF**
Buildings to be Demolished for Doyle Drive		
D8	Building 201 (half)	6,164 SF
D9	Building 204	12,193 SF
D10	Building 230	10,060 SF
D11	Building 231	3,842 SF
	Total	**32,259 SF**
Buildings Demolished Since PTMP		
D11	Building 215	1,848 SF
D12	Building 85	415 SF
	Total	**2,263 SF**
	TOTAL	**93,939 SF**



Source: Presidio Trust 2010

eastern edge would expand riparian habitats and would reestablish a connection to Crissy Marsh.

El Presidio

The site of El Presidio would be delineated and commemorated. Buildings 40 and 41 would be removed or relocated to re-establish the spatial character of El Presidio's *plaza de armas*, and parking would be reduced from 252 to 75 daily spaces. Removable bollards would allow for periodic closure of Graham Street and Moraga Avenue to redirect traffic around the site during excavations and programs.

RECREATIONAL FACILITIES

Under this alternative, the Infantry Terrace tennis courts, the tennis court adjacent to the Bowling Center, and the YMCA Fitness Center would remain. A new athletic field would be constructed on the Building 386 site north of Infantry Terrace. The Presidio Bowling Center would be relocated out of Building 93 and would be removed from the district. A network of pedestrian and multi-use trails would be constructed through the Main Post. The Anza Esplanade, stretching from the Officers' Club to Crissy Field, would create a new pedestrian corridor linking key Presidio visitor destinations in the Main Post and Crissy Field districts and provide a connection to several major Presidio trails (Golden Gate Promenade/Bay Trail, Presidio Promenade, and Ecology Trail). The Presidio Promenade would generally follow Lincoln Boulevard to connect the Main Post to the Golden Gate Bridge/Coastal Trail to the west and the Lombard Gate and the Letterman district on the park's eastern edge.

CIRCULATION AND PARKING

Lincoln Boulevard and Arguello Boulevard would be maintained as the primary entrance roads to the district. Several measures would be taken to simplify the roadway network, clarify vehicular circulation, and improve pedestrian circulation at the Main Post. Anza Street would be converted into the pedestrian Anza Esplanade, as described in the Main Parade environmental assessment. Sheridan Avenue between Montgomery Street and Graham Street, Lincoln Boulevard between Montgomery Street and Building 105, and Arguello Boulevard between Sheridan Avenue and Moraga Avenue would be used as pedestrian circulation routes. The width, alignment, and paving materials for roads converted to pedestrian use would be historically compatible. Several roads through El Presidio, including Graham Street, Moraga Avenue, and Mesa Street, would be periodically closed to facilitate excavations and public programs.

In an effort to serve the Main Post district as a whole, parking would largely be located in perimeter lots around the Main Post. Underground parking may be constructed beneath the Presidio Lodge (50 spaces maximum) and in a garage under the reconstructed north bluff adjacent to Doyle Drive (300 spaces maximum), although the total number of underground spaces would be no more than 300 spaces. Existing street parking would be preserved and new street parking may be added. Parking for an estimated 1,900 cars (excluding Infantry Terrace) would be developed in an effort to balance supply with demand. Parking supply would be managed with fees and time restrictions to minimize demand and encourage the use of alternative means of transportation. The Trust would continue to monitor parking occupancy to evaluate supply and demand conditions over time. Additional PresidiGo shuttle service would

be needed to keep pace with demand as buildings are rehabilitated and occupied throughout the Main Post. The shuttle would link the Presidio with other local and regional transit systems. Proposed circulation and parking are shown in Figure 6.

2.3 Alternative 3: History Center

This alternative is derived from a proposal submitted by the Presidio Historical Association to build a 48,000-square-foot History Center at the Main Post.[24]

CONCEPT

A new History Center at the site south of the Main Parade would be the primary interpretive facility, serving as both "an anchor and a portal" to receive and orient visitors to the historic Main Post (Figure 7). Preference would be given to those uses that perpetuate the Presidio's military legacy and tradition, provide opportunities for joint resource preservation programs, and/or enrich educational and other program elements. Tenants would be selected over the long term based on their ability to support park programs and activities and retain the district's sense of community and the past.

PUBLIC USES

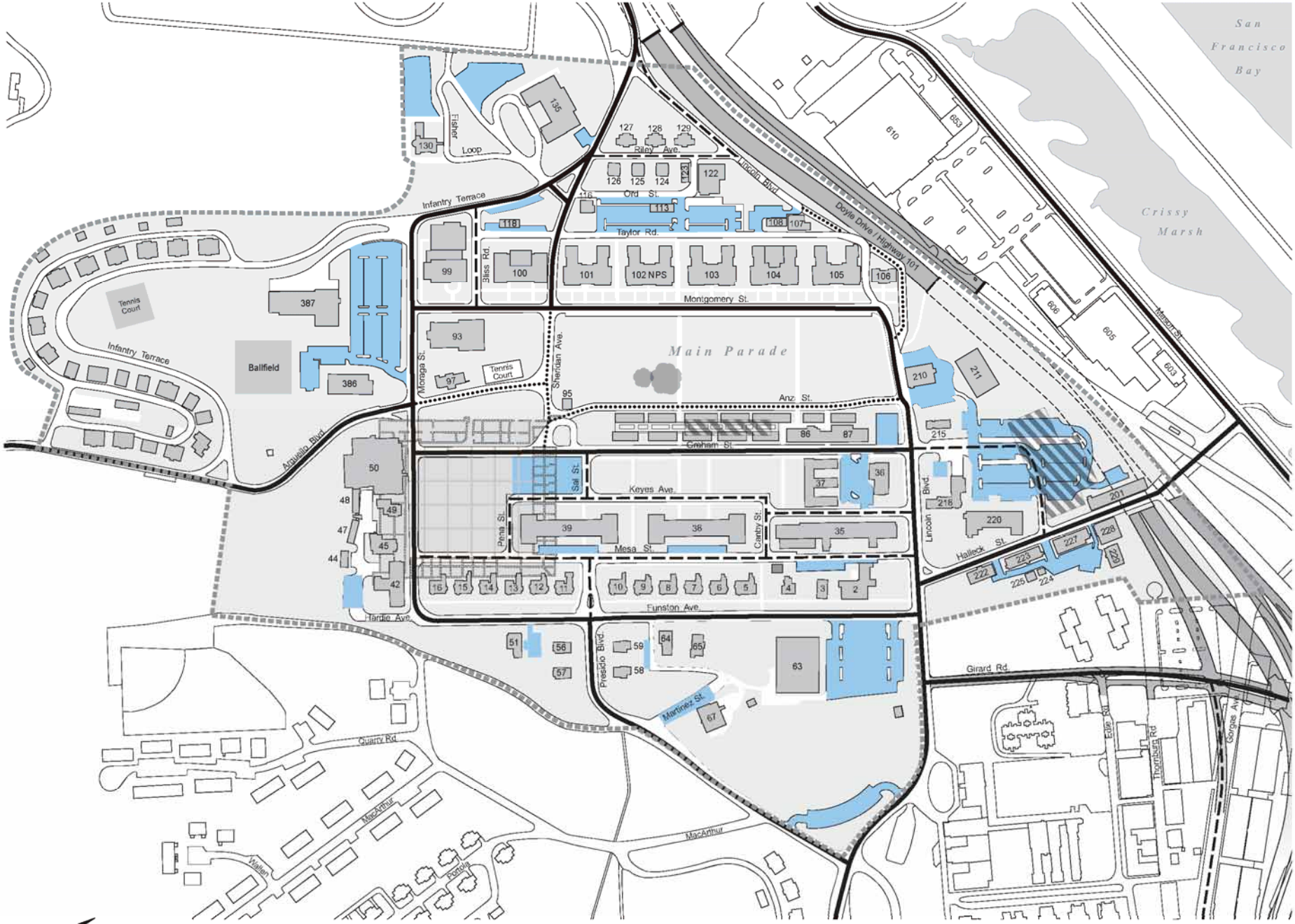
Approximately 40 percent (464,000 square feet) of the building space in the district would be devoted to visitor use to welcome the public. Cultural and educational facilities would be similar to those proposed under Alternative 1, except that limits on new construction would preclude the Presidio Theatre addition and a History Center adjacent to the southern end of the Main Parade (see below) would replace the Heritage Center in Building 2. In addition to a small hotel in Pershing Hall, B&B-style inns (up to 36 rooms) would be offered in the upper Funston Avenue Officers' Quarters (Buildings 11-16).

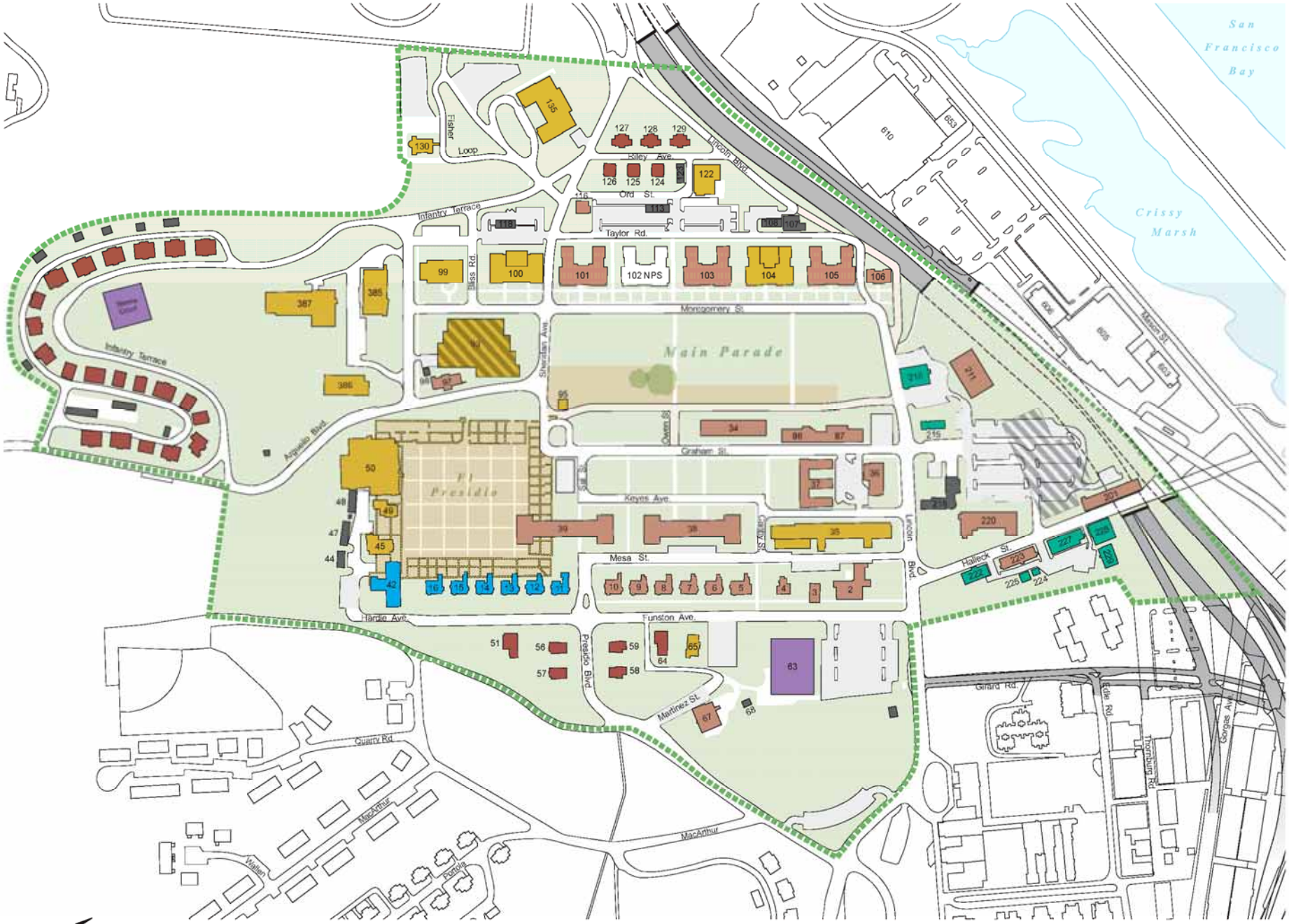
History Center (Site at the Head of the Main Parade)

A 48,000-square-foot History Center located at the southern end of the Main Parade would be the centerpiece of this alternative. The design of the museum would echo the surrounding historic structures, emphasize sustainable principles and energy conservation,[25] and allow for the construction of approximately 100 parking spaces below the building. Key features of the museum would include a lobby and orientation center, exhibit galleries organized around themes and using a variety of experience design technologies, a temporary exhibit gallery, classrooms, a central atrium for special events, and a retail store. The proposal did not identify a collection for the museum.

[24] *A complete description of the proposal is provided in the Proposal for a Cultural Institution at the Presidio Main Post, A History Center at the Golden Gate (Presidio Historical Association, no date) available for review in the Presidio Trust Library. The proposal remains unfunded to date.*

[25] *Green design features would include passive solar storage, a photovoltaic skin, sod roof, and use of recycled materials.*


San Francisco Bay
Crissy Marsh
Main Parade
Ballfield
Tennis Court
Infantry Terrace
Arguello Blvd.
Fisher Loop
Riley Ave.
Lincoln Blvd.
Doyle Drive / Highway 101
Old St.
Taylor Rd.
Montgomery St.
Moraga St.
Sheridan Ave.
Anza St.
Graham St.
Sal St.
Keyes Ave.
Penna St.
Mesa St.
Canby St.
Funston Ave.
Hardie Ave.
Presidio Blvd.
Martinez St.
Halleck St.
Girard Rd.
Mason St.
Quartermaster Rd.
MacArthur
Gorgas Ave.
Thornburg Rd.
Edie Rd.
Wallen
Porter
0
400 FT
Source: Presidio Trust 2010
Main Post Planning District
Primary Road
Secondary Road
Road to be Pedestrianized
Surface Parking
Below-Grade Parking


San Francisco Bay
Crissy Marsh
Main Parade
El Presidio
Lincoln Blvd.
Montgomery St.
Graham St.
Keyes Ave.
Mesa St.
Funston Ave.
Hardie Ave.
Martinez St.
Taylor Rd.
Ord St.
Riley Ave.
Infantry Terrace
Fisher Loop
Bliss Rd.
Sheridan Ave.
Quartermaster Ave.
Sumner St.
Halleck St.
Girard Rd.
Edie Rd.
Thornburg Rd.
Gorgas Ave.
Presidio Blvd.
MacArthur
Quarry Rd.
Arguello Blvd.
Moraga Ave.
Portola
Walker
102 NPS
0
400 FT
Source: Presidio Trust 2010
Main Post Planning District
Paved Pedestrian Area
Retail
Office
Residential
Recreation
Lodging
Infrastructure
Cultural / Educational
NPS
Surface Parking
Below-Grade Parking

BUILDING CONSTRUCTION AND DEMOLITION

Building area in the district would decrease from 1.215 million square feet to 1.161 million square feet. New construction (since 2002) would include the 48,000-square-foot History Center south of the Main Parade, and the 24,000 square feet of construction that has occurred since the PTMP was implemented. Demolition would include up to 64,000 square feet of buildings, including 12,800 square feet within the Presidio Bowling Center (Building 93), 32,259 square feet of buildings required to reconstruct Doyle Drive, and 2,263 square feet already demolished since the PTMP was implemented in 2002. Building construction and demolition are shown in Figure 8.

OPEN SPACE

Within the Main Post's public open space, military pageantry would commemorate traditions of the Presidio's military history. Open space features under this alternative would be similar to those under Alternative 1, except for commemoration of El Presidio; under Alternative 3, Buildings 40 and 41 would be removed, the archeological site would be closed to traffic, and parking would be eliminated.

RECREATIONAL FACILITIES

The Infantry Terrace tennis courts and the YMCA Fitness Center would be retained for use. The Presidio Bowling Center and adjacent tennis court would be demolished. Pedestrian and multi-use trails within the district would be improved.

CIRCULATION AND PARKING

Vehicular traffic on the portion of streets bordering El Presidio, including Moraga Avenue (east of Arguello), Graham Street (south of Sheridan), Mesa Street (south of Presidio), Keyes Avenue (south of Sal), and Pena Street would be eliminated to establish the archaeological site as a pedestrian zone. Within the surrounding area, Sheridan Avenue between Montgomery Street and Graham Street and Arguello Boulevard between Sheridan Avenue and Moraga Street would remain open to vehicles.

Similar to Alternative 1, parking on the Main Parade would be replaced with smaller, peripheral parking lots to better serve the district. Additionally, underground parking may be constructed in a garage under the reconstructed north bluff adjacent to Doyle Drive. Existing street parking would be preserved and new street parking would be added. Parking for an estimated 1,890 cars would be maintained in the new lots (excluding Infantry Terrace) to meet tenant and visitor needs. No parking would be made available within the site of El Presidio. Proposed circulation and parking are shown in Figure 9.

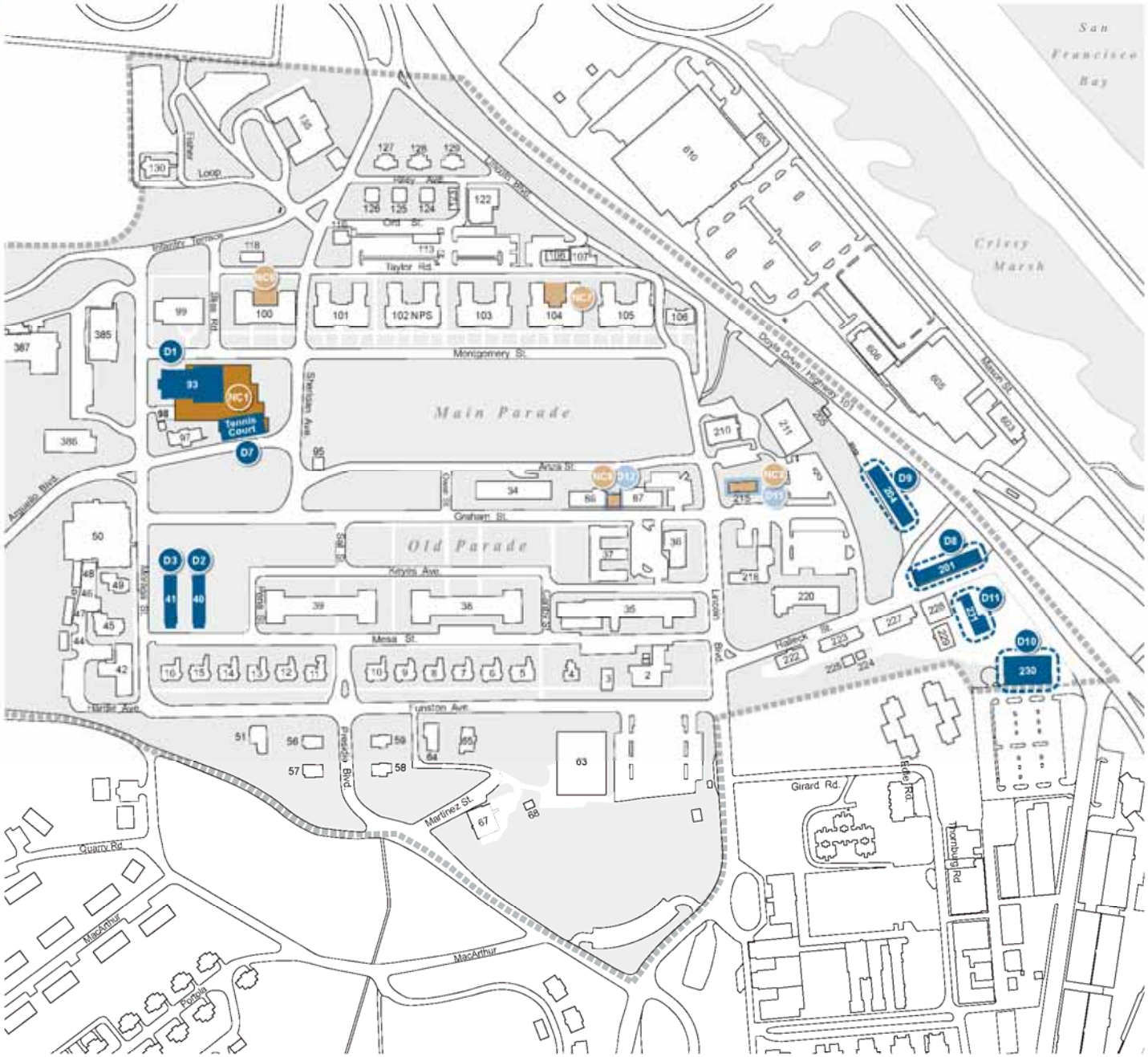
2.4 Alternative 4: Status Quo

This alternative was developed at the request of several commentors during scoping of the SEIS and represents a pragmatic management direction for the Main Post. Site improvements would be limited to those undertaken as part of other ongoing Trust plans, programs, or projects.[26]

[26] *Such as the Main Parade, Doyle Drive, Tennessee Hollow, and the Presidio Trails and Bikeways Master Plan.*

Proposed New Construction (NC)	
NC1 History Center	50,000 SF
Incidental New Construction	3,000 SF
Total	**53,000 SF**
New Construction Since PTMP	
NC6 Int'l Center to End Violence	3,000 SF
NC7 Disney Family Museum	18,000 SF
NC8 Transit Center	2,000 SF
NC9 Buildings 86 / 87 Infill	1,000 SF
Total	**24,000 SF**
TOTAL	**77,000 SF**

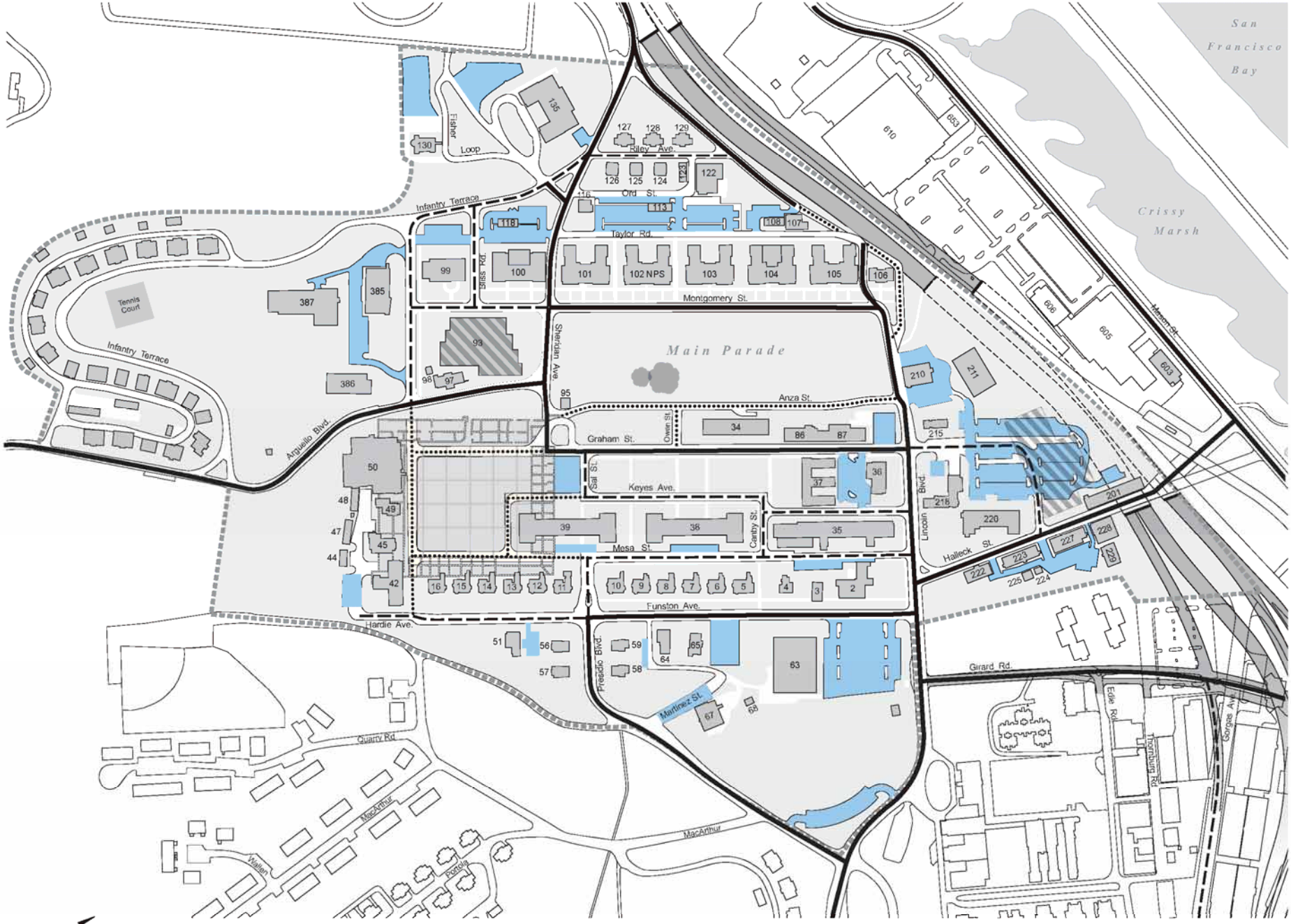
Proposed Demolitions (D)	
D1 Building 93	12,800 SF
D2 Building 40	8,216 SF
D3 Building 41	8,298 SF
D7 Tennis Court	N/A
Total	**29,314 SF**
Buildings to be Demolished for Doyle Drive	
D8 Building 201 (half)	6,164 SF
D9 Building 204	12,193 SF
D10 Building 230	10,060 SF
D11 Building 231	3,842 SF
Total	**32,259 SF**
Buildings Demolished Since PTMP	
D11 Building 215	1,848 SF
D12 Building 85	415 SF
Total	**2,263 SF**
TOTAL	**63,836SF**



Main Post Planning District
Proposed New Construction
New Construction Since PTMP
Proposed Demolition
Doyle Drive Project Demolition
Buildings Demolished Since PTMP

0 400 FT

Source: Presidio Trust 2010



Source: Presidio Trust 2010

To a large extent, the environmental characteristics of this alternative would be generally as described in the affected environment discussions in Section 3.

CONCEPT

Under this alternative, no significant park enhancements or physical change beyond that already permitted or underway would occur in the district, i.e., there would be no further building demolition or new construction and existing buildings and activities would remain (Figure 10). Buildings would be rehabilitated to meet essential code requirements, consistent with the Secretary of the Interior's Standards, and then leased out for the highest and best use (generally mixed-use office). Tenants that could help fund the preservation and enhancement of the Presidio's resources and meet the community service needs of the park's visitors, tenants, and residents would be sought. If tenants could not be identified after reasonable time and effort, the buildings would be deactivated for an extended period of time, protected from weather, stabilized, and secured from vandalism as funding permits through a process known as mothballing.

PUBLIC USES

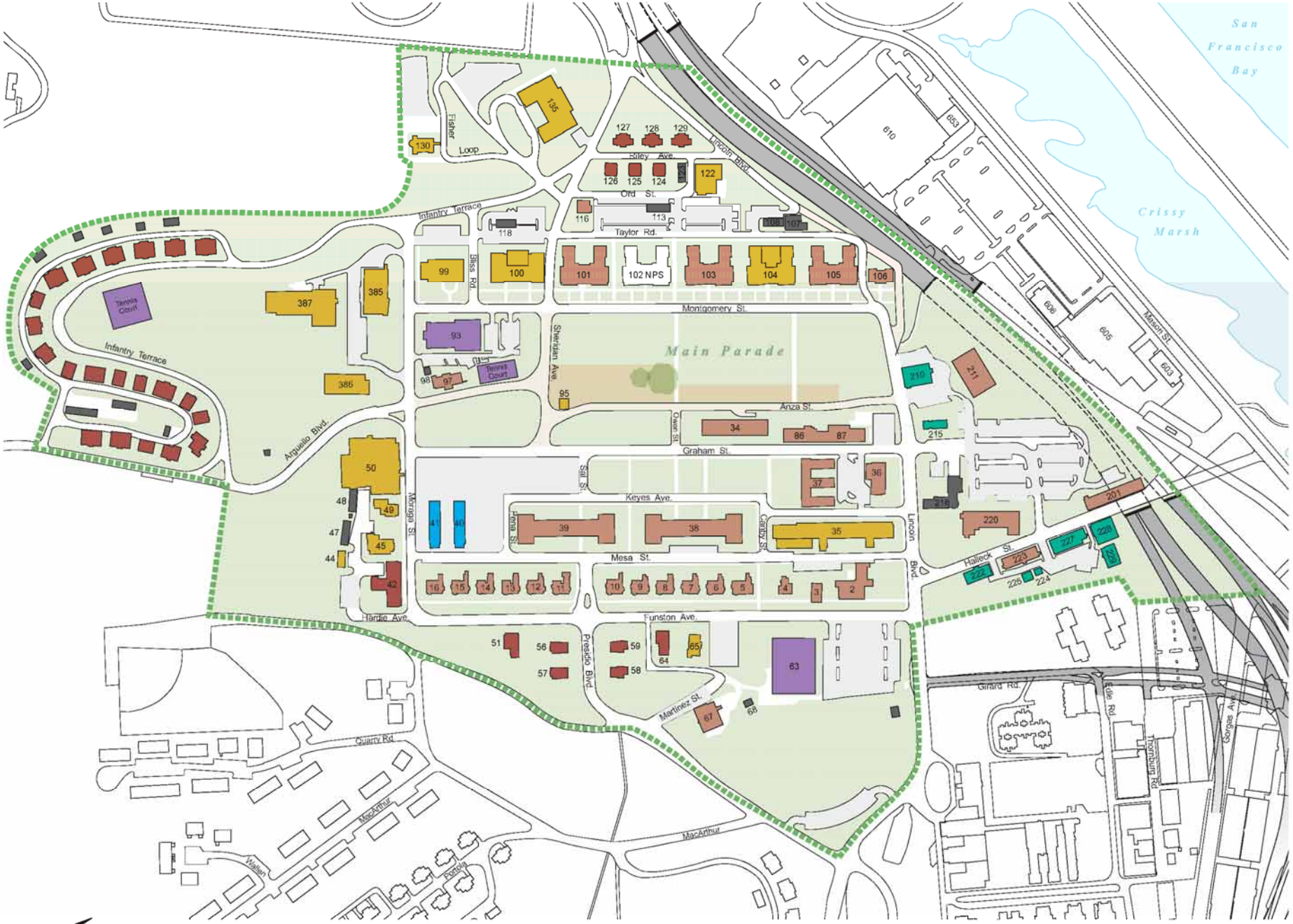
Under this alternative, there would be no cultural and educational facilities and programs beyond what exists or is currently planned. Approximately 393,000 square feet of building space would be used or dedicated to cultural activities and other public uses. These would include a Visitor Center in the Officers' Club (visitor information only), the Presidio Chapel, Herbst International Exhibition Hall, the Walt Disney Family Museum, the Presidio Child Development Center, and the Golden Gate Club. Tenants in leased buildings would have discretion in offering publicly available programs, which could involve stewardship and sustainability, cross-cultural and international cooperation, community service and restoration, health and scientific discovery, recreation, the arts, education, research, innovation, and/or communication. No lodging would be provided (Pershing Hall would be used for residential tenants).

BUILDING CONSTRUCTION AND DEMOLITION

Building demolition since the PTMP was implemented (post 2002) and the Doyle Drive reconstruction project would reduce the existing overall building area from 1.148 million square feet (2002) to 1.140 million square feet. New construction would be limited to approximately 26,000 square feet and would generally be associated with building additions recently completed or underway, including the Walt Disney Family Museum and the International Center to End Violence and a small café along the Anza Esplanade as described in the Main Parade EA. Future demolition would be limited to buildings to be demolished for replacement of Doyle Drive (32,259 square feet). Building construction and demolition are shown in Figure 11.

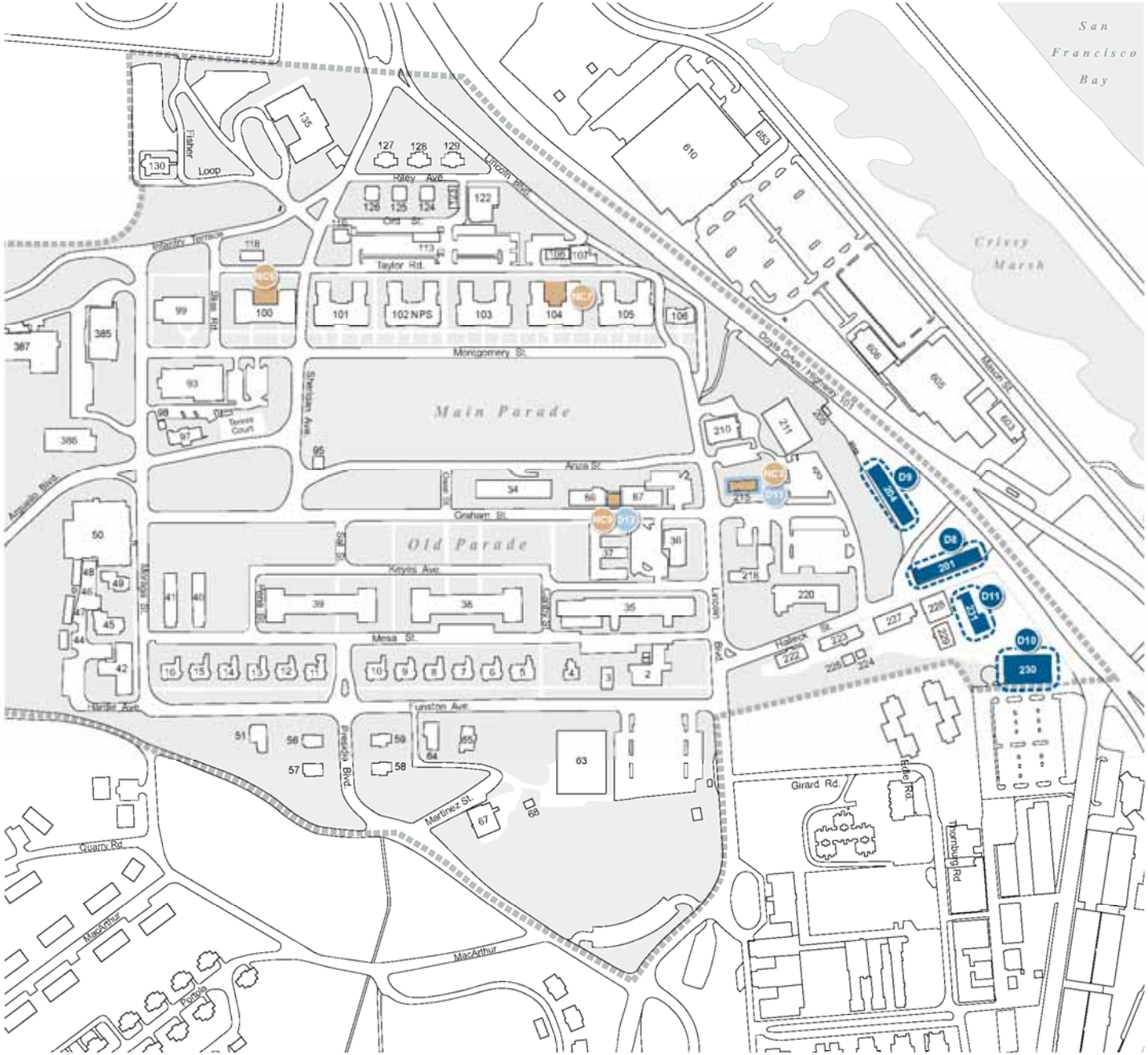
OPEN SPACE

Open space enhancements that are currently underway would continue, including the Main Parade, Doyle Drive, and Tennessee Hollow projects. Landscaped areas and small open spaces could be used for passive or informal recreation. Within the public open space, special events would be held periodically but would not increase above current levels. Commemoration of the site of El Presidio would be limited to interpretive panels.


San Francisco Bay
Crissy Marsh
Main Parade
Lincoln Blvd.
Mason St.
Infantry Terrace
Anguello Blvd.
Fisher Loop
Riley Ave.
Ord St.
Taylor Rd.
Bliss Rd.
Montgomery St.
Sheridan Ave.
Anza St.
Graham St.
Sill St.
Keyes Ave.
Mesa St.
Funston Ave.
Hardie Ave.
Moraga St.
Presidio Blvd.
Martinez St.
Halleck St.
Girard Rd.
Edie Rd.
Thornburg Rd.
Gorgas Ave.
Quarry Rd.
MacArthur
Wallen
Pontola
Tennis Court
102 NPS
0
400 FT
Source: Presidio Trust 2010
Main Post Planning District
Paved Pedestrian Area
Retail
Office
Residential
Recreation
Lodging
Infrastructure
Cultural / Educational
NPS
Surface Parking
Below-Grade Parking

Proposed New Construction (NC)	
Incidental New Construction	2,000 SF
Total	**2,000 SF**
New Construction Since PTMP	
NC6 Int'l Center to End Violence	3,000 SF
NC7 Disney Family Museum	18,000 SF
NC8 Transit Center	2,000 SF
NC9 Buildings 86 / 87 Infill	1,000 SF
Total	**24,000 SF**
TOTAL	**26,000 SF**

Buildings to be Demolished for Doyle Drive	
D8 Building 201 (half)	6,164 SF
D9 Building 204	12,193 SF
D10 Building 230	10,060 SF
D11 Building 231	3,842 SF
Total	**32,259 SF**
Buildings Demolished Since PTMP	
D11 Building 215	1,848 SF
D12 Building 85	415 SF
Total	**2,263 SF**
TOTAL	**34,522 SF**



Main Post Planning District
Proposed New Construction
Proposed Demolition
Buildings Demolished Since PTMP
New Construction Since PTMP
Doyle Drive Project Demolition

0 400 FT

Source: Presidio Trust 2010

RECREATIONAL FACILITIES

Existing recreational facilities, including the tennis courts, Presidio Bowling Center, and YMCA Fitness Center, would be retained for use. Improvements to promote pedestrian and bicycle use consistent with the Presidio Trails and Bikeways Master Plan would be completed.

CIRCULATION AND PARKING

Measures taken to clarify vehicular circulation and improve pedestrian circulation at the Main Post would be similar to those under Alternative 1. Similar to Alternative 1, parking would be provided in smaller, peripheral parking lots within the district. Existing street parking would be preserved and new street parking would be added. Parking for an estimated 1,850 cars would be maintained and managed to reduce the demand for parking. Proposed circulation and parking are shown in Figure 12.

2.5 Other Alternatives

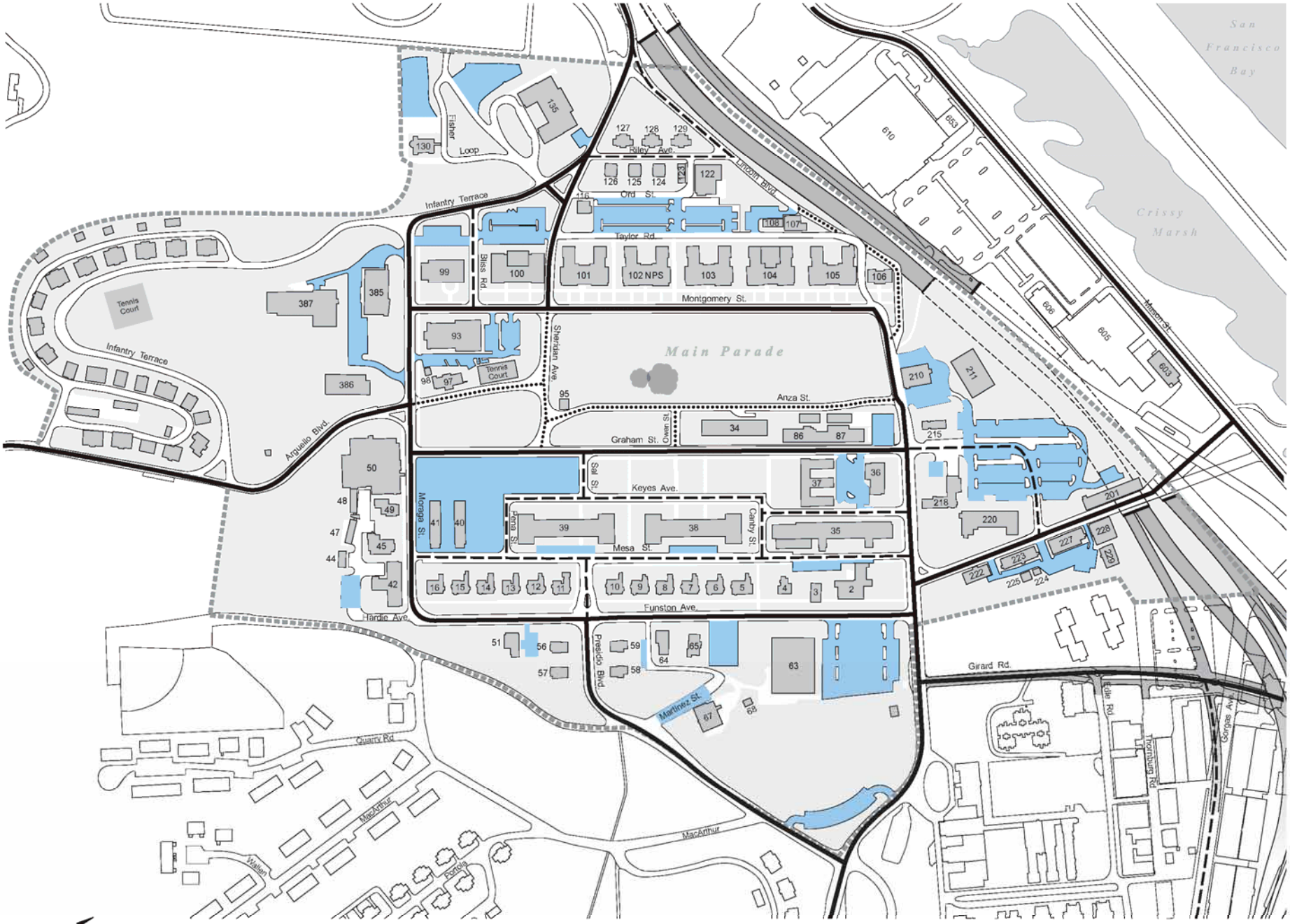
The following briefly summarizes additional alternatives that were previously considered by the Trust but have not been carried forward for detailed study in the final SEIS.

CULTURE AND HERITAGE CENTER

This alternative was formerly identified as the proposed action that was fully analyzed in the draft SEIS. This alternative was initially developed in part in response to several proposals presented to the Trust in 2007, including one to build a 100,000-square-foot museum of contemporary art (CAMP) to showcase a preeminent collection of contemporary art and include a major education program (in Building 101) at the Main Post. This alternative is no longer being considered because, following release of the draft SEIS, the alternative was modified as a result of the Trust's analysis of the proposals, considered public comment, and consultation under Section 106 of the National Historic Preservation Act. The Trust then elected to address the modified alternative as the preferred alternative in a supplement to the draft SEIS (see below) to best integrate and satisfy its NEPA and NHPA obligations.

BIRTHPLACE OF SAN FRANCISCO AND HEART OF THE PARK

This alternative was formerly identified as the preferred alternative that was fully analyzed in a supplement to the draft SEIS. This alternative combined elements of alternatives that were analyzed in the draft SEIS, and included approaches that attempted to avoid, minimize, or mitigate effects on the National Historic Landmark District from the various proposals under consideration, including the CAMP. These approaches included substantial design modifications that reduced the contemporary art museum's height and mass. This alternative is no longer being evaluated because in 2009 the proponent abandoned its effort to build the contemporary art museum at the Main Post (King 2009). Following the proponent's decision, the Trust moved forward with the mitigated preferred alternative, which did not include the CAMP and which contemplated other changes in response to public comment and Section 106 consultation. The mitigated preferred alternative is analyzed as Alternative 2 in the final SEIS.



Source: Presidio Trust 2010

REFERENCES

Contemporary Art Museum at the Presidio (CAMP). 2007. *Response to Request for Proposals for Cultural Institutions at the Presidio Main Post*. Dated November 8.

Frankel, Diane, Management Consultants for the Arts. 2008. *Presidio Heritage Program: A Museum Without Walls.* Draft. Prepared for the Presidio Trust. Dated July 21.

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San Francisco County Transportation Authority. 2008. *Final Environmental Impact Statement/Report and Final Section 4(f) Evaluation, South Access to the Golden Gate Bridge (Doyle Drive).* Dated September.

Affected Environment and Environmental Consequences

The following describes the environmental impacts of each alternative. Mitigation measures adapted from the final PTMP EIS and new measures where relevant are also discussed.

3.1 Land Use

AFFECTED ENVIRONMENT

Context

The Main Post, one of seven planning districts within Area B of the Presidio, is the oldest part of the Presidio. It dates from 1776 when early Spanish explorers chose the gently sloping land in front of what is now the Officers' Club as the site for a new presidio, or garrison, for their northern frontier. Since that time, the Main Post has undergone continuous expansion and redevelopment as the historic, social, and administrative center of the Presidio. Compared to other districts in the Presidio, the Main Post has undergone a great deal of development and change. Varied architectural styles and formal landscapes illustrate the complex layering of construction over time. Through all of the Presidio's major building campaigns, however, the Main Post has always been organized on a northeast/southwest grid framing central open spaces or parade grounds. This rectilinear organization has stood in contrast to the curving forms of the forested, steeply sloping southern hillsides, which provide a dramatic backdrop to the district. The open bluff along the district's northern edge offers spectacular views of San Francisco Bay and the land features beyond. Small remnants of the once ecologically rich Tennessee Hollow creek system and riparian corridor punctuate the eastern edge of the district.

Open Space

Today, of the 120 acres within the Main Post, approximately 92 acres, or 77 percent, are developed and 28 acres, or 23 percent, are open space. The district's open space consists of formal landscapes surrounding the clusters of buildings organized around three historic open spaces: the original El Presidio plaza, a Civil War-era parade ground (Old Parade), and the Main Parade built in the 1890s. Although all three ceremonial open spaces are still visible and still convey their orthogonal organization, their boundaries and visual character have been seriously compromised.[27] Other important designed landscape features within the district include Pershing Square, the Funston Avenue streetscape, the row of Montgomery Street Barracks, and the "Alameda" entrance (remnants

[27] *The proposed rehabilitation of the Main Parade, which would remove the existing seven-acre parking lot and replace it with landscaped open space, will better reinforce the edges of the parade ground through new design features including the Anza Esplanade.*

of the historic entry circle, garden and pathway at Presidio Boulevard / Funston Avenue).

Existing Building Uses

The district's 124 buildings (114 historic and 10 non-historic) include representatives from every era of the Presidio's history. The buildings are being re-used for offices, housing, and community support services. Existing building uses are shown in Figure 13. The breakdown by building square footage is as follows:[28]

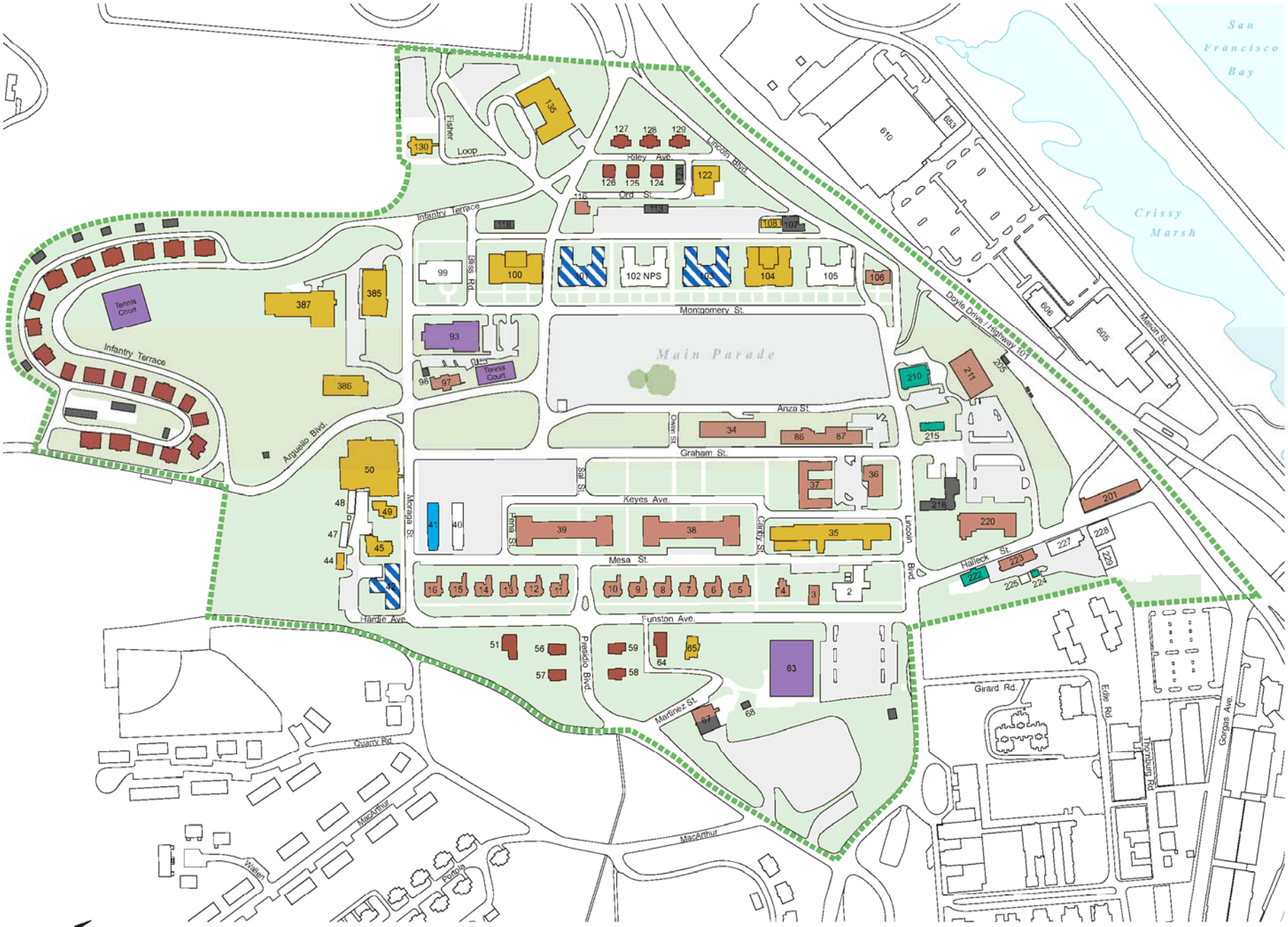
Use	*Square Feet*
Industrial/Warehouse/Infrastructure	51,000
Office	340,000
Retail/Community Support	8,000
Lodging/Conference	32,000
Recreational	36,000
Cultural/Educational	161,000
Residential	151,000
Vacant	369,000
TOTAL	**1,148,000**

Approximately 715,000 square feet, or 62 percent of the total of 1.148 million square feet of building space, have been recently rehabilitated and put to new uses to host park tenants and programs. Non-residential occupants include the First Republic Bank (Building 210); the Presidio Child Development Center (Building 387); the Bay School of San Francisco (Building 35), an independent high school; the San Francisco Film Society (Building 39); and various tenants within Buildings 11-16 (upper Funston Avenue Officers' Quarters). Existing administrative and operational functions include the Presidio fire station (Building 218), the post office (Building 210), Trust headquarters (Building 34), and the transit center (Building 215). Cultural/educational facilities at the Main Post include the Officers' Club (Building 50), the Presidio Chapel (Building 45), the Golden Gate Club (Building 135), the Presidio Interfaith Center (Building 130), the Walt Disney Family Museum (Buildings 104, 122, and 108), and the Herbst International Exhibition Hall (Building 385). Existing historic buildings that are currently being rehabilitated include the International Center to End Violence (Building 100) and Buildings 44 and 49. Various other buildings, including fthree of the Montgomery Street Barracks buildings (101, 103, and 105), are vacant or partially vacant, although Buildings 101 and 103 are being rehabilitated as "warm shells." Building 102, part of Area A and under the jurisdiction of the National Park Service (NPS), is also vacant. More information on tenants or uses that could be subject to closure due to one or more of the alternatives is provided below.

Presidio Bowling Center (Building 93) The 12-lane public Bowling Center features a pro shop, snack bar, grill, and bathrooms and houses 10 adult and youth leagues. The Bowling Center, one of two remaining in San Francisco,[29] is open 7 days per week. The Bowling Center receives

[28] *For the most part, building and land uses are self-explanatory. However, for the purposes of this analysis, the definitions on page 269 of the final PTMP EIS apply to the building use categories used here.*

[29] *The other facility is the Yerba Buena Ice Skating and Bowling Center at Yerba Buena Gardens on the rooftop of the Moscone Convention Center in downtown San Francisco.*



Source: Presidio Trust 2010

approximately 90,000 visits annually and employs 40 individuals (27 full-time and 13 part-time).

Herbst International Exhibition Hall (Building 385) The Herbst International Exhibition Hall (formerly the Post Exchange) was renovated in 1996 by the Fort Mason Foundation for the purpose of offering regional, national, and international exhibitions and special events. The exhibition hall can accommodate up to 600 people.

Presidio Trust Headquarters (Building 34) Building 34 houses most of the administrative functions of the Trust and is occupied by approximately 110 staff members. The Presidio Trust Library, a resource for the visiting public and Trust staff, is also located in the building.

Buildings 86/87 Five offices are located in Buildings 86 and 87, employing a total of 55 full-time and 2 part-time individuals. The for-profit businesses provide services in insurance and finances, asset management, design and motion graphics, and content management software. All tenants have short-term leases, with the last lease terminating in September 2011.

Surrounding Land Uses

The Main Post is located within the interior of the Presidio, which is bordered to the south and east by the City and County of San Francisco. The nearest San Francisco neighborhood to the Main Post is the Marina district, located approximately ½ mile east. In the vicinity of the Presidio, the Marina is a combination of single-family homes, duplexes, and triplexes. Residential mixed-use districts exist a few blocks farther east. The Marina district also includes neighborhood commercial land uses in the vicinity of the Presidio generally along Chestnut Street, Lombard Street, and Union Street.[30]

The restored Crissy Field (Area A), which is under the jurisdiction of the NPS, is located north of Mason Street between the Marina Green and Fort Point, is approximately 500 feet north of the Main Post. Crissy Field (Area A) has popular visitor sites such as the Promenade by the bay and natural features of the bayfront coastline, including 22 acres of dunes and the Crissy Field tidal marsh. Overlooking the tidal marsh in Area B is the Crissy Field Center (Building 603), which offers a variety of environmental education programs and amenities to the Bay Area population. A new adjunct to the Crissy Field Center was built near the Marina Gate, and the Center's programs have been temporarily moved to the new facility during reconstruction of Doyle Drive.

ENVIRONMENTAL CONSEQUENCES

Methodology

This analysis follows the same methodology used in the final PTMP EIS to assess impacts on land use, that is identifying proposed building and land uses at the Main Post and assessing the effects of new uses on the district and surrounding areas. To quantify the changes in building use, a building database was developed that identified the 2010 and proposed PTMP use and square footage of each structure in the district. For the purposes of this analysis, each building was assigned a treatment and use

[30] *Within the broader Marina district is an area more commonly known as Cow Hollow. This neighborhood south of Lombard Street is comprised primarily of residences.*

code (for example, demolition, or rehabilitation for current or new use) corresponding with each alternative, and the building use categories were totaled (as shown in Table 3). Building and land use maps were developed to represent the overall uses for Alternatives 2, 3, and 4 (as provided in Figures 4, 7, and 10, respectively) and were compared with Alternative 1 (Figure 1) or, in the case of Alternative 1, with existing uses (Figure 13) to determine the potential for incompatible uses. According to the final PTMP EIS, incompatibility would occur if a new use could conflict with adjacent building or land uses or compromise the nature and character of the Main Post or surrounding areas. Other impacts from proposed changes in land or building uses (such as adverse affects to historic properties or recreation, or increases in traffic, noise, or visitation) are discussed in other pertinent sections in the final SEIS.

Alternative 1

The impact of new uses within the Main Post on the Presidio and surrounding areas are analyzed on pages 274 through 276 of the final PTMP EIS. The Main Post would become a mixed-use district with a preference for and predominance of office, cultural/educational, and residential uses. The mix of cultural and educational programs and community and visitor-serving uses within the district would eventually result in the enhancement of the district as a primary focus for park visitors. New visitor-oriented programs would be provided by tenants in leased building space, and additional open space (such as the Main Parade) would be created. The district would experience a slight increase in density and square footage as a result of 110,000 square feet of new construction. Approximately half (50,000 square feet) of the new construction would be devoted to a new office building between the Old Parade and Main Parade, the key change in land use proposed under this alternative. Based on estimates prepared since the release of the final PTMP EIS in 2002, the existing square footage of 1.148 million square feet would increase by about 67,000 square feet to 1.215 million square feet (revised PTMP baseline of maximum square footage). The maximum square footage is less than the 1.240 million square feet anticipated in the PTMP due to the demolition of additional buildings required for the reconstruction of Doyle Drive. Beyond what was previously assumed in the final PTMP EIS, Doyle Drive reconstruction would require the full demolition of two additional buildings and partial demolition of a third (22,000 square feet total). Approximately 369,000 square feet of currently vacant buildings would be rehabilitated and reoccupied, including 43,000 square feet of lodging (Pershing Hall and Buildings 40 and 41). Approximately 460,000 square feet of other visitor-serving uses would be introduced, including a Heritage Center (Building 2), an Archaeology Center, the Presidio Theatre and addition, and the Presidio Chapel and addition. Consistency with PTMP planning principles and policies would ensure that no substantial conflicts with adjacent land uses would occur.

Office The change in land use on the proposed office development site (from open space to office) would be compatible with existing uses. Surrounding (primarily office) uses and activities in Buildings 34, 38, and 39 would continue on their own sites and would interrelate with each other as they do at present, without disruption from the proposed new office building south of Building 34. Maximum height would be no more than 45 feet in accordance with the PTMP. The new structure would reinforce the historic framework and layout of the Main Post by reestablishing the historic relationship between buildings formerly

occupying the site and adjacent parade grounds. Consistency with PTMP planning policies and guidelines for buildings and structures would ensure compatibility with the character of adjacent buildings.

Presidio Theatre The 18,000-square-foot addition to and rehabilitation of the Presidio Theatre would allow the building to function in a manner consistent with its original use and location. The addition to the building would be designed to complement the existing structure and to serve the expanded program. Application of site-specific project parameters and ongoing design review would ensure that the addition respects the scale and character of surrounding buildings, and is consistent with the varied size, structures, and mixed land use character of the Main Post district.

Presidio Chapel The 4,000-square-foot addition to and rehabilitation of the Presidio Chapel would enhance the existing function of the historic building as an interfaith center and provide for its continued use. The expanded use would be consistent with activities (i.e., celebrations, meetings, conferences) at the nearby Golden Gate Club. Application of site-specific project parameters and ongoing design review would ensure that the addition respects the scale and character of surrounding buildings, and is consistent with the varied size, structures, and mixed land use character of the Main Post district.

Archaeology Center Relocation of the Presidio Archaeology Lab to Buildings 44, 47, 48, and 49 at the Main Post, along with a 500-square-foot addition between historic Buildings 47 and 48, would provide state-of-the-art lab and curation facilities and would allow the existing program to expand to provide more educational and volunteer opportunities. Application of site-specific project parameters would ensure that the addition respects the scale and character of surrounding buildings and is consistent with the varied size, structures, and mixed land use character of the Main Post district.

Alternative 2

Compared to Alternative 1, this alternative would provide for less office and residential space and allocate more space for cultural, educational, and other public-serving uses. Predominant land uses would remain as office and cultural/educational. Key changes in land or building uses would include the following:

- New construction along Graham Street identified in Alternative 1 for office space would be allotted to lodging, which would increase the amount of lodging by more than twice the square footage of that provided in Alternative 1.
- Office uses proposed for the upper floors of the Montgomery Street Barracks buildings would replace residential use, which would be reduced by about a third compared to Alternative 1.
- Cultural use at the site south of the Main Parade would displace an existing recreation use (Presidio Bowling Center in Building 93).
- Existing cultural use at the Building 385 site would be displaced by proposed surface parking.
- Additions to the Presidio Theatre and Presidio Chapel, and relocation of the Presidio Archaeology Lab would be the same as Alternative 1.

While the level of new construction would be greater than that in Alternative 1 by approximately 36,500 square feet, density and maximum building area (1.201 million square feet) in the district would

be less than under Alternative 1, due primarily to the demolition of Building 34 (Trust Headquarters) and Building 385 (Herbst International Exhibition Hall). There would be no substantial conflicts with adjacent land uses.

Lodge The change in building use on the proposed lodge development site (from office to lodging) would change the character of land use within this portion of the Main Post and increase current activity levels on the site. Surrounding (primarily office) uses and activities in Buildings 37, 38, and 39 would continue on their own sites and would interrelate with each other as they do at present, without disruption from the proposed Presidio Lodge. However, demolition of Building 34 and potential use of existing Buildings 86 and 87 for lodging would displace existing occupants of the buildings. Staff employed in Trust Headquarters would be relocated to one or more currently underused buildings within the district and/or elsewhere within the Presidio. Office tenants within Buildings 86 and 87 would have the option of moving to another location within the Presidio[31] or outside the park.[32]

New construction for the lodge would be limited to 70,000 square feet and would not exceed 30 feet in height. The scale and massing of the Presidio Lodge, therefore, would be similar to nearby Buildings 86 and 87. Furthermore, the materials, color, pattern and configuration of the infill construction would be compatible with the character of the adjacent buildings and consistent with site-specific project parameters established in the Main Post Update and ongoing design review. The new structure would reinforce the historic framework and layout of the Main Post by reestablishing separation between the Old Parade and Main Parade and by approximating the pattern of historic barracks that formerly occupied the site.

Montgomery Street Barracks Buildings Public-serving uses within the ground floors of Buildings 101, 103, and 105 would increase current activity levels along Montgomery Street. Along with the proposed Presidio Lodge, the increase in visitor services would also contribute to the mixed-use district and would enhance the Main Post as a destination for park visitors.

Site South of the Main Parade The change in uses would be compatible with existing nearby uses, including the proposed Heritage Center in Building 50, the Presidio Child Development Center in Building 387, and the proposed Presidio Theater in Building 99. Current activity levels on the site would not increase.

Parking at Building 385 Site Demolition of Herbst International Exhibition Hall for parking would reduce the available venues for indoor special events. Current users of the space could opt to hold their events or exhibitions at the Officers' Club, Fort Mason Center, or one of the other many venues readily available in the Bay Area.[33]

[31] *In March 2010, 42 leasing opportunities for non-residential tenants were available on the Trust's website.*

[32] *At year-end 2009, more that 86.4 million square feet of office space were available in San Francisco (TRI Commercial 2010).*

[33] *For example, Fort Mason Center hosts more than 15,000 events each year, produced by close to 2,000 different organizations and individuals, in a wide range of conference, meeting, and activity, theater, and pavilion-style spaces available for rent by both the nonprofit and for-profit sectors.*

Alternative 3

Similar to Alternative 1, predominant land uses would be office and cultural/educational. Conversion of Buildings 11-16 to bed and breakfast units would more than double the number of guest rooms in the district. Residential use would be reduced by about a third (to 167,000 square feet) as office use would replace housing in several of the Montgomery Street Barracks buildings. Building removal (approximately 64,000 square feet) and new construction (77,000 square feet) would result in a net decrease of total building square footage of 54,000 square feet to 1.161 million square feet, or 4 percent less than Alternative 1. While there would be no additions to the Presidio Theatre or Presidio Chapel under this alternative, cultural/educational building space would be maintained through development of the History Center, a key land use change under this alternative. There would be no substantial conflicts with adjacent land uses.

History Center The alternative would remove and replace existing recreational uses (the Presidio Bowling Center and adjacent tennis court) with a new cultural use (a History Center) and would increase the overall floor area on the site south of the Main Parade from 12,800 square feet to 48,000 square feet. The increase in square footage would change the general density and character of land use within this portion of the Main Post, and potentially increase activity on the site. The new use would require changes to the siting and design of new construction to protect the historic character of the district.

Alternative 4

Under this alternative, the general pattern of land use would be similar to current conditions, and, except for the rehabilitation of the Main Parade, there would be no land use changes of any consequence. Currently vacant building spaces would become occupied predominantly with office uses. Compared to Alternative 1, built space would decrease by approximately 6 percent due mainly to building removals required for the Doyle Drive project and the lack of new construction beyond projects permitted to date or built (i.e., Walt Disney Family Museum and International Center to End Violence). The total building area within the district would be about 1.14 million square feet. Consistency with the PTMP planning principles and policies would ensure that no substantial conflicts with adjacent land uses would occur.

MITIGATION MEASURES

The following measure from the final PTMP EIS would apply to all alternatives to minimize possible land use conflicts.

CO-1 *Monitoring of Area B Uses* Through the course of implementation, including leasing activities, the Trust would review proposed uses for buildings for their consistency with the PTMP Planning Principles to ensure protection of the Presidio's cultural, natural, scenic, and recreational resources. The Trust would also consult with the NPS for all activities that would have the potential to significantly affect Area A resources.

REFERENCES

TRI Commercial. 2010. *Year-End 2009 San Francisco Trends*. San Francisco, CA.

3.2 Land Use Plans and Policies

The NEPA requires an EIS to discuss possible conflicts among alternatives and the objectives of land use plans, policies, and controls for the area concerned. The site is located on the Main Post in Area B of the Presidio, which is under exclusive jurisdiction of the Presidio Trust, a federal agency. The Trust's formally adopted statement of land use policy is the Presidio Trust Management Plan (PTMP or plan).

CONSISTENCY WITH THE PRESIDIO TRUST MANAGEMENT PLAN

The PTMP provides an interrelated set of planning principles and policies, which taken together provide the framework for the Trust's decision-making and actions. The PTMP makes clear that "should principles come into conflict, care will be taken to balance competing values, and to seek overall conformance to the policy framework established by this [p]lan" (page 2). Furthermore, the PTMP is intended to be programmatic, rather than prescriptive, to allow consideration of alternative or changed uses, when appropriate.

The consideration of the PTMP planning principles and policies is carried out as an integral part of the Trust's weighing of environmental and non-environmental factors in reaching a rational and balanced decision. The discussion of land use policy conflicts will be relied upon in the Record of Decision and used by the Trust's Board of Directors as part of their decision whether to approve or disapprove the mitigated preferred alternative. Under the NEPA, however, the Trust has the authority to move forward with the mitigated preferred alternative, despite any possible conflict. Any potential conflicts with the PTMP that relate to physical environmental issues (such as increasing traffic or noise) are evaluated as part of the impacts analyses in various sections of the final SEIS. Any potential conflicts with PTMP policies not identified in the final SEIS could be considered in the design and construction review process and would not alter the physical environmental impacts of the mitigated preferred alternative analyzed in the final SEIS.

The existing building space in the Main Post is 1.15 million square feet and maximum future space allowed by the PTMP is 1.240 million square feet. The PTMP thus allowed for a net increase of 90,000 square feet that took into account 20,000 square feet of allowable demolition and 110,000 square feet of new construction.

Alternative 1

Alternative 1 reflects the Final Plan Alternative analyzed in the final PTMP EIS and therefore is consistent with the planning concept and planning guidelines described in the PTMP for the Main Post. The proposed maximum building area of 1.215 million square feet would be less than the planned 1.240 million square feet in the PTMP due to the demolition of additional buildings required for the replacement of Doyle Drive. The additional building demolition, which was not considered in the PTMP, is an unforeseen factor that altered assumed conditions after the PTMP was adopted, which in turn have been taken into account in this alternative. All projects with new construction (office, Presidio

Theatre, Presidio Chapel, Archaeology Center) proposed in this alternative would be considered preferred uses for the Main Post district under the PTMP. In general, these projects would be compatible with the character-defining features of the district as described in the PTMP, and with its guidelines for future changes, including potential new construction. The 110,000 square feet of new construction would be implemented as assumed in the PTMP.

Office (South of Building 34 Site) New construction for office use on the site south of Building 34 poses no conflict with PTMP policies. The PTMP identifies the Main Post as an appropriate location for office space. The project would be consistent with PTMP objectives for new construction, which permit freestanding buildings in order to enhance the function of adjacent landscapes and to reinforce historic character-defining features. The design and location of construction would be in keeping with PTMP historic preservation objectives to protect the character and integrity of the historic setting.

Presidio Theatre and Presidio Chapel Reuse and rehabilitation of the Presidio Theatre and Presidio Chapel pose no conflicts with the Trust's policies presented in the PTMP. The building additions would be consistent with PTMP objectives for new construction, which allow compatible additions to enhance the function of the adjacent historic buildings.

Heritage Center (Building 2) and Archaeology Center Rehabilitation and reuse of Building 2 as a Heritage Center pose no conflicts with the Trust's policies presented in the PTMP. Both the proposed Heritage Center in Building 2 and Archaeology Center would achieve PTMP objectives by contributing to the preservation of the park and its resources by deepening the public's understanding of the park's history, and by adapting historic buildings for these public uses.

Lodging Lodging in the Main Post poses no conflicts with PTMP policies. Pershing Hall is identified as one of the "priority sites" for lodging within the PTMP. Historic Building 41 has also provided affordable short-term accommodations in recent years. Lodging within the buildings would advance the PTMP objectives to provide visitors the opportunity to stay overnight in an historic building, and give them a first-hand experience of elements of former Presidio military life.

Alternative 2

Under Alternative 2, the proposed maximum building area of 1.201 million square feet would be less than the maximum permitted 1.215 million square feet (as revised by the Doyle Drive project) under the PTMP. However, Alternative 2 would require amending the PTMP[34] to reflect the proposed increase in both building demolition and new construction. Under Alternative 2, 94,000 square feet of buildings would be demolished, which is 50,000 square feet more than would be demolished under Alternative 1. Alternative 2 would remove or relocate Buildings 40 and 41 for El Presidio, Building 34 for the Presidio Lodge, and Building 385 for additional parking. New construction would exceed the amount allotted in the PTMP by 37,000 square feet. New construction under Alternative 2 would include 70,000 square feet for the Presidio Lodge and 30,000 square feet for incidental construction.

[34] *The decision amending the PTMP would be adopted by resolution of the Presidio Trust Board of Directors.*

Construction would occur in developed areas and would be compatible with existing structures.[35] The additional square footage would not affect the overall park-wide cap of 5.96 million square feet, nor would it affect the commitment made by the Trust in the PTMP to reduce the amount of square footage in the park to 5.6 million square feet. Also consistent with the PTMP, the Trust has developed through this NEPA process compelling reasons for allowing building removal or new construction: to consolidate built space in the northern end of the Presidio, to bring more cultural and public uses to the Main Post, to activate and organize its open spaces, and to stimulate reuse of the existing historic buildings. The Trust is satisfying its commitment made in the PTMP to engage in public review before making any decision to proceed with specific proposals to remove historic buildings or to construct new buildings.

Lodging The PTMP proposed that lodging be accommodated in historic buildings. This alternative would use historic buildings to support lodging (i.e., Pershing Hall), but would also use 70,000 square feet of new construction for a freestanding lodge, which is inconsistent with the PTMP. In that regard, the Presidio Lodge would also be inconsistent with the PTMP's commitment to locate public uses mainly in existing structures.

El Presidio Proposals for El Presidio under Alternative 2 do not pose any conflicts with PTMP policies. Should Buildings 40 and 41 eventually be removed following additional Section 106 consultation, the PTMP would allow for their demolition. The PTMP allows for the demolition of buildings to achieve other plan objectives, such as to restore open space and an important cultural landscape, which would be the case under Alternative 2.

Site South of the Main Parade Reuse of the Presidio Bowling Center (Building 93) to support park programs would be inconsistent with the PTMP's commitment to retain facilities for active recreational use. However, the PTMP acknowledges that recreational facilities may be removed in conjunction with planned projects such as rehabilitation of the Bowling Center.

Heritage Center (Building 50) Rehabilitation and reuse of Building 50 as a Heritage Center pose no conflicts with PTMP policies. The proposed Heritage Center would achieve PTMP objectives by contributing to the preservation of the park and its resources by deepening the public's understanding of the park's history, and by adapting historic buildings for this public use.

Theatre, Chapel, and Archaeology Center See discussion of Alternative 1 above.

Alternative 3

Alternative 3 would amend the PTMP to reflect the proposed increase in building demolition above that identified in the PTMP. The 64,000 square feet of buildings that would be demolished would be 20,000 square feet greater than under Alternative 1, due primarily to demolition of Buildings 40 and 41 for El Presidio and Building 93 for the History Center. The 77,000 square feet of new construction would be 33,000 square feet less than that assumed under Alternative 1. However, 48,000

[35] *For more discussion of this issue, refer to the response to comment titled "Compliance with the Presidio Trust Act" in Section 4.2, Art Museum EIS Scoping Process and Issues Raised During Scoping in the draft SEIS.*

square feet of new construction, in the form of the History Center at the site south of the Main Parade, would conflict with PTMP objectives that strive to protect the character of the historic setting. Given the increase in demolition and decrease in new construction, the proposed maximum building area of 1.161 million square feet would be less than the 1.215 million square feet (as revised by the Doyle Drive project) envisioned in the PTMP.

History Center Construction of the History Center at the site south of the Main Parade would not be consistent with PTMP objectives that new construction on the Main Post reinforce historic patterns of spatial organization and complement the rehabilitation of adjacent historic buildings. The new construction would also be inconsistent with the PTMP commitment to locate public uses mainly in existing structures. Demolition of the Bowling Center and adjacent tennis court as required for the History Center would be inconsistent with the PTMP's commitment to retain facilities for active recreational use.

Lodging Lodging as proposed under Alternative 3 poses no conflicts with PTMP policies, which identify Pershing Hall as a preferred location for lodging. The PTMP also considers the upper Funston Avenue Officers' Quarters (Buildings 11-16) for bed-and-breakfast accommodations as a priority site and the "best use" for these historic buildings.

El Presidio See discussion of Alternative 2 above.

Alternative 4

Alternative 4 would only minimally advance the PTMP goal to bring people to the park, as the limited visitor-serving uses and other amenities would not make the park a welcoming place for visitors. Should buildings not be filled and infrastructure systems not be improved, this alternative also would not attain the PTMP goal to preserve and enhance park resources, nor support the plan's requirement to provide for the Presidio's long-term management and care.

CONSISTENCY WITH THE SAN FRANCISCO GENERAL PLAN

The Presidio is a federal enclave within the City and County of San Francisco, and local land use plans, policies, and regulations do not apply. Nevertheless, the San Francisco General Plan, specifically the policy of the Recreation and Open Space Element that calls for preservation of the Presidio and its resources, and its associated guidelines, is discussed below.

The San Francisco General Plan (Map 3) designates the Presidio as "P" for Public Use and identifies Area B as "Open Space Area" and "Developed Area". Specifically relative to the Presidio, Policy 2.5 of the Recreation and Open Space Element recognizes the Presidio as among the most important and historic open spaces in the city, and a National Historic Landmark. The policy calls for the preservation of the open space and natural, historic, scenic, and recreational features of the Presidio, and acknowledges that large portions of the Presidio, including the Main Parade, have been developed as surface parking lots used mainly by commuters working in the park. The policy embraces the city's "transit-first policy"[36] by urging a transportation management

[36] *San Francisco City Charter, Section 8A.115. Any new demands for public transit generated by proposals within the Main Post district and transportation investments to meet those demands would be addressed by the city along with its other obligations. The Trust would continue*

(continued next page)

program to expand use of transit, carpools, and vanpools, and to reduce the amount of needed parking. The policy also encourages conversion of needed parking into parking structures whenever possible. The policy then recommends various guidelines to apply to new development and land use changes. The relationship of the Trust's action alternatives to these guidelines is described below.

New Structures

Guidelines and procedures in the PTMP and Main Post Update would ensure that any new construction under the alternatives is located and sized appropriately as called for in the Policy 2.5 Guideline 1, which states that "no new structures should be built that would adversely affect the scenic beauty and natural character of the Presidio."

New Construction

Policy 2.5 Guideline 3 recognizes removal and/or replacement of some structures within the Presidio as a management option. Policy 2.5 Guideline 4 echoes the Trust Act's provision to limit new construction to existing areas of development.

Historic Structures

Guidelines in the PTMP and Main Post Update would ensure that the size, scale, location, and design of new construction would be compatible with the Presidio's historic setting and the character of the area. These guidelines and preservation, rehabilitation, and use of historic buildings and landscapes in accordance with The Secretary of Interior's Standards for the Treatment of Historic Properties and the Guidelines for Rehabilitating Buildings at the Presidio of San Francisco would promote Policy 2.5 Guideline 6, which suggests that "historic structures and sites should be preserved."

Hiking and Bicycle Trails

Implementation of new trail corridors, such as the Presidio Promenade, and bicycle routes within the Main Post consistent with the Presidio Trails and Bikeways Master Plan would be responsive to Policy 2.5 Guideline 8, which recommends improvements to the recreational trail system. ("The system should include well designed and marked hiking and bicycle trails through the Presidio. Points of historic interest should be marked.")

REFERENCES

City and County of San Francisco. 1986. *San Francisco General Plan Recreation and Open Space Element.* Prepared by the San Francisco Planning Department.

Presidio Trust. 2002. *Presidio Trust Management Plan: Land Use Policies for Area B of the Presidio of San Francisco.* Dated May.

to: 1) expand its transportation demand management program, including alternative transportation, to meet public transportation needs; and 2) coordinate with the city to minimize adverse impacts on transit services provided by the city.

3.3 Transportation and Parking

AFFECTED ENVIRONMENT

This analysis is based in part on the Background Transportation Report for the Presidio Trust Management Plan (Wilbur Smith Associates 2002). The information obtained from the report was supplemented and updated with new traffic, transit, and parking data collected specifically for this SEIS. The following components of the transportation system are addressed in this section:

- Roadway network
- Traffic characteristics
- Public transit services
- Pedestrian and bicycle facilities
- Parking conditions

Roadway Network

Throughout its history, the Main Post has been a destination. From the earliest days of the Spanish garrison, roads from Mission Dolores, Yerba Buena (today, downtown San Francisco), and the Castillo (the Royal Spanish fort that guarded the Golden Gate strait) came together at the Main Post. These roads laid the foundation for today's primary streets. As the Main Post expanded, a rectilinear pattern of streets grew outward from El Presidio plaza, establishing a hierarchy of entries. Key entries include the former Alameda, the Halleck Street service corridor to the north, the southern arrival at Arguello Boulevard, the Lincoln Boulevard/Montgomery Street guardhouse checkpoint, and Sheridan Avenue to the west.

The Main Post continues to serve as a hub for Presidio tenants, residents, and visitors. Circulation within the Main Post is fairly confusing, however, in part because the hierarchy of Main Post streets has become unclear. Roadways connect the Main Post to the Marina and Cow Hollow neighborhoods to the east and Richmond and Presidio Heights neighborhoods to the south. All of the intersections within the Presidio as well as those at its gates are unsignalized.

The key roadways serving the Main Post are described below.

Lincoln Boulevard Lincoln Boulevard runs generally east-west in the eastern portion of the Presidio and serves as the primary thoroughfare in the Presidio. It begins at the intersection of Presidio Boulevard/Letterman Drive and ends at the intersection of 25th Avenue/El Camino del Mar. Lincoln Boulevard includes one lane in each direction with left-turn pockets at key intersections.

Presidio Boulevard Presidio Boulevard has one lane in each direction. It begins at Funston Avenue in the Main Post, connects to Lincoln Boulevard/Letterman Drive near the Letterman Digital Arts Center, and continues north-south in the eastern portion of the park to the southern boundary of the park, where it becomes Presidio Avenue in San Francisco.

Arguello Boulevard Arguello Boulevard has one lane in each direction. It runs north-south from its intersection with Sheridan Avenue in the Main Post, extending south through the Presidio's southern boundary. It serves as a gateway to the Richmond district of San Francisco.

Lombard Street Lombard Street runs east-west from its intersection with Presidio Boulevard near the Letterman Digital Arts Center and extends into San Francisco to the east. Lombard Street has one lane each way. It serves as the primary gateway to the eastern portion of the Presidio.

U.S. Highway 101 U.S. Highway 101 near the Presidio is comprised of the southern Golden Gate Bridge approach, Doyle Drive, Richardson Avenue, and Lombard Street (from Richardson Avenue to the east). Doyle Drive runs generally east-west through the northern portion of the Presidio before becoming Richardson Avenue. Richardson Avenue generally has three lanes in each direction and runs diagonally (northwest–southeast) from Doyle Drive until it merges with Lombard Street about two blocks east of the Presidio's eastern boundary. U.S. Highway 101 carries the majority of the east-west traffic between the Golden Gate Bridge and areas outside the Presidio. The only access to/from Doyle Drive in the Presidio is at the Golden Gate Bridge viewing area, the left exit slip ramp from northbound Richardson Avenue to the Letterman district, and a signalized intersection with Gorgas Avenue near the eastern boundary of the park.

Traffic Characteristics

Gateway Traffic Peak hour weekday traffic volumes collected in November and December 2000 for the purposes of the final PTMP EIS indicate a total of 5,967 vehicles were observed at the Presidio's gateways during the weekday PM peak hour, with the greatest percentage of traffic (21 percent) traveling through the Lombard Gate. Table 4 summarizes how the PM peak hour gateway volumes have changed in recent years. Despite several new tenants in the Presidio between 2000 and 2005, the total PM peak hour gateway counts in October 2005 were only slightly higher than those collected in 2000. Slip ramp access from Richardson Avenue was completed and opened during this time, and consequently traffic through the Lombard Gate decreased. Traffic entering the Presidio via the slip ramp and exiting onto Richardson Avenue is included in the counts for the Gorgas Gate. PM peak hour gateway counts in January 2008 were about 12 percent lower than counts collected in October 2005, with the decrease being most pronounced at the 25th Avenue and Golden Gate Bridge Toll Plaza Gates. Much of this difference is likely due to seasonal variation. Gate counts were collected again in March 2009. The gate counts indicate that peak hour volumes through the park's gates have continued to increase with increased occupancy of Presidio buildings and volume of pass-through traffic.

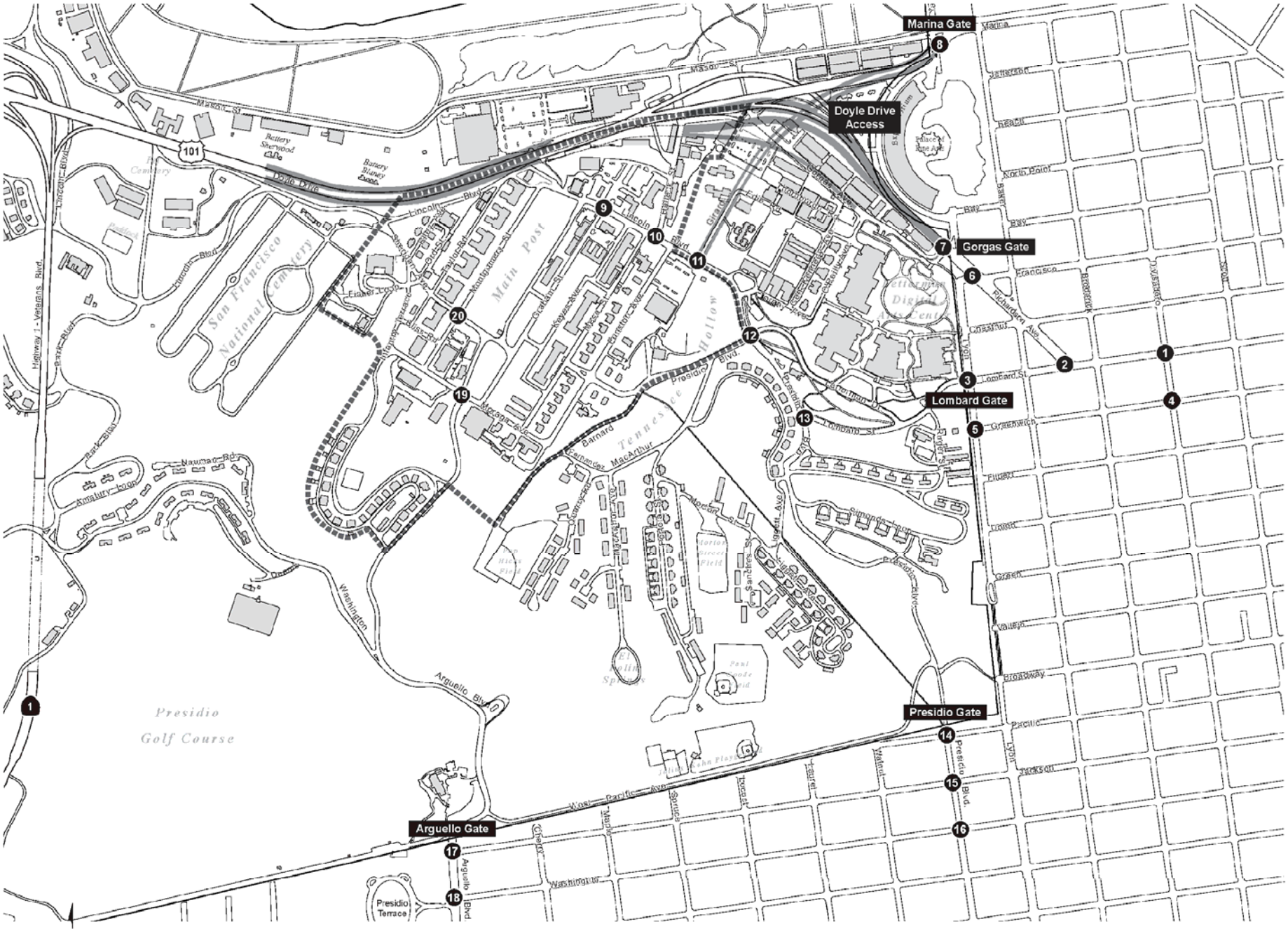
Intersection Analysis A total of 20 intersections, shown in Figure 14, were identified as study intersections for the analysis. These intersections are located on key access routes to the Main Post, both inside and outside the park. The intersections are primarily a subset of intersections analyzed as part of the final PTMP EIS, although three intersections on Greenwich Street and Divisadero Street were added in response to scoping comments from neighborhood groups near the Lombard Gate. The study

4 PRESIDIO GATEWAYS TRAFFIC VOLUME SUMMARY (WEEKDAY PM PEAK HOUR VOLUMES)

Gate	*November / December 2000*		*October 2005*		*January 2008*		*March 2009*	
	Vehicles per Hour	*Percent of Total*	*Vehicles per Hour*	*Percent of Total*	*Vehicles per Hour*	*Percent of Total*	*Vehicles per Hour*	*Percent of Total*
Marina	456	8	539	9	496	9	654	10
Gorgas[1]	196	3	363	6	315	6	660	10
Lombard	1,260	21	1,101	18	1,068	20	1,141	17
Presidio	1,002	17	982	16	1,005	19	906	14
Arguello	815	14	774	13	728	14	852	13
15th Avenue	107	2	134	2	143	3	125	2
25th Avenue	1,072	18	958	16	740	14	1,005	15
Plaza West	325	5	471	8	308	6	436	7
Plaza East	734	12	691	12	465	9	750	11
TOTAL	**5,967**	**100**	**6,013**	**100**	**5,268**	**100**	**6,529**	**100**

Source: Presidio Trust 2010

[1] *The Gorgas Gate includes the slip ramp in the October 2005, January 2008, and March 2009 counts.*



Source: Presidio Trust 2010

intersections are those that would most likely be substantially affected by increased traffic traveling to and from the Main Post. The study intersections are:

1 Lombard/Richardson
2 Lombard/Divisadero
3 Lombard/Lyon
4 Greenwich/Divisadero
5 Greenwich/Lyon
6 Richardson/Francisco
7 Richardson/Gorgas
8 Doyle/Marina/Mason
9 Lincoln/Graham
10 Lincoln/Halleck
11 Lincoln/Girard
12 Lincoln/Letterman/Presidio
13 Lombard/Presidio
14 Presidio/Pacific
15 Presidio/Jackson
16 Presidio/Washington
17 Arguello/Jackson
18 Arguello/Washington (outside the Presidio)
19 Arguello/Moraga
20 Sheridan/Montgomery

The turning movement traffic volumes at the study intersections were counted during the morning and afternoon peak-commute periods (7:00 to 9:00 AM and 4:00 to 6:00 PM) in January 2008. The peak hour total intersection traffic volume during each two-hour period was determined for each intersection and used for the intersection capacity analysis. In order to account for the seasonal variation in traffic volumes, the 2008 intersection turning movement counts were adjusted upward by 11 percent. The 11-percent adjustment is derived from PM peak hour gateway counts for three different seasons in 1998.

The AM and PM peak hour intersection operations analysis was conducted according to the methodology described in the 2000 Highway Capacity Manual (HCM) (Transportation Research Board 2000). The HCM methodology is currently the most commonly accepted methodology for traffic analyses and is the methodology currently used by the City and County of San Francisco for assessing traffic impacts. The HCM methodology calculates the average delay experienced by a vehicle traveling through the intersection and assigns a corresponding level of service (LOS). The levels of service range from LOS A, indicating volumes well below capacity with vehicles experiencing little or no delay, to LOS F, indicating volumes near capacity with vehicles experiencing extremely high delays. An intersection operating at LOS D or better is generally considered to be operating acceptably. Levels of service E and F are generally considered unacceptable. At one-way or two-way stop-controlled intersections, however, delay and LOS are calculated for each stop-controlled approach and operating conditions are reported for the worst approach. Levels of service for signalized intersections and all-way stop-controlled intersections are based on the weighted average delay per vehicle for all vehicles approaching the intersection. The HCM level of service criteria for signalized and unsignalized intersections are provided in Appendix A.

Table 5 presents the existing delay per vehicle and LOS for the 20 study intersections for both the AM peak hour and PM peak hour. Most of the intersections within the Presidio operate acceptably (LOS D or better) during both the AM and PM peak hours. Three intersections currently operate at LOS E or F in the AM peak hour and one intersection operates at LOS E or F in the PM peak hour. The intersection of Lyon/Lombard operates at LOS F and E in the AM and PM peak hour, respectively. In 1996, approximately 50 percent of the traffic traveling through the Lombard Gate at this intersection was determined to be merely passing through the Presidio, not traveling to or from uses in the park. Approximately 40 percent of the traffic through the Presidio Gate was estimated to be pass-through traffic, and this affects the operation of intersections on Presidio Boulevard. The intersection of Lombard/Presidio currently operates at LOS E in the AM peak hour, and the heavy volume of pass-through traffic on the northbound approach contributes to poor operating conditions at this intersection. Similarly, the intersection of Presidio/Jackson currently operates at LOS E in the AM peak hour. Detailed AM and PM peak hour LOS calculations for existing conditions at all study intersections are provided in Appendix A. Compared to intersection operating conditions in the year 2000, of the 17 intersections analyzed for the purposes of the final PTMP EIS, many have either remained at the same level of service or degraded one level (e.g., from LOS B to LOS C). Only three intersections on Presidio (Jackson, Pacific, and Letterman/Lincoln) deteriorated more than one level of service, all in the AM peak hour.

Public Transit Services

Public transit systems serving the Presidio include Muni, Golden Gate Transit, and the PresidiGo shuttle service. These services provide access to other regional carriers such as BART, AC Transit, CalTrain, SamTrans, and the regional ferry system. In addition, there are private transit carriers that accommodate specific needs not served by the public systems.

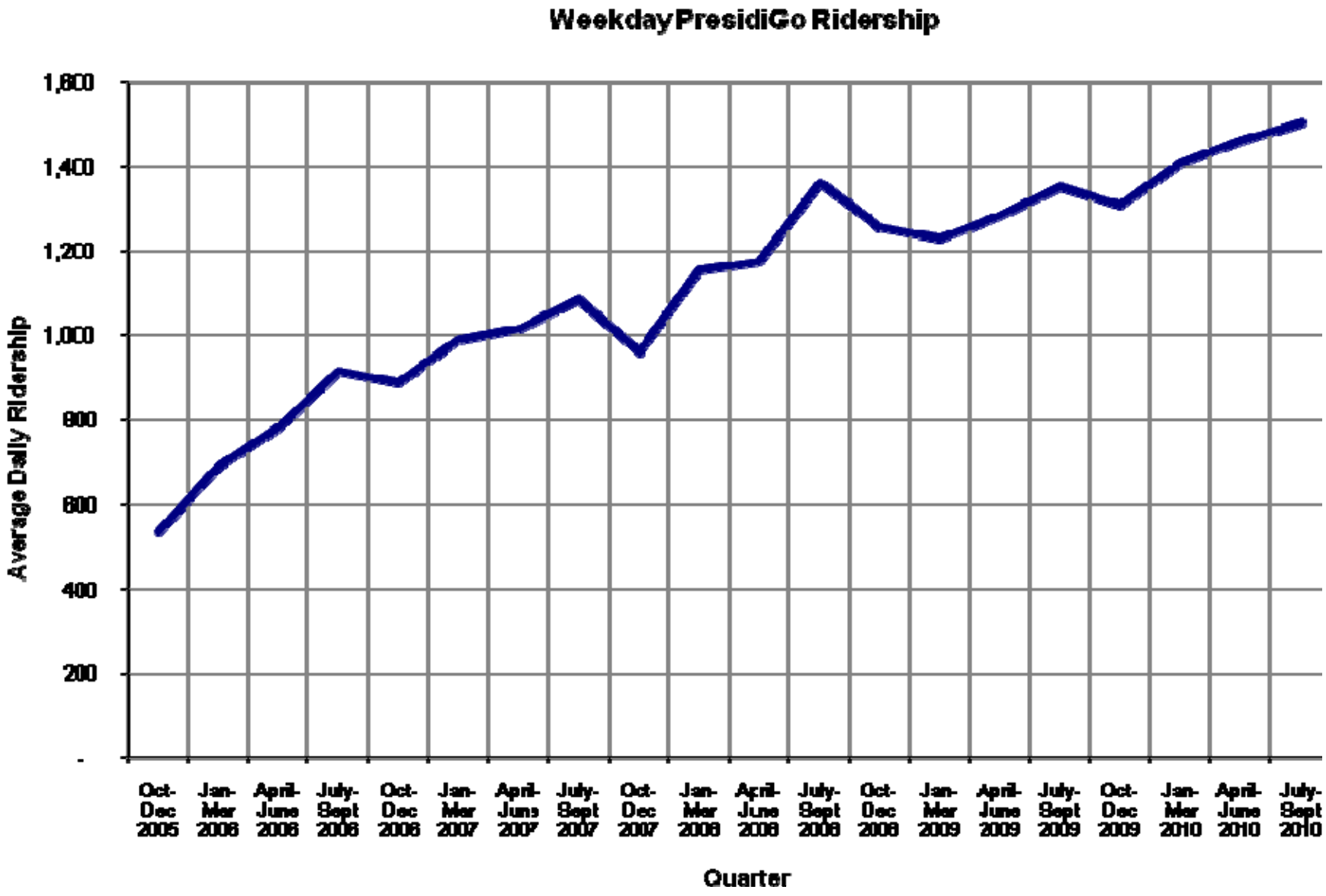
PresidiGo Shuttle (Downtown and Around the Park) The Trust implemented downtown shuttle bus service (PresidiGo Downtown) for Presidio employees and residents in September 2005. Since the inception of this service, ridership has grown dramatically, as illustrated in the chart below.

The PresidiGo downtown service is sequenced with the internal shuttle route (PresidiGo Around the Park) and allows Presidio residents to travel downtown without transferring to another bus. Presidio employees can board the Downtown shuttle service at the Transbay Terminal or the Embarcadero BART Station. PresidiGo downtown shuttle service is provided on weekdays from 5:45 AM to 9:00 PM. Downtown service operates at a frequency of every 15 minutes during the two-hour morning and afternoon peak periods, every 30 minutes on the shoulder periods, and every hour midday.

5 EXISTING (YEAR 2008) INTERSECTION OPERATING CONDITIONS (AM AND PM PEAK HOUR)

	Intersection	*Control Device*	*AM Peak Hour*		*PM Peak Hour*	
			LOS	*Delay (sec/veh)*	*LOS*	*Delay (sec/veh)*
1	Lombard/Richardson	Signal	A	7.0	A	4.5
2	Lombard/Divisadero	Signal	B	12.4	B	12.0
3	Lombard/Lyon	AWSC	**F**	**68.4**	**E**	**38.0**
4	Greenwich/Divisadero	AWSC	B	12.8	B	13.0
5	Greenwich/Lyon	AWSC	A	8.3	A	8.3
6	Richardson/Francisco	Signal	B	11.7	B	11.5
7	Richardson/Gorgas	Signal	A	6.7	A	7.2
8	Doyle/Marina/Mason	Signal	C	26.5	B	11.0
9	Lincoln/Graham[1]	AWSC	B	10.7	B	10.5
10	Lincoln/Halleck[1]	TWSC	C	22.2	C	19.9
11	Lincoln/Girard[1]	TWSC	B	14.6	B	14.3
12	Lincoln/Letterman/Presidio[1]	AWSC	C	18.4	B	12.7
13	Lombard/Presidio[1]	AWSC	**E**	**42.9**	C	24.7
14	Presidio/Pacific	AWSC	D	28.5	C	23.4
15	Presidio/Jackson	AWSC	**E**	**37.1**	D	29.6
16	Presidio/Washington	AWSC	C	22.9	C	21.5
17	Arguello/Jackson	AWSC	C	15.4	B	14.0
18	Arguello/Washington	AWSC	C	22.6	C	18.6
19	Arguello/Moraga[1]	AWSC	B	10.4	B	10.1
20	Sheridan/Montgomery[1]	AWSC	B	14.3	A	8.2

Source: Presidio Trust 2010
[1] Intersection is in the Presidio.
Notes: AWSC = all-way stop control
TWSC = two-way stop control
LOS = level of service
sec/veh = seconds per vehicle
For signalized and AWSC intersections, the LOS and average delay per vehicle are presented for the overall intersection.
For TWSC intersections, average delay per vehicle and LOS are presented for the worst approach.
***Bold** type indicates unacceptable operating conditions (LOS E or LOS F).*



Source: Presidio Trust 2010

As ridership on PresidiGo downtown service has grown, capacity continues to be added in order to keep pace with demand. Capacity has been increased by adding runs, extending service hours, and using larger vehicles. In February 2006, three additional morning runs and two additional afternoon runs were added. In May 2007, hourly service was added during the middle of the day. As they reach the end of their useful life, the original 24-passenger buses are being replaced with larger 37-passenger buses, significantly increasing capacity on the popular PresidiGo downtown service. The first 37-passenger bus was put into service in December 2007, with three more buses replaced in 2008 and 2009. In 2010, the remaining three smaller buses were replaced with larger ones.

PresidiGo Around the Park serves the entire Presidio. The internal shuttle routes connect residential areas, commercial areas, and visitor destinations in the park, as well as key transfer points to Muni and Golden Gate Transit buses. PresidiGo Around the Park shuttle service operates at a frequency of every 30 minutes on weekdays between 6:30 AM and 8:00 PM and every hour on weekends between 11:00 AM and 6:45 PM.

Muni Muni provides regular scheduled daily transit service to the nearby Letterman district on the 43-Masonic route and service to within one block of the Lombard Gate on two other routes (41-Union and 45-Union/Stockton). Table 6 presents the Muni bus lines serving the Main Post or adjacent neighborhoods, including route descriptions and the weekday AM and PM peak period headways as of January 2010. The 43-Masonic route extends between the Presidio and Lombard Gates with stops at the Letterman and East Housing areas. Lines 41-Union and 45-Union/Stockton provide service to the corner of Greenwich and Lyon streets just outside the Lombard Gate.

Recent Muni ridership data on the number of passengers boarding or disembarking from a bus within the Presidio indicate that majority in the Presidio are on the 43-Masonic route. Current weekday daily Presidio-based ridership on the 43-Masonic route is 322, with about 10 percent riding in the AM peak period and nearly one-third riding in the PM peak-commute period.

As shown in Table 6, recent Muni monitoring data at each line's maximum load point, defined as the location along the route at which the highest level of ridership typically occurs, indicate that the Muni lines serving the Presidio area are well-used at their respective maximum load points. Because the Presidio is at or near the end of all these routes, however, there is substantial excess capacity in and near the Presidio.

Pedestrian and Bicycle Facilities

The Main Post currently has a network of sidewalks, trails, and bicycle routes. Most intersections within the Main Post have marked pedestrian crosswalks. Sidewalks and/or multi-use paths provide pedestrians a safe connection between the Main Post and the Lombard Gate, where there are connections to the Muni 41-Union and 45-Union/Stockton routes, and to the Letterman district, where there is a connection to the Muni 43-Masonic route.

6 NEARBY MUNI TRANSIT LINES

Muni Route	*Description*	*AM/PM Peak Period Schedule Headway*	*Load Factor During Peak Periods*
41-Union	Weekday peak periods only, connecting Greenwich/ Lyon with downtown San Francisco.	10/9 minutes	79.3%
43-Masonic	Daily route connecting the Marina district to the Excelsior district via Lombard, Presidio, and Masonic.	9/10 minutes	94.0%
45-Union/Stockton	Daily local route connecting Greenwich/Lyon with Caltrain Depot at 4th/Townsend.	9/9 minutes	93.7%

Source: San Francisco Municipal Transportation Agency 2008

There are several bicycle routes serving the Main Post, although bicycles and vehicles share a standard-width roadway along most of these routes. Lombard Street, Presidio Boulevard, Mason Street, and Arguello Boulevard are part of the designated San Francisco Citywide Bicycle Route System (Routes #4, #55, #2, and #65, respectively) that continue into the Presidio to serve the Main Post or nearby areas. Most of these routes are Class III facilities (signed route only – bicyclists share roadway with motor vehicles), although Mason Street has Class I (separate off-street path) and Class II (dedicated, striped bike lanes on roadway edge) facilities, and Lincoln Boulevard between the Letterman district and Main Post district has striped bike lanes. Construction of a multi-use path between the cemetery and the Golden Gate Bridge toll plaza was completed in 2008. The path will be connected to the Main Post after construction of Doyle Drive. This multi-use path will substantially improve the bicycle and pedestrian connection between the Main Post and the Golden Gate Bridge.

Other improvements to the pedestrian and bicycle circulation network throughout the Presidio will be completed in coming years as described in the Presidio Trails and Bikeways Master Plan (NPS and Trust 2003).

Parking Conditions

Parking occupancy information in the Main Post district (excluding Infantry Terrace) was collected in the summer of 2006, twice in the summer of 2007, during the summer of 2008, and in the summer of 2009 during the weekday midday peak period (between 10:00 AM and 2:00 PM). Table 7 provides a summary of these recently collected data. The latest survey indicates that 969 spaces (44 percent) of the 2,200 spaces were occupied during the most recent midday period, when approximately 61 percent of the building square footage in the district was occupied.

7 PARKING SUPPLY AND CURRENT USE WITHIN THE MAIN POST

Date	*Total Spaces*	*Spaces Occupied*	*Percent Occupied*
August 1, 2006	2,200	838	38
July 17, 2007	2,200	1,050	48
August 8, 2007	2,200	1,075	49
July 24, 2008	2,200	1,034	47
July 7, 2009	2,200	969	44

Source: Presidio Trust 2010

ENVIRONMENTAL CONSEQUENCES

Methodology

Estimates of weekday daily, AM, and PM peak hour trips generated by each of the alternatives are based on the methodology used in the cumulative analysis for the final PTMP EIS, which, in turn, was based on trip generation information from standard data sources such as the San Francisco Planning Department Guidelines for Environmental Review (SF Guidelines), the State of California Department of Transportation (Caltrans), and the Institute of Transportation Engineers (ITE).

For the purposes of this analysis of transportation conditions in the Main Post, travel demand assumptions for specific, more defined uses (e.g., museums, theatre, YMCA Fitness Center, or recently approved projects) have been used instead of the more general travel demand assumptions used in the final PTMP EIS. All of the travel characteristics included in this analysis reflect a moderate level of effectiveness of transportation demand management (TDM) measures associated with all of the proposed alternatives, as was reflected in the final PTMP EIS transportation analysis.

Parking demand has also been estimated for midday weekday and weekend conditions, based on the methodology used in the final PTMP EIS. The parking demand analysis for the Main Post district expands the final PTMP EIS methodology to evaluate the reduction in parking demand that could be expected with more aggressive TDM measures in Alternatives 2 and 3, reflecting a ten-percent reduction in demand with Alternative 2 and a five-percent reduction in demand with Alternative 3.

Travel Demand At the time of publication of the final PTMP EIS in May 2002, the most recent version of the San Francisco County Transportation Authority (SFCTA) countywide travel demand forecasting model was used to develop the travel forecasts for proposed cumulative development and growth through the year 2020. The resulting cumulative impacts assessment for year 2020 conditions took into account both the future level of activity expected at the Presidio as well as the expected growth in housing and employment for the remainder of San Francisco and the nine-county Bay Area. Since publication of the final PTMP EIS, the SFCTA model has been updated for the horizon year 2030 as part of ongoing studies conducted for the Doyle Drive Environmental Impact Statement/ Report (EIS/R) being prepared by SFCTA, Federal Highway Administration (FHWA), and Caltrans (2005). The more recent model data reflect updates in Association of Bay Area Governments (ABAG) regional employment and population forecasts as well as the effect of the replacement of the current Doyle Drive structure.

The Doyle Drive replacement facility includes the replacement of the current structure with a parkway built to Caltrans standards that would provide direct vehicular access to the Presidio via Girard Avenue. The new direct connection to Doyle Drive would relieve some of the existing traffic congestion occurring at the Lombard Gate. Moving from east to west, US 101 is on Lombard Street and then diverges from Lombard Street to continue on Richardson Avenue for a short distance and then on the elevated Doyle Drive. Currently westbound traffic on US 101/Lombard Street must turn left to continue on Lombard Street where it becomes a local street and diverges from US 101/Richardson Avenue. Given the limited capacity of this westbound left-turn lane, the Doyle Drive/Girard Road access would become a primary entrance into the Presidio, with the Lombard Gate generally serving as a secondary entrance.

The 2030 SFCTA model data and information from the Doyle Drive EIS/R (which also considers a horizon year of 2030) were used to update the final PTMP EIS transportation analysis for the purposes of this SEIS. Because little was known about the influence of the Doyle Drive project on pass-through traffic at the time of publication of the final PTMP EIS, that analysis assumed that pass-through volumes on most routes would increase substantially. The Doyle Drive EIS/R suggests that the final PTMP EIS estimates of future pass-through volumes were overly conservative. The projected future traffic volumes used in this analysis have been adjusted to reflect the latest assessment of pass-through traffic as described in the draft Doyle Drive EIS/R.

Although the proportion of uses varies by alternative, at least 30 percent of the land uses in the Main Post would be office under any alternative. Because the amount of traffic generated by office use on weekends is typically 15 to 20 percent of weekday traffic, and because weekend traffic tends to be more evenly distributed across several hours rather than concentrated in peak commute periods, the weekday commute periods are still expected to be more congested than the peak hour of the weekend days. This perspective is substantiated by the analysis in the draft Doyle Drive EIS/R, which indicates that in 2030 nearby roadway segments and intersections would operate at the same or better level of service on weekends compared to weekday commute periods.

Trip Generation In order to estimate the number of new person trips that would be generated by each alternative, trip generation rates were developed for the different land use types (office, retail, residential, etc.). A trip generation rate expresses the number of person trips that would be generated by a unit of given land use type. Person trips for each alternative were calculated for weekday daily, AM peak hour, and PM peak hour conditions.

Trip generation rates from the final PTMP EIS were used for general land use types (e.g., office or warehouse). These trip generation rates were based on information obtained from the San Francisco Guidelines for Environmental Review, the Institute of Transportation Engineers Trip Generation Manual-Sixth Edition, the Caltrans' 15th Progress Report on Trip Ends Generation Research Counts, and the San Diego Traffic Generators Manual. The resulting person trip generation rates shown in Table 8 were developed to estimate the number of trips that were representative of the land uses expected on the Main Post.

Trip generation data for the Letterman Digital Arts Center were updated to reflect subleases for restaurant and office space. For the purposes of this analysis of conditions on the Main Post, specific trip generation rates

8 PERSON TRIP GENERATION RATES BY LAND USE

Land Use	*Daily Rate (number of person trips)*	*AM Peak Hour*			*PM Peak Hour*		
		Rate (number of person trips)	*In*	*Out*	*Rate (number of person trips)*	*In*	*Out*
Industrial/ Warehouse	6	0.60	80%	20%	0.90	20%	80%
Office	15	2.25	90%	10%	1.88	15%	85%
Retail	150	9.00	50%	50%	15.75	50%	50%
Restaurant	400	28	50%	50%	54	63%	37%
Lodging (rooms)	11	0.66	60%	40%	0.88	55%	45%
Conference	8.5	0.85	80%	20%	0.85	30%	70%
Presidio Bowling Center	45	2.48	60%	40%	4.50	50%	50%
YMCA Fitness Center	57	1.98	45%	55%	5.99	60%	40%
Cultural / Education	40	2.00	80%	20%	5.20	50%	50%
Theatre (seats)	1.13	0.05	90%	10%	0.26	50%	50%
Residential (units)	10	0.90	20%	80%	1.45	70%	30%
Infrastructure	1	0.50	90%	10%	0.50	15%	85%
Military	1.5	0.15	50%	50%	0.15	45%	55%
History Center	32.1	0.75	70%	30%	7.5	30%	70%
Walt Disney Family Museum	29.5	0.2	80%	20%	1.1	50%	50%

Source: Presidio Trust 2010

were developed for better defined projects such as a history center, a contemporary art museum, restaurants, the theatre, and the YMCA Fitness Center.

Attendance data for the 293,000-square-foot de Young Museum in Golden Gate Park were used to estimate trip generation for the proposed History Center in Alternative 3. In order to analyze museum attendance, the average Friday[37] visitation over the first six months of the de Young's opening was divided by six (to reflect a museum approximately one-sixth the size) to estimate daily trip generation for the 50,000-square-foot History Center in Alternative 3. This results in a daily person trip generation rate of 32.1 one-way trips per day. This trip generation rate corresponds to a daily attendance at the de Young Museum that is higher than the average weekday attendance in each month from July 2006 to June 2008.

In addition, more detailed, project-specific travel demand information was used for recently approved projects (e.g., Walt Disney Family Museum and International Center to End Violence) when available. Similarly, trip generation information was updated for other parts of the Presidio for which better, more specific information is now available, such as the restaurant on Ruger Street, upcoming projects in the Thornburg (west Letterman) district, and projects at the western end of Crissy Field (Area B).

[37] *Attendance on Fridays was typically higher than on other weekdays. Peak weekday attendance was used rather than weekend attendance because weekday peak commute period traffic conditions in and near the Presidio are typically worse than weekend traffic conditions.*

Some trips will be internal to the Presidio; examples include trips by a Presidio employee who also lives in the park, or by a Presidio employee who walks to a nearby restaurant for lunch. Because internal trips are more likely to be made by transit, walking, or bicycling than external trips, the separation of the two types of trips allowed for the application of different mode splits.

The mix of land uses expected within the Main Post (as well as the greater Presidio) would also create "linked" trips. Linked trips are internal trips that are made as intermediate stops on the way from an origin to a primary trip destination. For example, a Presidio employee who stops at the post office before traveling home would be a linked trip. The fact that some trips within the Presidio would be linked yields fewer trips than would occur otherwise.

Trip Distribution The geographic distribution of employee, visitor, and resident trips assumed in the final PTMP EIS was based on a survey of Presidio employees, the San Francisco Planning Department Guidelines for Environmental Review, and results from the San Francisco County Transportation Authority travel demand model. Trips were distributed to San Francisco, the East Bay, the North Bay, and the South Bay. Consistent with the San Francisco methodology for environmental review, the trips to and from San Francisco were further separated into four quadrants of the city, or superdistricts as described in the Citywide Travel Behavior Survey.

For the purposes of the final SEIS, this geographic distribution has been updated with data from a subsequent employee survey conducted by the Presidio Trust Transportation Department in 2005, and in the case of Alternatives 2 and 3, with information related to specific visitor uses

such as the History Center and lodge. The geographic distribution of trips in the final PTMP EIS assumed approximately 80 percent of trips would begin or end in San Francisco, including the Presidio. The 2005 employee survey suggests that only about 70 percent of Presidio employee and Presidio resident trips combined would begin or end in San Francisco.

The geographic distribution of the additional trips associated with the proposed changes in the Main Post, namely the cultural institutions and lodge, was based on survey data from the final EIRs for the de Young Museum and the California Academy of Sciences. The data for visitor trips to these cultural institutions suggest that only about 15 percent of trips to the History Center would originate in San Francisco and nearly one-third would be from outside the Bay Area, with the remaining portion coming from the East Bay, North Bay, and South Bay. It is expected that the lodge would similarly attract a significant proportion of guests from outside the San Francisco Bay Area.

Mode Split and Vehicle Occupancy As with the methodology used in the final PTMP EIS, mode split and vehicle occupancy for each of the alternatives vary by land use type and by whether the trip is external or internal to the Presidio. Project-generated person trips were assigned to travel modes in order to estimate the number of automobile, transit, and walk/bicycle trips. Mode split information used in the final PTMP EIS was obtained from the final General Management Plan Amendment EIS, Presidio employee and resident surveys, and the minimum performance standards of the TDM program.

The mode split for each alternative reflects implementation of improvements to encourage transit, pedestrian, and bicycle modes and discourage single-occupant vehicle travel; the overall modal split, which is the percentage of total trips that would occur via a private vehicle, transit, bicycle, or as a pedestrian, would vary by alternative. Auto person trips refer to person trips either as a driver or passenger in a private vehicle. To determine the number of vehicle trips generated by the number of auto person trips, an average vehicle occupancy was used. The assumed vehicle occupancy factor varies by land use. The chosen vehicle occupancy factors were based on the Citywide Travel Behavior Survey (CTBS) travel data published by the San Francisco Planning Department.

The mode split obtained for the different alternatives assumes implementation of TDM measures that would be phased in as more and more people work and live in the Presidio. Implementation of a TDM program would improve transit, pedestrian, and bicycle conditions and would thereby reduce auto usage to Presidio destinations. The TDM program includes the following:

- Mandatory participation and commitment to trip reduction requirements by all non-residential tenants
- A clean-fuel shuttle bus serving the entire Presidio with direct connections to Muni and Golden Gate Transit routes
- On-site sale of transit passes
- Transit and ridesharing information disseminated on kiosks within the park, on the Trust’s website, and at employee orientation programs
- Mandatory event-specific TDM programs for all special events

- Periodic monitoring of traffic volumes and mode choice among Presidio residents and employees
- Express bus service to regional transit connections (i.e., BART and the Transbay Terminal)
- Secure bicycle parking
- A parking management program

The TDM program consists of components that can be implemented to meet or exceed the intended traffic reductions. The TDM traffic reductions used in the final PTMP EIS and Main Post transportation analysis reflect the Trust's minimum performance standards. Since traffic reductions are likely to exceed what has been incorporated here, the traffic forecasts can be considered somewhat conservative. Additional TDM program components will be instituted or existing TDM program elements will be intensified to achieve additional automobile trip reductions as transit service and other alternative transportation opportunities are expanded.

As part of the TDM program, a series of parking management measures would be implemented to reduce parking demand in the Main Post, although the parking management measures under Alternatives 2 and 3 would be more intensive than those under Alternative 1 and those previously considered in the final PTMP EIS. The current popularity of the PresidiGo Downtown shuttle service suggests that parking fees will cause some employee and resident motorists to shift to transit service, particularly if that service is free (PresidiGo) or subsidized by employers. It is expected that parking fees will also cause many drive-alone motorists to switch to carpooling. Implementation of parking fees is expected to reduce parking demand by approximately ten percent under Alternative 2 and by about 2.5 percent under Alternative 3. In order to avoid overestimating the beneficial effect on traffic conditions, the more intensive parking management measures in Alternatives 2 and 3 are not reflected in the trip generation estimates or traffic analysis. However, the effect of the reduced parking demand and the associated reduction in needed supply are considered in the analysis of parking conditions.

Table 9 presents the projected daily, AM peak hour, and PM peak hour travel demand estimates for the Main Post by mode for typical weekday conditions for the four alternatives. Daily and peak hour travel demand would vary by alternative, depending on the land use elements contained in the alternatives and the intensity of use. The number of weekday daily person trips would range from approximately 24,600 under Alternative 4 to approximately 32,570 under Alternative 2. In general, 7 to 9 percent of the daily trips generated by each alternative would occur during the AM peak hour, and 11 to 13 percent would occur during the PM peak hour. During the AM peak hour, the number of vehicle trips generated by the alternatives would range from between 949 vehicle trips under Alternative 3 to about 1,124 vehicle trips under Alternative 2. Vehicle trips would be somewhat higher during the PM peak hour and would range from 1,359 vehicle trips under Alternative 4 to 1,808 vehicle trips under Alternative 2.

9 MAIN POST TRIP GENERATION BY MODE OF TRAVEL AND BY ALTERNATIVE (WEEKDAY DAILY, AM PEAK HOUR, AND PM PEAK HOUR)

	Alternative 1	*Alternative 2*	*Alternative 3*	*Alternative 4*
WEEKDAY DAILY				
Person Trips				
Automobile	18,556	19,899	15,782	14,975
Transit	6,144	6,609	5,076	5,099
Bike/Walk/Other	5,529	6,061	4,680	4,526
Total	30,229	32,569	25,538	24,600
Vehicle Trips	13,951	14,955	11,894	11,630
WEEKDAY AM PEAK HOUR				
Person Trips				
Automobile	1,294	1,393	1,127	1,144
Transit	451	481	398	412
Bike/Walk/Other	398	433	348	356
Total	2,143	2,307	1,873	1,912
Vehicle Trips	1,057	1,124	949	974
Percent of Daily Trips	7.6%	7.5%	8.0%	8.4%
WEEKDAY PM PEAK HOUR				
Person Trips				
Automobile	2,197	2,417	1,970	1,748
Transit	731	805	611	603
Bike/Walk/Other	637	726	569	524
Total	3,565	3,948	3,150	2,875
Vehicle Trips	1,637	1,808	1,448	1,359
Percent of Daily Trips	11.7%	12.1%	12.2%	11.7%

Source: Presidio Trust 2010

The relationships among building square footages and types of land use across alternatives are reflected in the trip generation estimates. Although the total square footage under Alternative 2 would be slightly less than under Alternative 1, the projected number of trips is slightly greater due to the relative increase in visitor-oriented uses and decrease in office and residential uses. Alternative 2 would generate 7 percent more daily vehicle trips than Alternative 1, and Alternatives 3 and 4 would generate 15 to 17 percent fewer vehicle trips than Alternative 1, respectively.

Although a different mode share and vehicle occupancy rate were assumed for each land use, composite mode share and vehicle occupancy rates were estimated for each alternative as shown in Table 10. The mode share under Alternatives 2, 3, and 4 would be very similar to the mode share under Alternative 1.

Parking Demand Parking demand for the alternatives consists of both long-term demand (i.e., employee and resident parking) and short-term demand (i.e., visitor parking). Long-term parking for non-residential uses was estimated by determining the number of employees for each land use and applying the average mode split and vehicle occupancy from the trip generation estimates for both external and internal trips. Each employee vehicle trip was assumed to require one space per day. The parking demand for lodging was estimated as long-term only, with a rate of 1.0 space per room, which accounts for both employees and guests. Since most of the housing on the Main Post consists of large units (e.g., Infantry Terrace), a long-term rate of 2.5 spaces per housing unit was used for all housing units for evenings and weekends, and a rate of 1.25 spaces per unit was used for the midday weekday period.

Short-term parking was estimated based on the total daily visitor trips and the average turnover rate. Consistent with assumptions in the final PTMP EIS transportation analysis, a short-term parking turnover rate of 6 vehicles per space per day was applied to most land uses for all alternatives, with the exception of retail and cultural/educational uses for which a turnover rate of 10 vehicles per space per day was used, and conference uses for which a turnover rate of 3 vehicles per space per day was used. A turnover rate of 4 or 4.5 was used for recreational and museum uses based on data from the final de Young Museum EIR. Detailed parking demand calculations by alternative are provided in Appendix A.

Table 11 presents the estimated weekday and weekend parking demand for all alternatives. Different land uses experience peak parking demand at different times of the day, and some uses such as museums experience peak demand on weekends rather than weekdays. Each of the alternatives would experience the peak demand during the midday weekday period, but the parking demand associated with very large weekend special events would have to be managed to ensure adequate parking supply in the Main Post district. The parking demand for Alternative 1 would be similar to that anticipated in the final PTMP EIS. Alternative 4 would generate the lowest weekday parking demand of 2,018 spaces, approximately 7 percent less than Alternative 1. The parking demand under Alternative 2 would be approximately the same as under Alternative 1. Alternatives with fewer visitor-oriented or residential uses and a higher percentage of office space (e.g., Alternatives 3 and 4) would have a weekend parking demand that is less similar to midday weekday demand, compared to other alternatives.

10 MAIN POST COMPOSITE MODE SHARE AND VEHICLE OCCUPANCY RATE BY ALTERNATIVE (WEEKDAY DAILY, AM PEAK HOUR, AND PM PEAK HOUR)

	Alternative 1	*Alternative 2*	*Alternative 3*	*Alternative 4*
WEEKDAY DAILY				
Mode Share				
Automobile	61%	61%	62%	61%
Transit	20%	20%	20%	21%
Bike/Walk/Other	18%	19%	18%	18%
Vehicle Occupancy Rate	1.33	1.33	1.33	1.29
WEEKDAY AM PEAK HOUR				
Mode Share				
Automobile	60%	60%	60%	60%
Transit	21%	21%	21%	22%
Bike/Walk/Other	19%	19%	19%	19%
Vehicle Occupancy Rate	1.23	1.24	1.19	1.17
WEEKDAY PM PEAK HOUR				
Mode Share				
Automobile	62%	61%	63%	61%
Transit	21%	20%	19%	21%
Bike/Walk/Other	18%	18%	18%	18%
Vehicle Occupancy Rate	1.34	1.34	1.36	1.29

Source: Presidio Trust 2010

Note: Percentages do not always total 100 due to rounding.

11 PARKING DEMAND BY ALTERNATIVE

	Alternative 1	*Alternative 2*	*Alternative 3*	*Alternative 4*
Number of Parking Spaces Needed				
Midday Weekday	2,163	2,159	2,028	2,018
Weekend	1,546	1,552	1,276	1,237
Ratio of Weekend to Midday Weekday Demand	0.71	0.72	0.63	0.61

Source: Presidio Trust 2010

Traffic Impacts

The potential impacts of development within the Main Post district on future traffic conditions on Presidio and city roadways were analyzed on pages 302 through 320 of the final PTMP EIS. The analysis assumed the road network would be simplified and clarified by establishing a hierarchy of routes, providing additional signage, closing some roads to auto traffic to provide for recreational use, and reducing traffic on some roads. As described in the subsequent 2007 Main Parade EA, three roadway segments in the Main Post would be closed to vehicular traffic: Sheridan Avenue between Montgomery Street and Graham Street, Arguello Boulevard between Moraga Avenue and Sheridan Avenue, and Anza Street. Doyle Drive will be reconstructed and will establish Girard Road as a new access point to the park. In addition to anticipated growth in vehicles traveling to and from the Main Post and the larger Presidio, the final PTMP EIS projected that regional growth throughout San Francisco and the greater Bay Area would contribute to increased traffic on roadways near the Presidio.

Proposed development throughout the park under the PTMP was estimated to generate 44,407 daily one-way vehicle trips, and Main Post uses were estimated to generate approximately 11,860 daily vehicle trips. The final PTMP EIS and the subsequent final Public Health Service Hospital (PHSH) EIS concluded that, following mitigation, local intersections would operate at acceptable levels except for the intersection of Lincoln/Bowley/Pershing, which would operate at LOS E, partially due to growth in overall regional traffic passing through the park. Strategies for reducing single-occupancy vehicle trips identified in PTMP EIS Mitigation Measure TR-19 *TDM Program Monitoring* would reduce vehicular delays at local intersections.

For this SEIS analysis, future 2030 traffic volumes were developed for each of the alternatives for all study intersections. Baseline 2030 traffic volumes were derived from the 2020 traffic volumes in the final PTMP EIS and then modified to reflect anticipated growth between 2020 and 2030 and findings of the Doyle Drive EIS/R, including that study's prediction of the Doyle Drive parkway alternative's effect on pass-through traffic.

The new Girard Road Gate provided as part of the reconstruction of Doyle Drive would also accommodate a substantial portion of the additional trips generated by the alternatives as well as pass-through traffic. The Doyle Drive EIS/R estimates that pass-through traffic will increase slightly through the Arguello Gate but decrease slightly through the Presidio and Lombard Gates.

Intersection Operational Analysis Based on the future projected traffic conditions, and the estimated traffic volumes for each of the alternatives, future 2030 traffic operating conditions were calculated for the study intersections for AM and PM peak hour conditions, as shown in Tables 12 and 13, respectively. For unsignalized one-way or two-way stop-controlled intersections, the level of service (LOS) and delay per vehicle are presented for the approach that would experience the highest delay. For all-way stop-controlled or signalized intersections, the overall intersection LOS and average delay per vehicle are presented. When forecasted intersection volumes exceed capacity substantially, the calculated intersection delay increases exponentially absent any mitigation to reduce volume or increase capacity. For these intersections, the forecasted delay is noted as greater than 70 seconds in Tables 12 and 13. The detailed LOS calculation sheets for each study intersection are presented in Appendix A.

All 20 study intersections could be mitigated to an acceptable level of service (LOS D or better) through improvements identified in the final PTMP EIS or additional mitigation measures identified in this analysis. Some study intersections are in the City and County of San Francisco (CCSF or city), and any identified improvements at these intersections would be beyond the jurisdiction of the Trust. The Trust would coordinate with the CCSF to implement any improvements.

Significance Criteria Although specific significance thresholds were not used to determine whether a transportation impact is significant or not, several factors were considered in making this determination. Table 14 provides a comparison of these factors to the significance thresholds used by the CCSF Planning Department for impacts at unsignalized intersections.

Alternative 1 This alternative would generate 13,951 daily vehicle trips, including 1,057 AM peak hour trips and 1,637 PM peak hour trips. As shown in Table 15, of the 20 studied intersections, eight would operate at unacceptable levels (LOS E or F) during the AM peak hour, and seven during the PM peak hour under this alternative. The current traffic volumes at the intersection of Arguello/Washington are higher in the AM peak hour than in the PM peak hour, likely due to the nearby schools. The contribution of the traffic generated by the Main Post is greater in the PM peak hour than in the AM peak hour. However, the total intersection traffic volume is greater in the AM peak hour, and the intersection is expected to operate unacceptably in the AM peak hour but acceptably in the PM peak hour.

The poor operating conditions at these intersections reflect the increase in traffic volumes traveling to and from the Presidio and relatively modest increases in traffic resulting from regional growth. Seven of the eight intersections expected to operate at LOS E or F were forecast to operate at LOS E or F in the final PTMP EIS. The intersection of Lincoln/Halleck was *not* expected to operate at an unacceptable level of service in the final PTMP EIS. In the final PTMP EIS, this intersection was analyzed with two lanes in each direction on Lincoln, reflecting the geometric modifications originally described in the 1994 NPS General

12 YEAR 2030 AM PEAK HOUR LEVELS OF SERVICE

	Intersection	*Existing Control Device*	*PTMP Mitigation Control Device*	*Existing Conditions*		*Alternative 1*		*Alternative 2*		*Alternative 3*		*Alternative 4*	
				LOS	*Delay (sec/ veh)*	*LOS*	*Delay (sec/ veh)*	*LOS*	*Delay (sec/ veh)*	*LOS*	*Delay (sec/ veh)*	*LOS*	*Delay (sec/ veh)*
1	Lombard/Richardson	Signal	n.a.	A	7.0	A	6.5	A	6.6	A	6.3	A	6.3
2	Lombard/Divisadero	Signal	n.a.	B	12.4	B	15.1	B	15.5	B	14.6	B	14.5
3	Lombard/Lyon	AWSC	Signal	**F**	**68.4**	**E**	**37.4**	**E**	**39.4**	C	20.0	D	34.3
4	Greenwich/Divisadero	AWSC	n.a.	B	12.8	B	14.1	B	14.1	B	14.1	B	14.1
5	Greenwich/Lyon	AWSC	n.a.	A	8.3	A	8.6	A	8.6	A	8.6	A	8.6
6	Richardson/Francisco	Signal	n.a.	B	11.7	B	15.4	B	15.6	B	15.0	B	15.0
7	Richardson/Gorgas	Signal	n.a.	A	6.7	A	8.1	A	8.2	A	8.0	A	8.0
8	Doyle/Marina/Mason	Signal	n.a.	C	26.5	C	34.0	C	34.0	C	34.0	C	34.0
9	Lincoln/Graham	AWSC	n.a.	B	10.7	D	28.2	D	28.6	**E**	**35.3**	C	21.4
10	Lincoln/Halleck	TWSC	n.a.	C	22.2	**F**	**> 70.0**	**F**	**> 70.0**	**F**	**> 70.0**	**F**	**> 70.0**
11	Lincoln/Girard	TWSC	Signal	B	14.6	**F**	**> 70.0**	**F**	**> 70.0**	**F**	**> 70.0**	**F**	**> 70.0**
12	Lincoln/Letterman/Presidio	AWSC	Signal	C	18.4	C	24.0	D	25.3	C	16.6	C	22.9
13	Lombard/Presidio	AWSC	Signal	**E**	**42.9**	**F**	**> 70.0**	**F**	**> 70.0**	**F**	**> 70.0**	**F**	**> 70.0**
14	Presidio/Pacific	AWSC	Signal	D	28.5	**F**	**> 70.0**	**F**	**> 70.0**	**F**	**67.9**	**F**	**68.6**
15	Presidio/Jackson	AWSC	Signal	**E**	**37.1**	**F**	**> 70.0**	**F**	**> 70.0**	**F**	**> 70.0**	**F**	**> 70.0**
16	Presidio/Washington	AWSC	Signal	C	22.9	**F**	**> 70.0**	**F**	**> 70.0**	**F**	**> 70.0**	**F**	**> 70.0**
17	Arguello/Jackson	AWSC	Signal	C	15.4	B	14.8	B	15.0	B	14.6	B	14.6
18	Arguello/Washington	AWSC	Signal	C	22.6	**E**	**46.1**	**E**	**47.4**	**E**	**44.7**	**E**	**45.2**
19	Arguello/Moraga	TWSC	Signal	B	10.4	C	16.0	C	16.0	B	13.9	C	15.7
20	Sheridan/Montgomery	AWSC	n.a.	B	14.3	C	22.8	C	22.8	C	18.9	C	19.9

Source: Presidio Trust 2010

Notes: AWSC = all-way stop control *LOS = level of service*
TWSC = two-way stop control *sec/veh = seconds per vehicle* *n.a. = not applicable*
For signalized and AWSC intersections, the LOS and average delay per vehicle are presented for overall intersection operations.
For TWSC intersections, the LOS and delay are presented for the worst approach.
***Bold** type indicates unacceptable operating conditions (LOS E or LOS F).*

13 YEAR 2030 PM PEAK HOUR LEVELS OF SERVICE

	Intersection	Existing Control Device	PTMP Mitigation Control Device	Existing Conditions		Alternative 1		Alternative 2		Alternative 3		Alternative 4	
				LOS	Delay (sec/ veh)	LOS	Delay (sec/ veh)	LOS	Delay (sec/ veh)	LOS	Delay (sec/ veh)	LOS	Delay (sec/ veh)
1	Lombard/Richardson	Signal	n.a.	A	4.5	A	8.2	A	8.7	A	7.2	A	6.9
2	Lombard/Divisadero	Signal	n.a.	B	12.0	B	15.0	B	16.5	B	14.1	B	13.9
3	Lombard/Lyon	AWSC	Signal	**E**	**38.0**	**F**	**> 70.0**	**F**	**> 70.0**	**F**	**55.1**	**F**	**> 70.0**
4	Greenwich/Divisadero	AWSC	n.a.	B	13.0	B	13.9	B	14.0	B	13.9	B	13.8
5	Greenwich/Lyon	AWSC	n.a.	A	8.3	A	8.4	A	8.4	A	8.4	A	8.3
6	Richardson/Francisco	Signal	n.a.	B	11.5	B	16.4	B	18.0	B	15.2	B	15.1
7	Richardson/Gorgas	Signal	n.a.	A	7.2	A	9.2	B	10.1	B	10.4	A	7.0
8	Doyle/Marina/Mason	Signal	n.a.	B	11.0	C	26.3	C	26.9	C	25.7	C	25.6
9	Lincoln/Graham	AWSC	n.a.	B	10.5	C	21.6	C	23.9	D	28.0	B	14.0
10	Lincoln/Halleck	TWSC	n.a.	C	19.9	**F**	**> 70.0**	**F**	**> 70.0**	**F**	**> 70.0**	**F**	**> 70.0**
11	Lincoln/Girard	TWSC	Signal	B	14.3	**F**	**> 70.0**	**F**	**> 70.0**	**F**	**> 70.0**	**F**	**> 70.0**
12	Lincoln/Letterman/Presidio	AWSC	Signal	B	12.7	D	27.0	**E**	**35.6**	C	16.7	C	20.9
13	Lombard/Presidio	AWSC	Signal	C	24.7	**F**	**> 70.0**	**F**	**> 70.0**	**F**	**> 70.0**	**F**	**> 70.0**
14	Presidio/Pacific	AWSC	Signal	C	23.4	**F**	**> 70.0**	**F**	**> 70.0**	**F**	**68.8**	**F**	**67.3**
15	Presidio/Jackson	AWSC	Signal	D	29.6	**F**	**> 70.0**	**F**	**> 70.0**	**F**	**> 70.0**	**F**	**> 70.0**
16	Presidio/Washington	AWSC	Signal	C	21.5	**F**	**> 70.0**	**F**	**> 70.0**	**F**	**> 70.0**	**F**	**> 70.0**
17	Arguello/Jackson	AWSC	Signal	B	14.0	C	20.5	C	21.3	C	19.8	C	19.3
18	Arguello/Washington	AWSC	Signal	C	18.6	D	27.4	D	28.9	D	26.0	D	25.3
19	Arguello/Moraga	TWSC	Signal	B	10.1	C	16.0	C	16.2	B	14.0	C	15.3
20.	Sheridan/Montgomery	AWSC	n.a.	A	8.2	B	10.2	B	10.2	A	10.0	A	9.4

Source: Presidio Trust 2010

Notes: AWSC = all-way stop control *LOS = level of service*
TWSC = two-way stop control *sec/veh = seconds per vehicle* *n.a. = not applicable*
For signalized and AWSC intersections the LOS and average delay per vehicle are presented for overall intersection operations.
For TWSC intersections, the LOS and average delay per vehicle are presented for the worst approach.
***Bold** type indicates unacceptable operating conditions (LOS E or LOS F).*

14 COMPARISON OF FACTORS USED IN EVALUATING THE RELATIVE SIGNIFICANCE OF TRANSPORTATION IMPACTS AT UNSIGNALIZED INTERSECTIONS

CCSF	*Trust*
Potentially significant if project-related traffic:	Potentially significant if project-related traffic at two-way stop-controlled intersections:
• causes the level of service (LOS) at the worst approach to deteriorate from LOS D or better to LOS E or F, and Caltrans signal warrants would be met; or	• causes Caltrans signal warrants to be met, and contributes considerably to the cumulative traffic increases that would cause the level of service at the worst approach to deteriorate from LOS D or better to LOS E or F; or
• causes Caltrans signal warrants to be met when the worst approach is already operating at LOS E or F.	• causes Caltrans signal warrants to be met, and contributes considerably to cumulative traffic increases that would cause the average delay per vehicle to worsen considerably on the worst approach already operating at LOS E or F conditions.
	Potentially significant if project-related traffic at all-way stop-controlled intersections:
	• contributes considerably to the cumulative traffic increases that would cause a deterioration in LOS from LOS D or better to LOS E or F, or from LOS E to LOS F; and
	• causes Caltrans signal warrants to be met.

Source: Presidio Trust 2010

Management Plan Amendment (GMPA). In this analysis for the Main Post Update SEIS, the future lane configuration is assumed to be the same as it is currently. Mitigation measures that would improve the operation of all eight intersections to LOS D or better are described at the end of this section.

Five of the eight intersections expected to operate unacceptably (Lombard/Lyon, Presidio/Pacific, Presidio/Jackson, Presidio/Washington, and Arguello/Washington) are located in the city. Improvements at these intersections would be beyond the jurisdiction of the Trust, and the Trust would coordinate any improvements with the CCSF.

Alternative 2 Alternative 2 would generate 14,955 daily vehicle trips, including 1,124 AM peak hour trips and 1,808 PM peak hour trips. The roadway network associated with Alternative 2 would be the same as under Alternative 1, as presented in the draft SEIS. Some of the additional traffic generated by this alternative would be related to the lodge and is expected from travelers from outside San Francisco. Consequently, it is expected that this traffic would enter the park via the Doyle Drive ramps and Girard Road. Compared to Alternative 1, Alternative 2 would generate 6 and 10 percent more vehicular traffic in the AM and PM peak hours. Most levels of service would be the same as with Alternative 1, but the delay per vehicle would be slightly higher at

15 INTERSECTIONS OPERATING AT LOS E OR F BY ALTERNATIVE

Intersection	*Jurisdiction*	*AM Peak Hour*				*PM Peak Hour*			
		Alt.1	*Alt. 2*	*Alt. 3*	*Alt. 4*	*Alt.1*	*Alt. 2*	*Alt. 3*	*Alt. 4*
Lombard/Lyon	CCSF	X	X			X	X	X	X
Lincoln/Graham	Trust			**X**					
Lincoln/Halleck	Trust	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**
Lincoln/Girard	Trust	X	X	X	X	X	X	X	X
Lincoln/Letterman/Presidio	Trust						X		
Lombard/Presidio	Trust	X	X	X	X	X	X	X	X
Presidio/Pacific	CCSF	X	X	X	X	X	X	X	X
Presidio/Jackson	CCSF	X	X	X	X	X	X	X	X
Presidio/Washington	CCSF	X	X	X	X	X	X	X	X
Arguello/Washington	CCSF	X	X	X	X				

Source: Presidio Trust 2010

Note: Intersections not expected to operate at LOS E or F in the final PTMP EIS are highlighted in ***bold****.*
CCSF = City and County of San Francisco.

most intersections. With Alternative 2, the same number of intersections (eight) would operate at LOS E or F in the AM peak hour and one additional intersection would operate at LOS E or F in the PM peak hour. At an average delay of 35.6 seconds per vehicle, the intersection of Letterman/Lincoln/Presidio would barely be operating at LOS E (the threshold between LOS D and LOS E is 35 seconds per vehicle) with Alternative 2. The northbound through movement is expected to be a congested traffic movement, but the northbound left-turn movement to Presidio Boulevard is not. Motorists destined for the Main Post would likely learn over time to turn left and approach the Main Post from Presidio Boulevard rather than continuing on Lincoln Boulevard.

As shown in Table 15, of the 20 studied intersections, eight would operate at unacceptable levels (LOS E or F) under Alternative 2 during both the AM peak hour and PM peak hour. The current traffic volumes at the intersection of Arguello/Washington are higher in the AM peak hour than the PM peak hour, likely due to nearby schools. The contribution of the traffic generated by the Main Post is greater in the PM peak hour than in the AM peak hour. However, the total intersection

traffic volume is greater in the AM peak hour, and the intersection is expected to operate unacceptably in the AM peak hour but acceptably in the PM peak hour. The poor operating conditions at these intersections reflect the increase in traffic volumes traveling to and from the Presidio and relatively modest increases in traffic resulting from regional growth. All but one of the intersections expected to operate at LOS E or F were forecast to operate at LOS E or F in the final PTMP EIS. The intersection of Lincoln/Halleck was *not* expected to operate at an unacceptable level of service in the final PTMP EIS. In the final PTMP EIS, this intersection was analyzed with two lanes in each direction on Lincoln, reflecting the geometric modifications originally described in the final GMPA EIS. In this analysis, the future lane configuration is assumed to be the same as it is currently with a bike lane in each direction, travel lane in each direction and left-turn pocket. Mitigation measures that would improve the operation of all intersections to LOS D or better are described at the end of this section.

Five of the eight intersections expected to operate unacceptably (Lombard/Lyon, Presidio/Pacific, Presidio/Jackson, Presidio/Washington, and Arguello/Washington) are located in the city. Improvements at these intersections would be beyond the jurisdiction of the Trust, and any improvements would be subject to the approval of the CCSF.

Alternative 3 Proposed improvements to El Presidio under this alternative would include closing one block of Graham Street to through traffic and eliminating parking at the site of El Presidio. These modifications to traffic circulation would divert more traffic to Graham Street and Lincoln Boulevard. In the PM peak hour, approximately 450 additional vehicles would be diverted through the Lincoln/Graham intersection. The intersection would operate at LOS E in the AM peak hour and LOS D in the PM peak hour. The unacceptable operating conditions in the AM peak hour would be partially due to the closure of some streets to vehicular traffic.

This alternative is estimated to generate 11,894 daily vehicle trips, including 949 AM and 1,448 PM peak hour vehicle trips. These trip estimates are slightly less than those for Alternative 1. In both the AM peak hour and PM peak hour, Alternative 3 would result in unacceptable service levels (LOS E or F) at the same number of intersections as Alternative 1. In the PM peak hour, these intersections would be the same as under Alternative 1. In the AM peak hour, the intersection of Lincoln/Graham would operate unacceptably, rather than Lombard/Lyon under Alternative 1. Mitigation measures that would improve the operation of all nine intersections to LOS D or better are described at the end of this section. The Lincoln/Halleck intersection would operate at an unacceptable level of service due to the change in lane configuration on Lincoln Boulevard.

As described in the final PTMP EIS, improvements at the five intersections in the city would be beyond the jurisdiction of the Trust, and implementation of these improvements would require coordination with the CCSF. This alternative includes strategies for reducing single-occupancy vehicle trips, which could reduce vehicular delays below the levels described in the discussion of traffic impacts.

Alternative 4 This alternative is estimated to generate 11,630 daily vehicle trips, including 974 AM peak hour and 1,359 PM peak hour vehicle trips. In both the AM peak hour and PM peak hour, Alternative 4 would result in unacceptable service levels (LOS E or F) at seven

intersections – one fewer than Alternative 1 in the AM peak hour and the same intersections as Alternative 1 in the PM peak hour. The Lincoln/Halleck intersection was *not* expected to operate at an unacceptable level of service in the final PTMP EIS due to the future intersection improvements assumed in baseline conditions.

All of these intersections would operate at acceptable levels with the mitigation measures identified at the end of this section. Improvements at the five intersections located in the city would be beyond the jurisdiction of the Trust, and any improvements would be subject to the approval of the CCSF.

Parking Impacts

Assumptions for parking management considered in the final PTMP EIS analysis and in planning for the Main Parade improvements were provided on page 51 of the PTMP. These included developing policies for managing parking supplies and reducing the demand for parking. These policies would be coordinated with other transportation programs to create a coherent, effective approach to discouraging automobile use and promoting more sustainable means of travel and commuting. Tools would include fees for employee parking during the workday, time restrictions, designated tenant and residential parking areas, designated carpool and vanpool parking, and special events coordination. Future planning efforts would decrease the number of parking spaces in the park without impeding the Trust's ability to attract tenants to reuse historic buildings. The number of parking spaces on the Main Post would remain about the same as it is today. Parking facilities would be concentrated near main activity areas and would be designed to accommodate the average demand rather than peak demand during the peak period (e.g., midday weekday, evening, or weekend day). Parking areas may be redesigned or relocated to simplify access or to reduce their visual impacts. Large parking areas would be removed, and smaller peripheral parking lots would be built. Parking would be sufficient to meet tenants' needs and avoid exacerbating parking problems in adjacent neighborhoods.

An analysis of future parking demand and supply for the Main Post under the PTMP was provided on pages 314 through 315 of the final PTMP EIS. The PTMP committed to reduce the overall number of parking spaces at the Presidio, but to provide sufficient parking in each district of the Presidio to meet that district's average demand during the peak period (midday weekday, evening, or peak weekend day). At the Main Post, future parking demand was estimated to be about 2,015 parking spaces. In the final PTMP EIS, approximately 2,115 spaces were proposed to accommodate this demand. The parking demand estimates and supply accounted for shared use of parking, a moderate degree of parking management (including fees), and management of resources to accommodate special events.

As required by PTMP EIS Mitigation Measure TR-19 *TDM Program Monitoring*, the Trust has implemented a Transportation Demand Management (TDM) program within the district to reduce automobile usage by all tenants, occupants, and visitors. If TDM goals are not being reached, the Trust would implement more aggressive strategies or intensify components of the existing program, such as requiring tenant participation in more TDM program elements and/or providing more frequent and/or extensive shuttle service.

For the final SEIS analysis, a general description of the number of parking spaces in key locations in the district under each alternative is provided, and the parking areas in which the number of spaces would differ significantly across alternatives are illustrated in Table 16. Many parking areas would remain unchanged, and the amount of on-street parking would be similar across alternatives. These parking areas are also illustrated in Figures 3, 6, 9, and 12.

Table 17 presents a summary of the weekday parking demand, as compared to supply, for each alternative. To provide an estimated range of TDM effectiveness, Alternative 2 reflects a 10-percent reduction in demand associated with implementation of parking fees and restrictions, and Alternative 3 reflects a more modest 5-percent reduction in demand.

The parking demand estimates and supply account for shared use of parking in the district. District-wide parking demand on weekends is expected to be 400 to 800 spaces less than on weekdays. Under all alternatives, special events would be scheduled and coordinated based on parking availability, and events would be regulated to ensure that supply meets expected demand. Events requiring large amounts of parking would not be scheduled concurrently with other events or Presidio peak parking demand periods. Special events with extraordinarily large parking needs would need to consider a shuttle service to/from other parts of the Presidio. PTMP EIS Mitigation Measure TR-21 *Special Event Parking Management* would ensure that events would be coordinated so that combined parking demand would not exceed parking supply.

The Trust has been actively involved in the Doyle Drive design process, in which the construction of a parking garage against the bluff at the north edge of the Main Post is being considered. If a garage at this location is feasible, this reservoir of parking would be located immediately north of the transit center, making it convenient for employees and visitors of buildings at the north end of the Main Post as well as people boarding a shuttle to reach the rest of the park.

Alternative 1 Without any underground parking, and without the demolition of Building 385, this alternative would provide 1,817 parking spaces and is estimated to have a demand for 2,098 spaces, resulting in a 281-space (13-percent) deficit. The lack of an access ramp to underground parking at the north bluff would allow approximately 25 more surface spaces. This alternative reflects a moderate degree of TDM measures and would not substantially increase auto occupancy or reduce auto mode share beyond the level anticipated in the final PTMP EIS. Without more aggressive TDM strategies, finding parking in the Main Post would be difficult, and motorists may go to Crissy Field to find parking.

Alternative 2 As shown in Table 16, Alternative 2 would provide approximately 1,910 spaces in the district and is estimated to generate demand for slightly fewer spaces, resulting in a negligible surplus of spaces. The parking would include up to 300 underground spaces in up to two locations: under the lodge (up to 50 self-park spaces), and up to 300 spaces in a garage at the north bluff. Due to existing lease provisions, approximately 75 spaces would remain at the site of El Presidio in the foreseeable future. Parking closest to most uses would be managed with measures such as time restrictions to make the most convenient parking available for short-term visitors. Regardless of location, the majority of parking would be within a five-minute walk

16 MAIN POST PARKING SUPPLY BY ALTERNATIVE

	Alternative 1 (number of parking spaces)	*Alternative 2 (number of parking spaces)*	*Alternative 3 (number of parking spaces)*	*Alternative 4 (number of parking spaces)*
Unaffected Surface Lots	435	435	440	440
On-Street	360	308	330	360
ALTERNATIVE PARKING SITES				
Building 93/97 Area	90	0	0	90
North Bluff: Lot Expansion	100	75	75	100
North Bluff (Underground)	0	up to 300	285	0
Lot South of Sal Street/North of El Presidio	25	25	25	25
Behind Buildings 101-104	182	182	182	182
Behind Building 100	35	35	35	35
Behind Building 42	30	30	30	30
West of Presidio Theatre	0	0	30	30
Building 385 Site	70	235	70	70
Lodge (Underground)	0	up to 50	n.a.	n.a.
Southern End of Main Parade (Underground)	0	0	150	n.a.
El Presidio	250	75	0	250
North of Building 65	40	0	40	40
YMCA Fitness Center	140	150	140	140
East of YMCA Fitness Center	60	60	60	60
TOTAL SUPPLY	**1,817**	**1,910**	**1,892**	**1,852**
Total Underground	0	up to 300	435	0

Source: Presidio Trust 2010

Notes: XXX = Underground parking. n.a. = not applicable

Parking supply excludes Infantry Terrace residential neighborhood.

Total parking supply for Alternative 2 would be approximately 1,910, with underground spaces in two possible locations including the north bluff and under the lodge. The total number of underground spaces would not exceed 300 spaces.

17 COMPARISON OF MAIN POST WEEKDAY PARKING DEMAND AND SUPPLY BY ALTERNATIVE

	Alternative 1 (number of parking spaces)	*Alternative 2 (number of parking spaces)*	*Alternative 3 (number of parking spaces)*	*Alternative 4 (number of parking spaces)*
Estimated Demand	2,098	2,102	1,973	1,963
TDM Adjustment	–	(210)	(99)	–
Adjusted Demand	2,098	1,892	1,874	1,963
Supply	1,817	1,910	1,892	1,852
SURPLUS/DEFICIT	**-281**	**18**	**18**	**-111**

Source: Presidio Trust 2010

Note: Parking demand and supply excludes Infantry Terrace residential neighborhood.

(approximately 1,500 feet) of any building in the Main Post. Relocating parking from the center of the Main Post to the periphery would be supported with parking management strategies that would encourage long-term parking (e.g., employees parking all day) in the lots at the greatest distance from most uses in the Main Post.

Alternative 3 Under this alternative, there would be no parking within El Presidio. Demand would be about 11 percent less than under Alternative 1, but the number of surface spaces would be 20 percent less than under Alternative 1. A combination of a modest (5 percent) TDM reduction in demand and 435 underground parking spaces would allow supply to accommodate estimated demand with a negligible surplus of spaces.

Alternative 4 Approximately 250 spaces would remain at the site of El Presidio under this alternative. In total, about 1,852 parking spaces would be provided. There would be no underground parking at the north bluff, and the lack of an access ramp to underground parking would allow approximately 25 more surface spaces at the north bluff. This alternative is estimated to generate a parking demand for about 1,963 parking spaces, resulting in a deficit of an estimated 111 spaces.

Impacts on Pedestrian and Bicycle Facilities

Bicycle access and pedestrian circulation within the Main Post were reviewed as part of the Presidio Trails and Bikeways Master Plan. The plan calls for a network of pedestrian and multi-use trails through the Main Post as part of continuous corridors. The Presidio Promenade is one of these trails and would generally follow Lincoln Boulevard to connect the Main Post to the Golden Gate Bridge/Coastal Trail to the west and the Lombard Gate and the Letterman district on the park's eastern edge.

Implementation of any of the alternatives would result in an increase in pedestrian and bicycle activity within the Main Post and on streets adjacent

to the key gates. Under all alternatives, approximately 18 percent of all trips generated by the land uses are anticipated to occur by walking and bicycling as the primary mode. In addition, people coming to the Presidio by auto or transit would also walk from transit stops and parking areas. The increase in pedestrian and bicycle activity would generally be accommodated within the existing pedestrian and bicycle network. Planned improvements to the pedestrian and bicycle network described in the Presidio Trails and Bikeways Master Plan would improve conditions for pedestrians and cyclists and facilitate the safe and direct flow of pedestrians and bicyclists to and from the different parts of the Presidio. Implementation of the Presidio Trails and Bikeways Master Plan and other improvements such as the Anza Esplanade should ensure that bicycle and pedestrian facilities are adequate to meet the demand generated.

Impacts on Public Transit Services

Land uses associated with the alternatives would generate transit trips for several Bay Area transit providers and would most affect the transit providers that directly serve the Main Post (Muni and the Presidio's shuttle, PresidiGo). Transit trips to and from the Main Post were estimated based on the expected geographic distribution of trips and mode split. Because some transit passengers may use more than one transit mode (e.g., transfer from PresidiGo to BART), the sum of transit trips for each transit provider may exceed the total number of transit passengers generated by each alternative.

At the time the final PTMP EIS was adopted, downtown PresidiGo service was not anticipated. To reflect the addition of this transit service, the transit methodology used in the final PTMP EIS was updated for the draft Main Post Update SEIS. The changes effectively substituted PresidiGo Downtown service for the then skeletal 82X Muni service. In order to reflect the popularity of Downtown PresidiGo service, more transit trips have been assigned to PresidiGo Downtown service than were previously assigned to 82X Muni service. Furthermore, the employee survey completed after publication of the final PTMP EIS suggests slightly more Presidio employees traveling to and from the East Bay than were assumed in the final PTMP EIS. To the extent that the geographic distribution of trips generated by the lodge and cultural/educational uses reflects more trips from outside San Francisco, those changes have been accounted for in the assignment of transit trips across transit service providers. The transit hub at the north end of the Main Post would facilitate transfers between Muni buses and the Presidio shuttle buses. Since publication of the draft SEIS, two additional changes in Muni service have occurred. First, all 29-Sunset Muni service now terminates at Baker Beach, eliminating direct service to the Main Post. Muni 29 passengers must transfer to/from PresidiGo at Baker Beach. Secondly, the 82X service to the Presidio has been eliminated altogether. These changes in Muni service will affect the transit choices of passengers throughout the park, and the transit analysis has been updated to reflect these changes.

The San Francisco Municipal Transportation Agency (SFMTA) Transit Effectiveness Project (TEP) proposal includes a number of changes for Muni service in and near the Presidio. A summary of TEP changes by route is provided in Table 18 below. The TEP service changes were approved by the SFMTA Board in October 2009. Although the termination of all 29-Sunset service at Baker Beach and the elimination of 82X service to the Presidio were implemented as part of the service changes in December 2009, many of the improvements (e.g., routing the

18 MUNI TRANSIT EFFECTIVENESS PROJECT PROPOSED SERVICE CHANGES

Route	*Proposed Changes*
28–19th Avenue	• Increase service frequency to 5 minutes on Park Presidio Boulevard and 19th Avenue (28 & 28L route combined service) • Terminate at Golden Gate Bridge during most hours (service to Marina neighborhood would be provided by 28L; service to Fort Mason would be provided by 43 route) • Provide OWL (late night) coverage of Marina neighborhood via 28 route when 28L route is not running
28L–19th Avenue Limited	• Extend to intersection of Van Ness Avenue and North Point Street on Lombard Street and to intersection of Mission Street and Geneva Avenue via I-280 • Extend limited-stop service from 4:00PM to 9:00PM • 28L route would not serve the Golden Gate Bridge toll plaza; service to bridge would be provided by 28-local route, PresidiGo shuttle, and Golden Gate Transit (GGT); transfers to GGT would be made at Richardson Avenue / Francisco Street intersection
29–Sunset	• Service would be rerouted to Baker Beach Housing along Pershing Drive and would not continue farther into the Presidio due to low ridership • Provide direct route on Ocean Avenue to Balboa Park BART/Muni station (instead of Mission Street to Geneva Avenue) • Provide two-way service on Gilman Avenue to simplify route to Monster Park • Discontinue service on Fitzgerald Avenue
41–Union	• Discontinue outer segment beyond Steiner Street • Increase service frequency during AM peak
43–Masonic	• Extend from Chestnut Street/Fillmore Street intersection to Fort Mason (Marina Boulevard/Laguna Street intersection), replacing the existing 28-line terminal • Modify service in the Presidio to connect to the Presidio Transit Center and exit the Presidio at the Gorgas Avenue Gate rather than Lombard Gate

Source: www.sfmta.com

43-Masonic service to the Main Post Transit Center) have not yet been implemented. The elimination of the Golden Gate Bridge toll plaza stop from the 28 route would eliminate a key transfer point between Muni and the PresidiGo shuttle. Presidio employees, residents, and visitors would have to walk two or more blocks in order to transfer between PresidiGo and the Muni 28 (near Park Presidio/Lake) or 28L (Richardson/Gorgas) route.

Table 19 summarizes the expected AM peak hour and PM peak hour transit trips to and from the entire Presidio by transit service provider for each alternative. The Main Post would comprise 30 to 40 percent of the peak hour ridership, depending on the alternative. PresidiGo is expected to carry over one-third of all transit trips to and from the Main Post. The increase in Muni ridership to and from the Main Post would be distributed among the bus lines serving the Presidio and its vicinity, according to the expected geographic distribution of trips to and from the Presidio. The 43-Masonic is expected to carry about 20 percent of transit trips to and from the Main Post, and the 28-19th Avenue and 29-Sunset combined are expected to carry about 20 percent of the transit trips to and from the Main Post. With TEP service changes, more Main Post transit riders destined for the Sunset and Richmond neighborhoods may choose to take the 43-Masonic route out of the park rather than boarding at the Richardson/Francisco intersection, and this assumption is reflected in ridership assumptions. (See Appendix A for more detailed transit ridership assumptions.) The increase in ridership on Golden Gate Transit would be distributed among the approximately 20 Golden Gate Transit routes that serve the Presidio.

Alternative 1 Alternative 1 would generate 6,144 daily transit person trips, including 451 AM and 731 PM peak hour transit person trips. Since some transit person trips use more than one mode, the total number of trips in Table 19 sums to more than the number of transit person trips. The transit trips generated by the Main Post under Alternative 1 would comprise 34 percent of the total peak hour Presidio-wide transit ridership reflected in Table 19. The number of AM and PM peak hour transit trips generated by Alternative 1 is approximately 2.5 to 3 times the estimated number of transit trips currently generated by uses in the Main Post. In total, the final PTMP EIS assumed 1,117 and 1,621 Muni riders in the AM and PM peak hours, respectively. With the emergence of the PresidiGo Downtown service, Muni ridership is expected to be reduced by 31 to 36 percent from the levels forecast in the final PTMP EIS, depending on the alternative and peak hour.

The more recent geographic distribution data suggest that more people will travel to and from the North Bay than expected at the time the final PTMP EIS was published. Therefore, Golden Gate Transit ridership is expected to be 35 to 55 percent greater under Alternative 1 than anticipated in the final PTMP EIS. According to the Golden Gate Bridge, Highway and Transportation District's latest Short-Range Transit Plan (December 2007), overall Golden Gate Transit regional bus ridership is expected to decrease by about 3 percent annually over the next ten years, making more capacity available for this expected increase in ridership.

Ridership on PresidiGo Downtown service is near capacity today during peak months, and additional capacity will be needed to keep pace with increasing demand. If Muni does not increase capacity by 2030, the cumulative ridership due to regional growth trends and implementation of the PTMP and proposed projects in the Main Post could exceed capacity on one or more routes. Mitigation called for in the final PTMP

19 PRESIDIO-WIDE TRANSIT RIDERSHIP (NUMBER OF TRIPS) BY TRANSIT PROVIDER AND BY ALTERNATIVE (AM PEAK HOUR AND PM PEAK HOUR)

	Transit Service Provider					
	Muni	*PresidiGo*	*AC Transit*	*BART*	*Golden Gate Transit*	*Caltrain*
AM PEAK HOUR						
Alternative 1	770	410	70	230	173	49
Alternative 2	776	427	73	253	173	54
Alternative 3	743	396	68	230	165	49
Alternative 4	756	395	67	216	170	46
PM PEAK HOUR						
Alternative 1	1,034	666	111	460	227	102
Alternative 2	1,097	643	105	365	250	78
Alternative 3	941	642	109	502	197	113
Alternative 4	970	622	104	443	209	98

Source: Presidio Trust 2010

Note: The sum of transit trips presented in this table are greater than the number of employees, residents and visitors choosing to ride transit shown in Table 9 because this table shows all transit trips generated by the Presidio. In addition, some transit passengers may ride more than one transit service (e.g., someone who rides BART and PresidiGo).

EIS, including increased frequency on Muni lines, PresidiGo service, and monitoring of Golden Gate Transit routes and coordination with Golden Gate Transit, would reduce the effects of Alternative 1 on transit service.

Alternative 2 This alternative is estimated to generate 481 AM and 805 PM peak hour transit person trips. The Main Post under Alternative 2 would contribute 36 percent to the total Presidio-wide transit ridership in the AM and PM peak hours. Ridership on all transit providers would be comparable to or slightly greater than Alternative 1 in the AM peak hour and comparable to or slightly less than Alternative 1 in the PM peak hour. PTMP mitigation measures, including support of increased frequency on Muni lines, PresidiGo shuttle service, and monitoring of

Golden Gate Transit routes and coordination with Golden Gate Transit, would reduce the effects of this alternative on transit service.

Alternative 3 On a daily basis, this alternative is estimated to generate the fewest daily transit trips of all alternatives. The alternative would generate about 398 AM and 611 PM peak hour transit person trips, 12 to 16 percent fewer than Alternative 1. The transit trips generated by the Main Post under Alternative 3 would comprise 30 percent of the total Presidio-wide transit ridership described in Table 19. Ridership on all transit providers would be comparable to Alternative 1 in the AM peak hour and within approximately 10 percent in the PM peak hour. Mitigation called for in the final PTMP EIS, including increased frequency on Muni lines, PresidiGo service, and monitoring of Golden Gate Transit routes and coordination with Golden Gate Transit, would reduce the effects of Alternative 4 on transit service.

Alternative 4 This alternative would generate approximately the same number of transit trips as Alternative 3 (slightly more on a daily basis and in the AM peak hour and slightly fewer in the PM peak hour). The alternative would generate about 412 AM peak hour and 603 PM peak hour transit trips, 9 to 18 percent fewer than Alternative 1. Ridership on all transit providers would be slightly less than under Alternative 1 in both the AM and PM peak hour. The Main Post under Alternative 4 would comprise 30 percent of the total Presidio-wide transit peak hour ridership. Mitigation called for in the final PTMP EIS, including increased frequency on Muni lines, PresidiGo service, and monitoring of Golden Gate Transit routes and coordination with Golden Gate Transit, would reduce the effects of Alternative 4 on transit service.

Impacts Due to Construction Traffic

The short-term impact of construction traffic on the roadway network due to construction activities within the Main Post district and elsewhere within the Presidio was discussed on page 321 of the final PTMP EIS. The discussion concluded that, because construction vehicle trips traveling to and from the district would be dispersed, the vehicle trips on other regional roadways would not be substantial and would generally fall within the normal fluctuations of traffic. PTMP EIS Mitigation Measure TR-23 *Construction Traffic Management Plan* would require contractors to work with the Trust to develop a plan including information on construction phases and duration, scheduling, proposed haul routes, permit parking, staging area management, visitor safety, detour routes, and alternative pedestrian routes.

Under all alternatives, construction activities at the Main Post would include rehabilitation of existing buildings, structural improvements and other seismic work, road improvements, utility upgrades, and other infrastructure enhancements. For construction of new structures, the following phases would generally be included: demolition, excavation, and installation of foundations, building structure, finishes, and landscaping. Construction vehicles would include trucks hauling construction debris and delivering construction materials and supplies, as well as construction worker vehicles. The volume of construction vehicles traveling to and from the Presidio would vary, depending on the specific construction activity and the schedules of the various building elements of each of the alternatives. For individual projects, the duration of demolition and construction would be relatively short-term.

Construction-related traffic, especially larger construction vehicles, could create some conflicts with local and regional traffic. Because construction vehicle trips traveling to and from the Presidio would be dispersed through the Bay Area, however, the vehicle trips on other regional roadways would not be substantial and would generally fall within the normal fluctuations of traffic. A comprehensive Construction Traffic Management Plan, as discussed in PTMP Mitigation Measure TR-26, would be developed to provide specific routes and other measures to minimize potential traffic impacts.

Construction vehicles would generally enter the Presidio via Richardson Avenue, Doyle Drive, or the Golden Gate Bridge toll plaza. Truck traffic would comply with city truck restrictions on nearby streets (e.g., Marina Boulevard and Lyon Street). The amount of construction-related traffic would generally correlate to the amount of new construction and demolition with each alternative (see Table 2). Construction activities for individual projects would need to be carefully coordinated with other individual projects as well as the Doyle Drive project.

MITIGATION MEASURES

This section presents the transportation mitigation measures that would be required to reduce the impacts of the alternatives to less-than-significant levels.

Traffic

Traffic impacts at all of the study intersections could be mitigated to acceptable operating conditions of LOS D or better. Table 20 presents the intersections that would require mitigation by alternative. Table 21 presents the unmitigated and mitigated LOS for the intersections where mitigation measures have been identified for the AM and PM peak hours, respectively. Appendix A contains the detailed LOS calculation sheets for the mitigated intersections. Some of the improvements assumed as part of the baseline conditions in the final PTMP EIS analysis were not assumed as part of the baseline conditions in this analysis; these improvements include the realignment of Halleck Street to intersect with Lincoln Boulevard and Anza Street, and the provision of two lanes in each direction on Lincoln Boulevard. Mitigation Measures TR-1, TR-4, TR-12, TR-14, and TR-24 through TR-27 are measures adapted from the final PTMP EIS, while Mitigation Measures TR-28 and TR-29 are new additional measures developed to minimize the effects of implementation of the Main Post alternatives. Any mitigation measures including signalization of these ten intersections would be considered as a last resort. TDM measures such as more frequent and/or extensive PresidiGo service, modifications to parking fees or restrictions, and enhanced carpooling or vanpooling incentives will be considered and implemented before signalization.

Signalization is identified as the mitigation measure for the intersections of Lincoln/Graham and Lincoln/Halleck. These two study intersections are in the center of the Main Post district. Although the Trust has identified signalization as the mitigation measure as required by the NEPA, the Trust does not intend to signalize these intersections due to the potential impact on historic resources. The intersection of Lincoln/Graham is least likely to exceed significance thresholds, and would only do so under Alternative 3 in the AM peak hour. The intersection of Lincoln/Halleck is currently stop-controlled on the minor (Halleck Street) approach only and operates at LOS C in both peak

20 INTERSECTION MITIGATION MEASURES BY ALTERNATIVE

Mitigated Intersection	*Alternative 1*	*Alternative 2*	*Alternative 3*	*Alternative 4*
TR-1 Presidio/Pacific	AM/PM	AM/PM	AM/PM	AM/PM
TR-4 Lombard/Presidio	AM/PM	AM/PM	AM/PM	AM/PM
TR-12 Lyon/Lombard	AM/PM	AM/PM	PM	PM
TR-14 Letterman/Presidio/Lincoln	–	PM	–	–
TR-24 Presidio/Jackson	AM/PM	AM/PM	AM/PM	AM/PM
TR-25 Presidio/Washington	AM/PM	AM/PM	AM/PM	AM/PM
TR-26 Arguello/Washington	AM	AM	AM	AM
TR-27 Lincoln/Girard	AM/PM	AM/PM	AM/PM	AM/PM
TR-28 Lincoln/Graham			AM	
TR-29 Lincoln/Halleck	AM/PM	AM/PM	AM/PM	AM/PM

Source: Presidio Trust 2010

hours. Although implementing all-way stop control is not forecasted to improve the operation of this intersection to LOS D or better in year 2030, it would improve operating conditions from the current one-way stop control.

TR-1 *Presidio Boulevard/Pacific Avenue Intersection Improvements* When needed (i.e., prior to the level of service deteriorating to LOS E or F), install a traffic signal. Signalization of the intersection of Presidio Boulevard/Pacific Avenue would improve the operation of the intersection to an acceptable level of service. If the CCSF determines that signalization is appropriate, the Trust will coordinate with the CCSF to determine the contribution of each party to the cost of the improvements.

TR-4 *Lombard Street/Presidio Boulevard Intersection Improvements* When needed (i.e., prior to the level of service deteriorating to LOS E or F), signalize the intersection. The final PTMP EIS called for both signalization and widening of the south leg of the intersection to facilitate an additional northbound right-turn lane. However, signalization alone will improve the operation of this intersection to an acceptable level of service and no additional mitigation would be necessary.

21 UNMITIGATED AND MITIGATED LEVELS OF SERVICE

Mitigated Intersection	*Alternative 1*	*Alternative 2*	*Alternative 3*	*Alternative 4*
AM PEAK HOUR				
TR-1 Presidio/Pacific	F/A	F/A	F/A	F/A
TR-4 Lombard/Presidio	F/C	F/C	F/B	F/B
TR-12 Lyon/Lombard	E/B	E/B	--	--
TR-14 Letterman/Presidio/Lincoln	--	--	--	--
TR-24 Presidio/Jackson	F/B	F/B	F/B	F/B
TR-25 Presidio/Washington	F/A	F/A	F/A	F/A
TR-26 Arguello/Washington	E/D	E/D	E/D	E/D
TR-27 Lincoln/Girard	F/B	F/B	F/C	F/B
TR-28 Lincoln/Graham	--	--	E/B	--
TR-29 Lincoln/Halleck	F/B	F/B	F/B	F/B
PM PEAK HOUR				
TR-1 Presidio/Pacific	F/A	F/A	F/A	F/A
TR-4 Lombard/Presidio	F/C	F/C	F/C	F/C
TR-12 Lyon/Lombard	F/B	F/B	F/B	F/B
TR-14 Letterman/Presidio/Lincoln	--	E/A	--	--
TR-24 Presidio/Jackson	F/B	F/B	F/B	F/B
TR-25 Presidio/Washington	F/A	F/A	F/A	F/A
TR-26 Arguello/Washington	--	--	--	--
TR-27 Lincoln/Girard	F/B	F/B	F/B	F/B
TR-28 Lincoln/Graham	--	--	--	--
TR-29 Lincoln/Halleck	F/B	F/B	F/B	F/B

Source: Presidio Trust 2010

Note: Unmitigated LOS / Mitigated LOS *LOS = level of service*

TR-12 *Lyon Street/Lombard Street Intersection Improvements* When needed (i.e., prior to the intersection operations deteriorating to LOS E or F), signalize the intersection. The final PTMP EIS called for both signalization and restriping the eastbound approach to provide an exclusive left-turn lane and a shared right-through lane. However, because of the new Doyle Drive access ramps at Girard Road, some traffic would be diverted away from the Lombard Gate, and signalization alone will adequately improve the operation of the intersection to an acceptable level of service. Should the CCSF decide to signalize the intersection, the Trust will coordinate with the CCSF to determine the contribution of each party to the cost of the improvements.

TR-14 *Letterman Drive/Presidio Boulevard/Lincoln Boulevard Intersection Improvements* When needed (i.e., prior to the intersection operations deteriorating to LOS E or F), install a signal. The final PTMP EIS called for widening Lincoln Boulevard north of this intersection and restriping the northbound left-turn lane to a shared left-through lane. However, a signal alone would improve the operation of this intersection to an acceptable level.

TR-24 *Presidio Avenue/Jackson Street Intersection Improvements* When needed (i.e., prior to the intersection operations deteriorating to LOS E or F), signalize the intersection. The Trust will coordinate with the CCSF to determine the contribution of each party to the cost of the improvements.

TR-25 *Presidio Avenue/Washington Street Intersection Improvements* When needed (i.e., prior to the intersection operations deteriorating to LOS E or F), signalize the intersection. The Trust will coordinate with the CCSF to determine the contribution of each party to the cost of the improvements.

TR-26 *Arguello Boulevard/Washington Street Intersection Improvements* When needed (i.e., prior to the intersection operations deteriorating to LOS E or F), signalize the intersection. The Trust will coordinate with the CCSF to determine the contribution of each party to the cost of the improvements.

TR-27 *Lincoln Boulevard/Girard Road Intersection Improvements* When needed (i.e., prior to the intersection operations deteriorating to LOS E or F), signalize the intersection.

TR-28 *Lincoln Boulevard/Graham Street Intersection Improvements (new)* When needed (i.e., prior to the intersection operations deteriorating to LOS E or F), signalize the intersection.

TR-29 *Lincoln Boulevard/Halleck Street Intersection Improvements (new)* When needed (i.e., prior to the intersection operations deteriorating to LOS E or F), signalize the intersection.

Parking

The following mitigation measures identified in the final PTMP EIS would adequately mitigate parking-related impacts.

TR-18 *Presidio-Wide Parking Management* In order to reduce impacts of fee parking in Area B on parts of the Presidio outside the Trust's jurisdiction (Area A), the NPS is encouraged to implement parking regulations, time limits, and/or parking fees in potentially affected parking areas under its administration (notably, Crissy Field). The Trust will provide assistance to the NPS to ensure coordination and consistency of parking management within both Areas A and B. Should the NPS choose not to adopt or enforce this measure, or is otherwise opposed to it,

implementation of parking management control in Area B would affect parking for Crissy Field (Area B).

TR-19 *TDM Program Monitoring* The Trust implements a TDM program to reduce automobile usage by all tenants, occupants, and visitors (see Appendix D of the PTMP for full description). The Trust will periodically monitor implementation and effectiveness of the TDM program. If the TDM performance standards as described in the PTMP are not being reached, the Trust will implement more aggressive TDM strategies or intensify components of the existing TDM program such as requiring tenant participation in more TDM program elements, and more frequent and/or extensive shuttle service.

TR-21 *Special Event Parking Management* The Presidio TDM program includes a comprehensive array of parking management strategies implemented through Trust administration of park-sponsored activities and special event permitting processes including coordination with the NPS. The Trust will continue to recommend these TDM measures to discourage single-occupant automobile usage, encourage alternative modes of travel, and maximize use of available parking resources. Special events that could result in overflow parking will be coordinated to ensure that parking supply is not exceeded. Special events will be scheduled based on parking availability and will be regulated to ensure that supply meets expected demand, including demand from Area A of the Presidio. Events requiring large amounts of parking will not be scheduled concurrently with other events or Presidio peak parking demand periods if combined parking demand would exceed the available supply within Area B of the Presidio. Sponsors may be required to provide special transit and bicycle services during their events to reduce expected parking demand and promote use of public transit, biking, walking, and remote parking lots.

Pedestrians and Bicycles

The following final PTMP EIS mitigation measure, combined with the bikeway and trail improvements outlined in the Presidio Trails and Bikeways Master Plan, would provide a pedestrian and bicycle network that would adequately accommodate pedestrians and bicycles without creating hazards, barriers, or access restrictions for pedestrians and bicyclists.

TR-9 *Pedestrian/Bicycle Amenities* The Trust will provide bicycle and pedestrian amenities such as shelters, benches, water fountains, secure bicycle racks, route lighting, and other facilities throughout the Presidio to encourage travel by foot and bicycle.

Public Transit Services

The following mitigation measures identified in the final PTMP EIS would adequately mitigate impacts on public transit services.

TR-10 *Support Increased Muni Frequencies* Muni is encouraged to increase frequency of service on existing Muni lines as warranted. Increased frequency on existing Muni lines with or without any extensions of these lines would increase the transit peak hour capacity, and consequently reduce passenger load factors on these lines. If service on Muni routes serving the Presidio is reduced from current levels, the Trust will increase PresidiGo service levels to accommodate the displaced transit demand and coordinate with Muni to improve transfers between PresidiGo and Muni.

TR-22 *Transit Service Monitoring Program* The Trust will continue to monitor Muni operations and passenger loads within the Presidio. Continued monitoring of Muni service in the Presidio, and similar monitoring of Golden Gate Transit service at the Presidio would indicate any capacity problems, particularly on northbound Golden Gate Transit bus service during the PM peak hour. If the monitoring were to reveal insufficient capacity for northbound Presidio-generated passengers during the PM peak hour, potential improvements will be coordinated with the Golden Gate Bridge, Highway and Transportation District.

Construction Traffic

The following mitigation measure identified in the final PTMP EIS would adequately mitigate impacts due to construction traffic.

TR-23 *Construction Traffic Management Plan* During pre-construction activities, the contractor(s) of individual projects will work with the Trust to develop a Construction Traffic Management Plan. The plan will include information on construction phases and duration, scheduling, proposed haul routes, permit parking, staging area management, visitor safety, detour routes, and pedestrian movements on adjacent routes. Construction Traffic Management Plans for individual projects will be reviewed with consideration of other individual projects in the Main Post as well as Doyle Drive reconstruction.

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3.4 Air Quality

AFFECTED ENVIRONMENT

The existing air quality environment of the Presidio and its regulatory context are described on pages 124 to 126 of the final PTMP EIS. This description is incorporated herein by reference. Updated information relevant to the Main Post district is summarized below.

Air Quality Management

The nine-county San Francisco Bay Area Air Basin has a history of recorded violations of federal and state ambient air quality standards for ozone, carbon monoxide (CO), and inhalable particulate matter less than ten microns in diameter (PM10). The U.S. Environmental Protection Agency (EPA) has classified the Bay Area as a marginal non-attainment area for ozone and as a maintenance (attainment) area for carbon monoxide. The EPA strengthened the federal ambient air quality standard for particulate matter less than 2.5 microns in diameter (PM2.5) in 2006, and a non-attainment designation became effective for the Bay Area for the federal 2006 PM2.5 standard in 2009. The California Air Resources Board (CARB) has given the Bay Area state-level non-attainment status for ozone, PM10, and PM2.5.

The Bay Area Air Quality Management District (BAAQMD) is the primary agency responsible for managing compliance with the ambient air quality standards in the Bay Area. With the State Implementation Plan (SIP) and the Clean Air Plan (CAP), the BAAQMD identifies the steps that must be taken to attain and maintain the state and federal standards, respectively. Local jurisdictions can cooperate with these efforts by implementing transportation control measures to reduce emissions from motor vehicles. The Trust's transportation demand management (TDM) program implements the relevant transportation control measures from the 2000 BAAQMD CAP and will insure consistency with the recently adopted 2010 Clean Air Plan (BAAQMD 2010a), which includes updated transportation control measures to improve transit services, encourage sustainable travel behavior, support focused growth, and implement pricing strategies.

The State of California does not require a plan for attaining the PM10 or PM2.5 standards. In lieu of a formal plan, the BAAQMD developed a list of potential PM control measures as part of the regional Particulate Matter Implementation Schedule adopted on November 16, 2005. The Particulate Matter Implementation Schedule led to implementation of new BAAQMD regulations for stationary sources in the region, namely through expansion of the wood burning control program. The recent federal PM2.5 non-attainment designation requires the BAAQMD to develop a PM2.5 attainment plan by 2012, and the 2010 Clean Air Plan lays the foundation for this. Although a formal plan for PM attainment is not yet established, measures that control gaseous pollutants from motor vehicles (such as ozone precursors) are also useful for controlling PM10 and PM2.5.

In order to ensure that federal actions would not disrupt attainment of goals, proposed actions must include a formal conformity determination if total direct and indirect emissions of non-attainment pollutants exceed specified thresholds. For any federal action in the Bay Area causing more than 100 tons per year of an ozone precursor (either reactive organic gases [ROG] or nitrogen oxides [NOx]), PM2.5 or sulfur dioxide as a PM2.5

precursor, or CO, the general conformity rule would apply (40 CFR 93.153). Federal actions causing emissions below these thresholds are presumed to conform to the SIP.

The Trust manages the air quality effects of land use development by managing construction activities and the demand for transportation. Development at the Presidio must conform to the Presidio-wide TDM program that would reduce emissions from motor vehicle sources. The Trust also coordinates land uses to avoid locating "sensitive receptors" (housing, lodging, and other uses that might have occupants who are sensitive to air pollution) near substantial sources of pollution. Through these efforts, the Trust can ensure that its actions will be consistent with the SIP and the CAP and that it will not disrupt efforts to attain the ambient air quality standards.

Air Quality Conditions and Monitoring

Air quality at the Presidio is generally superior to that of most urban areas because the park is generally upwind of most sources of pollution. Violations of the state and federal standards for ozone persist in the Bay Area inland from San Francisco. Pollutants from San Francisco tend to be carried into the more sheltered areas of the region and cause violations of the standards there. Because of the city's location and climate, neither federal nor state ozone standards have recently been exceeded in San Francisco. Concentrations of carbon monoxide in the Bay Area have complied with federal and state standards since 1991. However, the state standards for PM10 and PM2.5 and the 2006 federal standard for PM2.5 have recently been exceeded in San Francisco. Additional information about ambient air quality data is available in the final PTMP EIS (pages 125 to 126).

Toxic air contaminants also affect the region. Because the effects of these contaminants are largely localized, ambient standards are not used to characterize their concentrations. Contaminants that are emitted primarily from motor vehicles account for over one-half of the average calculated cancer risk for Bay Area residents. Due largely to reductions in air toxics from motor vehicles, the calculated average cancer risk has been significantly reduced in recent years. Based on the most recent regional annual report (ambient monitoring data from 2003), the calculated cancer risk is 145 in one million, which is 53 percent less than what was observed eight years earlier (BAAQMD 2007). Although diesel particulate matter is not specifically monitored, it may significantly contribute to a cancer risk that is greater than all other measured toxics combined.

Local Sources of Air Pollution

Traffic-related emissions of criteria pollutants and toxics are generated along the roadways leading to and located within the Main Post district and along the region-serving roadways such as Doyle Drive. Motor vehicles are the primary source of ozone precursors, and traffic congestion can occasionally result in localized elevated concentrations (hotspots) of carbon monoxide under certain stagnant weather conditions. Diesel trucks, buses, and construction equipment are sources of toxic diesel particulate matter. High volumes of traffic cause elevated risks along Doyle Drive. No notable stationary sources are within the Main Post district other than small heaters or boilers that are exempt from permitting requirements. Land uses that are most sensitive to odors and toxic air contaminants include residences (on Riley Avenue, Funston Avenue, and Infantry Terrace), Adult Day Health Care (ADHC) centers, schools or child care

facilities (including the Bay School of San Francisco in Building 35, and the Presidio Child Development Center in Building 387), and lodging.

Global Climate Change

Greenhouse gases (GHG), including carbon dioxide (CO_2), contribute to global climate change. In 1997, the Council on Environmental Quality (CEQ) released guidance on how to address cumulative effects in NEPA documents, and one example of a cumulative effect was climate change. Draft NEPA guidance (CEQ 2010) indicates that a level of 25,000 metric tons of direct GHG emissions annually would be an indicator that decision makers and the public would find a quantitative and qualitative assessment of GHG meaningful. The EPA established this level as a threshold for mandatory reporting of GHG, and additional regulations to address GHG emissions from major stationary sources, motor vehicles, and fuel use under the federal Clean Air Act remain under development. As the EPA evaluates strategies for addressing GHG emissions, recent California laws establish GHG targets and programs for control. This analysis provides information on how Trust actions would affect GHG emissions.

Due to California's particular vulnerability to climate change, the California Global Warming Solutions Act of 2006, Assembly Bill 32 (AB32), was signed into effect on September 27, 2006. In passing the bill, the California Legislature found that

> *Global warming poses a serious threat to the economic well-being, public health, natural resources, and the environment of California. The potential adverse impacts of global warming include the exacerbation of air quality problems, a reduction in the quality and supply of water to the state from the Sierra snowpack, a rise in sea levels resulting in the displacement of thousands of coastal businesses and residences, damage to marine ecosystems and the natural environment, and an increase in the incidences of infectious diseases, asthma, and other human health-related problems* (California Health & Safety Code, Section 38500, Division 25.5, Part 1).

Recognizing that global climate change imposes "compelling and extraordinary impacts" on California, the Governor signed Executive Order S-3-05 (June 2005) which established climate change emission reduction targets for the state and set in motion a process to ensure the targets are met. In late 2007, the CARB approved a statewide GHG emissions limit for 2020 that is equal to the statewide GHG emission level in 1990 of 427 million metric tons of carbon dioxide equivalent (MMTCO2e). This CARB-approved limit for 2020 represents a goal of reducing emissions by about 28 to 33 percent from "business as usual" (CAPCOA 2008). In December 2008, the CARB approved the AB32 Climate Change Scoping Plan to achieve the targeted reductions (CARB 2008).

Emissions of CO_2 occur largely from combustion of fossil fuels. The major categories of CO_2 sources from fossil fuel combustion can be broken into sectors for residential, commercial, industrial, transportation, and electricity generation. The transportation sector includes all motor gasoline and diesel fuel combustion. The GHG emissions of this sector are not split into activities or uses (e.g., there are not separate estimates for GHG emissions caused by gasoline or diesel fuel combustion related to statewide construction activities compared to fuel use for other activities). Other GHG emissions such as methane (CH_4) and nitrous oxide (N_2O) are also tracked by state inventories but occur in much smaller quantities. Strategies that the state should pursue for managing GHG emissions in California are identified in the CARB Scoping Plan (CARB 2008), which

builds upon the overall climate policies of the California Climate Action Team (CAT) Report to the Governor (CalEPA 2006).

The CARB Scoping Plan and CAT strategies providing the largest reductions focus on generally reducing consumption of petroleum across all areas of the California economy and improving forest management. Increasing transportation energy efficiency (through fuel economy, low carbon fuels, and reduced travel), building/appliance energy efficiency, use of alternatives to petroleum-based fuels (use of renewable energy), controls on high global warming potential gases (like methane), and carbon storage in forests are expected to provide substantial reductions by 2020 (CalEPA 2006 and CARB 2008).

The Presidio, because of its location and unique, protected resources, is a place where the effects of climate change could become particularly noticeable. With its establishment in 1996, the Trust was given responsibility to protect the park's significant natural, historic, scenic, cultural, and recreational resources. As knowledge about climate change and its effects has accumulated, the Trust acknowledges the need to conduct its environmental, transportation, and energy-related activities in support of its mission in an environmentally, economically, and fiscally sound, integrated, continuously improving, efficient, and sustainable manner.

ENVIRONMENTAL CONSEQUENCES

Methodology

This analysis follows the same methodology used in the final PTMP EIS to assess impacts on air quality, expanded to address global climate change (see below). Construction or demolition activities and use of heavy equipment that creates fugitive dust particulate matter and exhaust emissions including toxic diesel particulate matter are analyzed through a comparison with the BAAQMD recommendations for particulate matter control measures applicable to all construction activities. Emissions of other contaminants (ROG, NOx, and CO) that would occur in the exhaust from heavy equipment are included in the regionwide inventory that is the basis for regional attainment and are not expected to impede attainment of maintenance of the ambient air quality standards. Demolition, renovation, or removal of asbestos-containing building materials is subject to BAAQMD Regulation 11, Rule 2. Through environmental review, permit compliance and contracting processes, the Trust ensures that activities within its jurisdiction comply with such air quality rules.

The analysis of emissions that would be caused throughout the region by new motor vehicle trips and increased consumption of natural gas and other energy related to development of the alternatives relies on estimates using the Urbemis2007 emission model developed by the CARB. Mobile source emission estimates reflect the implementation of the Trust TDM program, which would minimize the activity of mobile sources (PTMP EIS Mitigation Measure NR-21 *Transportation Control Measures*).[38] Area source estimates also provided by Urbemis2007 account for the emissions that could be associated with any foreseeable small new stationary sources (e.g., hot water boilers) that may be necessary to provide basic utilities, even though none has been specifically proposed for any alternative. Any new sources for heating or steam generation would likely be small enough to be exempt from BAAQMD permit requirements or would otherwise

[38] *CAP revisions made since preparation of the final PTMP EIS incorporate the growth anticipated under the PTMP.*

comply with all applicable regulatory requirements and permit conditions such that no notable sources of air pollutants would occur.

Table 22 quantifies the total emissions of criteria pollutants and carbon dioxide (CO_2) due to mobile sources and area sources related to the new vehicle trips and land uses for each of the alternatives. For projects subject to the California Environmental Quality Act (CEQA), the BAAQMD recently adopted threshold of significance levels of 54 pounds per day for ROG, NOx, and PM2.5 and 82 pounds per day for PM10 (BAAQMD 2010b). Emissions from mobile and area sources at levels exceeding these thresholds would be considered significant in the regional context.

The analysis of the potential for localized carbon monoxide (CO) violations relies on reviewing the most congested and most poorly performing roadways or intersections and comparing the level of traffic generated by each alternative with traffic levels at intersections that could possibly have high CO concentrations. Emissions from traffic at congested intersections can, under certain circumstances, cause a localized build-up of CO concentrations. Regional ambient air quality monitoring data demonstrate that CO concentrations have recently been well below the applicable standards. The potential for localized increases in CO concentrations from increased traffic has been greatly reduced in recent years. This is because improvements in motor vehicle exhaust controls since the early 1990s and the use of oxygenated fuels have drastically reduced vehicle CO emissions. Even with increased traffic caused by Main Post development, none of the alternatives would be likely to cause a violation of the CO standards.[39]

General Conformity

Federal actions that cause emissions of non-attainment pollutants are required to complete a formal conformity determination when total direct and indirect emissions caused by the action exceed specified thresholds (40 CFR 93.153). None of the alternatives under consideration for the Main Post Update would disrupt goals of attainment. Implementation of the TDM program would ensure consistency with the CAP, and conformity with the SIP would be ensured in light of the relatively small scale of the proposed demolition and construction activities. The final PTMP EIS (page 389) found that, based on the scale of the proposed demolition and construction activities, it is highly unlikely that the 100-ton conformity applicability threshold would be exceeded by construction activities during any single year of the phased build-out.[40] Construction and demolition activities associated with any of the alternatives would not be likely to exceed the 100-ton-per-year threshold of the general conformity rule.

[39] *This impact is discussed in more detail on page 255 of the final PTMP EIS.*

[40] *Using the Urbemis2007 computer model allows preliminary estimates, although emissions would vary between alternatives and development timelines. One year of new construction involving site preparation and building construction using a crane, three smaller lifts, and eight other pieces of active heavy equipment would cause approximately 20 tons of ROG, NOx, and CO; less than 0.1 ton of SO_2; 10 tons of PM10; and 1 ton of diesel particulate matter (as PM2.5).*

22 ESTIMATED AVERAGE WEEKDAY EMISSIONS FROM VEHICLE TRIPS AND AREA SOURCES BY ALTERNATIVE

	Alternative 1: PTMP Visitor and Community Center	*Alternative 2: Main Post Update* (Net of Alternative 1)		*Alternative 3: History Center* (Net of Alternative 1)		*Alternative 4: Status Quo* (Net of Alternative 1)	
Average Weekday Vehicle Trips (trips/day)	13,951	14,955	*(+1,004)*	11,894	*(-3,061)*	11,630	*(-264)*
Reactive Organic Gases (ROG) (pounds/day)	62.20	62.22	*(+0.02)*	52.43	*(-9.77)*	54.04	*(-16.52)*
Nitrogen Oxides (NOx) (pounds/day)	63.44	66.98	*(+3.54)*	55.63	*(-7.81)*	54.63	*(-22.14)*
Carbon Monoxide (CO) (pounds/day)	452.70	479.87	*(+27.17)*	393.33	*(-59.37)*	385.26	*(-164.49)*
Sulfur Dioxide (SO_2) (pounds/day)	1.14	1.21	*(+0.07)*	0.97	*(-0.17)*	0.96	*(-0.42)*
Particulate Matter (PM10) (pounds/day)	190.16	202.02	*(+11.86)*	164.18	*(-25.98)*	161.44	*(-70.81)*
Fine Particulate Matter (PM2.5) (pounds/day)	36.85	39.13	*(+2.28)*	31.83	*(-5.02)*	31.29	*(-13.70)*
Carbon Dioxide (CO_2) (pounds/day)	120,486	127,393	*(+6,907)*	105,056	*(-15,430)*	103,308	*(-42,844)*
Carbon Dioxide (CO_2) (metric tons/year)	21,858	23,121	*(+1,263)*	19,043	*(-2,816)*	18,729	*(-2,775)*

Source: Aspen Environmental Group 2010

Notes: Based on BAAQMD recommendations for compliance with the California Environmental Quality Act (CEQA), a significant impact would occur if an increase in operation-related emissions equal or exceed 54 pounds per day of ROG, NOx, or PM2.5 or 82 pounds per day of PM10. The recently-adopted guidelines also extend the thresholds to construction as well as operation-related emissions (BAAQMD 2010b).

Emission estimates are based on use of the CARB Urbemis2007 model (version 9.2.4).

Future stationary and area sources that are associated with the proposed uses in the alternatives would not cause substantial emissions.

Global Climate Change

Greenhouse gas emissions of the proposed alternatives would vary depending primarily on transportation demand and energy use. Levels of CO_2 emissions for the alternatives are shown in Table 22. No alternative would cause more than the CEQ's Draft NEPA guidance level of 25,000 metric tons of direct CO_2-equivalent GHG emissions per year. The alternatives would cause lower levels of GHG emissions than similar development in a non-urban or suburban setting, and the emission levels would likely be lower than what historically occurred with Presidio military activity in the CARB target date of 1990. For this analysis, cumulative contributions to global climate change caused by a development alternative are considered less than significant if the alternative would meet California's statutory targets and comply with strategies currently identified by the CARB and the CAT to comply with AB32 and Executive Order S-3-05.

California's GHG reduction strategies would be partially implemented by the Trust-required TDM program (PTMP EIS Mitigation Measure NR-21 *Transportation Control Measures*) and air quality mitigation measures. For example, diesel construction equipment idling would be limited by Public Health Service Hospital (PHSH) SEIS Mitigation Measure NR-23 *Construction Equipment Exhaust Measures*. Trust requirements for conserving energy through high-efficiency installations, meeting or surpassing current California Title 24 energy code requirements, and requiring LEED® (Leadership in Energy and Environmental Design) Silver ratings would also be consistent with CARB and CAT strategies for businesses and local governments. These measures would ensure water conservation and advance green building initiatives. Consistent with new Mitigation Measure NR-26 *Climate Friendly Parks Program*[41] *Participation*, the Trust would demonstrate "climate leadership" by developing a GHG emissions inventory, identifying strategies for reducing emissions through the development of an action plan, implementing the action plan within the Trust's environmental management systems (EMS), and educating park visitors about climate change and Trust efforts to address the issue. With these measures, none of the alternatives, including the mitigated preferred alternative, would generate GHG in quantities to cause a substantial impact related to global climate change or disrupt the CARB's progress on achieving the goals of AB32 and Executive Order S-3-05.

Alternative 1

The air quality impact of new uses within the Main Post on the Presidio and surrounding neighborhoods was analyzed on pages 252 through 260 of the final PTMP EIS. The rehabilitation and reuse of existing buildings and new construction expected under the PTMP would cause construction/demolition-related dust and exhaust from heavy equipment. Construction-related emissions would result from a variety of construction

[41] *The Climate Friendly Parks (CFP) program, a collaboration of the National Park Service (NPS) and the U.S. Environmental Protection Agency (EPA), provides national parks with management tools and resources to address climate change. The program aims to provide national parks with comprehensive support to address climate change both within park boundaries and the surrounding community. More information about the CFP program can be found at* www.nps.gov/climatefriendlyparks.

activities, including demolition, excavation, vehicle travel, and vehicle and equipment exhaust, but would be short-term in duration and localized. Because children in the Presidio Child Development Center in Building 387 would be sensitive to air quality impacts of the project, control measures would be warranted. Feasible BAAQMD-recommended control measures for fugitive dust particulate matter would be required to limit adverse effects on air quality during demolition and construction activities (PTMP EIS Mitigation Measures NR-20 *Basic Control Measures* and NR-22 *Deconstruction/Demolition Techniques*). Additionally, the final SEIS for the Public Health Service Hospital (PHSH) identified another measure to control construction equipment exhaust in a manner consistent with EPA recommendations (PHSH SEIS Mitigation Measure NR-23 *Construction Equipment Exhaust Measures*). Alternative 1 would be required to implement the equipment exhaust measure along with the other measures for dust control.

Table 22 shows the emissions from motor vehicles and operation of minor stationary sources that would occur with the vehicle trips and occupation of rehabilitated and new buildings under this alternative. The PTMP EIS found that motor vehicle trips associated with PTMP development would cause emissions that would be significant in the regional context but the effects of the emissions would be adequately reduced by maintaining consistency with the regional Clean Air Plan. The Trust's TDM program, which consists of activities conducted by the Trust and by the park's tenants, would implement relevant transportation control measures of the CAP and the 2005 Ozone Strategy to reduce the number and length of vehicle trips and thus minimize air emissions and maintain consistency with the CAP (PTMP EIS Mitigation Measure NR-21 *Transportation Control Measures*). Land uses would be coordinated to provide buffer zones and avoid conflicts from toxic contaminants or odors, which would also be consistent with the CAP. The anticipated traffic would not cause localized violations of ambient air quality standards for carbon monoxide at congested intersections.

Alternative 2

This alternative would not substantially increase vehicle emissions or emissions of other air pollutants when compared to the impact anticipated under Alternative 1 (the adopted management approach provided for in the PTMP) and would not generate significant nuisance dust or odors. The air quality impact of new uses within the Main Post on the Presidio and surrounding neighborhoods was analyzed on pages 252 through 260 of the final PTMP EIS. The alternative would involve demolition, construction, and other ground-disturbing activities that would cause short-term emissions of construction dust and equipment exhaust that would be greater than under Alternative 1 because more new construction would occur that involves greater amounts of soil excavation. Feasible BAAQMD-recommended control measures for fugitive dust particulate matter would be required to limit adverse effects on air quality during demolition and construction activities (PTMP EIS Mitigation Measures NR-20 *Basic Control Measures* and NR-22 *Deconstruction/Demolition Techniques* and PHSH SEIS Mitigation Measure NR-23 *Construction Equipment Exhaust Measures*).

The total emissions due to mobile sources and area sources related to this alternative are quantified in Table 22. Impacts on local and regional air quality from motor vehicle emissions and other operating-phase emissions would be similar to those identified for Alternative 1. In the PTMP EIS, motor vehicle trips associated with PTMP development were found to

cause emissions that would be significant in the regional context but the effects of the emissions would be adequately reduced by maintaining consistency with the regional Clean Air Plan. Although Alternative 2 would generate more traffic, the change in emissions from mobile and area sources over the emissions that would occur with Alternative 1 (net of Alternative 1 in Table 22) would not exceed the BAAQMD 54-pound-per-day thresholds. Compared to the emissions that would occur under Alternative 1, the operating-phase emissions from this alternative would not be significant in the regional context. The TDM program (PTMP EIS Mitigation Measure NR-21 *Transportation Control Measures*) would reduce these emissions and ensure that they occur in a manner consistent with the regional CAP. Land uses would be coordinated to provide buffer zones and avoid conflicts from high-volume roadways and other potential sources of toxic contaminants or odors, which would also be consistent with the CAP. The anticipated traffic would not cause localized violations of ambient air quality standards for carbon monoxide at congested intersections.

Alternative 3 (History Center)

This alternative would involve less new construction, traffic-related, and area source emissions than Alternative 1 and would not result in a significant air quality impact (a net reduction from Alternative 1 in Table 22). BAAQMD-recommended PM10 control measures and EPA recommendations for construction equipment exhaust emissions would be implemented during construction. Operational-phase emissions for this alternative are shown in Table 22. With the TDM program, regional emissions from motor vehicle trips would occur in a manner consistent with the CAP.

Alternative 4

Under this alternative, essentially no demolition or replacement construction would occur and the only sources of emissions would be similar to those that currently exist. Minor amounts of traffic-related and area source emissions would occur because existing buildings and activities would remain. Emissions that would be caused throughout the region by motor vehicle trips attributable to this alternative are shown in Table 22, and they would be less than what would occur under Alternative 1. Because emissions would be minor, this alternative would not adversely affect localized concentrations of any contaminant or disrupt air quality management plans within the region.

MITIGATION MEASURES

The following measures adapted from the final PTMP EIS (Mitigation Measures NR-20 through NR-22) and the final PHSH SEIS (Mitigation Measure NR-23) would eliminate the potential for significant air quality impacts.

NR-20 *Basic Control Measures* To reduce construction-generated particulate matter (PM10 and PM2.5) emissions, construction contractors will implement as appropriate the BAAQMD's recommended control measures for emissions of dust during construction. Basic control measures are as follows:

1. water all active construction areas at least twice daily
2. cover all trucks hauling soil, sand, and other loose materials or require trucks to maintain at least two feet of freeboard

3. pave, apply water three times daily, or apply (non-toxic) soil stabilizers on all unpaved access roads, parking areas, and staging areas

4. sweep when necessary (with water sweepers) all paved access roads, parking areas, and staging areas and

5. sweep streets daily (with water sweepers) if visible soil material is carried onto adjacent public streets

NR-21 *Transportation Control Measures (TCMs)* The Presidio Trust transportation demand management (TDM) program will implement the TCMs of the 2000 CAP and applicable TCMs of the 2010 CAP to minimize air emissions from Presidio-related activities. In addition, consistent with the 2000 CAP, the Trust will coordinate land uses to provide buffer zones and avoid conflicts from toxic contaminants or odors.

NR-22 *Deconstruction/Demolition Techniques* To the extent feasible, the Trust will apply an environmentally effective approach, including a combination of deconstruction and demolition techniques, to remove outdated structures and to reduce PM10 and PM2.5 emissions from demolition.

NR-23 *Construction Equipment Exhaust Measures* To reduce construction-related equipment exhaust of particulate matter and ozone precursors, construction contractors will implement the EPA's recommended measures for equipment emissions as follows. All construction equipment used at the construction site will:

1. not idle for more than ten minutes

2. not be altered to increase engine horsepower

3. include particulate traps, oxidation catalysts and other suitable control devices generally consistent with the most stringent of applicable federal or state emission standards and the best available emissions control technology (for example, Tier 4 engines will be available in the 2009 model year)

4. use ultra low sulfur diesel fuel with a sulfur content of 15 ppm or less

5. be tuned to the engine manufacturer's specifications in accordance with a defined maintenance schedule and

6. not be unnecessarily operated or staged near occupied residences, lodging, schools, or childcare facilities

The following measure would reduce GHG emissions, address the Presidio's (Area B) contribution to climate change, and assist the CARB in achieving the goals of AB32 and Executive Order S-3-05.

NR-26 *Climate Friendly Parks Program Participation (new)* Consistent with applicable law and subject to the availability of appropriate funding, the Trust will meet greenhouse gas (GHG) emissions reductions comparable to California's statutory requirements: by 2010, reduce GHG emissions to 2000 levels; by 2020, reduce GHG emissions to 1990 levels; by 2050, reduce GHG emissions to 80 percent below 1990 levels. To accomplish this, the Trust will become a member of the Climate Friendly Parks Program to develop an inventory of park-based GHG emissions, identify and implement sustainable strategies to mitigate these emissions and adapt to climate change impacts, and educate the public about these efforts. The Trust will estimate emission and cost savings associated with such implementation actions as:

1. replacing boilers or furnaces with energy-efficient models

2. using biotic fuels (e.g., biodiesel) in generators and other stationary devices
3. installing energy-efficient lighting
4. producing or purchasing renewable electricity
5. reducing electricity and onsite fossil fuel consumption
6. reducing park vehicle and equipment fuel consumption
7. replacing park vehicles with fuel-efficient or alternative-fuel vehicles
8. reducing vehicle idling
9. increasing recycling, composting, and green procurement and
10. practicing reforestation and conservation forest management

The Trust will use environmental management systems (EMS) as the primary management approach for addressing these actions and for collecting, analyzing, and reporting information to measure performance in the implementation of this measure. The results of the park's emission inventory and the Trust's identified mitigation actions and associated emissions reductions will be summarized in a narrative document (Action Plan) intended for viewing by Presidio employees, visitors, and other interested parties.

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3.5 Noise

AFFECTED ENVIRONMENT

To help the reader, the following description of noise terminology is provided as summarized from the final PTMP EIS. The A-weighted decibel scale (dBA) characterizes the pitch and loudness, as perceived by humans. The equivalent energy indicator, Leq, is an average of noise over a stated time period, usually one hour. The day-night average, Ldn, is a 24-hour average, which accounts for the greater sensitivity of most people to nighttime noise. The sound level that is exceeded ten percent of the time is known as L10. If the Leq is similar for two locations, a higher L10 indicates a wider fluctuation of noise levels and a lower L10 indicates steadier noise levels. Generally, a 3-dB difference in community noise is noticeable to most people, a 5-dB difference may cause a change in community reaction, and a difference of 10 dB is perceived as a doubling of loudness.

Noise Control Regulations and Programs

The Federal Highway Administration (FHWA) regulations (23 CFR 772) establish Noise Abatement Criteria (NAC), which aim to protect noise-sensitive land uses from highway noise. The FHWA procedures state that noise impacts from traffic are serious enough to warrant consideration of abatement when noise levels for a project approach or exceed the NAC or when they substantially exceed existing noise levels. The NAC are shown in Table 23.

The San Francisco Noise Ordinance[42] (Article 29 of the San Francisco Police Code) contains the local noise control regulations that apply to the urban neighborhoods surrounding the Presidio. The noise ordinance regulates construction noise, fixed-source noise, and unnecessary, excessive, or offensive noise disturbances within the city. Sections 2907 and 2908 of the San Francisco Police Code provide that:

- Construction noise is limited to 80 dBA at 100 feet from the equipment during daytime hours (7:00 AM to 8:00 PM). Impact tools are exempt provided that they are equipped with intake and exhaust mufflers.
- Nighttime construction (8:00 PM to 7:00 AM) that would increase ambient noise levels by 5 dBA or more is prohibited unless a permit is granted by the Director of Public Works.

To protect all new or rehabilitated multi-family dwelling units (including hotel guest rooms, apartments, and other attached dwellings) from unacceptable exterior noise environments, the Trust enforces noise insulation requirements equivalent to the California Noise Insulation Standards (Part 2, Title 24, California Code of Regulations) with building permit conditions. Single-family homes are not subject to Title 24 standards.

[42] *The San Francisco Noise Ordinance can be viewed at* http://www.municode.com/content/4201/14140/HTML/ch029.html.

23 FHWA NOISE ABATEMENT CRITERIA (HOURLY DBA)

	Activity Category	*Leq(h)*	*L10(h)*
A	Lands on which serenity and quiet are of extraordinary significance and serve as important public need and where the preservation of those qualities is essential if the area is to continue to serve its intended purpose	57 (Exterior)	60 (Exterior)
B	Picnic areas, recreation areas, playgrounds, active sports areas, parks, residences, motels, hotels, schools, churches, libraries, and hospitals	67 (Exterior)	70 (Exterior)
C	Developed lands, properties, or activities not included in Categories A or B above	72 (Exterior)	75 (Exterior)
D	Undeveloped lands	None Applicable	None Applicable
E	Residences, motels, public meeting rooms, schools, churches, libraries, hospitals, and auditoriums	52 (Interior)	55 (Interior)

Source: 23 Code of Federal Regulations, Part 772, Table 1
Notes: dBA = A-weighted decibel scale
Leq(h) = equivalent energy indicator; average noise over one hour
L10(h) = sound level exceeded 10 percent of the time over one hour

Existing Noise Conditions

The existing noise environment of the Main Post district is characterized by traffic, most notably on U.S. Highway 101 (Doyle Drive), where traffic noise levels are commonly above 67 dBA, the FHWA Noise Abatement Criterion that applies to recreation areas, parks, residences, hotels, and schools. Additionally, noise levels above 67 dBA can occasionally occur adjacent to some of the primary internal roadways of the Presidio (Presidio Boulevard and Lincoln Boulevard) and near Presidio entry gates (Lombard and Presidio gates). As with other areas of the Presidio away from primary roadways, the remainder of the Main Post is generally quieter than the surrounding urban environment of San Francisco because there is less urban activity (and density). Within the Main Post district, noise levels in areas more than 200 feet from Doyle Drive and areas not immediately adjacent to other internal roadways are below the 67-dBA NAC threshold.

Existing daytime noise levels in the Main Post district range from approximately 60 to 72 dBA hourly Leq, depending on the receptor's proximity to traffic. Immediately adjacent to Doyle Drive (Building 106), the exterior noise levels are about 72 dBA Leq due to steady highway traffic. Levels above 67 dBA Leq occur within about 200 feet of Doyle Drive (Environmental Sciences Associates 2004). Along Presidio Boulevard, west of Lombard Street, noise fluctuates around 68 dBA Leq

depending on variable traffic, including urban buses. At the Officers' Club (Building 50), daytime noise is lower at about 60 dBA Leq. On a day-night basis, noise at the edge of Doyle Drive is above 70 Ldn, and day-night levels are between 60 and 65 Ldn along the roads of the perimeter of the Main Post including Presidio Boulevard, Moraga Avenue, Montgomery Street, and Lincoln Boulevard (CCSF 2007). The results of a monitoring program for daytime noise levels conducted in 1999 and 2001 are summarized in Table 24. These levels are representative of current conditions because the types of noise sources in the Main Post have remained virtually unchanged since the PTMP was prepared.

Noise-Sensitive Areas

Examples of noise-sensitive uses include lodging, residences, schools, day care centers, and recreational uses of noise-sensitive areas (such as San Francisco National Cemetery) or areas where natural sounds are of significance (such as Crissy Field marsh). Existing noise-sensitive areas at the Main Post include:

- Presidio Child Development Center (Building 387);
- Bay School of San Francisco (Building 35), an independent high school;
- residences on Riley Avenue, Funston Avenue, and Infantry Terrace; and
- Tennessee Hollow.

24 SUMMARY OF SHORT-TERM NOISE MEASUREMENTS

Site	*Description*	*Dominating Noise Source*	*Hourly Leq (dBA)*	*L10 (dBA)*
R3	Presidio Boulevard at Building 545	Buses Accelerating	67.9	69.1
R14	Doyle Drive at Building 106	Doyle Drive/Highway 101	72.1	73.8
R15	Moraga Avenue at Building 50	Main Post Activity	59.9	64.0

Source: Aspen Environmental Group 2001
Notes: dBA = A-weighted decibel scale
Leq(h) = equivalent energy indicator; average noise over one hour
L10(h) = sound level exceeded 10 percent of the time over one hour
L10 = sound level exceeded 10 percent of the time
FHWA = Federal Highway Administration
Either Leq or L10 (but not both) may be used on a project.

The nearest noise-sensitive areas within the City and County of San Francisco are residences over 1,500 feet east of the Main Post near the Lombard Gate on Lyon Street.

ENVIRONMENTAL CONSEQUENCES

Methodology

This analysis follows the same methodology used in the final PTMP EIS to assess impacts from noise. The analysis of the potential impacts of demolition or construction noise relies on a comparison of the anticipated effects of each alternative with the limitations of the San Francisco Noise Ordinance. Presidio tenants, recreational users, and certain residences could experience significant impacts if the physical constraints of a particular construction/demolition site preclude provision of suitable buffer distance.

The analysis of traffic noise impacts relies on a comparison of observed and modeled noise levels at locations where substantial traffic changes are expected to be induced by an alternative. For roadways internal to the Presidio and near noise-sensitive areas, traffic volumes that would occur under each alternative were compared to determine if the alternative would cause a noticeable noise increase. Significance of impacts depends on the existing conditions. At some locations throughout the Presidio, existing noise conditions are known to approach or exceed the FHWA Noise Abatement Criteria. For these locations, a noticeable (greater than 3-dBA) noise increase caused by an alternative would warrant new mitigation for traffic noise. To protect new development from unacceptable exterior noise environments, new multi-family residential units (lodging, apartments, or other attached dwellings) within the Presidio would be constructed according to standards equivalent to Title 24 of the California Code of Regulations. If this practice would not be sufficient to protect new noise-sensitive areas from traffic noise, additional mitigation is identified.

Alternative 1

The impact of noise from general construction/demolition, increased traffic, special events, and other activities within the Main Post and in surrounding neighborhoods was analyzed on pages 260 through 268 of the final PTMP EIS. Development under this alternative would cause construction/demolition noise and increased traffic noise on the Main Post.

Construction Equipment Noise Construction/demolition noise could at times be distinctive and disruptive to park users and other people within close proximity of the activity. The types of construction equipment to be used would typically generate noise levels of 70 to 80 dBA at a distance of 100 feet while the equipment is operating. Construction equipment operations would vary from intermittent to fairly continuous, with multiple pieces of equipment operating concurrently. Such noise levels, however, would not be continuous throughout the day and would be restricted to daytime hours. During construction, contractors and other equipment operators would need to comply with the San Francisco Noise Ordinance, which prescribes working times, types of construction equipment to be used, and permissible noise emissions. Trust-enforced noise standards would be applied to minimize noise disturbance in the vicinity of construction/demolition activity (PTMP EIS Mitigation Measure NR-23 *General Construction/Demolition Noise*).

Traffic Noise Traffic volumes generated by this alternative would increase ambient noise above existing levels but not to levels that would be noticeably different from what is shown in the final PTMP EIS. Locations where existing noise conditions are known to approach or exceed the FHWA Noise Abatement Criteria would continue to experience adverse traffic noise. Existing noise-sensitive uses would experience increased noise from traffic internal to the Presidio. Although traffic volumes would increase noise above background levels, the increase would not be substantial (i.e., would not exceed applicable standards) for most locations and would not warrant mitigation. However, traffic generated by this alternative would be noticeable at the Riley Avenue housing. Trust-enforced traffic noise reduction measures and noise monitoring (PTMP EIS Mitigation Measures NR-24 *Traffic Noise Reduction* and NR-25 *Traffic Noise Monitoring and Attenuation*) would be enforced to reduce noise. The current practice of enforcing noise insulation requirements would provide acceptable interior noise levels.

Development of visitor-oriented and open space uses (such as the Main Parade) would not introduce new noise-sensitive uses to the areas of the Main Post district that are above the 67-dBA NAC threshold. Use of typical building materials for the Presidio Theatre and other cultural/educational uses would ensure that tenants and visitors to the buildings are insulated from outdoor noise because interior noise levels would be at least 15 dBA below exterior levels.

Alternative 2

This alternative would not expose persons to or generate noise levels in excess of applicable standards. Development under Alternative 2 would cause construction/demolition noise and increased traffic noise on the Main Post.

Construction Equipment Noise Construction would result in increased noise levels from earthmoving and construction/demolition activities. General construction/demolition would disrupt Presidio tenants at noise-sensitive uses and recreational users similar to what is anticipated under Alternative 1. Construction for the Presidio Theatre would occur at least 400 feet from the nearest noise-sensitive residential areas along Riley Avenue or Infantry Terrace. The residences along Riley Avenue would be buffered from construction activities by the Montgomery Street Barracks and currently experience relatively high noise levels (i.e., commonly above 67 dBA) from Doyle Drive traffic, which would tend to mask construction noise. The noise-sensitive Presidio Child Development Center (Building 387) would also experience increased disruption from theatre construction and from demolition of the adjacent Herbst International Exhibition Hall (Building 385). As anticipated under the PTMP, tenants of Building 387 and Infantry Terrace residences could experience significant noise impacts because of construction/demolition activity being within 250 feet. During construction, contractors and other equipment operators would need to comply with the San Francisco Noise Ordinance, which prescribes working times, types of construction equipment to be used, and permissible noise emissions. Trust-enforced noise standards would be applied to minimize noise disturbance in the vicinity of construction/demolition activity (PTMP EIS Mitigation Measure NR-23 *General Construction/Demolition Noise*).

Traffic Noise Traffic noise increases are evaluated by considering whether they would cause noise to approach or exceed the NAC in Table 23. Operation and occupation of uses within the Main Post would cause

increased traffic noise, but would not result in unnecessary, excessive, or offensive noise. Although residences along Riley Avenue and locations along some of the primary internal roadways of the Presidio currently experience noise levels that exceed the FHWA NAC of 67 dBA, traffic noise under this alternative would not cause a noticeable change (greater than 3 dBA) when compared to the traffic noise that would occur under Alternative 1. Similarly, noise from traffic at the Lombard, Presidio, and Arguello Gates under this alternative would not notably increase above the traffic noise levels shown in Alternative 1, which are levels common and accepted in the urban areas surrounding the Presidio. Roadways that lead to and from the Main Post district would experience increased traffic, but new mitigation would not be warranted beyond what is identified in the final PTMP EIS. Trust-enforced traffic noise reduction measures and noise monitoring (PTMP EIS Mitigation Measures NR-24 *Traffic Noise Reduction* and NR-25 *Traffic Noise Monitoring and Attenuation*) would be enforced to reduce noise. The current practice of enforcing noise insulation requirements would provide acceptable interior noise levels.

This alternative would introduce a new lodge, theatre, and other cultural/educational uses that would be sensitive to traffic noise. These uses would not be exposed to excessive noise from Doyle Drive, which is the major ambient source of noise for the Main Post, because each would be more than 200 feet away from the highway. The PTMP recognized that new uses in the Main Post district could occasionally be exposed to outdoor ambient noise levels above the 67-dBA NAC where immediately adjacent to the primary internal roadways of the Presidio (Presidio Boulevard and Lincoln Boulevard). The current practice of enforcing noise insulation requirements would provide acceptable interior noise levels for the lodge, and use of standard building materials for the theatre and cultural/educational uses would ensure that tenants and visitors to these buildings would be insulated from outdoor noise because interior noise levels would be at least 15 dBA below exterior levels.

Noise from Stationary Sources or Special Events Special events that would be held periodically at the Main Post could temporarily increase ambient noise levels. Similar to what is anticipated under the PTMP, because no major stationary noise sources or major sound amplification systems would be used in the district, no substantial noise effects would occur. The Trust would impose limitations on the equipment used and the time and area for outdoor events to ensure that noise does not unreasonably disturb visitors or tenants.

Alternative 3

Under this alternative, construction/demolition noise would cause less disruption than what is anticipated under Alternative 1 because new construction would be limited to the History Center. Construction/demolition for the History Center would occur at least 400 feet from the nearest noise-sensitive residential areas along Riley Avenue or Infantry Terrace. Ambient noise increases associated with traffic due to operation and occupation of the uses under this alternative, and the effects of traffic noise on the proposed uses and the History Center, would be less than under Alternative 1 due to fewer vehicle trips under this alternative.

Alternative 4

Under this alternative, construction/demolition noise would cause less disruption than what is anticipated under Alternative 1 because new construction would be limited to only those projects underway. Ambient noise increases associated with traffic due to operation and occupation of

proposed uses under this alternative, and the effects of traffic noise, would be less than under Alternative 1 due to fewer vehicle trips under this alternative.

MITIGATION MEASURES

The following measures adapted from the final PTMP EIS would protect Presidio residents, visitors, and wildlife from construction, traffic, and special events noise.

NR-8 *Natural Sounds* Special events or other activities that could disturb nesting birds at sensitive use areas will be seasonally restricted.

NR-23 *General Construction/Demolition Noise* Construction contractors and other equipment operators will comply with Trust-enforced noise criteria, standards and levels set forth in the San Francisco Noise Ordinance (Article 29 of the San Francisco Police Code) to minimize noise disturbance in the vicinity of project sites during the construction process.

NR-24 *Traffic Noise Reduction* Vehicle traffic throughout the Presidio represents the major source of existing and future noise, especially from U.S. Highways 101 and 1. Although the Trust cannot control the level of noise produced by privately owned vehicles, it can control which types of transit vehicles are used for park purposes at the Presidio. The Trust will use and encourage city agencies and transit providers to select transit vehicles that produce less noise pollution. Energy-conserving government vehicles will be used by maintenance and other divisions. If possible, electric or other alternative vehicles will be used to reduce noise levels.

NR-25 *Traffic Noise Monitoring and Attenuation* The San Francisco National Cemetery, Crissy Field marsh, and Tennessee Hollow have been identified as areas important to natural soundscapes, both for recreation and wildlife, and will be monitored during construction or other activities that could be detrimental to this value. Noise attenuation measures will be instituted, if feasible, if noise levels exceed the Noise Abatement Criteria standards. Examples of attenuation measures include sound barriers or berms, vehicle restrictions, and traffic calming.

REFERENCES

Aspen Environmental Group. 2001. *Short-Term Ambient Noise Measurements*.

City and County of San Francisco (CCSF), San Francisco Department of Public Health. 2007. *Traffic Noise Model for Transportation Noise Maps*.

Environmental Science Associates. 2004. *Draft Noise and Vibration Study, South Access to the Golden Gate Bridge*. Dated September.

3.6 Historic Resources

The history and the significant buildings, structures, and landscapes of the Presidio are described on pages 68 to 76 of the final PTMP EIS. Both this description and the 1993 National Historic Landmark (NHL) documentation (1993 NHL update) are incorporated here by reference. The Trust initiated an update to the NHL documentation in 2008. Research and analysis for the update was conducted in 2008 (2008 NHL update) and submitted to the National Park Service (NPS) for review that year. Pending NPS review schedules, the update is anticipated to be finalized in 2010. Portions of the final PTMP EIS descriptions of the historic resources along with the revisions to historic significance that are anticipated from the 2008 NHL update are summarized below. Historic resources within the Area of Potential Effects are identified in Figure 15.

AFFECTED ENVIRONMENT

National Historic Landmark District

The Presidio was designated as a National Historic Landmark (landmark) in 1962 with minimal documentation but with recommendations for further work on identification. The National Historic Landmarks Advisory Board indicated at that time that the boundary of the NHLD should be the entire Presidio of San Francisco military reservation. The Commanding General of the Sixth Army and the NPS agreed in 1970 that the entire military reservation was within the NHLD boundary.[43] A comprehensive update of the NHL documentation with identification of contributing resources was not completed until 1993. Based on the National Register of Historic Places 50-year minimum age "rule of thumb"[44] for considering contributing resources, the 1993 update identified 1776 through 1945 as the period of significance for the Presidio.

Basis for NHL Designation

The Presidio was designated as a National Historic Landmark because it was considered to possess national significance under both the National Historic Landmark Criteria (Henry, ed. 1999) and the National Register of Historic Places Criteria (Shrimpton, ed. 1997). Both the National Historic Landmark Criteria and the National Register Criteria identify themes under which a property might be considered for eligibility, such as association with important events, association with lives of important persons, embodiment of distinguishing architectural characteristics, and

[43] *Page 7-6 of the 1993 NHL update describes the history of listing the Presidio as a NHLD.*

[44] *"Properties that have achieved significance within the past 50 years shall not be considered eligible for the National Register. However, such properties will qualify if they are integral parts of districts that do meet the criteria or if they fall within" categories further defined in the National Register Bulletin 15 (Shrimpton, ed. 1997).*

Source: Presidio Trust 2010

the potential to yield information important in prehistory or history. The 1993 NHL update states the following with regard to the significance of the Presidio:

> *The Presidio of San Francisco possesses national significance under combined National Historic Landmark Criteria 1, 4, 5, and 6. The property is composed of a wealth of historic, architectural and archeological resources that collectively comprise a distinctive entity of exceptional historical significance (Criteria 4, 5, and 6), and whose archeological study can amplify our understanding of those periods and peoples underrepresented in the existing historical record. As a vast district entity, the Presidio possesses exceptional value in illustrating the history of the United States through its association with important historical events and its outstanding representation of patterns of national development through multiple periods (Criterion 1).*[45]

2008 NHL Update

The 1993 NHL update used in the final PTMP EIS to identify historic resources is now more than 15 years old. The implementing regulations for Section 106 of the NHPA state that "The passage of time, changing perceptions of significance, or incomplete prior evaluations may require the agency official to reevaluate properties previously determined eligible or ineligible" for the National Register of Historic Places.[46] No aspect of the Cold War era was 50 years old when the 1993 update was completed. However, the update states, "At a point in the future when there exists greater perspective from which to evaluate the significance of the Presidio after World War II, an extension of the district's period of significance through the 1950s and beyond should be considered." In recent years, there has been a considerable amount of study, undertaken primarily by the Department of Defense, on the significance and possible National Register eligibility of Cold War-era installations. The Cold War era (1945 through 1989) is a focus of the 2008 NHL update since it is the last epoch in the history of the U.S. Army at the Presidio before the announcement of the Base Closure and Realignment Act in 1989 that the U.S. Army no longer needed the Presidio.

Although still in draft form, the 2008 NHL update has found that activities in the Presidio during the Cold War may have National Register significance.[47] However, only a few of the structures built

[45] *Pages 8-7 though 8-8 of the 1993 update describe the historical significance of the Presidio and list the themes and eras of history under which the Presidio is considered to be of national significance.*

[46] *36 CFR 800.4(c)(1), Application of the National Register Criteria. According to 36 CFR 60.4, the National Register Criteria include "the quality of significance in American history, architecture, archeology, engineering, and culture is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association and (a) that are associated with events that have made a significant contribution to the broad patterns of our history; (b) that are associated with the lives of persons significant in our past;(c) that embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; (d) that have yielded, or may be likely to yield, information important in prehistory or history."*

[47] *To qualify for the National Register, a property must be significant; that is, it must represent a significant part of the history, architecture, archaeology, engineering, or culture of an area, and it must have the characteristics that make it a good representative of properties associated with that aspect of the past (Shrimpton, ed. 1997).*

(continued)

during that time would actually qualify for listing in either the National Register or in the NHLD. Buildings that housed the Sixth Army's command during the Cold War would be eligible for the National Register of Historic Places. However, all of these older buildings are already listed as contributing structures in the NHLD. The majority of the structures constructed during the Cold War era were part of nationwide construction efforts such as the Capehart and Wherry housing programs.[48] The majority of the structures built in the Presidio during the Cold War were constructed from standard plans and are not unique to the Presidio. Evaluating these structures in the context of other U.S. Army facilities indicates that, with one exception, there are better or equal examples of these buildings already listed in the National Register. At the Main Post, the Presidio Library (Building 386) appears to represent a unique building type for the Cold War period and has been determined eligible for the National Register (Sucre, et al. 2008). Despite the medical research that occurred at Letterman Hospital during that period,[49] the Presidio does not contain structures that represent the scientific and technological advance that has been the major justification for listing Cold War era sites on the National Register.

Properties that have achieved significance within the past 50 years may be listed in the National Register of Historic Places, according to the National Register Criteria for Evaluation, only if they are of "exceptional importance," or if they are integral parts of districts that are eligible for listing in the National Register. This principle safeguards against listing properties that are of only contemporary, faddish value and ensures that the National Register is a register of historic places (Sherfy, et. al. 1990).

[48] *In 67 FR 39,332, dated June 7, 2002, the Advisory Council on Historic Preservation (ACHP) issued a Program Comment approving the Army's management of Capehart and Wherry Era family housing and associated structures and landscape features. The Program Comment states, "The Army considers its inventory of Capehart and Wherry Era properties, including any associated structures and landscape features, to be eligible for the National Register of Historic Places for the purposes of Section 106 compliance" (ACHP 2002). The 2008 NHLD update will take this Program Comment into consideration when evaluating the eligibility of Capehart and Wherry properties in the Presidio of San Francisco.*

Changes in Existing NHLD Resources Following the 1993 NHL update, the NPS demolished 37 historic buildings: 32 to undertake the Crissy Field rehabilitation and five to remove hazardous materials. Five additional historic structures were demolished by the Trust. One was removed after significant damage from fire and another after being damaged by heavy equipment. Two historic tennis courts were removed for construction of the Letterman Digital Arts Center. The fifth structure to be demolished by the Trust was the Fort Scott War Department Theater (Building 1387) after it collapsed in 2003 due to structural deficiencies that resulted from its conversion by the U.S. Army to a bowling alley. In recent years, changes in the condition of the Presidio's historic building stock have been primarily related to stabilization, preservation, and rehabilitation projects of varying scale and scope.

Main Post Construction History and Resources, 1776-1945

The Main Post is the one district in the Presidio that represents the entire NHLD period of significance of 1776 through 1945. It also includes buildings associated with the Cold War era of base activity. It contains

[49] *The Letterman Army Institute of Research carried out primary research in medicine, optics, nutrition, and toxicology (Thompson 1997).*

the remains of the original Spanish structures from the 18th century as well as buildings that housed the Sixth Army Command during the Cold War era.

The Cultural Landscape Assessment (CLA) for the Main Post (SMWM, et al. 2002) describes the changes in the area that occurred through nine major epochs of history (expanded from the eight described in the 1993 update). The CLA also studied a tenth epoch that includes the Cold War through base closure in 1994. Each successive layer of history expanded upon or erased the evidence of earlier periods of development. The CLA identifies the remaining elements of each period within the context of the physical framework of the Main Post as it can be seen today. The CLA's treatment recommendations suggest methods for clarifying significant features in the landscape that have eroded over time (such as the Main Parade and El Presidio), including new infill construction and building removal. In the final analysis, the Main Post is significant and contributes to the NHLD for the sum of its history as it existed through 1945 (the last year of the period of significance) rather than for any individual epoch of development. A description of each of the epochs of history detailed in the CLA follows, along with a summary of changes to historic resources since 1994.

Spanish Occupation, 1776-1792 The small, early Spanish Presidio, El Presidio, marked the northern frontier of Spanish Colonial America. It represents the first European settlement site within San Francisco. While as an archaeological resource the site qualifies as a contributing element of the NHLD, there is little to no evidence of this resource above grade. Moraga Avenue and portions of the Officers' Club (Building 50) are the only remaining above-ground elements that mark the location of the early El Presidio.

Spanish/Mexican Occupation, 1792-1845 By 1812, El Presidio was greatly enlarged with improvements that indicate that the colony intentionally took on a more permanent character after 1792. The enlargement was the first construction effort in the Main Post that permanently changed its appearance by greatly altering or removing prior structures. In 1821, when Mexico declared independence from Spain, the Presidio became a Mexican colony. As with the early Spanish Presidio, the archaeological site from this period clearly contributes to the significance of the Main Post and to the NHLD. Above grade, however, the site is expressed only in the remains of the Officers' Club along with the locations of Moraga Avenue, Mesa Street, and Graham Street. It is important to note that almost all later development in the Main Post is based on the grid that was created by the quadrangle of the 1812 El Presidio.

Early U.S. Occupation, 1846-1860 John C. Fremont, commander for American forces in California, took possession of the Presidio in 1846, officially claiming California for the United States. Few improvements were made to the Presidio during this time, although effort was expended to fortify the harbor entry. A parade ground (First Parade) was established in El Presidio plaza, therein setting the pattern for future development of the Main Post. Little evidence of the early United States occupation remains beyond the Officers' Club and the locations of Moraga Avenue, Mesa Street, and Graham Street.

Civil War Expansion, 1861-1870 With the discovery of gold in 1849 and the growing unrest between the northern and southern states, the Presidio was subject to a major expansion to secure California and the gold shipments for the Union states. For the second time in its history, major expansion overwrote previous eras of development and altered the appearance of the Main Post. The First Parade, which marked the 1812

El Presidio, was extended to what is now Lincoln Avenue. One side of this new enlarged parade ground (Old Parade) was lined with officer housing and the other with enlisted barracks. The basic boundaries of the Civil War-era expanded post remain in the street patterns, despite the removal of the buildings on the west side of the Old Parade in the 1950s. However, the spatial definition of the eastern edge of the Old Parade was diminished with the addition of Buildings 35, 38, and 39 in the early to mid-twentieth century.

Division Headquarters, 1871-1890 After the Civil War, the U.S. Army began a conscious development program to transform the Presidio from a frontier post to a more imposing military presence. Concurrently, in an effort to retain the Presidio and mark its boundaries, the U.S. Army began a major forestation program starting with the lands surrounding the Main Post. Changes in the Presidio reflected national trends from both the City Beautiful and parks movements. Working predominantly with wood construction and ornamental plant materials, the U.S. Army transformed the Presidio to a more garden-like site with a grand entry along Lombard Street and with alleys of trees and hedges lining the major streets. While the garden-like environment has changed with the loss of plant materials, strong visual evidence of the development of this period survives in the Funston Avenue houses, the mature Presidio forest, and the remains of the Alameda entry and walkway (SMWM, et al. 2002).

A Grand Post, 1891-1908 The outbreak of the Spanish-American War in 1898 and the consolidation of small frontier military outposts transformed the Presidio into a nationally prominent military base. The role of the Presidio as the command in the Pacific Theater was solidified and a major construction and expansion program supplanted wood-frame construction with masonry, thereby creating the north and west edges of the drill field now known as the Main Parade. This third major overlay of construction in the Main Post was more a program of expansion than a change to the previous layers of development. Building 42, a Bachelor Officers Quarters (BOQ) later named Pershing Hall, replaced an earlier wood structure that had burned in 1899. The Montgomery Street district remains largely intact. The central open space from this era (the Main Parade) survives as a parking lot. The buildings along both sides of Anza Street that had formed the eastern edge of the Main Parade (with the exception of Buildings 86/87) were demolished beginning in the 1950s.

World War I, 1909-1920 As a command for the U.S. Army in the Pacific, the Presidio had a significant role during World War I. The construction program of masonry buildings begun at the end of the 19th century was continued with the completion of officer housing on Infantry Terrace and two more barracks along Montgomery Street. The Infantry Terrace housing introduced the Mission Revival style into the Main Post and created an architectural theme that was continued until the Cold War. Reflecting another influence of this period – the Panama Pacific Exposition – a large three-story barracks (Building 35) was constructed in the neo-classical style at the north end of the Old Parade, beginning the gradual encroachment of new construction into the parade space. During this period of time the land bounded by Moraga Avenue, Graham Street, Arguello Boulevard, and Sheridan Avenue was set aside as a plaza to honor General Pershing after a house fire in this area killed his wife and three daughters; his son survived. Today Pershing Square remains as an open park that has been overlaid with a system of non-historic concrete walkways and plazas that were constructed in the 1950s

and 1960s. The post flagpole was moved to this location in the 1950s. Infantry Terrace, the Halleck Street building cluster, and the Main Post street system all survive as intact elements of the 1909-1920 period.

Peacetime Activity, 1921-1940 After World War I, activity at the Presidio was reduced. The standing U.S. Army was made smaller and its divisions reorganized. The post remained an active training ground, but the role of the post as a major command began to diminish. Works Progress Administration (WPA) funding and the Federal Highways Act greatly transformed the Presidio, in particular the Main Post. WPA construction included the Presidio Theatre (Building 99), two new barracks (Buildings 38 and 39), and the School for Bakers and Cooks (Building 220) as well as a "restoration" of the Officers' Club that actually remodeled the wooden structure with stucco to make it look more Spanish in origin. The new barracks structures, located within the Old Parade, permanently altered the primary open space around which the Main Post had been organized for 160 years (SMWM, et al. 2002). Building 39 also eliminated what had been the post's formal entry at the end of Presidio Boulevard (the Alameda), thus changing a major circulation pattern and the experience of a grand entry to the Main Post from the east. The buildings constructed during this time remain in excellent condition and mark a strong WPA influence on the Main Post.

In 1937, the Federal Highways Act triggered the construction of Doyle Drive as the east-west connector from the city to the Golden Gate Bridge, dividing the Main Post from Crissy Field and the waterfront and greatly transforming the Presidio. Doyle Drive construction included the introduction of two major viaduct structures into the Presidio's landscape and the relocation or demolition of several buildings along the highway corridor. At the Main Post, the project severed street and railroad connections and removed several buildings at the north end of Halleck Street that had been the quartermaster depot.

World War II, 1941-1945 In the first years of World War II, the Presidio again took on the role as an Army command for the Pacific Theater. A general fear that San Francisco would be the next target after Pearl Harbor prompted the designation and related build-up of personnel and support facilities. The command was located in Building 35, which had been converted from barracks to offices. The first years of the war saw a major construction effort of "temporary" wood-frame buildings that were built from standard plans. On the Main Post, three barracks (Buildings 3, 40, and 41) and a recreation hall (Building 37) were built in this style, along with the Spanish Colonial Revival-style Red Cross building (97). By 1941, the First Parade, formerly El Presidio plaza, had become a paved parking lot with two of the new temporary barracks located on its eastern edge. The overlay of new construction from this and previous eras at the Old Parade and El Presidio plaza significantly changed the open appearance of this area. The Presidio's status as a headquarters for the Pacific theater of operations was terminated in 1943 following the Battle of Midway, but the post continued to conduct support operations for the war effort. The majority of World War II construction on the Main Post remains.

Main Post Construction History and Resources, 1945-Present

The 2008 NHL update necessitated the evaluation of eras of history that were not previously considered as contributing to the significance of the NHLD, and a description of changes or treatments to historic resources in the Presidio (including the Main Post) that have occurred since the 1993 update. A summary of this information is provided below.

Cold War Era, 1945-1989 Studies prepared primarily by the U.S. Department of Defense identify the Cold War era as extending from 1945 (the end of World War II) through 1989 (the fall of the Berlin Wall). The Presidio was at the heart of the U.S. Army's operations in California and the West Coast from the early 1850s through World War I. The Presidio began to lose its preeminence during the inter-war era, but it nonetheless remained an active post through the majority of World War II. During much of the Cold War, it was the administrative command for the Sixth Army and home to various specialized functions. The Sixth Army included 30 U.S. Army installations in eight western states (Thompson 1997). Its key facilities were at Fort Ord, Fort Irwin, and Fort Lewis. While the Presidio served as administrative command, the majority of functional work occurred at other bases. The 1973 ceasefire in Vietnam saw the Sixth Army relieved of all administrative responsibilities other than those associated with Army Reserve and National Guard units. These final functions remained essentially unchanged between 1973 and the transfer of the Presidio from the U.S. Army in 1994.

During the Cold War era, Letterman Hospital was one of the largest and most active modern hospitals in the military, and Fort Winfield Scott remained a command for coastal defenses. The hospital and coastal defense units were under separate commands and were largely independent of each other as well as of the Sixth Army. Fort Scott commanded the San Francisco Bay Area deployment of short-range anti-aircraft missiles, one of two such deployments in the state of California. The Presidio's only Nike installation, Battery Caulfield, was inactivated before 1972. The remaining Bay Area Nike sites were inactivated by 1974, at which time the functions housed at Fort Scott were reduced in scope and responsibility. With the ceasefire in Vietnam, the Letterman command was greatly reduced.

This last period of U.S. Army development significantly changed the appearance of the Main Post through a program of construction, demolition, and alteration of both buildings and landscaped areas. Six of the eight Civil War barracks lining the west side of Graham Street were demolished, the Main Parade was paved, and several of the Montgomery Street Barracks were converted to office use. The landscape of Pershing Square was also modified during this period, resulting in its appearance today.

Eight new buildings were constructed in the Main Post during this period: a gym (Building 63), a bowling center (Building 93), the enlisted club (Building 135), a cafeteria (Building 211), a communications center (Building 34), the post exchange (Building 385), the library (Building 386), and the child care center (Building 387). The bowling center, the last building to be constructed during this period, was built in 1989. Various garages and support buildings were also constructed during this time; some of these structures (such as the carports along Mesa Street) have since been removed. The Officers' Club was also greatly modified in the 1970s by a major addition on the south side of the building. The only buildings on the Main Post constructed during the Cold War era that are eligible for the National Register are the library (Building 386) and Golden Gate Club (Building 135). Pending finalization of the 2008 NHL update, all other construction that occurred

on the Main Post during this time has been found not to qualify for Register listing.[50]

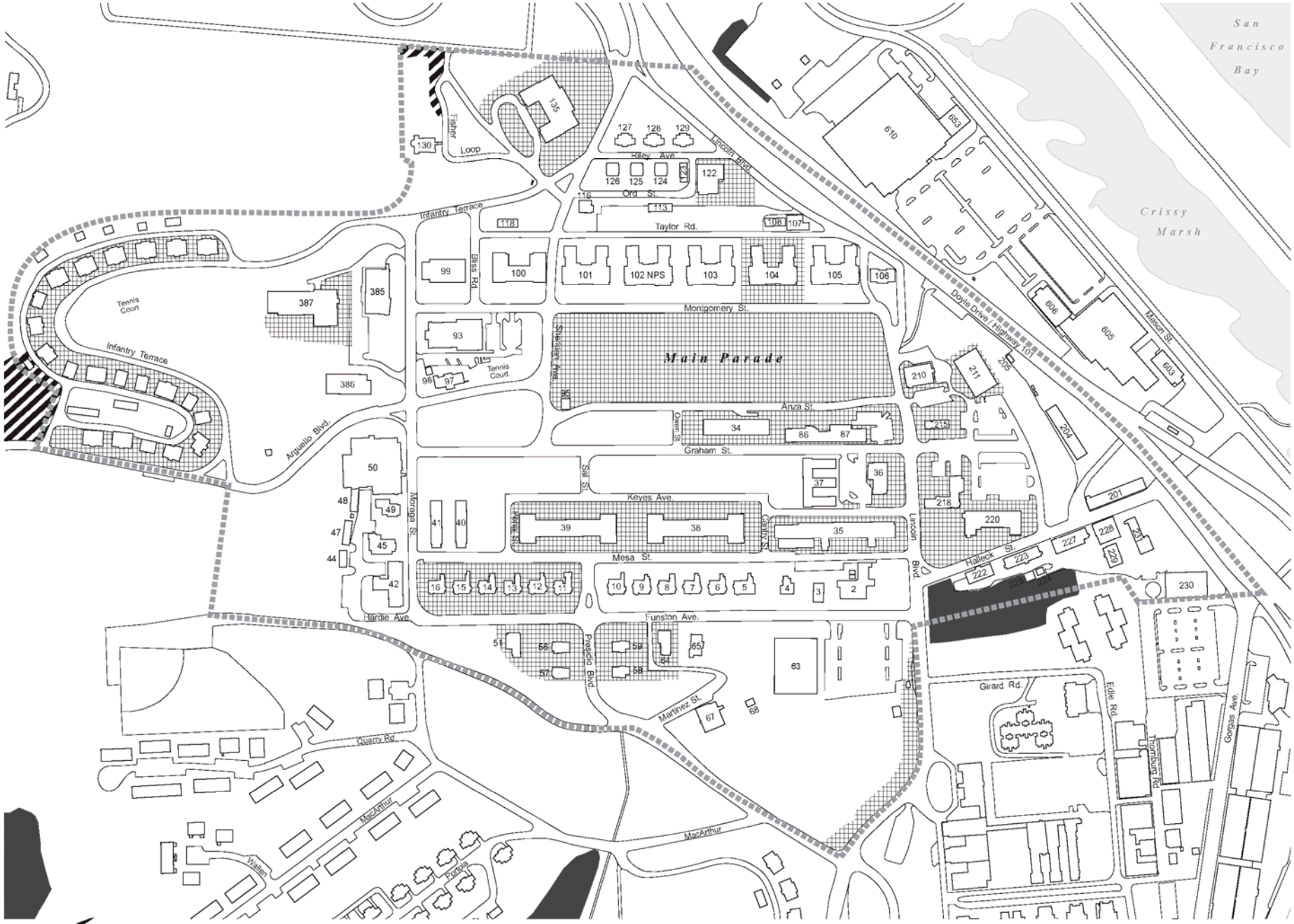
Post to Park, 1994-Present Since transfer from the U.S. Army in 1994, management of the Presidio, first by the NPS and then by the Trust, has resulted in preservation and rehabilitation projects that have greatly improved the condition of historic resources in the Presidio. The efforts have ranged in scope from upgrade of existing landscape features to projects that have completely changed the appearance of some sections of the Presidio.

Thousands of hours of volunteer work managed jointly by the Golden Gate National Parks Conservancy, the NPS, and the Trust have restored many acres of natural resource habitat. A multi-million dollar environmental remediation program that the Trust assumed from the U.S. Army has also allowed for restoration of both native plant habitats and cultural landscapes, including restoration of a 400-foot segment of the Tennessee Hollow creek system at former Fill Site 6A. Fourteen acres of the Presidio's historic forest have been replanted by the Trust and 13 major cultural landscapes throughout Area B of the Presidio have also been rehabilitated. A cooperative effort among the agencies to implement the Presidio Trails and Bikeways Master Plan has resulted in major improvements in trails and, perhaps most visibly, the creation of overlooks at Inspiration Point, at Immigration Point, above Crissy Field, and above the National Cemetery. Ultimately, there will be 24 miles of trails and eight new scenic overlooks (Figure 16).

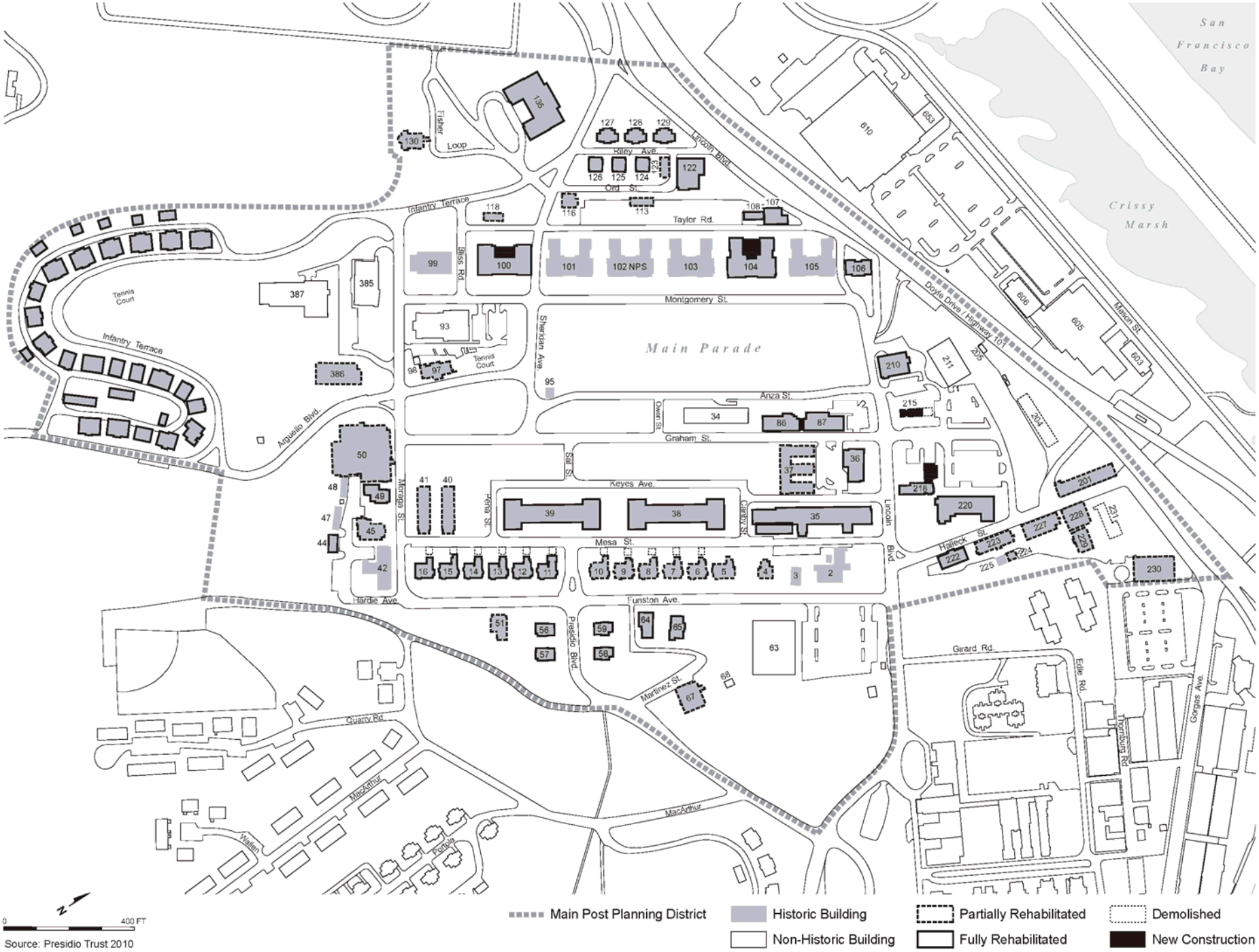
The Trust has rehabilitated more than 300 of the 433 historic buildings in Area B. Many more historic buildings have received significant preservation work. All of the 1,092 housing units in the Presidio, both historic and non-historic, have been rehabilitated. The final 11, located in seven historic buildings at the Public Health Service district, were completed in 2010. Six of the major multi-million-dollar historic building rehabilitation projects have been certified to receive tax credits through the federal historic preservation tax incentives process (Figure 17). The NPS and the Golden Gate National Parks Conservancy completed the multi-million-dollar Crissy Field marsh and airfield restoration project in 2001. In order to restore the historic 1920s airfield, create a tidal marsh, and develop recreational opportunities along San Francisco Bay, the NPS removed 32 historic buildings.

The largest new construction project to date under Trust jurisdiction in Area B is the Letterman Digital Arts Center. This project removed an eight-acre parking lot and the ten-story non-historic Letterman Hospital and associated research building. Combined, these two large structures included 850,000 square feet of building space. In their place, a 23-acre office campus of equivalent square footage, with three- and four-story buildings and a seven-acre public park, was constructed.

[50] *Building 135, the enlisted men's club (today's Golden Gate Club), was constructed in 1949, four years after closure of the current period of significance. The 1993 update (National Park Service 1993) determined that the building contributes to the landmark because it "relates directly to the long-spanning significance of the Presidio in military history." According to the 1993 update, it also may be individually eligible for listing in the National Register due to its 1951 hosting of joint security pact delegations that followed the end of World War II.*



Source: Presidio Trust 2010



Source: Presidio Trust 2010

The Trust has also signed a development agreement for the adaptive use and rehabilitation of the 1932 Main Hospital (Building 1801) in the Public Health Service district, which began construction in 2008 and was completed in 2010. At 173,000 square feet of building space, the adaptive use of the Main Hospital is the largest single historic rehabilitation project to date in the Presidio. The project included removing 125,000 square feet of building area, including the non-historic wings and connector that were constructed on the front of the building, to allow for the restoration of the 1932 façade. The Main Hospital was adaptively used as apartments; the project also included compatible new construction of seven townhouse-style apartments. In conjunction with the reuse of Building 1801, the Trust rehabilitated the historic landscape and completed an adaptive reuse of the Nurses' Quarters (Building 1808) as offices. The project also included rehabilitation of the seven residential buildings along Wyman Terrace (Buildings 1809-1815).

The Trust is planning to revitalize the Tennessee Hollow upper watershed and rehabilitate the Main Parade. The Tennessee Hollow project includes enhancement of both natural and historic resources while providing for rehabilitation of existing ball fields. The Main Parade project will rehabilitate the historic drill field in front of the Montgomery Street Barracks by replacing seven acres of asphalt pavement with landscape features and grass. The project will also create an opportunity for interpreting the history of the Presidio through a series of landscape treatments along the Anza Esplanade, which will become a "walk through time."

The project that will create the greatest change to the Presidio will be the Federal Highway Administration's Doyle Drive replacement project.[51] This more than $1 billion project will remove all or a portion of four historic buildings as well as two historic roads for the construction of a parkway replacement structure for the NHLD-contributing Doyle Drive. The new parkway will have a combination of raised, at-grade, and below-grade segments that will include landscapes ranging from restored habitat corridors to re-created historic bluffs.

Main Post Integrity

The National Register of Historic Places identifies seven criteria for considering the integrity of a National Register property: location, design, setting, materials, workmanship, feeling, and association. Integrity is assessed as the property exists now in relationship to its

[51] *In 2000, the Federal Highway Administration (FHWA), California Department of Transportation (Caltrans), and San Francisco Transportation Authority (SFCTA) proposed an undertaking to replace Doyle Drive, a National Register-eligible roadway that connects the Golden Gate Bridge with Richardson Avenue. The purpose of the project is to address seismic and safety deficiencies in the existing structure. As the lead agency, FHWA determined that its project would have an adverse effect on the Presidio NHLD, and thus initiated consultation under Section 106 of the NHPA with Caltrans serving as primary contact in the consultation process. Cooperating agencies for the consultation include the NPS, the Department of Veterans' Affairs, and the Trust. The Final Finding of Effect was completed in December 2005 with an addendum Finding of Effect completed in February 2007 (SFCTA and FHWA 2007). NEPA compliance for the project is complete, with a final Environmental Impact Statement/Report (EIS/R) released in September 2008 and associated Record of Decision signed in December 2008.*

period of significance. For a property with a very long period of significance such as the Presidio, the integrity is a product of the total elements remaining at the end of the period of significance (in this case, 1945) rather than the completeness of resources from any one of the periods of development. When the National Register form is written for such a property, the integrity is assessed by comparing the appearance and completeness of that property at the time of the writing against the property's appearance and completeness at the end of the period of significance. In essence, the property is assessed for how well it still conveys the significance for which it was determined eligible for the National Register. The CLA states:

> *While the historic landscapes associated with most of the eras are clearly significant, no single period has primary integrity. Today's Main Post is a virtual 'palimpsest' of historic fabric – a place where each successive development period overlaps and modifies the physical record of previous periods. Thus the site's overall historic integrity is grounded in a rich but fragmented record of continuity and change. It is a living mosaic of 200 years of growth and adaptation under the influence of local geography, world history, changing social values and technological innovation. Key aspects of the district's integrity lie not only with the individual historic buildings but in their location, setting, and the relationship between them and adjacent elements. The Post's complex composition allows the informed viewer to see and feel the dynamic of two centuries of military landscape change in a single location.*

At the writing of the 1993 update, it was found that even with the changes made after 1945, the Presidio and the Main Post exemplified enough of the seven aspects of integrity to retain the property's listing as a National Historic Landmark. The projects that have been accomplished in the Main Post since 1993 have not diminished the integrity that qualified it as part of a NHLD. A summary of the aspects of integrity as they relate to the Main Post follows.

Design, Materials, and Workmanship The Main Post district reflects the changing tastes in design, the evolving methods of construction, and the craftsman's building arts that were prevalent or popular for each period of the Presidio's development. While the majority of the resources related to the Spanish and Mexican period have been removed, the evidence of design, construction materials, and workmanship can still be found in archaeological remains as well as within the walls of the Officers' Club. After 1945, buildings were removed and added to the Main Post. Enough resources and examples of the entire history of the Main Post remain, however, to convey the elements of design, materials, and workmanship as they existed at the close of the period of significance in 1945.

In particular, the Main Post still conveys the design integrity of a post that evolved over many years of growth even though individual structures or landscape elements were changed, removed, or added after 1945. The form, plan, and structure of the Main Post still exist as established by the location, layout, and orientation of El Presidio. The basic form and configuration of standard military planning also still exist at the Main Post. The post aligns along an axis that has the former headquarters building (now the Officers' Club) at the head and support structures at the foot, with each side flanked by housing and barracks. The spatial relationships among open spaces and buildings remain largely intact (with some exceptions, such as the intrusion of Buildings 35, 38, and 39 into the Old Parade), as does the grid of streets that connect these elements. The rhythms of buildings that line the streets and parade grounds also remain largely intact, particularly along

Funston and Montgomery Streets. Removal of the majority of Civil War barracks and other structures along the boundary between the Old Parade and the Main Parade, leaving only Buildings 86 and 87, has diminished the "rhythm" in this corridor, but the historic street grid remains, ensuring that not all of the original relationships are lost. Though uses changed in buildings over the years, original building uses, such as barracks buildings, can still be discerned because of their standard military architecture.

Location and Setting The Main Post still conveys the aspects of location and setting as these relate to the significance for which the Presidio was listed as an NHLD. Though greatly expanded from its beginnings as a Spanish outpost, the Main Post still commands the Presidio's central valley and strategically overlooks the Golden Gate and San Francisco Bay. The Spanish located here for defensive purposes, and the Main Post remained at this location as the command for the U.S. Army on the west coast for much the same reason. Though San Francisco has developed around the Presidio, the Main Post remains distinct from the surrounding urban environment, separated by stands of historic forest, and organized around formal landscape features and ceremonial open spaces.

Feeling and Association The Main Post still retains the feeling of a military installation. Even with the changes after 1945, enough of the post's built environment remains to convey its association with the long and important military history for which it was listed as an NHLD. The buildings and landscapes of the Main Post retain a military character and the site conveys to an observer the connection with the U.S. Army command that presided over the Spanish American War and the two world wars. While little remains to allow an observer to connect with the Spanish and Mexican history at the Presidio, the archaeological remains of El Presidio are intact and can be interpreted to the visitor.

ENVIRONMENTAL CONSEQUENCES

Methodology

The methodology used to assess potential impacts of the actions considered in the final SEIS is derived from that provided in the final PTMP EIS. Potential impacts on historic resources, including the NHLD, were evaluated on pages 196 through 219 of the final PTMP EIS by determining physical changes from proposed building demolition as well as from proposed new construction. Analysis in the final PTMP EIS presented a district-by-district discussion of proposed changes, including the maximum allowable new construction and demolition. The PTMP's Planning Principles and District Guidelines and regulatory requirements were to be applied to reduce or eliminate potential adverse impacts. These guidelines apply to the projects described in the Main Post Update as well. The methodology in the final PTMP EIS also incorporated the Trust Act's requirement for a comprehensive management program to reduce expenditures and increase revenues. That program was necessarily to include demolition of structures that could not be cost-effectively rehabilitated and that were identified for demolition in the NPS's General Management Plan Amendment.

The final PTMP EIS methodology further described the responsibilities of federal agencies under Sections 106 and 110 of the NHPA. Under Section 110, federal agencies are to ensure that historic preservation is fully integrated into ongoing programs. Additionally, under Section 110(f), federal agencies must exercise a higher standard of care

when considering undertakings that may directly and adversely affect National Historic Landmarks. Execution of the 2002 PA signed by the Trust, the Advisory Council on Historic Preservation (ACHP), the California State Historic Preservation Officer (SHPO), and the NPS satisfied obligations under Sections 106 and 110 (Presidio Trust 2002). Two historic preservation organizations, the National Trust for Historic Preservation and the Fort Point and Presidio Historical Association (now known as the Presidio Historical Association), participated in the consultation and signed the 2002 PA as concurring parties.

The Section 106 consultation for the PTMP did not include assessment of effects because the PTMP is a programmatic document and the description of projects anticipated at that time was not adequate to assess potential effects on historic and archaeological resources. The 2002 PA, therefore, stipulated a process wherein the Trust's Federal Preservation Officer and other historic preservation staff would identify historic properties, establish an Area of Potential Effects, and assess effects for each project. For proposed undertakings that would have no adverse effects, the 2002 PA allows review among Trust historic preservation staff without outside consultation. Reviews performed without outside consultation are thoroughly documented and an annual report is distributed to inform PA parties of actions that have been reviewed under the 2002 PA. For proposed undertakings that would have an adverse effect, the 2002 PA stipulates that consultation shall be conducted according to the Advisory Council on Historic Preservation's regulations that implement Section 106.[52] Also stipulated in the 2002 PA is a "streamlined" process for consultation with the signatory parties for review of planning documents that will not have an adverse effect.

Potential effects on historic resources from proposals identified in the Main Post Update were assessed in a Section 106 consultation that was initiated through the PA. Review by the Trust historic preservation staff determined that actions proposed in the Main Post Update would have the potential for adverse effect. Therefore, a consultation with the appropriate parties was begun in November 2007. Multiple meetings have been held with interested parties since the consultation was initiated. During the identification phase of the consultation, the Area of Potential Effects was established as the entire NHLD (Figure 15). In order to address the assessment of potential effects, the Trust released a draft Finding of Effect in August 2008. A revised Finding of Effect, which assessed the preferred alternative as described in the February 2009 Main Post Update, was finalized in July 2009. The assessment phase of the consultation concluded with ACHP and SHPO concurrence on a finding of adverse effect. Additional meetings in 2009 and 2010 were held to develop measures to avoid, minimize and/or mitigate those adverse effects and to draft a Programmatic Agreement for the Main Post Update (PA-MPU) (Presidio Trust 2010) to resolve the consultation. The PA-MPU is provided in Appendix B.

The analysis below identifies adverse effects on historic resources according to 36 CFR 800.5 (Assessment of Adverse Effects) under the

[52] *36 CFR Part 800, Protection of Historic Properties, was written and implemented by the Advisory Council on Historic Preservation to define how federal agencies would conduct consultation under Section 106 of the NHPA. Under the 2002 PA, consultation for an adverse effect begins at Section 800.5, Assessment of Adverse Effects, of those regulations.*

(continued)

NHPA. Adverse effects on individual historic resources (such as buildings or structures) would not be considered significant. Where applicable, the analysis also identifies adverse effects on the NHLD, which would be considered significant.

Alternative 1

Building Rehabilitation The final PTMP EIS assumed that rehabilitation and reuse of historic buildings would conform to the Secretary of the Interior's Standards for the Treatment of Historic Properties (Secretary of the Interior's Standards) (NPS 1992) and the Guidelines for Rehabilitating Buildings at the Presidio of San Francisco (NPS 1995). It also assumed that the Trust would make every reasonable effort to incorporate compatible uses that require minimal alteration of the character-defining elements of the historic buildings, while meeting financial and other goals. The PTMP assumed full occupancy and rehabilitation of historic buildings by the year 2020.

Under this alternative, Pershing Hall (Building 42) would be rehabilitated for lodging, while elsewhere on Moraga Avenue, Buildings 47 and 48 would provide lab and curation facilities for the Archaeology Center. The old Post Hospital (Building 2) would be rehabilitated as the Heritage Center. Building 104 is rehabilitated and occupied, and the rehabilitation of Building 100 is underway. The remaining Montgomery Street Barracks would be rehabilitated for various mixed uses. The Presidio Theatre (Building 99) would be rehabilitated as part of a film or performing arts program. Partial landscape and building restoration in the upper Funston Avenue Officers' Quarters would have a beneficial effect on the historic district. The Archaeology Center would be housed in rehabilitated Buildings 44, 47, 48 (historic garages), and 49 (offices). New construction between Buildings 47 and 48 would enable their reuse as a state-of-the-art curation facility for housing the Presidio's archaeology collections, and to support programmatic and interpretive efforts. Overall, the adaptive use and rehabilitation efforts would ensure that historic buildings in the Main Post would be rehabilitated, which would have a beneficial impact on the Main Post district.

Stabilization and Maintenance The final PTMP EIS described a stabilization and preservation program for vacant buildings that included physical stabilization as well as monitoring. The Trust would continue to carry out routine maintenance to help stabilize both the landscapes and buildings and to ensure the continued preservation of the Main Post. Building tenants would prepare preservation maintenance plans for buildings they lease and would be responsible for carrying out routine maintenance under the supervision of the Trust. This program of preservation maintenance would ensure continued preservation and have a beneficial impact on the Main Post.

Demolition The final PTMP EIS analyzed building demolition for the entire Presidio and stated that demolition of historic buildings would be minimized but may be considered where such buildings cannot be cost-effectively rehabilitated or reused. The analysis further stated that any loss of historic buildings would be an adverse effect but that the Trust would ensure that the overall integrity of the NHLD would be preserved and protected. The PTMP assumed a maximum demolition of 20,000 square feet on the Main Post. The final PTMP EIS assumed that some non-historic buildings might be demolished to restore historic setting and views. The decision-making process for building demolition would be subject to public notice, outreach, environmental review, and

consultation with historic preservation agencies. Specific mitigation measures would be developed during the decision-making process.

Under Alternative 1, up to 44,000 square feet of building demolition on the Main Post would occur. This includes buildings that have already been demolished (non-historic Buildings 85 and 215), that are slated for demolition under the Doyle Drive project (Buildings 201 [half], 204, 230, and non-historic 231), and that would be demolished under this alternative (non-historic Building 211 and historic Building 46).

Because Building 46 is a small, ancillary support structure, demolition would not result in a significant impact on the historic Main Post. Demolition of Building 46 would facilitate the rehabilitation of adjacent Buildings 47 and 48 as state-of-the-art laboratory and curation facilities for the archaeology collection, supporting the Trust's efforts to study, preserve, and interpret the Presidio's history. This would have a beneficial impact on the Main Post's historic resources and on the Trust's ability to interpret them for the general public.

Buildings 201, 204, 230, and 231 are located in the northernmost portion of the Main Post district in the former Quartermaster or maintenance area. Of these, Buildings 201, 204, and 230 contribute to the landmark status; Building 231 is non-historic. Analysis of the impacts of removing the historic buildings has been conducted as part of the Doyle Drive project. Analysis of removing Buildings 85 and 215 was completed by the Trust under separate projects.

New Construction The final PTMP EIS analyzed new construction for the entire Presidio as well as for each planning district. The final PTMP EIS stated that the Trust would make every reasonable effort to minimize new construction through adapting historic properties to new uses. However, it was fully anticipated that new construction would be required for building additions, infill buildings within existing building clusters, and stand-alone structures. New construction would primarily be considered as a means to enhance reuse of historic buildings and to achieve other plan objectives.

The exact location or nature of new construction was not known at the time the final PTMP EIS was adopted. However, new construction was only to occur in existing areas of development that are identified in the PTMP. New buildings would be sited to minimize impacts, to be compatible with the historic setting, and to reinforce character-defining features of an area. They would be designed to ensure that the association, feeling, and setting of the NHLD would be protected.

The final PTMP EIS anticipated that new construction could have an adverse effect on individual buildings. However, it was also anticipated that conformance with the Planning Principles and Planning District Guidelines for each district, as well as review through the stipulations in the 2002 PA, would ensure that new construction would not impair the integrity of the NHLD. The Planning Principles require that mass, scale, style, and color of new construction be compatible with the historic setting of the Presidio. Each district's planning guidelines identify a maximum height as well as the character-defining features to be maintained or enhanced by new construction.

The PTMP assumed maximum new construction of 110,000 square feet at the Main Post. New construction would be associated with additions to historic buildings to make reuse feasible as well as with stand-alone construction where appropriate. Examples of possible new construction sites were given as replacement of the YMCA Fitness Center if it were

removed and at Graham Street "to re-establish historic spatial patterns, such as the historic edge of the Old Parade…"

New construction under Alternative 1 would not have an adverse effect on individual historic structures or the Main Post district. New construction would reinforce the historic edge of the Old Parade with a new 50,000-square-foot office building placed along Graham Street south of Building 34. Re-establishing the edge of the Old Parade would have a beneficial impact on the Main Post. New construction would be associated with additions to other historic buildings, including those already analyzed in separate NEPA and NHPA processes for two Montgomery Street Barracks (Buildings 100 and 104). New construction would also facilitate the reuse of and expanded programs for the Presidio Theatre (Building 99) and the Presidio Chapel (Building 130), as well as the establishment of the Archaeology Center, as described below.

Presidio Theatre The historic building would be rehabilitated as a single-screen auditorium. The new 18,000-square-foot addition to the building would house two smaller theaters as well as lobby and circulation space. The new addition would be located on the west side of the historic building, separated by a transparent "connector" and oriented toward Moraga Avenue so as to use the main entrance of the historic theater. Buildings 99 and 100 effectively screen the new addition from the historic heart of the Main Post, although the addition would be visible from Sheridan Avenue, the main entrance to the historic post from the west. Conformance with the project parameters in the Main Post Update, preparation of a historic structures report (HSR) to guide the building rehabilitation and new addition, application of district-wide design guidelines, and the design review process in the PA-MPU would ensure that the new addition would not have a significant impact on either the adjacent historic structures or the Main Post.

Presidio Chapel The historic chapel building would be rehabilitated and seismically upgraded for continued use as an interfaith center. A new 4,000-square-foot addition to the building would expand program space and facilitate accessible building circulation, including an elevator. The new addition would be oriented perpendicularly to the west side of the historic building and set back from the chapel's primary facade. Conformance with the project parameters in the Main Post Update, preparation of an HSR, application of district-wide design guidelines, and the design review process in the PA-MPU would ensure that the new addition would not adversely affect either the adjacent historic structure or the Main Post.

Archaeology Lab and Curation Facilities Lab and curation facilities for the archaeology collection would include construction of a 500-square-foot, single-story, connecting foyer between contributing Buildings 47 and 48 (1,500-and 1,600-square-foot garages, respectively, both constructed in 1940). The size and scale of the infill construction would be smaller than, and about the same height as, the two garage buildings, while retaining the historic utilitarian feel of a garage area fronted by a service alley (Hardie Avenue). The new construction would facilitate the rehabilitation of the garage buildings, which together would function with rehabilitated Buildings 44 and 49 and portions of Building 50 as a public-serving resource (the Archaeology Center). Construction of the foyer would not adversely affect the historic resources and would have an overall beneficial impact on the NHLD.

Alternative 2

Building Rehabilitation Under this alternative, buildings would be rehabilitated for a variety of visitor, cultural, lodging and retail activities, as well as other supporting uses. The proposed Heritage Center would be located in Building 50; changes to the building would be concentrated in non-historic portions of the building. Treatment of the remaining contributing buildings on the Main Post would follow the Secretary of the Interior's Standards for the Treatment of Historic Properties (NPS 1992), the Guidelines for Rehabilitating Buildings at the Presidio of San Francisco (NPS 1995) and, where appropriate, the California State Historic Building Code. Adaptive use and rehabilitation of these historic resources would have a beneficial impact on the buildings and on the NHLD.

Stabilization and Maintenance As under Alternative 1, the Trust would continue to carry out routine maintenance to help stabilize both the landscapes and buildings and to ensure their continued preservation. Building tenants would prepare preservation maintenance plans for buildings they lease and would be responsible for carrying out routine maintenance under the Trust's supervision. This preservation maintenance program would ensure the continued preservation of the contributing resources in the Main Post.

Demolition Under this alternative, up to 94,000 square feet of building space would be demolished. Analysis of building demolition includes structures that have already been demolished (Buildings 85 and 215) or are part of the Doyle Drive project (Buildings 201, 204, 230, and 231); demolition of these structures has been subject to previous environmental review. In addition, the analysis includes the proposed demolition of a garage (non-historic Building 98), a shed (historic Building 46), Trust headquarters (non-historic Building 34), and Herbst International Exhibition Hall (non-historic Building 385), and the removal of World War II Barracks (Buildings 40 and 41). Of these, Buildings 40, 41, and 46 are contributing structures to the NHLD.

Buildings 40 and 41 represent two of the five remaining structures constructed during the World War II epoch at the Main Post (1941-1945), and two of the remaining 15 World War II "temporary"-type structures remaining at the Presidio.[53] Until 2001, a large collection of "temporary"-type structures existed on Crissy Field, but the majority were removed by the National Park Service to accomplish the Crissy Field restoration.[54] The relocation or demolition of Buildings 40 and 41 would reduce the collection of remaining resources constructed during the World War II epoch at the Main Post but would allow for revealing and interpreting El Presidio.

Demolition of Buildings 40 and 41 under this alternative would result in a significant impact on the historic resources of the NHLD by diminishing the landmark's ability to convey the entire period of significance through its built resources. Relocation of Buildings 40 and 41 to another site on the Main Post, or elsewhere in the Presidio, would

[53] *According to the 1993 NHL update, "Many of the buildings on Post from [the World War II period] were constructed rapidly in 1941 and 1942… these buildings were of a light and standardized "temporary"-type wood-frame construction with low gable roofs, wood siding, and spare architectural detailing" (NPS 1993).*

[54] *Several "temporary"-type structures at the east end of Crissy Field were removed to restore the Crissy Marsh.*

reduce this impact to a less-than-significant level, as the overall inventory of "temporary" buildings in the Presidio would be unchanged. Demolition or relocation of Buildings 40 and 41 under Alternative 2 would enhance the character of the open space in the *plaza de armas* of El Presidio but this action would be undertaken at the expense of the two World War II buildings that also contribute to the landmark. In short, Alternative 2 would make enhancement of El Presidio – an extremely unique resource in California and the western United States – a priority, at the expense of a resource for which other examples exist within the Presidio and the larger Golden Gate National Recreation Area.

Demolition associated with the Archaeology Lab and Curation Facilities under Alternative 2 would be the same as under Alternative 1.

New Construction This alternative includes 146,500 square feet of new construction on the Main Post. New construction would include the following.

Lodge Under this alternative, the lodge would be located at the Graham Street site analyzed for new office construction under Alternative 1. New construction for the lodge would demolish non-historic Building 34 and replace it with a series of one-and-two-story structures, connected by outdoor walkways and passages, totaling no more than 70,000 square feet above grade. Below-grade parking would be located underneath the current site of Building 34. The new lodge buildings would be configured on the site south and west of Buildings 86 and 87 in a pattern roughly based on the 19th century buildings that stood on the site until they were removed by the Army after 1945. Buildings 86 and 87 (currently used as office) may be incorporated into the lodge program. As under Alternative, 1, Pershing Hall (Building 42) would also be rehabilitated as a hotel (as described under Building Rehabilitation for Alternative 1).

The new lodge buildings located south of Buildings 86 and 87, and set back 150 feet north of Building 95, would be lower (30 feet tall) than the neighboring Graham Street Barracks (40 feet tall); the two new buildings west of Buildings 86 and 87 would be single story (15 feet tall). New construction between Graham and Anza streets, on the site previously occupied by 19th century barracks and administrative and support buildings, would re-establish an important historic character-defining feature of the Main Post: the separation of the Old Parade and the Main Parade.

The lodge would have less impact on surrounding historic resources than the 50,000-square-foot office building described under Alternative 1. This would be accomplished by reducing the overall non-historic square footage on the site (approximately 70,000 square feet under Alternative 2 versus 82,000 square feet under Alternative 1); by basing the building design on the pattern of historic development that existed on the site during the period of significance; by separating the lodge buildings into smaller structures connected by outdoor walkways, so that they do not read as an unbroken wall of new construction; and by shifting the building site north (away from the historic Building 95).

Conformance with the project parameters in the Main Post Update, preparation of Historic Structure Reports (HSRs) for Buildings 86 and 87 (should they be included in the lodge scheme), application of district-wide design guidelines, and the design review process in the PA-MPU would ensure that the new construction would not adversely affect either the adjacent historic structures or the Main Post.

Additional New Construction New construction associated with the Presidio Theatre and addition, Presidio Chapel and addition, and archaeology lab and curation facilities would be the same as under Alternative 1. Conformance with the project parameters in the Main Post Update, application of district-wide design guidelines, and/or reviews under the PA-MPU would ensure that the new construction would not adversely affect either the adjacent historic structures or the NHLD.

Landscape, Traffic, and Parking Modifications This alternative would include complete or partial conversion of five historic roadways to serve as either parking lots or pedestrian walkways. While removal of cars and asphalt would alter the appearance and present-day function of the contributing resources, width, alignment and paving materials designed as part of the roadway rehabilitations would be historically compatible. This provision would protect the overall historic circulation pattern at the Main Post, return some roads to their pre-automobile function and appearance, and avoid adverse effects to the resources.

Construction of five new surface parking lots will not adversely affect historic resources at the Presidio. Underground parking at the Main Post bluff would adversely affect archaeological resources, as described in Section 3.7, Archaeology.

Alternative 3

Building Rehabilitation New uses would include facilities that would welcome the public as well as facilities with community and education programs. Pershing Hall (Building 42) would be rehabilitated as a small hotel and the upper Funston Avenue Officers' Quarters (Buildings 11-16) would be converted to bed-and-breakfast-style inns. Similar to Alternative 1, uses with assembly occupancy requirements may require substantial modifications to meet seismic code requirements. However, application of the California State Historic Building Code would allow for interpretation of code requirements and innovative solutions such that historic building rehabilitations would meet the Secretary of the Interior's Standards while fully providing for occupant safety. Adaptive use and rehabilitation of the historic buildings would have a beneficial impact on the buildings, on the Main Post, and on the NHLD as a whole.

Archaeology Center The proposed Archaeology Center would be housed in rehabilitated Buildings 44, 47, 48 (historic garages) and 49 (offices) but would not include demolition or new construction as under Alternatives 1 and 2. The garage buildings would function as storage and program space but are not adequately sized for a curation facility; therefore, the curation facility would need to be located elsewhere in the Presidio, in a building that meets the current standards. These stringent standards make it likely that such a building would not be at the Main Post, or adjacent to the archaeology staff offices or the El Presidio site.

Presidio Theatre The historic building would be rehabilitated as a single-screen auditorium. Preparation of an HSR to guide the building upgrade would ensure that rehabilitation and reuse of the historic building would conform to the Secretary of the Interior's Standards and result in no adverse effect.

Presidio Chapel The historic chapel building would be rehabilitated and seismically upgraded for continued use as an interfaith center. Preparation of an HSR would ensure that the rehabilitation would not adversely affect the historic structure.

Stabilization and Maintenance As under Alternatives 1 and 2, the Trust would continue to carry out routine maintenance to help stabilize and preserve both the landscapes and buildings. Building tenants would prepare preservation maintenance plans for buildings they lease and would be responsible for carrying out routine maintenance under the Trust's supervision. This preservation maintenance program would ensure the continued preservation of the contributing resources in the Main Post.

Demolition Under this alternative, up to 64,000 square feet of buildings would be demolished. This includes buildings that have already been demolished (Buildings 85 and 215) and those that were analyzed as part of the Doyle Drive replacement project compliance process (Buildings 201, 204, 230, and 231). Like Alternative 2, this alternative would allow for removal of the World War II barracks (Buildings 40 and 41) from the El Presidio site in order to enhance the interpretive program for the Spanish-era site. Alternative 3 would also remove the Presidio Bowling Center (Building 93) and the tennis court (historic Structure 96) in order to construct the History Center (see below). Of the resources described above, Buildings 40, 41, 201, 204, and 230 and Structure 96 are contributing structures to the NHLD.

As described in the analysis of Alternative 1, demolition of historic buildings would be an adverse effect. As under Alternative 2, demolition of Buildings 40 and 41 would result in a significant impact on the historic resources of the NHLD by diminishing the landmark's ability to convey the entire period of significance through its built resources. Relocation of Buildings 40 and 41 to another site in the Main Post, or elsewhere in the Presidio, would reduce this impact to a less-than-significant level, as the overall inventory of "temporary" buildings in the Presidio would be unchanged. The removal of the tennis court (Structure 96), a supporting recreational structure, would not significantly affect the historic Main Post.

New Construction This alternative proposes up to 77,000 square feet of new construction, which is less than the 110,000 square feet proposed under the PTMP, and less than the 146,500 square feet proposed under Alternative 2. New construction would be limited to the History Center and incidental new construction, primarily for building additions needed for rehabilitation and reuse of historic buildings.

History Center The 48,000-square-foot History Center would be constructed on the site south of the Main Parade, bounded by Montgomery Street, Moraga Avenue, Arguello Boulevard, and Sheridan Avenue. The new building would be constructed with one story above grade (with mechanical equipment rooms and a roof terrace in a limited second story) and one story below grade (primarily to accommodate parking). Maximum height of the building would be 45 feet (average). Demolition of the historic tennis court (Structure 96) would be required to accommodate the new building. The above-grade portion of the new building would be approximately 32,000 square feet larger than the existing Bowling Center. The proposed site for the History Center was mostly open until 1942 when the Red Cross building and a dental facility, both one-story low-density buildings, were constructed. Parking lots on either side of the dental facility and the tennis court maintained a feeling of informality on the southern edge of the Main Parade. The non-historic Bowling Center, another one-story building, replaced the dental facility in 1989 with a finding of no adverse effect under Section 106.

Construction of a new building the size of the History Center on this site would introduce a focal point at the southern boundary of the Main Parade that would be inconsistent with the overall historic character of its setting. The introduction of a large new element on this site would adversely affect "relationships between buildings and other features or open space" as described in the National Register aspects of integrity under "setting" (Shrimpton, ed. 1997). The new building would change the "feeling" of the historic site by creating a formal southern edge to the Main Parade Ground where none had previously existed. The location, size, and scale of the new building would partially obscure the primary façade of Building 100, when viewed from much of the Main Post. Introduction of the History Center onto the site would have an adverse impact on the historic Main Post and potentially the NHLD. Conformance with the design guidelines in the Main Post Update would provide design compatibility for the appearance of the new building but without additional mitigation measures would not fully mitigate the impact. Underground parking for the History Center could adversely affect archaeological resources, as described in Section 3.7, Archaeology.

Alternative 4

Under this alternative, no significant park enhancements or physical changes would occur beyond those already permitted or underway. Existing buildings and activities would remain and there would be no further building demolition or new construction.

Building Rehabilitation Historic buildings would be rehabilitated consistent with the Secretary of the Interior's Standards, and therefore this alternative would have no adverse effect on these historic resources. If tenants could not be identified in a reasonable period of time, the buildings would be stabilized and secured. Where implemented, rehabilitation of historic buildings would have a beneficial impact on the Main Post district.

Stabilization and Maintenance Since rehabilitation of historic buildings would not be ensured under this alternative, stabilization and maintenance measures set forth in the final PTMP EIS would be implemented. Vacant buildings would be stabilized and/or moth-balled, and an inspection and monitoring program would be instituted to prevent deterioration. The Trust's ongoing routine maintenance program would address these buildings and associated landscapes. These measures would significantly reduce the potential of adverse effects from benign neglect on the individual historic resources and the Main Post district.

Demolition Building demolition would be primarily limited to that associated with and evaluated under the Doyle Drive project (Buildings 201 [half], 204, 230, and 231).

New Construction Construction would be limited to approximately 26,000 square feet and would be generally associated with previously evaluated projects that have been completed or are underway. No significant impact on the Main Post district would occur. Analysis of impacts of this new construction was completed in previous environmental documents.

MITIGATION MEASURES

The following mitigation measures include those adapted from the final PTMP EIS.

CR-1 *Documentation of Buildings to be Relocated or Removed* Before historic buildings or additions to historic buildings are relocated or removed, appropriate mitigating measures will be determined in consultation with the California State Historic Preservation Officer, and the Advisory Council on Historic Preservation during the Section 106 consultation process. Measures will include recordation according to the Historic American Building Survey Standards. In addition, salvage, preservation, and curation of historic building fabric may be warranted in some situations.

CR-2 *Code Compliance* The Trust will or will require that tenants upgrade buildings to meet life safety standards and to comply with applicable accessibility laws and regulations. Rehabilitation of historic buildings will include modification to meet applicable building codes to the extent practicable.

CR-3 *Long-Term Maintenance & Preservation of Vacant Buildings* Following rehabilitation of historic buildings, the Trust will ensure that tenants perform continued maintenance, thereby preventing damage to historic features and ensuring that buildings are adequately maintained. A preservation and maintenance program for unoccupied buildings will include regular inspections, necessary stabilization work to ensure long-term preservation and safe conditions for park visitors, monitoring of the condition of vacant buildings, and prioritization of stabilization and rehabilitation needs to ensure the maximum feasible preservation and protection of park resources.

CR-6 *Monitor Visitor Impacts on Sensitive Resources* The Trust will monitor sensitive cultural resources, such as historic landscape features and vacant structures, and will prioritize actions to reduce any adverse impacts on these resources caused by park visitors and new uses. Potential remedies may include temporary closure of areas, protective barriers, and informational signs.

CR-7 *Compliance with Standards for Building and Cultural Landscape Rehabilitation* The Trust will ensure that building rehabilitation projects conform with the Guidelines for Rehabilitating Buildings at the Presidio of San Francisco (NPS 1995). If new uses are proposed for historic buildings the Trust will ensure that required building modifications conform to the Secretary of the Interior's Standards for the Rehabilitation of Historic Properties. For historic landscape rehabilitation, projects will conform to the Secretary of the Interior's Guidelines for the Treatment of Cultural Landscapes. Conformance will be demonstrated through provisions in the 2002 PA for consultation and reporting.

CR-8 *Ongoing Identification of Historic Properties* Consistent with requirements under Section 110 of the NHPA and the 2002 PA, the Trust will continue to evaluate for possible inclusion in the list of contributing resources those buildings or structures that may become 50 years old or may have achieved exceptional significance since the 1993 update was completed. These evaluations will also encompass archaeological discoveries.

CR-9 *Stipulations and Mitigations Resulting from the Section 106 Consultation (new)* The Trust will incorporate in the implementation of SEIS proposals any avoidance, minimization or mitigation measures that have been stipulated in the PA-MPU that resolved the NHPA Section 106 consultation, including additional consultation, design reviews and the preparation of supplementary documentation (such as HSRs or a Cultural Landscape Report).

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3.7 Archaeology

AFFECTED ENVIRONMENT

Prehistoric Sites

In America, prehistoric sites are generally defined by archaeologists as the physical evidence of the Native American occupation prior to European colonial contact. These native peoples and their descendants were the first inhabitants of the Presidio. Today, some of the descendants are known as the Ohlone. While there is little evidence of prehistoric cultures of the San Francisco Bay Area between 11,500 and 3,500 B.C., it is likely that the Ohlone and culturally similar populations occupied this part of the San Francisco Bay Area for at least two to three thousand years prior to its colonization by the Spanish and possibly much earlier. Recent studies suggest that population densities were 2.0 to 3.0 persons per square mile at the north end of the San Francisco peninsula prior to colonization (Milliken, et al. 2007). However, this population was not spread thinly as this number suggests but was clustered in villages, seasonal camps, and various work areas.

Prehistoric sites at the Presidio are not identified as contributing to the National Historic Landmark District (NHLD) because they are not associated with the areas of significance that form the basis for landmark designation (Military, Explorations/Settlement, Ethnic Heritage: Hispanic, Archaeology: Historic-Non-Aboriginal). However, prehistoric properties are and can be individually eligible for the National Register of Historic Places (NRHP). There are three prehistoric properties discovered at the Presidio that have been evaluated.

The three recorded prehistoric sites at the Presidio, all within the Crissy Field district, were originally designated as SFr-6, SFr-26, and SFr-129. SFr-6, the “Presidio Mound,” was recorded in 1912 by archaeologists from U.C. Berkeley. This was one of the first prehistoric sites listed in the California archaeological site inventory for the City and County of San Francisco (CCSF). Sixty years later, in 1972, a single individual was discovered buried near SFr-6. This unforeseen and isolated burial was designated SFr-26. Carbon dating has placed this human burial at about A.D. 740. As part of the Doyle Drive archaeological investigations (Jones & Stokes 2002), the location of SFr-6 was verified in 2002 and the site underwent minimal scientific testing to evaluate its significance and better define its boundaries. Carbon dating and obsidian hydration has placed SFr-6 at about A.D. 750-1350. The California State Historic Preservation Officer (SHPO) concurred with a recommendation to combine SFr-6 and SFr-26 into one site (now designated SFr-6/26) and to consider this site eligible to the NRHP. Other subsurface testing for the Doyle Drive project did not identify additional prehistoric sites, nor have any prehistoric sites been identified through construction monitoring in Area B. However, in 1998, another site designated SFr-129 was discovered during construction of Crissy Field marsh (Area A). Recent analysis of the prehistoric resources at the Presidio and surrounding areas can be found in the draft Archaeological Treatment Plan for the Doyle Drive project (Jones & Stokes 2002).

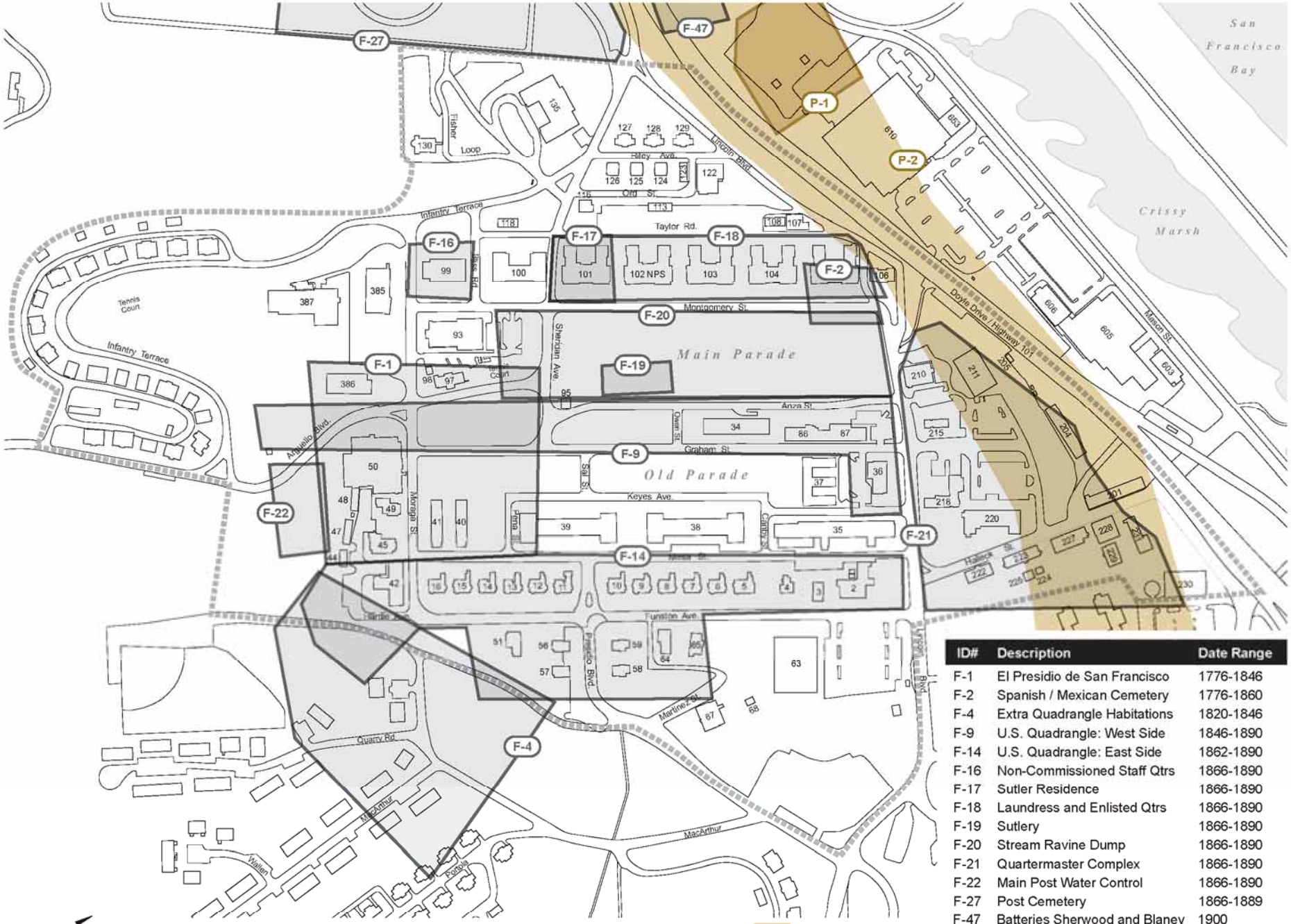
Based on archaeological discoveries within the CCSF and the GGNRA, it is possible that additional subsurface sites are present within the Presidio and discoveries of seasonally occupied and permanent prehistoric sites are likely to occur. These sites would probably be shell middens with the potential to contain human burials and related materials but could also include archaeological features representing (but not limited to) house floors, cooking areas, and specialized work areas; and various artifacts of stone, bone, and shell. As a result of two centuries of military development, there are few, if any, surface indications of prehistoric archaeological sites, but buried sites may be present in areas of the Presidio where the land has been modified by placement of fill material, encapsulating archaeological evidence. Many 20thcentury archaeological inventories in the Bay Area concentrated on the coastal environment using a model indicating that sites would most likely be near the shoreline, where aquatic foods were available, or near freshwater springs. However, it is possible that sites other than shell middens are present in or along the bluffs and in other areas away from the shoreline.

There is a potential for discovering additional prehistoric archaeological resources at the Presidio. Seasonally or permanently occupied prehistoric sites are likely because of the extensive freshwater resources and the large estuarine lagoons and sloughs that once extended along the waterfront areas. In addition to the known sites along Crissy Field, several areas were identified in the 1993 National Historic Landmark (NHL) documentation (1993 NHL update) (NPS 1993) as having Predicted Prehistoric Archaeological Potential. The Estuary Bluff, denoted as P-2 in the 1993 NHL update, overlooks the former marshlands along the Letterman district, the North Cantonment, the Main Post, the National Cemetery, and Cavalry Stables (Figure 18).

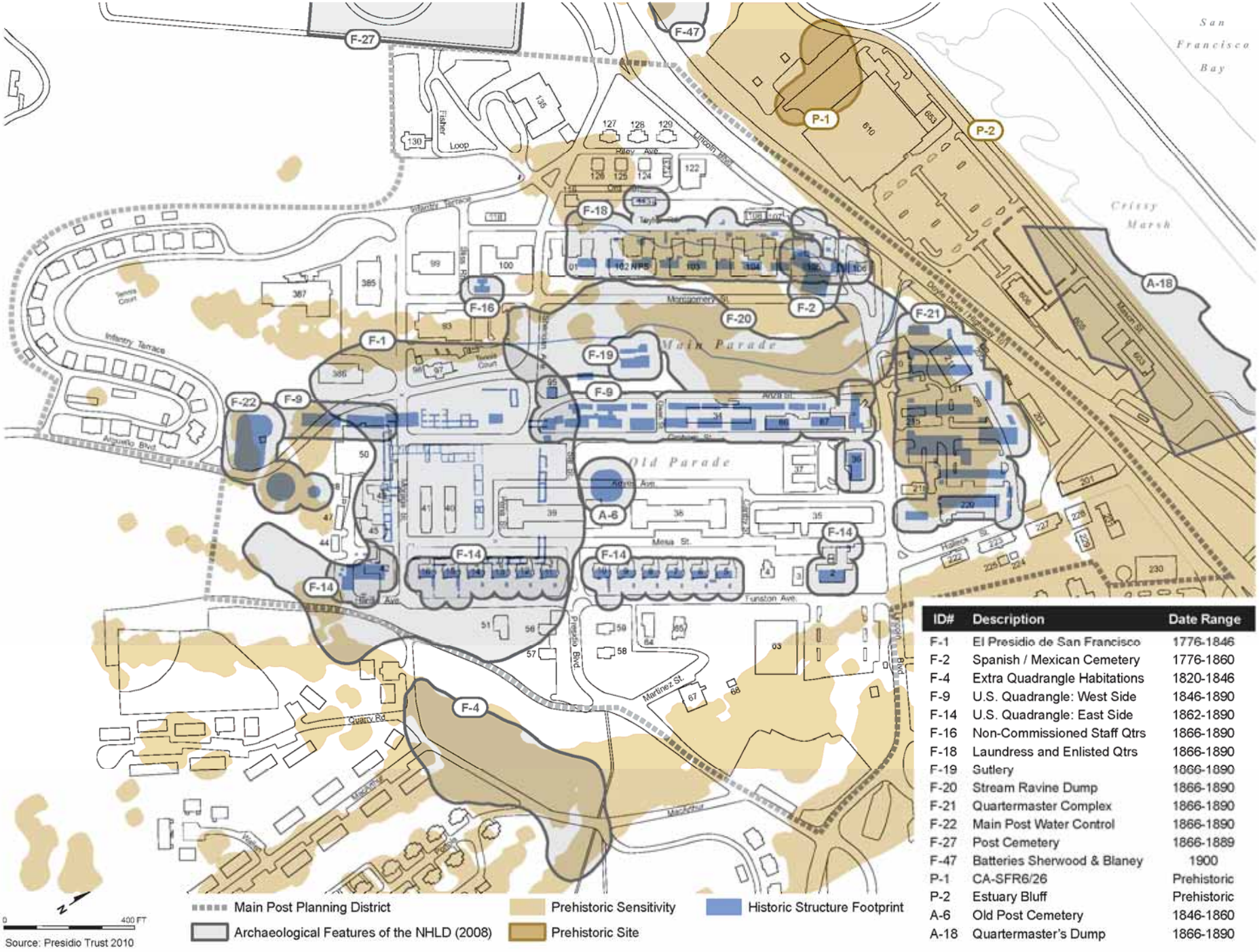
More recent predictions in the Presidio Trust Management Plan (PTMP) incorporated new information from the rehabilitation of Crissy Field, such as the discovery of SFr-129, and took a much more conservative approach, adding additional areas of Crissy Field and more areas surrounding the Presidio's natural freshwater sources, including Tennessee Hollow, the stream ravine underneath the Main Parade, and areas around Cavalry Stables. The Trust continues to update these predictions based on a more detailed understanding of the prehistoric environment. Most recently, in 2008 during the course of preparing the 2008 NHL update (Page & Turnbull, Inc. 2008), a new prehistoric sensitivity model was developed. This model took into account several environmental factors and incorporated information gathered during the 15 years since the last update (Figure 19).

Historic Sites

At the Presidio, historic sites are generally defined by archaeologists as the physical evidence, usually augmented by written documentation, of the Spanish, Mexican, and American occupations that began in 1776, and could also include evidence of the Ohlone and other native peoples who occupied the Presidio in the 18th and 19th centuries. One of the most remarkable aspects of the Presidio's history is that multiple cultures undertook a similar military mission in the same locale over a long period of time. This history is inscribed in the landscape and buried within the ground. The historic archaeological record provides some of the earliest evidence for the establishment of the Spanish Colonial site known as El Presidio de San Francisco (El Presidio) and contains significant information pertinent to the ensuing cultural transitions and



ID#	Description	Date Range
F-1	El Presidio de San Francisco	1776-1846
F-2	Spanish / Mexican Cemetery	1776-1860
F-4	Extra Quadrangle Habitations	1820-1846
F-9	U.S. Quadrangle: West Side	1846-1890
F-14	U.S. Quadrangle: East Side	1862-1890
F-16	Non-Commissioned Staff Qtrs	1866-1890
F-17	Sutler Residence	1866-1890
F-18	Laundress and Enlisted Qtrs	1866-1890
F-19	Sutlery	1866-1890
F-20	Stream Ravine Dump	1866-1890
F-21	Quartermaster Complex	1866-1890
F-22	Main Post Water Control	1866-1890
F-27	Post Cemetery	1866-1889
F-47	Batteries Sherwood and Blaney	1900
P-1	CA-SFR6/26	Prehistoric
P-2	Estuary Bluff	Prehistoric



Source: Presidio Trust 2010

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F-21	Quartermaster Complex	1866-1890
F-22	Main Post Water Control	1866-1890
F-27	Post Cemetery	1866-1889
F-47	Batteries Sherwood & Blaney	1900
P-1	CA-SFR6/26	Prehistoric
P-2	Estuary Bluff	Prehistoric
A-6	Old Post Cemetery	1846-1860
A-18	Quartermaster's Dump	1866-1890

technological developments that eventually resulted in a 20th century American military post. Research suggests that historic archaeological remains from the period 1776-1890 would provide the most significant contribution to knowledge of the Presidio (NPS 1993). By 1890, the Presidio was beginning to change substantially, and documentation of design and construction was more extensive. The archaeological features dating from about 1890 and into the present century, although they might contribute information about military, social, and technological history, would often be ancillary to other sources, including documents, standing physical remains, and possibly oral history.

The colonial site of El Presidio was the basis for the Presidio's designation as a National Historic Landmark in 1962. In the 1993 NHL update, the Presidio was defined as a single historic archaeological site congruent with the property and having numerous contributing features that are functional components of a single long-term military occupation by multiple cultures. The historic archaeological features described represent a variety of types ranging in complexity from individual elements to functional groupings of features, such as neighborhoods. The 1993 NHL update took a predictive approach to identifying these contributing archaeological features. Instead of survey or extensive excavation, the predictive approach used the abundance of historical documents available to analyze, locate, and map historic features while also adapting models derived from other colonial and military sites in the West. All of the identified historic archaeological features contribute to the NHLD under Criterion D, which indicates these features have "yielded or are likely to yield important information about the past" and are of national significance.

Archaeological excavations and monitoring since 1993 have confirmed the presence of some of the predicted features; others still remain predictive. Features confirmed since 1993 are found to have a high degree of integrity, have yielded important information about the past, and have reinforced the validity of the predictive approach. The 2008 NHL update incorporates new information from archaeological investigations since 1993 that have verified the presence, further defined the boundaries, or better identified the constituents of these features. The significance of post-1890 archaeological features is being assessed in the 2008 NHL update under Criterion D especially for those populations that are poorly documented in the written records, such as women, children, and servants. Previously identified archaeological features are also being evaluated under NRHP Criterion A ("associated with events that have made a significant contribution to the broad patterns of our history"). The historic archaeological features identified in the Main Post district documented in 1993 and updated in 2008 are listed in Table 25.

Any unforeseen historic archaeological features discovered in the future could be determined to contribute to the NHLD or be individually eligible for the NRHP.

ENVIRONMENTAL CONSEQUENCES

This section describes the environmental consequences of the alternatives on archaeological resources in the Main Post district. In general, direct effects would vary and be closely related to the nature and extent of specific ground-disturbing actions, such as new construction.

25 HISTORIC ARCHAEOLOGICAL FEATURES WITHIN THE MAIN POST THAT CONTRIBUTE TO THE NHLD[1]

ID #	*Description*	*Date Range*	*Notes*
F:1	El Presidio de San Francisco	1776-1846	Original Spanish Colonial site that established the Presidio, *known* to contain substantial architectural remnants, work areas, refuse middens, and numerous other features. The area of this feature has been substantially expanded based on excavation and monitoring since 1993. This site forms the basis for the 1962 National Historic Landmark designation.
F:2	Spanish/Mexican Cemetery	1776-1860	Former burial ground *predicted* to contain remains from some of the early Spanish colonists, later Mexican-era families, and possibly some associated Native Americans.
F:9	United States Quadrangle West Side	1846-1890	Former neighborhood *known* to contain remnants of early U.S. Army-era barracks, kitchens, workshops, guard house, and headquarters. Portions of this site also overlay El Presidio.
F:14	United States Quadrangle East Side[2]	1862-1890	Existing neighborhood *known* to contain remnants from the Civil War-era Funston Avenue Officers' Quarters, Bachelor Officers' Quarters (the Corral), Post Hospital, and meteorological station. Portions of this site also overlay El Presidio.
F:16	Non-Commissioned Staff Quarters	1866-1890	Former residence *predicted* to contain remnants from this isolated structure and associated outbuildings and landscape features. Recent topographic analysis suggests this area later underwent substantial landform modifications that may have compromised its archaeological integrity.
F:17	Sutler Residence[3]	1866-1890	Former residence *predicted* to contain remnants from the Post Sutler and his family; the Sutler was the official supplier of victuals or provisions to an army outpost.
F:18	Laundress and Enlisted Quarters	1866-1890	Former neighborhood *known* to contain remnants from the residences, work areas, outbuildings, and latrines for this group of women working for the U.S. Army, their families, and later married enlisted men.
F:19	Sutlery	1866-1890	Former building *predicted* to contain remnants from the structure and associated landscape elements for the Sutler's store and warehouse.
F:20	Stream Ravine Dump	1866-1910	Buried topographic feature *known* to contain refuse deposits and possible work areas from the U.S. Army period, and most likely earlier periods including Spanish Colonial and Mexican eras.

ID #	*Description*	*Date Range*	*Notes*
F:21	Quartermaster Complex	1866-1910	Former neighborhood of storehouses, a blacksmith shop, several stables, barns, sheds, a weighbridge, farriers' shop, pig sties, and corrals *predicted* to contain remnants of the architecture, work yards, and associated deposits.
F:22	Main Post Water Control	1866-1890	Early water reservoir and gravity distribution system for water to the Main Post *predicted* to contain remnants of this early form of infrastructure.
A:6	Old Post Cemetery	1846-1860	Early location of a cemetery *predicted* based on sketch map made by Captain Gibson in the 1859 post inspection report (addition since 1993).
A:18	Quartermaster's Dump	1866-1890	Refuse area *known* to contain deposits from the Quartermaster's operations and general supplies from the Main Post and other functional areas of the Presidio. This feature was discovered during the Crissy Field (Area A) rehabilitation project (addition since 1993).

Source: Presidio Trust 2010

[1] *This list has been partially updated to reflect archaeological work since 1993 that has confirmed the presence of these features. Confirmed features are denoted in the text as known.*

[2] *As part of the 2008 NHL update, Archaeological Feature 14 was divided into two separate areas, one related to Officers' Quarters and another pertaining to the Post Hospital.*

[3] *Due to subsequent construction of the Montgomery Street Barracks and probable destruction of this feature, the 2008 NHL update does not identify F:17 as a historic archaeological feature.*

This analysis is coupled with that done under Section 106 of the NHPA. The NHPA specifies that archaeological resources must be taken into consideration before implementing, funding, or permitting any federal undertaking. Other federal laws also apply. The Archaeological Resources Protection Act defines archaeological resources; requires federal permits for excavation; provides for curation of materials, records, and other data; provides for confidentiality of archaeological site locations; and, in the 1988 amendment, requires the inventorying of archaeological resources on public lands. Also, the Native American Graves Protection and Repatriation Act (NAGPRA) specifies the federal government's responsibility for the treatment and ultimate disposition of human burials and grave-related materials.

Methodology

Trust archaeology staff and their consultants performed a series of investigations between January and December 2008 to characterize some of the predicted features identified in the 1993 NHL update. This effort included a review of the information contained in the 1993 NHL update and 2008 NHL update, new archival research, GIS analysis, and geo-archaeological assessments of Presidio soils and sediments. Using the

information assembled, the Trust developed a work plan to identify any prehistoric sites and to further identify, or more precisely to verify, the presence of contributing archaeological features identified in 1993 (Figure 18) and 2008 (Figure 19). Subsurface work was initiated at those locations where substantial excavation associated with potential new construction could occur under various alternatives.

National Historic Landmark District Review With a few minor exceptions, the identification of resources provided in the 1993 NHL update has proved to be reliable and very useful for both planning and preservation. Some of the contributing features are still predicted while others have since been verified. Because contributing status for these features has previously been established – and given the reliability of the predictions – the Trust assumes that, unless contrary data exist, the features identified by the NPS in 1993, and modified in 2008, retain integrity. Making this assumption is preferable to undertaking the destructive testing that would be required to evaluate their integrity.

Revisions to the 1993 documentation that reflect resource identification information gathered since 1993 have been made part of the 2008 NHL update. The 2008 NHL update is meant to build upon – not replace – the 1993 work and has employed the same methodology for predictive modeling in areas that have not yet been excavated. In the recent update, specific features have been mapped using state-of-the-art GIS technology and geo-referencing, with some spatial allowance for error among historic maps and for the expected sub-features associated with a structure or building (e.g., privies, gardens, yards) that would yield valuable information but that would not have been noted on most historic maps. Modifications in the 2008 NHL update were derived from three sources:

- Technical advances in GIS applications that have allowed more accurate spatial projections;
- Archival research that has generated a more robust collection of source material (such as historic maps) that can be used to identify likely features and establish boundaries; and
- Excavation data collected over the intervening years by the U.S Army, NPS, Presidio Trust, and their various contractors and academic partners.

Modifications to the contributing archaeological features in the draft 2008 NHL update have been taken into consideration to determine environmental consequences and are also represented in the FOE. The 2008 NHL update will remain in draft form until the NPS has reviewed and added this updated information to the National Register of Historic Places. The NPS may also request revisions to the draft that was previously submitted.

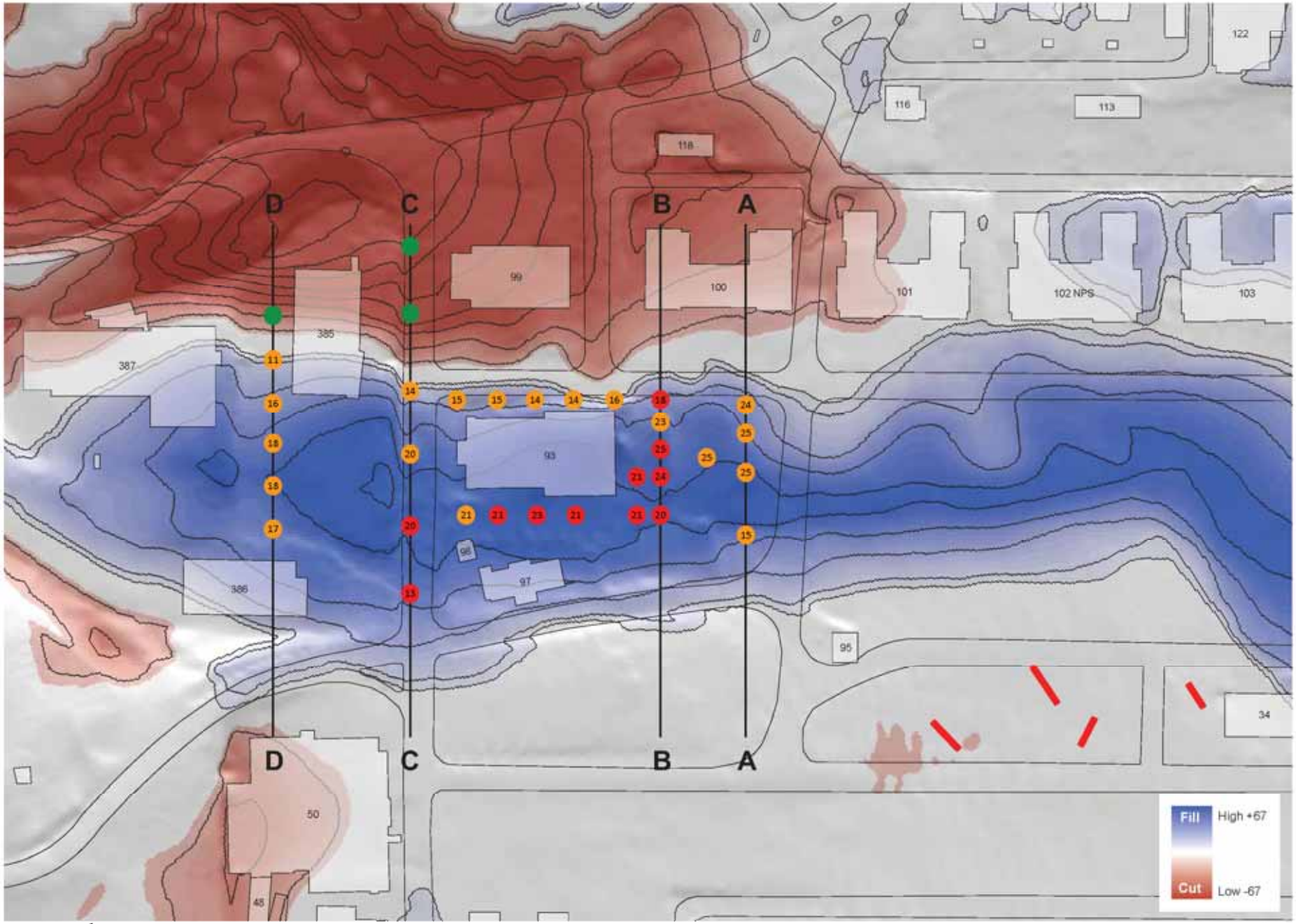
Archival Research Research into the history and development of the Presidio and especially the Main Post has been ongoing since 1993. Archival research was undertaken to further document the land use history for each area of the district where contributing archaeological features coincide with proposed new construction. Historic photographs and maps indicate that massive amounts of fill were used to level the stream ravine west of El Presidio and to create the Main Parade. This may have buried intact prehistoric or historic features from the 1870s or earlier that were located within the ravine (Reese, et al. 2008, Kaijankoski 2008). Topographic maps are the most helpful archival documents for analyzing massive landscape modifications, which can either preserve or destroy archaeological sites. Research using

topographic maps demonstrated the need to better understand historic landscape modifications to identify depths, or subsurface horizons, at which archaeological features were likely to be located.

GIS Analysis Recognizing the scale and magnitude of landscape modifications and their probable effects on archaeological features, the Presidio Archaeology Lab developed a Cut/Fill Map 1871-2000 (cut/fill map) (Figures 20 and 21). The cut/fill map illustrates the evolution of the Presidio's landscape. A detailed topographic map with six-foot contour lines from the year 1871 was the earliest and best record available for this three-dimensional modeling. Once a digital model was created from the historic topographic lines it was spatially correlated with the best recent topographic survey of the Presidio, which was done in 2000. Differences between the two models were calculated and the resulting cut/fill map represents the positive or negative change in elevation between 1871 and 2000. These elevation changes allow archaeologists and planners to assess whether archaeological features are at or near the current ground surface, are buried under fill, or have been destroyed by land modifications. This work recognized that some historic archaeological features may exist intact at depths up to 25 feet *beneath* the current ground surface (such as F:20 Stream Ravine Dump) while others may have been located on previous ground surfaces that would have been up to 20 feet *above* the current ground surface and hence destroyed (such as F:16 Non-Commissioned Staff Quarters).

Geo-Archaeological Research Building on the information in the cut/fill map, the Trust archaeological staff and their consultants also reviewed sedimentary data, such as soil borings undertaken by the U.S. Army prior to construction of a bowling center (Building 93), that might explain natural processes and human activities that have altered the Presidio's landscape. The research found that, given the presence of freshwater, the ravine area is sensitive for prehistoric archaeological resources. Due to the nature and timing of the geologic sequence, all of the layers situated between the Pleistocene Colma Formation and the artificial fill are considered sensitive for buried prehistoric archaeological materials (Kaijankoski 2008) (Figures 20 and 21). This research also confirmed that fill soils include cultural materials, which have likely lost any integrity they may have had in their original location. Therefore, the depth of fill can serve as a guide for future efforts to avoid intact archaeological features that may be preserved in the native soils beneath this fill layer.

Subsurface Testing The above information was instrumental in developing and locating a work plan that consisted of two types of subsurface investigations: geoprobe cores at the site south of the Main Parade and trench excavations at the site of the proposed office (under Alternative 1) and the proposed lodge (under Alternative 2). First, in January 2008, 17 geoprobe cores were taken to a depth of up to 50 feet in and around the area at the site south of the Main Parade. In December 2008, an additional 16 soil cores were again taken within this area (Figure 21). This type of site characterization was the most practical approach given the extensive depth (up to 25 feet) of fill material in the former stream ravine and the density of modern structures and utilities (bowling center, child care center, high voltage electrical lines, tennis court, etc.). These cores were employed to corroborate the cut/fill map through direct testing so that this combined information could be used to help understand the environmental consequences and to make a determination of effect for new construction. This form of investigation was not designed to evaluate the integrity of subsurface features, because



0 150 FT

Source: Presidio Trust 2010

21 Core Location Indicating Depth to Potential Archaeological Strata/Layer (Artifacts Present)

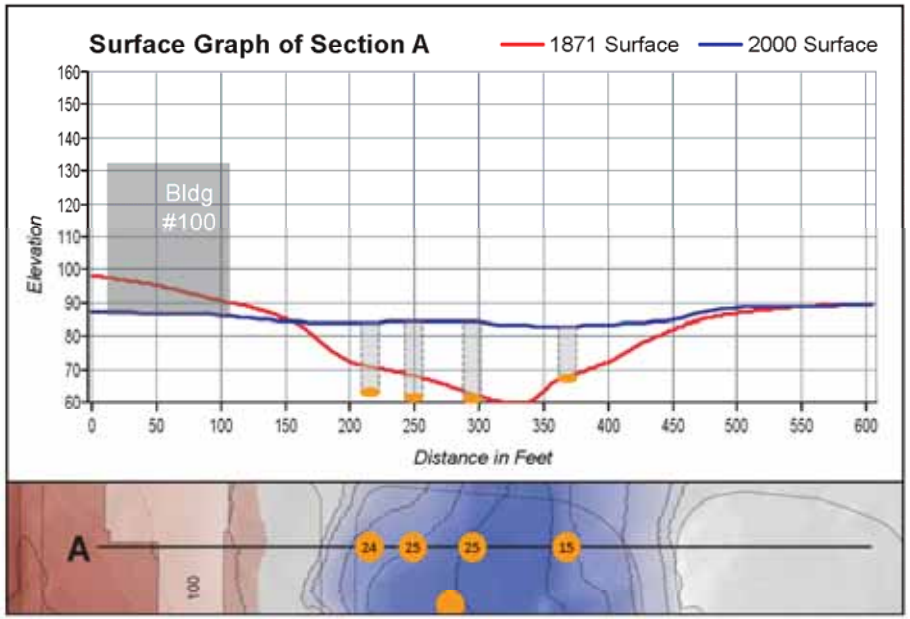
14 Core Location Indicating Depth to Potential Archaeological Strata/Layer (No Artifacts)

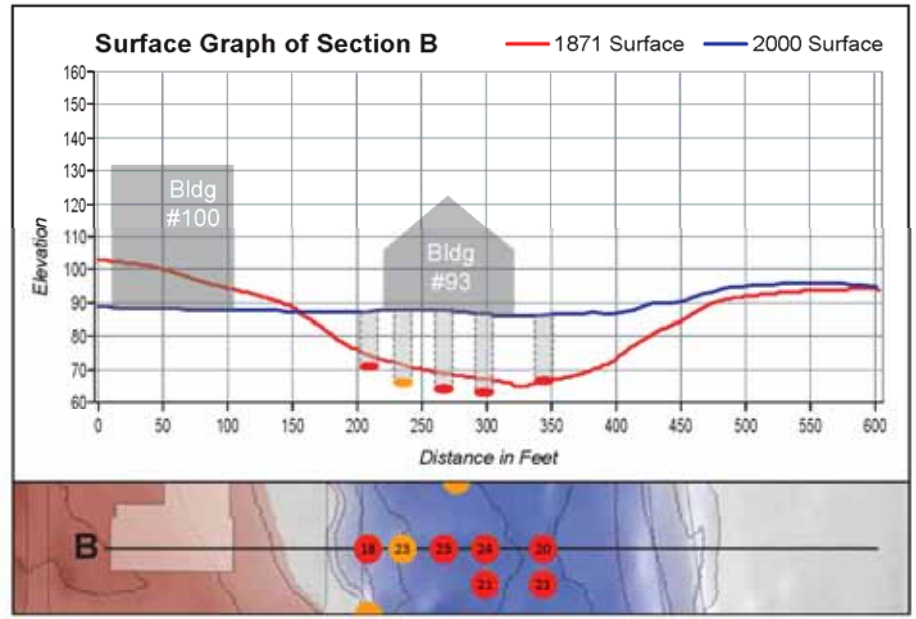
Core Location Where Potential Archaeological Strata/Layer was Previously Removed

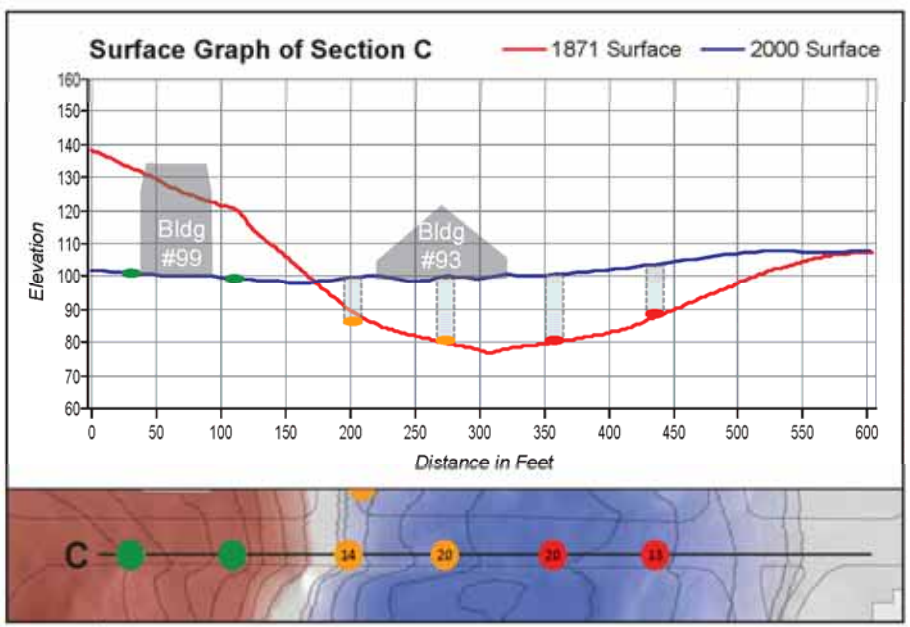
Trench Location with Artifacts/Features

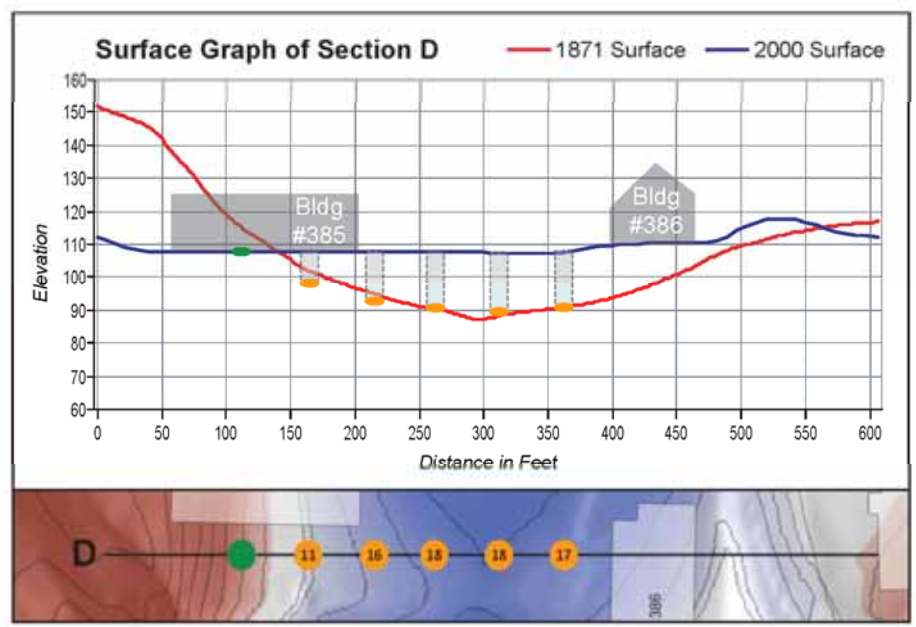
A—A Section Line

5' Contour Intervals









0 150 FT

Source: Presidio Trust 2010

A——A Section Line

21 Core Location Indicating Depth to Potential Archaeological Strata/Layer (Artifacts Present)

14 Core Location Indicating Depth to Potential Archaeological Strata/Layer (No Artifacts)

Core Location Where Potential Archaeological Strata/Layer was Previously Removed

the identified historic features F:1 El Presidio and F:20 Stream Ravine Dump were assumed to retain integrity. The cores were also used to identify the possible presence of a buried prehistoric site. Ultimately this information was used to develop design strategies to avoid adverse effects on deeply buried archaeological features.

The cores were analyzed by a geo-archaeologist at the Anthropological Studies Center of Sonoma State University (now with Far Western Anthropological Research Group). While buried Holocene paleosols were encountered, no prehistoric materials of human manufacture were encountered. Given the limited scope of this investigation, buried deposits could have been missed. The lack of evidence suggests, however, that it is doubtful that a large prehistoric feature, such as a shell mound, was missed. Areas with intact paleosols are still considered sensitive for prehistoric archaeological features (Kaijankoski 2008).

Despite the limited scope of investigation, historic period artifacts conforming to expectations for F:1 El Presidio were encountered in several of the easterly cores, including colonial-period ceramics, 19th century glass, and charcoal (Figures 20 and 21). Three of the westerly cores indicated that the historic ground surface was missing, corroborating the cut/fill map, which shows that the westerly portion of the area was cut and that the historic ground surface would have been above current grade. This observation leads to the conclusion that archaeological features in this area, including portions of F:16 Non-Commissioned Staff Quarters, would have previously been destroyed by this massive landscaping operation. The remainder of the cores established depths to historic ground surfaces varying between 5 and 25 feet below current ground surface, which further corroborates the cut/fill map.

The second subsurface tests were undertaken in March 2008 by the Anthropological Studies Center of Sonoma State University and consisted of four trenches comprising 250 linear feet of excavation placed at opposing angles within the area south of Building 34. Three of these trenches were placed at the southern end of the site proposed for the office (Alternative 1) and lodge (Alternative 2) and one within the northern extent of the site of El Presidio as identified in 2008. Unlike the former stream ravine, there were no massive landscape modifications to the area south of Building 34 and more routine excavations could be performed. Given the relatively shallow layer where prehistoric archaeological materials would be possible, and no previous or current indications, the area has a low prehistoric sensitivity. These four excavations were designed to further identify F:9 United States Quadrangle West Side, which consisted of Civil War-era barracks in this location, and to provide additional data for the northern boundary of El Presidio (Figures 19 and 20). Excavation determined that a variety of archaeological deposits consistent with F:9, such as building foundations, building materials, and historic trash deposits, still exist. The southernmost trench, placed within the site of El Presidio, recovered several artifacts and features consistent with F:1 El Presidio. Because the presence of intact elements demonstrated a level of depositional integrity consistent with previous assumptions, further destructive testing was deemed unnecessary to understand environmental consequences and to make a determination of effect.

Final Note on Methodology The methodology described above confirmed the presence of historic deposits and artifacts associated with several NHLD-contributing features previously identified by the NPS and subsequently confirmed by the Presidio Trust. It also provided additional

information regarding the features' location and especially their depth. Further, the identification process affirmed two inferences put forth in the 1993 NHL update that have been fundamental to the Trust's continued approach. The first inference was that "construction and development episodes on this military reservation have resulted in substantial alterations in original landforms which have probably both preserved and destroyed archaeological resources." This line of reasoning informed the approach to modeling the historic landscape through the cut/fill map. The Trust directly tested this surface modeling through geoprobe cores, which corroborated both the model and the original line of reasoning. The second fundamental inference was that "historic archaeological remains identified from the analysis of historic sources do exist, to the extent that they have not been obliterated by cut and fill activities." This line of reasoning informed the Trust's assumption that, unless contrary evidence exists, archaeological features found in their original location retain integrity.

Alternative 1

The impacts due to destruction of, or damage to, archaeological resources from ground-disturbing actions within the Main Post under the PTMP were analyzed on pages 215 through 219 of the final PTMP EIS. New construction and the removal of structures, pavement, or vegetation on the Main Post could adversely affect prehistoric and historic archaeological resources. In addition, ongoing repair and maintenance of buildings, structures, roads, and utilities near known archaeological sites or archaeologically sensitive areas would increase the likelihood of impacts. Underground infrastructure upgrades such as new water, sewer, or electrical connections for new construction could have as-yet undetermined effects on archaeological resources. Reuse of existing utility trenches and placement of new trenches in areas that are not archaeologically sensitive could avoid impacts.

New construction, operations, and maintenance activities would be conducted in such a manner as to avoid impacts on El Presidio and would conform to stipulations in the 2002 Programmatic Agreement (PA).[55] All other activities in proximity to El Presidio's quadrangle (defined through architectural features) and associated cultural manifestations (defined through archaeological features and other evidences of colonial occupation outside of the quadrangle walls) would be designed to minimize or avoid impacts on the site. In addition to El Presidio, ten other historic archaeological features on the Main Post contribute to the NHLD, including areas of predicted prehistoric potential that, if present,

[55] *The 2002 PA called for the Trust to prepare a draft Archaeological Management Plan for El Presidio not later than 24 months after execution of the PA. In 2004, a draft, titled Levantar: the Presidio of San Francisco Archaeological Management Strategy (Levantar), was submitted to signatories of the PA and peer reviewers for comment. It outlined the mission, goals, and programs for archaeology at the Presidio. It also proposed new directions for the archaeology facility and proposed new programs, preservation priorities, and partnering opportunities. Finally, it examined the site of El Presidio from a design perspective and offered a strategy for creating an attractive place that commemorates what lies underground. The Trust is taking an affirmative responsibility to advance the protection, enhancement, and contemporary use of El Presidio through an archaeology program that includes incremental conservation-minded excavation, a phased landscape commemoration that preserves subsurface features, interpretation of the process of archaeology to the public, and dissemination of the information being recovered through educational programs.*

may be individually eligible for the NRHP. The Archaeological Research Design for El Presidio and the Main Post (Revelar) (Praetzellis, et.al. 2008) and other archaeological management documents would apply to these historic sites as well as to El Presidio.

Specific effects of Alternative 1 on archaeological resources from new construction, rehabilitation, circulation, and parking are described below.

Office Construction of a 50,000-square-foot office building between the Old Parade and Main Parade would adversely affect F:1 El Presidio and F:9 United States Quadrangle West Side, both of which contribute to the NHLD. Approximately 12 percent of F:9 would be within the footprint of the new structure. New construction of this size would not be able to avoid direct effects to this contributing feature of the NHLD.

Archaeology Lab and Curation Facilities The limited new construction (up to 500 square feet) between Buildings 47 and 48 that would provide an accessible public entry and movement between the laboratory and curation facilities has no potential to affect archaeological features. All evidence shows this small area to have been previously graded, removing any intact archaeological features or artifacts.

Presidio Theatre The proposed addition to the Presidio Theatre (Building 99) is within the area of F:16 Non-Commissioned Staff Quarters as identified in 1993. The cut/fill map depicts the area as having undergone substantial alterations including the removal of up to 20 vertical feet of soil and sediment west of the theatre, which would have removed any archaeological potential. Limited archaeological testing supports this assessment (Kaijankoski 2008).

Presidio Chapel Rehabilitation and new construction on the west and south side of the Presidio Chapel are not anticipated to affect archaeological resources.

Circulation Proposed traffic circulation would be inconsistent with the priority outlined in Levantar (Presidio Trust and NPS 2004) to “close one block of Graham Street to through traffic.” Roadways and traffic through El Presidio would limit opportunities to interpret the colonial period and represent it in the landscape and would also make ongoing research at the façade of the earlier (circa 1792) portions of El Presidio difficult.

Parking Relocation of surface parking around the Main Post has the potential to affect near-surface archaeological features in those areas where grading or other ground disturbance is necessary. Parking on El Presidio would remain under this alternative and would continue to degrade the character of the historic landscape and diminish the ability to interpret the colonial period at the Presidio.

Alternative 2

New construction and other ground-disturbing activities, including the removal of buildings or structures on the Main Post, could adversely affect prehistoric sites and historic archaeological features. Underground infrastructure upgrades such as new water, sewer, or electrical connections for new construction could have as-yet undetermined effects on archaeological resources. Reuse of existing utility trenches and placement of new trenches in areas that are not archaeologically sensitive could avoid impacts. Ongoing rehabilitation and maintenance of buildings, structures, roads, and utilities near known archaeological sites

or archaeologically sensitive areas would increase the likelihood of impacts.

Specific effects of Alternative 2 are described below.

Lodge The new lodge on the site encompassing Building 34 and a parcel immediately south, as well as the smaller structures west of Building 86, would adversely affect portions of F:9 United States Quadrangle West Side. The area of the lodge that would affect F:9 would be of a smaller size, however, than the new construction (for an office building) assessed in Alternative 1. This smaller footprint of construction with a setback of 150 feet from the powder magazine (Building 96) would avoid construction in areas identified as F:1 El Presidio. It is assumed that the original construction of Building 34 and its basement previously destroyed any archaeological resources that may have been present within the footprint of that building. Reuse of this existing area of disturbance for underground parking would largely avoid impacts on archaeological resources.

Archaeology Lab and Curation Facilities, Presidio Theatre, and Presidio Chapel Impacts of Alternative 2 would be same as described for Alternative 1 above.

El Presidio Alternative 2 incorporates many of the ideas and proposals contained in Levantar, notably the creation of a new, state-of-the-art archaeology facility at the Main Post and the excavation and commemoration of El Presidio. Alternative 2 would advance the protection, enhancement, and contemporary use of El Presidio through an ongoing archaeology program, which is consistent with the significance of this contributing feature to the NHLD. The program would serve as a benefit to the archaeology and interpretation of the Presidio. The associated removal or relocation of Buildings 40 and 41 in Alternatives 2 and 3 would enhance the character of the open space in the *plaza de armas* of El Presidio but this action would be undertaken at the expense of the two World War II buildings that also contribute to the landmark. In short, Alternative 2 would make enhancement of El Presidio – a unique resource in California and the western United States – a priority, at the expense of a resource for which other examples exist within the Presidio and the larger Golden Gate National Recreation Area.

Circulation Alternative 2 would implement methods to intermittently close and redirect traffic away from the sections of Moraga, Graham, Pena, and Mesa streets that extend through El Presidio. The recommendation in Levantar to close “one block of Graham Street” has been modified in this alternative. Instead of permanently closing Graham Street, Alternative 2 provides for the intermittent closure of all roads through El Presidio. This occasional action would facilitate excavations, commemorations, and interpretation that would otherwise be prevented or hampered by through traffic.

Parking The reduction of parking on El Presidio to 75 cars would improve the ability to interpret the colonial period at the Presidio. It would remove parking from the earliest and smaller *plaza de armas* (the first designed open space) and enable archaeological excavation, interpretation, and public programming. Relocation of surface parking around the Main Post has the potential to affect near-surface archaeological features in those areas where grading or other ground disturbance is necessary. Underground parking at the bluff edge

(adjacent to the reconstructed Doyle Drive) would have an adverse effect on F:21 Quartermaster Complex. [56]

Alternative 3

Under Alternative 3, the potential for archaeological impacts could be less than that described for Alternatives 1 and 2. The overall area of potential ground disturbance would be reduced given the absence of an office (Alternative 1) or lodge (Alternative 2) at the site on and south of Building 34. Available evidence shows that the History Center on the site south of the Main Parade would not likely adversely affect F:1 El Presidio, given the depth of the portion of that archaeological feature in this location. However, underground parking below the History Center would have the potential to affect F:1 El Presidio and F:20 Stream Ravine Dump. If the depth of excavation for the History Center and its underground parking would extend into these two contributing archaeological features ,then the area and number of impacts would increase and be roughly equal to Alternatives 1 and 2.

Circulation Under this alternative, the closure of Moraga Avenue between Arguello and Mesa streets and the closure of Graham Street between Moraga and Sheridan avenues would reestablish the historical connection, unencumbered by traffic, between the Officers' Club (along the southern façade of El Presidio) and Pershing Square (along the western façade of El Presidio) with the rest of the *plaza de armas*. This alternative would enable important archaeological investigations to occur within current street corridors and reestablish this area as an historic open space.

Parking As proposed under this alternative, relocation of parking away from El Presidio would be beneficial to the long-term management, research, and public interpretation goals for the site. The historic open space would be rehabilitated in a manner that would revitalize and commemorate El Presidio's history.

Alternative 4

No additional building demolition or new construction is proposed under this alternative. Direct effects on archaeological resources would be limited to ground-disturbing activities resulting from routine maintenance and ongoing operation of buildings, grounds, roads and parking areas, utilities, and other existing facilities. Under the terms of Stipulation VII, Assessment of Effects, of the 2002 PA (Presidio Trust 2002), these undertakings would be considered repetitive and low-impact in nature and would have minimal or low potential to affect archaeological resources. Therefore, no known or previously unidentified archaeological resources are likely to be affected.

MITIGATION MEASURES

Mitigation measures remedy or offset adverse effects or changes in a resource's qualifying characteristics so as not to diminish its integrity. The following measures adapted from the final PTMP EIS would be implemented to avoid potentially significant impacts. These measures have been further developed during ongoing Section 106 consultation and incorporated in a Programmatic Agreement for the Main Post Update

[56] *The effects of underground parking at the proposed lodge site are assessed as part of the lodge analysis.*

(PA-MPU) (Appendix B). The measures that follow should be viewed as recommendations based on the types of resources that would be affected and Section 106 Archaeology Guidance issued by the ACHP. Implementation of these measures and other measures stipulated in the PA-MPU would reduce potentially significant impacts to archaeological resources.

AR-1 *Avoidance and Minimization* The Trust will take all reasonable measures to protect archaeological sites and features identified inside the NHLD. To accomplish this and inform the design process, an Archaeological Management Assessment (AMA) will be prepared for individual construction projects or groups of related projects by a qualified archaeologist prior to the completion of schematic design. Avoidance and minimization of adverse effects through the continuing design phases is the preferred outcome. Direct effects on archaeological resources that contribute to the NHLD or are eligible for the NRHP will be avoided and/or minimized to the extent possible through negotiation with project proponents, the Trust's Federal Preservation Officer, and the Trust's Principal Archaeologist. The AMA will outline a course of action for the projects where significant archaeological sites could not be avoided, employing one or several of the mitigation measures below, and the stipulations of the PA-MPU.

AR-2 *Archaeological Identification Plan(s)* A project-specific plan will be developed at the completion of the schematic phase for projects anticipated to have an adverse effect but that require further identification to understand the content and dimensions of the features, to assess the nature and extent of the effect, and/or to guide continuing efforts to avoid or minimize the adverse effect. For archaeological features identified the Trust may assume eligibility. Identification will further refine recommendations in the AMA and may lead to a monitoring or treatment plan.

AR-3 *Archaeological Monitoring Plan(s)* A project-specific plan will be developed for those projects that are not anticipated to have an adverse effect, or that have been designed to avoid adverse effect during design development but that nonetheless are within proximity to identified or predicted archaeological features. The monitoring plan will describe measures to protect archaeological features and will include the proposed location and frequency of monitoring along with required documentation procedures. Measures to identify, assess, and determine the appropriate treatment of archeological features should they be encountered during monitoring will be consistent with the discovery protocols, below.

AR-4 *Archaeological Research Design* If archaeological resources cannot be avoided, the Trust will review the Archaeological Research Design for El Presidio and the Main Post (Revelar) to assess its completeness and appropriateness before proceeding with other mitigation measures, such as data recovery, for specific projects. Site-specific information and detail may need to be added. If it is determined that a project will likely disturb prehistoric sites, another research design will need to be drafted for those resources.

AR-5 *Archaeological Treatment Plan(s) and Data Recovery* If an archaeological site or feature cannot be avoided and preserved in place during construction, a treatment plan including data recovery will be developed and implemented in order to preserve important information that would otherwise be lost. A project-specific plan will be developed for those projects that have unavoidable adverse effects and where existing identification is sufficient to proceed to treatment, or for which

further identification is incorporated within the treatment plan. Data recovery and analysis will be accomplished in a thorough, efficient manner, using the most cost-effective techniques practicable. The plan will describe protection measures for unaffected archaeological features, methods for data recovery, relevant research questions to be answered, monitoring during construction, responsibilities and coordination, curation, and the interpretation of recovered information in a manner that it is understandable and accessible to the public. The plan will describe the mitigation sufficiently to serve as a scope of work and for the purpose of developing a budget. Treatment plans will be reviewed according to terms set forth in the PA-MPU.

AR-6 *Creative Mitigation* This measure will be considered in combination with data recovery to derive greater public benefits from the information extracted through data recovery. Examples of creative combinations with data recovery may include:

- Using a portion of the resources expended on mitigation to fund fellowships or competitive grants for local universities for scholarly research projects that would further the public knowledge about the Presidio's history and past cultures represented in the archaeological data recovered and in similar collections or features as those affected, and to provide this information to the archaeological education program for use in school curriculum.
- Using a portion of the resources expended on mitigation to enhance and interpret those portions of the Main Post landscape not affected by new construction; undertaking multilingual public interpretation to reach a broad audience of visitors.
- Using a portion of the resources expended on mitigation to develop, host, and maintain a website that would serve as a clearinghouse for archaeological publications, scholarly reports, videos, interpretive materials, interactive games, and other educational media that could be used in schools and otherwise would not be produced or distributed to the public.

AR- 7 *Discovery Protocols* A standard response protocol will be developed by the Trust for all projects in the event of a discovery. For projects without any anticipated effects, this will be the only condition required prior to implementation. In the event of a discovery the Trust may assume eligibility for the purposes of treatment. Should circumstances arise where the Trust cannot address discoveries in a manner consistent with the protocol, the Trust will notify the SHPO of the discovery and any project-related time constraints, then agree upon reasonable time frames for consultation. The Trust will take into account any timely comments prior to making a final decision on treatment. This protocol will describe the Trust's methods to comply with the Archaeological Resources Protection Act and Native American Graves Protection and Repatriation Act (NAGPRA).

AR-8 *Curation of Archaeological Collections* All records associated with excavations and all excavated materials not subject to the NAGPRA that are deemed important for preservation will be accessioned, catalogued, and managed in accordance with applicable field and laboratory manuals for the undertakings, and 36 CFR Part 79, Curation of Federally-Owned and Administered Collections.

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3.8 Visua1 Resources

AFFECTED ENVIRONMENT

In describing the visual resources at the Main Post, it is useful to discuss visual character and views. Visual character is influenced by topography, vegetation, and buildings as well as patterns created by building ensembles, designed landscapes, and open spaces. These elements work to convey the sense of place in a visual context. Views at the Presidio have high scenic value, with recognized visual appeal including scenes of landforms, trees, water, and groups of buildings. Many people visit the Presidio simply to enjoy its scenic views of its forests and buildings, and San Francisco Bay.

Visual Character

The visual character of the Main Post is complex, resulting from a highly ordered physical layout consisting of a wide range of building types and styles surrounding three significant, but visually degraded, open spaces. The Main Post is the most visually diverse of the Presidio's districts, containing both the oldest building on the Presidio (parts of the Officers' Club are remnants of the original El Presidio) and the newest (the transit center, constructed by the Trust in 2006).

While most districts at the Presidio feature unified buildings and styles, the Main Post has a wide variety of architectural styles and building types, constructed from adobe, brick, wood frame, and concrete. Of the nine prevalent architectural styles at the Presidio (Baron 1998), eight are represented at the Main Post: Victorian, Greek Revival, Italianate, Colonial Revival, Mediterranean Revival, Spanish Colonial Revival, World War II Era, and Post-War/Modern and Utilitarian. While the buildings reflect a succession of stylistic effects popular during the various periods of military post construction, the architecture is unified by the military's basic and straightforward approach to construction and design. This approach generally tends toward formal symmetry and eschews excessive ornamentation (NPS 1993).

Unlike many military posts, the Main Post has three parade grounds rather than one: El Presidio, the Civil-War-era or "Old" Parade, and the Main Parade. The Old Parade remains a landscaped open space, as it was originally, although its size has been reduced. El Presidio and the Main Parade, on the other hand, have both been converted from parade grounds into parking lots. The Main Parade today consists of seven acres of asphalt paving, with 700 parking spaces. Buildings 39, 40, and 41 intrude onto the quadrangle of El Presidio which was the original *plaza de armas* created by the Spanish.

The Main Post has a very strong organizing geometry. This geometric layout organizes the physical environment and provides a sense of order to the place, which stands in strong contrast to the Presidio's natural landscape, forests, and rolling topography. A visitor entering the Main Post via the Presidio's curving network of roads would immediately perceive the contrast.

In its most basic form, the Main Post consists of multiple rows of buildings that frame two central, side-by-side open spaces with one row

of buildings running down the middle. There are three visually dominant building ensembles that reinforce the Main Post's north-south orientation. These are the Montgomery Street Barracks; Buildings 35, 38, and 39 lining Keyes Street; and the upper Funston Avenue Officers' Quarters. These ensembles consist of a repetition of buildings of similar appearance lined in a row. A fourth building ensemble of low-scale barracks that once lined Graham Street separating the Main Parade from the Old Parade was mostly demolished by the U.S. Army in the 1950s. The Main Post's principal open spaces are situated between the three parallel rows of building ensembles with smaller buildings filling in the edges in the east-west direction. Together, the building ensembles and open spaces establish the spatial structure and formal layout of the Main Post, which in turn greatly determine its distinct visual character.

Views

Scenic Views From the northern part of the Main Post, expansive views include San Francisco Bay, Alcatraz Island, Angel Island, glimpses of the Marin Headlands, and the Golden Gate Bridge. To the south of the Main Post, the highest forested ridge of the Presidio rises above the skyline of military buildings, forming a green and naturalistic framework that embraces the whole scene. The simultaneous awareness of a strong human-made environment in juxtaposition to a dramatic natural setting creates a visual environment with recognized scenic values.

At the northern part of the Main Parade, bay views are panoramic and dominate the setting. From about 150 feet south of Building 210, the bay and Angel Island seem close at hand. Blue water is visible between Buildings 105 and 106, while the Golden Gate Bridge towers rise up behind them. At the southern end of the Main Post, bay views change from panoramic to linear; that is, they are distant and bracketed by buildings. They become long views, usually at the end of north-south roads. From the Officers' Club, a glimpse of the bay occurs between buildings with a long foreground of lawn and asphalt parking lot.

Internal Views In the southern part of the Main Parade, the bay figures less prominently into the visual setting. Views are more internal and are largely comprised of buildings. Open expanses within the Main Post district make it is easy to see from one area to another. The seven-acre parking lot that currently occupies the Main Parade is the most prominent feature. The Montgomery Street Barracks, with its row of five large, identical brick buildings, creates a visual unity that is perceived more as a single block than as individual buildings. It provides a commanding streetscape that is more than 1,200 feet long and is visible from both north and south directions. Views in the east-west direction visually connect the barracks to Buildings 38 and 39. Important objects, such as the flagpole, can be viewed from many locations within the Main Post. The Officers' Club holds a commanding position at the south end of the Main Post. It is the tallest building on the skyline. From it, linear views to the bay are possible, as are diagonal views to the Montgomery Street Barracks. The upper Funston Avenue Officers' Quarters create another prominent streetscape viewed internally as a linear corridor defined by buildings on the west side and a wall of trees on the east side.

The location for El Presidio was chosen for its commanding presence overlooking the bay. Today, what remains is a linear view down Graham Street that offers limited bay views framed by buildings and a view to the northwest from El Presidio across the Main Parade to the bay. Another important view is from Crissy Field and the water's edge to the Main Post. Finally, the view north from Halleck Street to the bay terminates

where the Presidio's wharf once stood. Both of these views remain mostly intact, although they are compromised by Doyle Drive.

ENVIRONMENTAL CONSEQUENCES

Methodology

The potential impacts of the alternatives on visual resources were assessed through an analysis of both existing and anticipated future conditions. The analysis considered the visual setting including the visual character of the Main Post, its buildings and open spaces, and the nature and makeup of present and historic views both to and from the Main Post. It then examined how visual character and views would be changed or otherwise affected by the actions that would occur under each alternative, and how those changes or effects compare to specific criteria established for determining visual impacts. This effort was assisted by treatment recommendations based on an analysis of the visual character, organization, and character-defining features of the district as described in the 2002 Cultural Landscape Assessment of the Main Post (SMWM, et al. 2002).

Field Studies Field observations of the Main Post and specific areas where actions would be implemented under each alternative were made. An inventory was developed consisting of existing landscape components, visual character, land uses, activities, patterns of movement through the Main Post, and viewing conditions. Significant views and open spaces were documented in site diagrams. Locations in the Presidio that could be affected by the alternatives were identified. These locations were marked on a base map and visited for the purpose of making direct observations of conditions. Photographs from each viewpoint were taken for reference and held as candidate baseline images for use in preparing photo simulations of the various proposals. Numerous viewpoints were visited and photographed.

Visual Simulations Visual simulations depicting the appearance of the alternatives in views from representative points open to public access within the Main Post were prepared. Figure 22 shows the viewpoints the visual simulations are taken from. Information used to prepare the visual simulations was supplied by the proponents of the various projects considered under the alternatives. Preparation of the visual simulations included creating digital 3D models of proposed buildings from engineering and architectural information. Two types of visual simulations were used: photorealistic digital models with photographic backgrounds, and computer-generated 3D drawings. In the case of the photorealistic simulations, an overall digital 3D model was created, which included the existing terrain and proposed building pads and a series of existing landmarks (buildings, trees, etc.). Using those landmarks as guides, the 3D model was then aligned with the respective digitized photographic images. In both types of simulation, basic forms and colors representing the proposed building materials, along with light and shade, were applied to the modeled buildings.

The visual simulations prepared for this analysis have been reviewed by the Trust and the project proponents and have been determined to be accurate. The result is a set of images that depict the Main Post's future appearance within the limitations of the information available at the time the images were prepared. They are not meant to convey the life-like appearance of a completed building design, but rather to provide basic information about building height, massing, and location. They are an accurate and objective means of depicting the future appearance of the district and identifying the changes in visual conditions that would result.

Criteria With the aid of the visual simulations, the alternatives were reviewed to determine whether they would:

- Disrupt the Main Post's geometric order established by the road network and the layout of buildings and open space
- Address the degraded visual character of El Presidio
- Be compatible with the existing historic setting
- Block or disrupt important panoramic views to the bay from the northern portion of the Main Post
- Block or disrupt important linear or otherwise scenic views to the bay from the southern portion of the Main Post

Alternative 1

This alternative would increase built space on the Main Post by 66,500 square feet. New construction would include a 50,000-square-foot office building at the Graham Street infill site, an 18,000-square-foot addition to the Presidio Theatre, and a 4,000-square-foot addition to the Presidio Chapel. A 500-square-foot addition between two historic garages would also be constructed and Building 46 would be removed to provide a secure entrance for the archaeology lab and curation facilities. A Heritage Center would be located in Building 2, and Building 42 would also be rehabilitated to accommodate lodging.

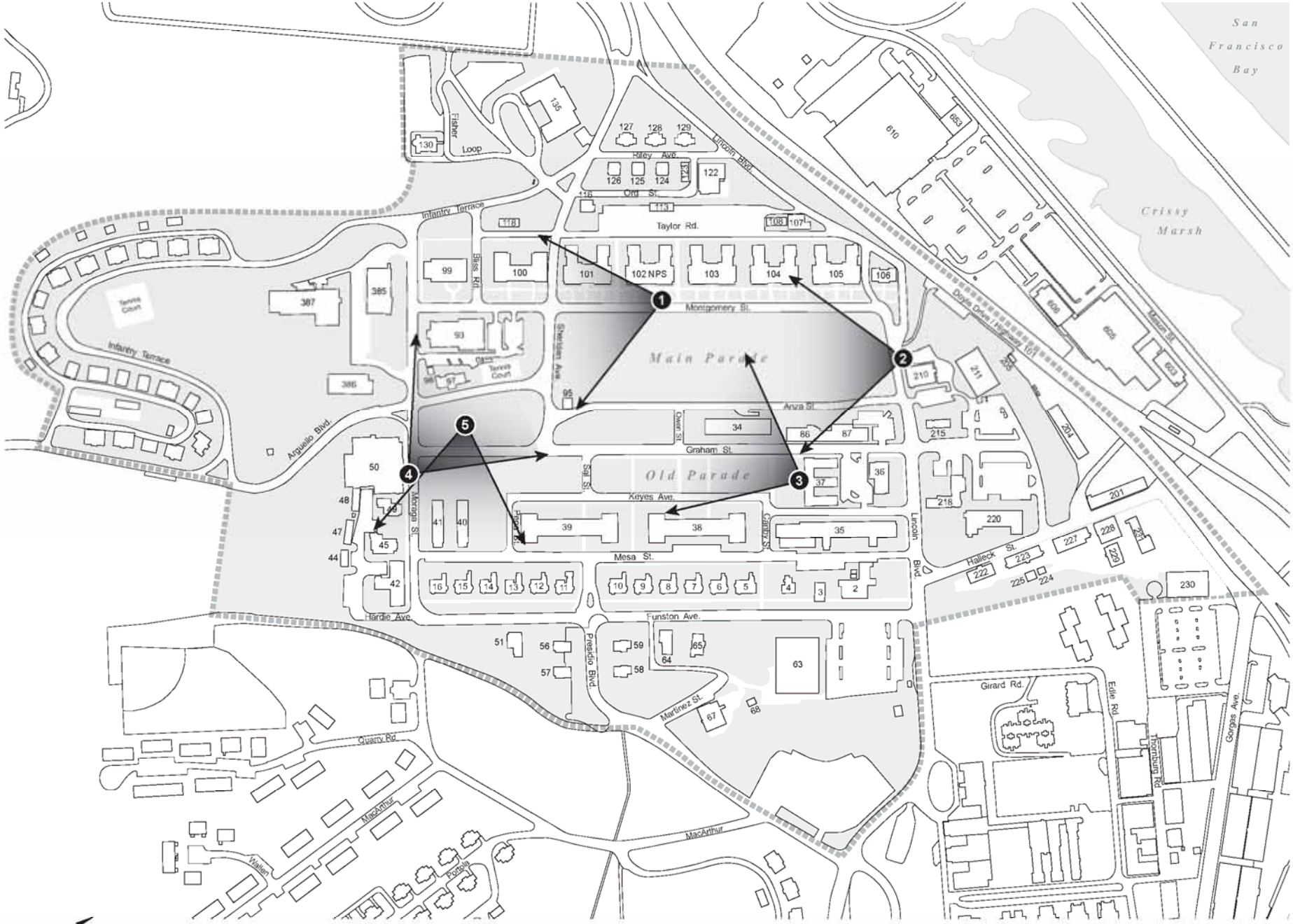
Heritage Center (Building 2) Some non-historic portions of the building would be removed, and overall the historic structure would be rehabilitated to enhance its historic character. No change in visual character would result because very few of the expected building modifications would be visible outside the building, and the impact on Main Post views would be unnoticeable.

Archaeology Lab and Curation Facilities Visible changes resulting from the proposed archaeology lab and curation facilities would entail removing Building 46, a small shed situated between Buildings 47 and 48, and replacing it with a 500-square-foot connector building that would link the two garages. This small structure would be very transparent due to its glass walls. An outdoor work area would be created in the existing paved area. Changes would not be visible from El Presidio or the other key Main Post open spaces and would have no impact on Main Post views.

El Presidio Under this alternative, the visual character of El Presidio would be marginally improved by replacing existing asphalt paving with more visually compatible surface materials.

Lodging (Pershing Hall) Very few exterior changes to accommodate lodging would occur, except for the possible removal of the non-historic metal fire escape on the building's front elevation. This alteration, along with any other minor exterior changes that might occur, would improve the appearance of Building 42.

Office As seen in Figure 23, the office building at the Graham Street infill site would strengthen the spatial separation between the Main Parade and Old Parade and would help differentiate the two open spaces (SMWM, et al. 2002). The office building would help establish a continuous "street wall" on Graham Street, aligning with Buildings 86 and 87, although Building 34 would not align with either. The office building would have a similar mass and scale as Buildings 35, 38, and 39, would help define the west side of the Old Parade, and would have a positive effect on the visual setting of the Old Parade. In addition, the



Source: Presidio Trust 2010

23 ALTERNATIVE 1: VIEW FROM NORTH END OF OLD PARADE LOOKING SOUTH

Source: Square One Productions 2010

building would not compete with the dominant visual position of the Officers' Club, which is at a higher elevation.

Figure 24 shows the view from the northern edge of the Main Parade, with the new building visible south of Building 34. From this vantage point, the building would appear as a compatibly scaled continuation of the existing row of buildings framing the eastern edge of the parade ground. The Main Parade lawn coupled with the Montgomery Street Barracks would form a strong spatial and visual unity, which would become a focus of the visual setting. Figure 25 shows that the office building would be visible from the Officers' Club and that its southernmost portion would block a small portion of the bay view. However, its impacts on the overall panoramic view would not be extensive enough to create an adverse impact. The building would not affect the linear view south down Graham Street from the Officers' Club or views to the Main Post from Crissy Field or from the bay. However, the building would block internal views in the east-west direction, such as the view from inside the Montgomery Street Barracks toward the east, or the view when standing in front of Building 39 looking west. Some visual relief would be provided because the volume of the new office building would be broken into two parts, of different heights. By retaining Owen Street, this alternative would provide a valuable east/west view corridor. In the view shown in Figure 26, the building would not be visible and would not adversely affect views toward Pershing Square or the Officers' Club beyond.

Presidio Theatre The 18,000-square-foot addition would be added west of the existing Presidio Theatre on an area that is currently an open lawn. The addition would be scaled and detailed to relate closely to the existing building. Its height would not exceed the existing building's eave line and its colors and materials would be similar to the existing theater. The addition would not affect the visual character of the nearby Montgomery Street Barracks, but would impact the visual character of the western end of Moraga Street. Due to its location on the open lawn west of the theater, the addition would reduce open space and obscure the theater's west wall. However, a transparent connector structure would separate the new addition from the existing theater so that the original volume of the building would be protected and the new construction would be visually separated from the original theater. The addition would have expanses of blank walls, as is evident in Figure 27. However, the volume of the new addition would be broken down through the visual separation from the existing theater, and use of transparent materials and scale-giving articulation at the entry. Because the entry to the new addition would face Moraga Avenue like the historic theater's entrance, it would reinforce the importance of the Moraga Avenue elevation. New construction would add to the extensive variety of architectural styles, building sizes, and construction types found within the district and would not create a negative impact on the visual character.

As seen in Figure 27, the theater addition would be visible mostly from its immediate surroundings and would affect localized views only. It would not be visible from the majority of the Main Parade, or block important views. However, it would block a linear view from Moraga Street toward the bay that is currently available from the open lawn west of the theater. Loss of this localized and non-linear view to the bay would not be significant due to the view's less than prominent role in the Main Post's visual setting, and Taylor Road's character as the "back edge" to the Montgomery Street Barracks (SMWM, et al. 2002).

Source: Square One Productions 2010

Source: Square One Productions 2010

Source: Square One Productions 2010

27 ALTERNATIVE 1: VIEW FROM MORAGA STREET LOOKING NORTHEAST

Source: BAR Architects 2010

Presidio Chapel The addition to the Presidio Chapel would not affect the visual character of the Main Parade, El Presidio, or Pershing Square. Because it would be located on the west side of and set back from the existing building, the addition would have minimal visual impacts on the chapel's immediate surroundings. Figure 28 shows that the addition would be located in such a way to minimize its impacts on the chapel's main architectural features, would not detract from the building's historic entrance orientation, and would leave a large portion of the chapel's west elevation unobscured by new construction.

Alternative 2

This alternative would increase built space on the Main Post by 52,500 square feet. New construction would include the Presidio Lodge at the Graham Street infill site and the additions to the Presidio Theatre and Presidio Chapel. The alternative would also provide for a Heritage Center in the Officers' Club (Building 50) and rehabilitation of Building 42 to accommodate lodging.

Heritage Center (Building 50) The Heritage Center in the Officers' Club would remove some non-historic portions of the building. Overall, the historic structure would be rehabilitated to enhance its historic character. Very few of the expected building changes would affect the exterior or be visible outside the building, resulting in minimal change to the Main Post's visual character.

Archaeology Lab and Curation Facilities Impacts would be the same as described for Alternative 1.

El Presidio Removing Buildings 40 and 41 would provide a larger and more contiguous open space to represent the original Spanish *plaza de armas*. As shown in Figure 29, this alternative would create a site with clearly visible boundaries on the ground plane and improved internal views toward Pershing Hall, Funston Avenue, and Pershing Square. These enhancements would improve the visual character of the proposed open space. Removal of Buildings 40 and 41 would reveal some panoramic views from the east side of the El Presidio site toward the Montgomery Street Barracks that are currently blocked. The view from Pershing Square toward the Officers' Club, Pershing Hall, and the Funston Avenue Officers' Quarters would be improved, allowing east-west views that promote an understanding of the original spatial relationships that existed around El Presidio prior to World War II.

Lodge The Presidio Lodge would improve the visual setting by replacing Building 34, a nondescript building with a flat roof and concrete block walls, with ungainly horizontal proportions that are visually jarring in juxtaposition to nearby historic buildings. The new lodge would consist of two parallel rows of small-scale buildings. Between the two parallel rows of lodge buildings, an open space would connect all the rooms. Second-story balconies and bridges would link the upstairs rooms. These buildings would be rectangular forms with pitched roofs and materials similar to and compatible with other Main Post buildings. As shown in Figure 30, the massing and scale of the proposed lodge would create a stronger visual relationship with the historic surroundings than Building 34 does. The size of new construction for the lodge would be equal to the total square footage of Building 35, which is approximately 70,000 square feet. Because this square footage would be distributed among a number of individual two-story buildings, the visual impact would be much less imposing than Buildings 35, 38, or 39. The lodge buildings would create a spatial separation between the Main Parade and the Old

Source: Page & Turnbull 2010

Source: Square One Productions 2010

Source: Square One Productions 2010

Parade and would provide a built edge to both parade grounds, helping to visually define the boundaries of the two open spaces (SMWM, et al. 2002). Unlike the office building at the site in Alternative 1, the lodge would be roughly based on the historic barracks layout and provide a strong visual unity with Buildings 86 and 87.

As shown in Figure 30, the lodge would be broken into at a number of small, narrow volumes facing Graham Street, each of which would be substantially shorter than the length of Buildings 86 or 87. The individual lodge buildings would be about 40 feet wide, varying in length from 80 feet to 120 feet, and would be separated by gaps ranging from 10 to 20 feet. The southern-most lodge building would be set back at least 150 feet from the historic powder magazine. This setback would lessen its visual impact on the powder magazine and provide more open space at the south end of the site. At a maximum height of 30 feet above grade, the lodge would be taller than the flat-roofed building it replaces (Building 34), but shorter than Building 86, which is approximately 45 feet at its highest point. It would also be shorter than the maximum height of Buildings 35, 38, and 39, thereby creating an appropriate visual presence. At this height, the proposed lodge would not compete with the dominant visual position of the Officers' Club, which is currently a focal point at the southern edge of the Old Parade.

Figure 31 shows the lodge and the rehabilitated Main Parade. Viewed from this vantage point, the Main Parade lawn coupled with the Montgomery Street Barracks would form a strong spatial and visual unity that would prevent the lodge from dominating the visual setting. In this view, the two new, one-story buildings behind Buildings 86 and 87 would be clearly visible. However, due to their height (limited to 15 feet), and the gap between these two buildings (approximately 20 feet), the buildings partially obscure but would not completely block views of Buildings 86 and 87 from the Main Parade. The buildings would block views out from the first floor (but not the second floor) windows of 86 and 87 toward the Montgomery Street Barracks and toward the bay, which would be considered a localized impact on these office buildings. In the view shown in Figure 32, the lodge would not be visible and would not adversely affect views toward Pershing Square or the Officers' Club beyond. As shown in Figure 33, compared to the office building in Alternative 1, the lodge would block fewer of the bay views from the Officers' Club because the lodge would consist of smaller buildings that are lower in height. The linear view south that currently exists down Graham Street would not be affected by the lodge. The lodge would affect some short-range, east-west internal views at the Main Post. However, because the lodge would consist of a number of separate buildings with open space between them, Alternative 2 would maintain internal views between the Old Parade and the Main Parade that would be blocked in Alternative 1. The lodge would block the view of some Montgomery Street Barracks from a street-level vantage point near Building 39 because the area south of Owen Street is currently an open lawn.

Presidio Bowling Center (Building 93) Changes to the Presidio Bowling Center would involve interior building modifications and would have little impact on visual character or views. This is shown in Figure 32.

Presidio Theatre and Presidio Chapel Impacts would be the same as described for Alternative 1.

Source: Square One Productions 2010

Source: Square One Productions 2010

Source: Square One Productions 2010

Alternative 3

This alternative would increase built space on the Main Post for the 48,000-square-foot History Center at the site south of the Main Parade, currently occupied by the Presidio Bowling Center. Unlike Alternatives 1 or 2, it would create the archeology lab and curation facilities without demolishing Building 46 or adding new construction. It would commemorate El Presidio by eliminating parking from the site and would remove Buildings 40 and 41. It would also rehabilitate Building 42 and the Funston Avenue Officers' Quarters to accommodate lodging.

History Center Figure 34 shows the view of the History Center and the rehabilitated Main Parade from the northern edge of the parade ground. While the History Center would be clearly visible from this vantage point, the Montgomery Street Barracks would appear more visually prominent than the History Center. From this vantage point, the History Center would not block views of the Infantry Terrace residences and would not obscure the planted ridge of Presidio Hill. Figure 35 shows the History Center from the front of Building 102, the middle barrack on Montgomery Street. From this vantage point, which encompasses approximately the southern third of the Main Parade, the History Center would block views south of some of the Infantry Terrace residences but would not interrupt the defining edge of the ridgeline. Because the History Center would be taller than the existing Presidio Bowling Center and occupy more space, the building would be more visually prominent than the Bowling Center from the closer vantage point shown in Figure 35. The building would create a strong southern edge to the Main Parade, but similar to the Bowling Center, this would not be considered detrimental to the visual character of the Main Post. The History Center would also be in keeping with the postmodern architecture that was introduced at the Presidio in the late 1980s. As shown in Figure 36 however, it would introduce large and very visible expanses of blank wall into the visual setting, which would be out of character with the scale and detail of the historic architecture of the Main Post and would thus create an adverse impact on the visual character of the Main Post. Mitigation Measure VR-1 would be applied to the History Center to avoid this adverse impact.

The History Center would not affect views from the Officers' Club to the bay, as shown in Figure 36. It would, however, block the view of Building 100 and the top portion of the Golden Gate Bridge's south tower, which is currently visible above Building 100. This is because the new building would be taller than the existing Bowling Center. It would also block internal east-west views from the area south of the Main Parade, creating an adverse impact on important views. Because it would be much taller than historic Building 97 and sit so close to it, the new building would diminish the historic setting of Building 97, thus creating an adverse impact on the visual character. Mitigation Measure VR-2 would be applied to the design to limit building height in order to avoid this adverse impact.

El Presidio Impacts would be similar to those described for Alternative 2, except the visual setting would be further improved by the removal of all parking.

Lodging (Pershing Hall and the Funston Officers' Quarters) Very few exterior changes to accommodate lodging would occur. Any minor exterior changes that might occur would generally improve the appearance of the buildings.

Source: Square One Productions 2010

Source: Square One Productions 2010

Source: Square One Productions 2010

Presidio Theatre and Presidio Chapel Alternative 3 would not include additions to these buildings, and therefore would not create any changes to the visual setting.

Alternative 4

This alternative would not increase built space on the Main Post. The geometric order of the Main Post would be preserved, since no changes would occur that could affect the existing street system or grid, strengthen the separation between the Old Parade and the Main Parade, or reintroduce the Graham Street street wall. No actions would be taken to enhance or improve the appearance of El Presidio; thus the degraded visual character of the quadrangle would remain under this alternative.

MITIGATION MEASURES

The final PTMP EIS did not include mitigation specific to visual resource impacts. The following site-specific mitigation would be implemented under Alternative 3 to reduce impacts on visual resources.

VR-1 *South of the Main Parade Site (new)* To avoid having the east and west elevations of the History Center (Alternative 3) appear monolithic and hence visually out-of-scale with the surrounding historic architecture, and to avoid blocking views of the Montgomery Street Barracks, Design Guidelines will be developed for the south of Main Parade site in order to modulate the long expanses of solid wall, subdivide the massing, and provide scale-giving architectural elements.

VR-2 *Height Limits on New Construction (new)* To avoid having the History Center (Alternative 3) block internal Main Post views, Design Guidelines will establish height limits on new construction.

REFERENCES

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3.9 Visitation

AFFECTED ENVIRONMENT

Visitor Experience

Today, the daily population of the Main Post is significantly smaller than it was when the Presidio was a U.S. Army post. Although most of the building space has been inhabited, there is a dearth of activity and few services to welcome the public. A visitor to the Main Post would not recognize it as the heart of a national park site, nor would a visitor perceive the historic significance of the area.

The visitor experience as described in the PTMP provided for more amenities and activities for both the park community and visitors. The PTMP described the Main Post as the “heart of the park” and a visitor destination.

Visitor Information

Visitor information, orientation, and amenities at the Main Post are currently limited, and most first-time visitors and tourists are unaware that any support services are available. The NPS Visitor Center, which is located temporarily inside the Officers' Club (Building 50), is the main contact point for visitors to the Main Post. The Officers’ Club serves as a primary staging area for tours and a variety of publications and maps are available in the bookstore. The Officers' Club is also used for changing exhibits, performances, lectures, and other special events.

Other visitor contact sites at the Main Post provide printed information, such as park brochures, maps, and other publications, to visitors. These sites include the Trust Headquarters (Building 34) and the transit center, which provides public restrooms and a restaurant. The transit center also includes an orientation and wayfinding kiosk that contains information about transit, hiking and bicycling routes, points of interest, and noteworthy attractions. Some leased buildings have display areas where current events, transit information, and interpretive information are available to visitors.

Visitor Facilities

The Main Post’s Old Parade and Pershing Square offer capacity for picnics and leisure. The area is also used for a range of special events including performances, concerts, festivals, and other cultural events. Pershing Square, located southeast of the Main Parade, hosts historic ceremonial events. The Main Parade is currently the largest parking facility on the park.

The Golden Gate Club (Building 135) is the Presidio’s largest special event facility. It accommodates cultural events, training classes, workshops, meetings, weddings, and receptions in its three ballrooms and seven dedicated meeting rooms.

The Presidio Chapel (Building 130) provides a venue for a variety of cultural events. A growing music program, interfaith ceremonies, and

other cultural events are held regularly at the chapel, sponsored by the Interfaith Center.

The former Chapel of Our Lady (Building 49) provides a venue for small community meetings, weddings, and lectures.

The Herbst International Exhibition Hall (Building 385) is a freestanding building with 6,800 square feet of exhibition space. In addition to periodic exhibitions, it accommodates meetings and other special events.

Visitor Services

Overnight lodging for the general public is not available at the Main Post. However, Building 41 is a dormitory for participants in internship and volunteer programs. Building 51 is used as a guest house for consultants and participants in special events at the Presidio.

Four small food service facilities offer dining options at the Main Post. These include a breakfast and lunch café (Dish Café in Building 39), a museum café (at the Walt Disney Family Museum), a grill (in the Presidio Bowling Center), and a French brasserie (La Terrasse in the transit center).

Visitation

Although visitation is difficult to estimate for the Presidio, it is estimated that approximately 650,000 visitors come to the Main Post annually (see Table 26). Visitors come to the Main Post principally for exhibitions and special events (e.g., Shakespeare in the Park, Film in the Fog, and the Aloha Festival). More than half of the visitor use is associated with the Presidio Community YMCA Fitness Center and the Presidio Bowling Center.

26 ANNUAL VISITATION TO THE MAIN POST (THOUSANDS)

	Existing Conditions	*Alternative 1*	*Alternative 2*	*Alternative 3*	*Alternative 4*
CULTURAL USES					
Public Use (Building 93)	0	0	15-25	0	0
History Center[1]	0	0	0	150	0
Heritage Center / Visitor Center	0	110-150	240-290	40-70	40-70
Archaeology Center	0	15	15	15	0
Walt Disney Family Museum[2]	0	300-350	300-350	300-350	300-350
Presidio Theatre	0	145	145	110	110
International Center to End Violence[3]	0	5	5	5	5
Other Cultural Uses[4]	37-62	48-81	76-127	37-62	37-62

	Existing Conditions	*Alternative 1*	*Alternative 2*	*Alternative 3*	*Alternative 4*
RECREATIONAL USES					
Presidio Community YMCA Fitness Center[5]	293	293	293	293	293
Presidio Bowling Center[6]	90	90	0	0	90
Main Post Tennis Court[7]	6	6	6	0	6
Main Post Ballfield	0	0	15-20	0	0
OTHER USES					
Programmed Uses (Main Post Buildings)[8]	175-200	200-250	200-250	200-250	175-200
Programmed Uses (Main Post Open Space)[9]	50	100-150	100-150	100-150	100-150
Lodge[10]	0	13	76	34	0
Restaurant / Retail Uses[11]	55-58	297-303	198-231	150-155	150-155
TOTAL ANNUAL VISITORS[12]	**600-645**	**1,380-1,570**	**1,430-1,690**	**1,220-1,400**	**1,110-1,270**

[1] *Alternative 3 only. Source: Presidio Historical Association n.d.*
[2] *Source: Bloomberg 2008.*
[3] *Source: Family Violence Prevention Fund 2004.*
[4] *Includes ground floor of Building 102 (Area A), Buildings 385 and 386, portions of Buildings 101 and 105, and incidental new construction.*
[5] *Source: Presidio Community YMCA 2008.*
[6] *Source: Presidio Bowling Center 2008.*
[7] *Source: Presidio Community YMCA 2008.*
[8] *Includes exhibitions and events in Golden Gate Club, Officers' Club, chapels, and San Francisco Film Centre.*
[9] *Includes existing events on Old Parade and Main Parade (e.g., Shakespeare in the Park, Aloha Festival) and anticipated growth in the number of comparable events per year.*
[10] *Source: Larkspur Hotels & Restaurants 2007. Estimated hotel guests are based on the hotel guest component of the Larkspur proposal.*
[11] *Includes transit center restaurant, Main Parade restaurant or café, portions of remaining Montgomery Street Barracks, east Halleck buildings and Building 210 (bank and post office). Approximately 20 percent of restaurant and retail patrons are assumed to be independent visitors Annual visitation is derived from daily trip generation rates for retail and restaurant uses; for restaurant uses, estimated annual visitation is adjusted based on existing restaurants in the Presidio.*
[12] *Assumes 15-percent reduction to reflect independent visitors.*

ENVIRONMENTAL CONSEQUENCES

Methodology

For this section, visitation was projected based on information provided by current and prospective tenants for both existing and anticipated uses, including building space and open space. Estimates for unidentified or general cultural uses, restaurants, and retail building uses were derived from the trip generation rates used in the draft SEIS transportation model. For these general cultural uses, restaurants, and retail uses, City and County of San Francisco guidelines (CCSF 2000) were used to help identify visitor generation percentages of total trips. These factors were then combined to predict future daily visitation. The factors used to convert daily visitor trips to annual visitation vary with the type of land use. For general restaurant uses, information from existing Presidio restaurants was used to convert daily visitors to annual visitation. The mix of land uses yields the total estimated visitation.[57] Visitation estimates also include visitors to current community services, cultural uses, weddings and other small private events, and a few large events. Table 26 provides estimates of the number of current annual visitors and the expected number of future annual visitors to the Main Post under each of the alternatives.

Annual visitation estimates are an aggregate of estimated visitation during peak and off-peak seasons. The traffic, transit, and parking analyses (Section 3.3) are based on trip generation rates that coincide with peak season conditions, where applicable. The potential effect of the increased numbers of visitors on traffic conditions, transit service, trails, and bikeways is considered separately in Section 3.3, Transportation and Parking. The transportation analysis in Section 3.3 is based on standard daily, AM peak hour, and PM peak hour trip generation rates described in Table 8.

Visitors to the Main Post and other districts within the Presidio have various expectations and the visitor experience is highly individualized. The quality of their different experiences depends on multiple factors, including the quality of the natural, cultural, visual, and recreational resources, as well as other components of the environment. (Impacts on these resources are evaluated elsewhere in this final SEIS and are not repeated here.)

Alternative 1

The potential impacts of Alternative 1 on park visitor use are analyzed on pages 292 through 301 of the final PTMP EIS. Under this alternative, a variety of public programs and interpretive and educational opportunities would be provided at the Main Post. The Trust and NPS would collaborate to develop and operate a Visitor Center and to provide interpretative services as well as other educational and cultural opportunities for visitors. The Presidio's cultural, natural, and recreational resources, along with facilities renovated for such purposes by the Trust or by tenants, would provide the setting for a range of public programs. To ensure consistency and quality, the Trust would play a role in the coordination of programs and would provide an increasing level of

[57] *For additional discussion of the methodology, refer to the response to comment titled "Visitation and Visitor Experience" in Section 4.3, Main Post Update EIS Scoping Process and Issues Raised during Scoping, of the draft SEIS.*

financial support over time. Programs would also benefit from philanthropic support.

A Heritage Center in Building 2 at the Main Post would serve as a gateway facility to the Main Post heritage program and provide visitors with an overall framework for understanding the Presidio's natural and cultural history. The program would convey an understanding of history through objects, architectural sites, stories, and audio and video presentations, and would portray the different roles the Presidio has played throughout its history. El Presidio would be commemorated, but 252 parking spaces would remain on the site and Buildings 40 and 41 would continue to make the site difficult for visitors to interpret as the *plaza de armas*.

Rehabilitating the Main Parade consistent with the Main Parade EA would substantially expand public program opportunities by replacing the 7-acre parking lot with a visitor-friendly site design, including an interpretive esplanade and green open space, which would accommodate more events of various sizes. The number of large events would be expected to increase somewhat, but most of the increase would be associated with smaller events.

The 293,000 annual visits to the YMCA Fitness Center would continue, and the other community retail services such as the post office, bank, and restaurants would also continue to draw visitors to the Main Post from the local area as well as serve visitors.

Cultural uses such as the Walt Disney Family Museum and Presidio Theatre would accommodate visitors to the area. The Walt Disney Family Museum expects to draw about the same number or slightly more visitors as the YMCA Fitness Center. Annual visitation to the Presidio Theatre is expected to be about half of the current visitation to the YMCA Fitness Center. Other cultural facilities and visitor amenities, including the Archaeology Center and El Presidio, would be located at the Main Post. Public access to portions of important historic buildings would be maintained and complemented by interpretive displays. Lodging in the historic Building 42, Pershing Hall, would give visitors an opportunity to stay in an historic building.

The Officers' Club, Golden Gate Club, and former Chapel of Our Lady currently host weddings, meetings, and other small events throughout the year. While these venues are currently fully booked in peak seasons, the popularity of these venues is expected to increase such that these venues would be fully booked throughout the year in the future. The addition to the Presidio Chapel would provide new exhibition gallery and meeting space to better serve its visitors.

This alternative would attract approximately 1.3 to 1.6 million recreational visitors annually to the Main Post. This alternative would provide facilities and services designed to accommodate visitation levels. Peak visitor use would occur primarily on weekend days and holidays. Mitigation measures identified in the final PTMP EIS would ensure that visitation levels would not exceed desired conditions and that unacceptable impacts on park resources and visitor experiences would not occur. These measures include limitations on visitor opportunities (CO-4), prohibitions on visitor uses (CO-5), management controls (CO-6), conditions for special events (CO-7), and monitoring of visitor levels (CO-8).

Alternative 2

Alternative 2 would provide a greater variety of facilities for the visiting public than Alternative 1. The range of programs and exhibition space (including a small theater) at a Heritage Center in Building 50 would create more opportunities for visitors to explore the history of the Presidio. The history of Building 50 would also be elevated.

Building 93 at the southern end of the Main Parade would continue to be used for public-serving and programmatic purposes. Restaurants and retail space in the Montgomery Street Barracks buildings would support visitor needs and bring more people to the Main Post.

The Presidio Lodge in a new building would serve more guests, create a focal point for activity and visitor amenities, and animate the Main Post at night in contrast to the office use that would be provided at the site under Alternative 1. Lodging in the historic Building 42, Pershing Hall, would give visitors an opportunity to experience a historic building.

The estimated annual visitation for Alternative 2 would be similar to that estimated for Alternative 1, approximately 1.4 to 1.7 million visitors annually. Alternative 2 would provide a greater variety of public uses, however. In addition to a Heritage Center in Building 50 and the expanded programming opportunities at the Presidio Theatre and the Presidio Chapel, El Presidio would become a focus of visitor interest. Excavation and interpretation at the archaeological site would encourage visitor participation in the archaeological process and allow a variety of visitors, from school children to adults, to explore San Francisco history. A more open site, with reduced parking, would allow for more hands-on special events that may also increase visitation. Like the other alternatives, Alternative 2 would provide facilities and services designed to accommodate expected visitation levels on most days. Existing community services would continue to draw local visitors from the Presidio and surrounding neighborhoods. Peak visitor use would occur primarily on summer weekend days and holidays. Implementation of the mitigation measures identified for Alternative 1 would ensure that unacceptable impacts on adjacent land uses or on visitor use would not occur. The Trust may make adjustments to the way activities are conducted if necessary (including limiting the size of special events and redirecting activities from one location to another), and would monitor uses to minimize use conflicts.

Alternative 3

Alternative 3 would provide fewer facilities for the visiting public than Alternative 1; facilities would be more focused on American history and therefore provide a more limited range of activities for visitors to the Main Post. The NPS and Trust Visitor Center in Building 50 would provide visitor orientation and interpretation services. However, the History Center would be the main visitor facility under this alternative, attracting approximately 150,000 annual visitors. Information within the center would interpret the nearby historic structures and sites to illustrate the larger stories of American history. In addition to lodging in the historic Pershing Hall, “bed and breakfast” accommodations would also be available to a limited number of visitors in the upper Funston Avenue Officers’ Quarters (historic Buildings 11-16). As with Alternative 2, the spatial character of El Presidio would be re-established and the removal of all parking from the site, as well as the closure of portions of Moraga Avenue and Graham Street, would further emphasize the site’s importance to visitors.

The remaining Montgomery Street Barracks (Buildings 101, 103, and 105) would be occupied by office uses rather than the mix of visitor-oriented ground floor uses assumed in Alternatives 1 and 2. The Presidio Theatre and Presidio Chapel would remain at their current size, have fewer programming opportunities, and attract fewer visitors than in Alternatives 1 and 2. This alternative would be expected to attract approximately 1.2 to 1.4 million recreational visitors annually to the Main Post. The Trust would implement measures (see Alternative 1) to ensure that visitor use would not adversely affect the park's resources or the public's enjoyment of the park.

Alternative 4

Under this alternative, minimal actions would be taken to expand visitor opportunities beyond existing facilities, and few benefits would be provided to enhance visitor experience. The NPS Visitor Center would offer a variety of interpretive services and media. Use of other existing visitor facilities for purposes of interpreting the park and delivering visitor information would continue. Public programs would continue, with little expansion. Other programs, such as the proposed heritage program under Alternative 1, would most likely not occur or would attract substantially fewer visitors. There would be fewer cultural or educational tenants than in other alternatives, and tenant-based public programs, which would depend on the initiative of park tenants, would be minimal. This alternative would attract approximately 1.1 to 1.3 million recreational visitors annually. The Walt Disney Family Museum and YMCA Fitness Center would combine to attract approximately half of all visitors.

MITIGATION MEASURES

The following measures from the final PTMP EIS would ensure that visitor use at the Main Post is managed to address unacceptable impacts on park resources and visitors.

CO-4 *Limitations of Visitor Opportunities* The Trust will limit visitor opportunities to those that are suited and appropriate to the significant natural, historic, scenic, cultural, and recreational resources of the Presidio. Only those visitor activities that are consistent with the Trust Act and appropriate to the purpose for which the park was established will be allowed. The Trust will welcome tenants to provide activities consistent with these requirements.

CO-5 *Prohibitions on Visitor Uses* The Trust will prohibit visitor uses that would impair park resources or values, or interfere with NPS interpretive activities or other existing, appropriate park uses.

CO-6 *Management Controls* The Trust will impose management controls on visitor uses, if necessary, to ensure that the Presidio's resources are protected. If an ongoing or proposed activity would cause unacceptable impacts to park resources, adjustments will be made to the way the activity is conducted, including placing limitations on the activity, so as to eliminate the unacceptable impacts. Any restrictions will be based on professional judgment, law and policy, the best available scientific study or research, appropriate environmental review, and other available data. As visitor use changes over time, the Trust will decide if management actions are needed to keep use at acceptable and sustainable levels.

CO-7 *Special Events* The Trust will impose appropriate permit conditions for special events to ensure that park resources are protected.

CO-8 *Monitoring of Visitor Levels* The Trust will monitor visitation levels to ensure that park uses would not unacceptably affect Presidio resources. Visitor carrying capacities for managing visitor use will be identified if necessary.

REFERENCES

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3.10 Recreation

AFFECTED ENVIRONMENT

The following recreational facilities on the Main Post could be affected by the alternatives, including the mitigated preferred alternative.

Presidio Bowling Center (Building 93)

The 12-lane, public Presidio Bowling Center features a pro shop, a snack bar/grill, and bathrooms, and supports 10 adult and youth leagues. The Bowling Center, one of two remaining in San Francisco,[58] is open seven days per week. In 2007, the Bowling Center received approximately 90,000 visits (Presidio Bowling Center 2007).

Main Post Tennis Court

The Presidio Community YMCA tennis program is available for members of the YMCA and provides recreational tennis opportunities for children and adults through individual and group lessons, youth and adult league and tournament play, summer camp programs, and cardio-tennis exercise classes for tennis and non-tennis players. The recreational facilities of the Presidio Community YMCA are also used by the Bay School located in the Presidio for both team/league sports, and for physical education and general recreation. The YMCA tennis program receives approximately 28,800 visits per year (Presidio Community YMCA 2008).

The YMCA started with two United States Tennis Association (USTA) teams in 1998 and has built its program significantly over the years, increasing participation every year. The Presidio Community YMCA's tennis program supported 12 USTA tennis teams: Men's (three levels), Women's (three levels), Mixed Doubles' (two levels), Combo Doubles' (Men's two levels, Women's one level), and Seniors' (Women). The USTA teams compete with other teams hosted at public and private courts and clubs in San Francisco and south of the city. With an average of 20 players per team, there are approximately 240 active league tennis players in the Presidio.

The Main Post tennis court is one of six at the Presidio that are currently administered by the Presidio Community YMCA. The Bowling Center provides the only permanent restroom facility accessible to a YMCA-administered tennis court.[59]

Other nearby courts include those at Infantry Terrace and on Ruger Street. The four courts at the Julius Kahn Playground are managed by the City and County of San Francisco (Recreation and Park Department). There are

[58] *The other facility is the Yerba Buena Ice Skating and Bowling Center at Yerba Buena Gardens on the rooftop of the Moscone Center in downtown San Francisco.*

[59] *During scoping, several commentors noted that league and youth programs that the YMCA supports require the use of a bathroom facility in close proximity to a tennis court.*

an additional 128 free municipal tennis courts located at playgrounds, parks, and recreation centers throughout San Francisco, including four courts at Mountain Lake Park. Golden Gate Park has 21 courts that can be reserved for a nominal fee. San Francisco has approximately 63,000 adult tennis players and supporters and nearly 11,000 youth players (Schwartz 2007).

According to community members, tennis programs in the city lack consistency, offer little cohesion, and are not comprehensive enough to meet the needs of the diverse tennis community. In addition, the conditions of the courts throughout the city, and at Golden Gate Park in particular, show significant wear and require many updates to produce effective programs, enhance events, and create greater opportunity for play in the future. The Recreation and Park Department, the San Francisco Tennis Coalition, and the USTA have plans to re-build the tennis court complex in Golden Gate Park. The existing tennis court complex was tentatively planned for demolition during the summer of 2008, and the new tennis complex was intended to be completed by the summer of 2009, but with five fewer courts (16 total) than currently exist. To date, the project has not started.

ENVIRONMENTAL CONSEQUENCES

Methodology

For this analysis, each alternative was analyzed for potential impacts on recreational activities and use.

Alternative 1

The impact of this alternative on recreational activities and use is evaluated on page 297 of the final PTMP EIS. The analysis indicated that existing built recreational facilities at the Main Post, including the Presidio Bowling Center and tennis court, would remain open to the public, but others could be removed as needed to meet other planning objectives. The Trust would evaluate the potential for additional recreational facilities, and levels of use in balance with other park resource goals. Options for additional built facilities, indoors and outdoors, would be considered. Future planning efforts would further define compatible recreational activities and locations and would address the potential relocation of existing facilities or construction of new ones. Because no recreational facilities would be removed, no adverse effects are expected.

Alternative 2

This alternative would discontinue the current recreational use of the existing Bowling Center to accommodate another public use at the site. The Bowling Center could be relocated elsewhere within the Presidio subject to a Request for Proposals, the execution of a lease agreement, and site-specific environmental review. The popularity of bowling has consistently declined during the past few decades as other athletic interests claimed the public's attention.[60] There are about 5,600 bowling centers in the United States, a decrease from nearly 6,700 in 1996 (and from an all-time high of nearly 11,000 in 1962). Many of the closures were due to

[60] *According to bowl.com, the official web site of the United States Bowling Congress, which serves as the national governing body and membership organization for the sport of bowling.*

properties being more profitable when serving a different purpose, and not due to financial difficulties. The closing of the Presidio Bowling Center would follow this national trend that has been gradual but magnified in metropolitan areas. During the past 12 years, San Francisco alone has experienced the loss of 62 lanes of bowling, and only 12 lanes would remain with the Presidio Bowling Center's closure. Should the Bowling Center not be replaced, its removal would have an adverse effect on current users, whose needs would have to be met through other facilities within driving distance outside the Presidio boundaries.

In accordance with the Trust's vision to maintain or slightly increase the current number of playing fields, this alternative would include an athletic field near buildings 386 and 387. Parking would be available in the adjacent lot to support the use.

Alternative 3

This alternative would remove the existing Presidio Bowling Center and adjacent tennis court to accommodate the History Center. The associated impacts of removing the Bowling Center would be similar to those evaluated under Alternative 2.

The tennis court could be relocated to another site within the Presidio as funding permits and subject to site-specific environmental review. The YMCA tennis community has requested that one or more replacement courts be built according to USTA standards and include lights and restrooms. Should the tennis court not be replaced, its removal would have an adverse effect on current users, whose needs would have to be met through other facilities within the park.

Alternative 4

This alternative would retain the Presidio Bowling Center and adjacent tennis court for public use. Because recreational facilities would remain, no adverse effects are expected.

MITIGATION MEASURES

The following measure adapted from the final PTMP EIS would reduce impacts on recreational facilities.

CO-10 *Relocation or Replacement of Recreational Facilities* Should any recreational facilities need to be relocated in conjunction with other planning objectives, their relocation or replacement would be pursued during activity- or planning area-specific analyses.

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Schwartz, Dr. Terry G., Superintendent of Citywide Services. 2007. *A Business Plan for Tennis, An Opportunity to be World Class.* San Francisco Recreation and Park Department.

3.11 Water Resources

AFFECTED ENVIRONMENT

Water quality and storm drainage are described on pages 118 through 121 and 188 through 189 of the final PTMP EIS. Relevant portions of these descriptions are incorporated herein by reference and expanded upon as necessary.

Surface Hydrology and Storm Drainage

The Presidio has three major watersheds, the Northeast, West, and Southern, each comprised of drainage basins that are further divided into subbasin areas. Located within the Northeast watershed, the Main Post occupies a northward-sloping hillside that drains north to San Francisco Bay. Maximum elevation is approximately 250 feet in the south, descending to an elevation of around 10 feet at the northern district boundary. Roughly 40 percent of the 120 acres within the Main Post are occupied by buildings, paving, and other hardscape impervious surfaces. Figure 13 shows the various open space areas within the Main Post.

Unlike the City of San Francisco, the Presidio, with the exception of the Public Health Services district, has separate storm water and sanitary sewer systems. The Main Post district is divided among three drainage basins as defined by the 1994 Presidio Stormwater Management Plan (SMP) (Dames & Moore 1994). Drainage Basin D serves the eastern portion of the district, roughly the area east of Anza Street. Drainage Basin F serves the central portion of the district between Anza Street and Taylor Road, and the area south of Lincoln Boulevard. Drainage Basin G serves the area west of Taylor Street.

Storm Drainage System The drainage system serving the Main Post is comprised of several elements that work together to direct and convey surface runoff from undeveloped open space in the upper portions of the watershed, landscaping around buildings, parking areas, and roadways. Runoff from open space and landscaped areas flows overland to roadways (or other paved surface), or flows directly to receiving waters such as Tennessee Hollow. The Main Parade, a dominant feature within the Main Post, currently consists of seven acres of impervious area that is directly connected to the storm drain system. Open channels and curbs and gutters along roadways intercept runoff and convey it down-gradient to catchbasin (inlet) structures. From this point, a combination of storm drainage piping and larger open channels convey the runoff to the receiving waters. The three drainage basins serving the district discharge to San Francisco Bay, either directly or through Crissy Field marsh.

The stormwater drainage network serving the Main Post was constructed piecemeal as land was developed over many decades. In total the storm drain system serving the district includes more than 25,000 lineal feet of pipe ranging from 4 to 72 inches in diameter and more than 10,000 lineal feet of maintained open channels (lined and unlined).

As part of the 1997 Presidio Storm Drain Survey Report (1997 Survey Report) (Dames & Moore 1997), the district's system was evaluated for both capacity and structural deficiencies. Some of the recommended

improvements have been implemented while others are still pending. As discussed below, the outlets of the systems were upgraded as part of the Crissy Field plan. The balance of the recommendations would be done in conjunction with associated developments, if needed.

Drainage Basin Capacities Drainage Basin D, which drains the eastern portion of the district as well as portions of the Letterman and East Housing districts, has a 10-year design flow of 101.2 cubic feet per second (cfs). The 72-inch concrete pipe serving the basin has a capacity of 308 cfs, which is sufficient to handle the expected design flow. In an effort to restore habitat and increase natural infiltration, the Trust recently "day-lighted" the Thompson Reach located north of Lincoln Boulevard. The project consisted of removing approximately 500 lineal feet of 72-inch pipe and restoring the riparian corridor.

Drainage Basin F, which serves the central portion of the district, has a 10-year design flow of 72.1 cfs. The primary trunk system is 30-inch reinforced concrete pipe (RCP) and has a capacity of 77 cfs, which is sufficient to handle the expected design flow. As part of the Crissy Field plan, the outfall was reconstructed to discharge into the newly constructed marsh and was equipped with an oil/water separator.

Drainage Basin G, which serves the western portion of the district, has a 10-year design flow of 30.7 cfs. The 30-inch trunk line serving the basin was installed as part of the Crissy Field plan and has a design capacity of 44 cfs, which is sufficient to handle the expected design flow. The outlet is also equipped with an oil/water separator. The section of pipeline in Taylor Street was upgraded to 18 inches in 2006.

Wetlands

Wetlands within the Main Post are generally confined to the Tennessee Hollow and Infantry Terrace areas, where natural creeks have been largely eliminated and/or altered by past filling, grading, and construction, leaving only isolated segments of the riparian corridor. The Presidio wetland resources report (URS 2003) identified a wetland at Infantry Terrance, south of Building 387, which is the likely headwaters for the stream that originally flowed through the Main Post area. Wetland conditions were restored at Thompson Reach following a landfill remediation project in the area (former Fill Site 6A). Runoff from the Tennessee Hollow area flows north into Crissy Field marsh, located just north of Mason Street on San Francisco Bay.

Groundwater Hydrology

The quantity and quality of groundwater are highly dependent on the type and thickness of the geologic materials present. Groundwater at the Presidio occurs within Colma formation, dunes, Bay Mud, artificial fill, and Franciscan bedrock. The Main Post supports dune and beach sands and estuarine sediments. Subsurface data and a thorough understanding of the natural groundwater complexity of the Main Post are lacking. However, two of five test borings conducted south of the Main Parade encountered subsurface water at depths of approximately 19 and 25.5 feet below ground surface (bgs), corresponding to approximate Elevations 64 and 71 respectively (Treadwell & Rollo 2008). The measured water levels likely represent perched groundwater that may not be present year-round. Perched groundwater is water moving laterally and/or downward through sandy soils. This movement of subsurface or perched water is affected by less permeable clayey layers. The spring

identified in the Infantry Terrace area is a likely contributor of the perched groundwater. In general, geotechnical studies conducted in the Main Post area have identified the groundwater table to be located approximately 33 feet bgs at the north end of the Main Parade and 43 to 50 feet bgs at the southern end (Treadwell & Rollo 2007 and Olivia Chen Consultants 1999).

Water Quality

The Presidio has implemented and is operating under the 1994 SMP, which includes a detailed Stormwater Pollution Prevention Plan (SWPPP) that outlines erosion prevention and sedimentation control measures used by the Presidio to avoid contamination of storm drains and surface water resources. The SMP is being updated to reflect changes in stormwater routing and new National Pollutant Discharge Elimination System (NPDES) Phase II stormwater permitting requirements.

NPDES regulates stormwater discharges from municipal separate storm sewer systems (MS4s). Under these regulations the Presidio is identified as a Non-traditional Small MS4 facility. The Presidio and other facilities with the same classification are not currently designated for coverage under the NPDES Phase II program. However, the Regional Water Quality Control Board (RWQCB), which administers the NPDES permit program, will likely require the Trust to seek coverage under the NPDES Phase II program. Consequently, the SMP update will be based on the six minimum measures identified in the Phase II program. The six minimum measures are:

1. Public Education and Outreach
2. Public Participation/Involvement
3. Illicit Discharge Detection and Elimination
4. Construction Site Runoff Control
5. Post-Construction Runoff Control
6. Pollution Prevention/Good Housekeeping (U.S. EPA 2005)

ENVIRONMENTAL CONSEQUENCES

Methodology

This analysis follows the same methodology used in the final PTMP EIS to assess impacts on water quality and storm drainage. As discussed below, impacts on water quality and storm drainage directly relate to changes in impervious surfaces. For the alternatives, the increase or decrease in impervious surface and resultant change in stormwater runoff were estimated. The analysis in the final PTMP EIS only considered the impacts of new construction. The analysis below includes new construction along with planned improvements to the Main Parade consistent with the Main Parade EA and the construction of surface parking lots throughout the Main Post. Underground parking beneath new buildings and below-grade portions of new construction are not included in the calculation of impervious surface, as the change in impervious surface that corresponds to the parking and below-grade portions of buildings is included in the new construction square footage estimate.

In general, development increases the amount of impervious surfaces. Potential impacts due to displacement of vegetated soil with buildings, walk areas, parking lots, and roadways include:

- Reduced opportunity for rainfall and any associated runoff to infiltrate into the underlying vegetated soil strata, where it can be treated by the root/soil matrix and associated microbial action;
- Increased rate of stormwater flow discharged to stormwater collection and conveyance systems and their downstream receiving waters, which can cause erosion; and
- Increased opportunities for stormwater to pick up pollutants.

This combination of effects results in a larger volume of stormwater discharged at a faster rate with a higher pollutant load, all of which can negatively affect the quality of receiving waters.

Effects of higher pollutant loads on receiving water quality include:

- Higher turbidity from soil erosion due to insufficient use of Best Management Practices (BMPs) during construction activities;
- Algal blooms and similar effects from transport of nutrients from yard and garden fertilization;
- Water-borne pathogens and emerging pollutants from human and animal wastewater discharges; and
- More recently, parasite-borne diseases and viruses (e.g., West Nile Virus carried by mosquitoes).

Stormwater runoff from unprotected disturbed areas can become concentrated and cause erosion and/or undermining of vegetation root systems, resulting in slope instability and loss of soil. Implementing BMPs that discourage sheet flow reduces velocities and flow rates to levels that storm drain infrastructure can handle more effectively. As stormwater infiltrates before discharging to receiving waters, it can be treated, and pollutants, including pathogens and nutrients, can be removed.

Transport of pollutants to receiving waters occurs primarily during the more frequent smaller rainfall events. These events, generally referred to as “first flush” events, transport the pollutants that have accumulated on buildings and paved surfaces since the last rainfall event. The amount of pollutants picked up and transported by stormwater runoff during first flush events is disproportionately large when compared with larger less frequent rainfall events. For this reason, BMPs generally focus on capturing the first flush and treating the stormwater and associated pollutants before allowing transport to receiving waters. Appendix C includes a list of BMPs appropriate for the Main Post and guidance on their selection, design, and implementation (URS 2008). These post-construction BMPs were selected to comply with post-construction runoff control requirements of the Phase II NPDES permit.

Alternative 1

The final PTMP EIS analyzed impacts on water quality and storm drainage on pages 240 to 246 and 335 to 341. Tables 26 and 27 summarize the change in impervious surfaces and stormwater runoff from existing conditions under Alternative 1 and the other alternatives. With the rehabilitation of the Main Parade, there would be an overall decrease in impervious area within the district, which would reduce the

27 CHANGES IN IMPERVIOUS AREA WITHIN THE MAIN POST

	Alternative 1	*Alternative 2*	*Alternative 3*	*Alternative 4*
BUILDINGS (square feet)				
New Construction	110,000	147,000	77,000	26,000
Demolition	-44,000	-94,000	-64,000	-34,000
Change	66,000	53,000	13,000	-8,000
PARKING LOTS (square feet)				
Existing	481,000	481,000	481,000	481,000
Proposed[2]	575,000	510,000	453,000	587,000
Change	94,000	29,000	-28,000	106,000
MAIN PARADE (square feet)				
Change	-269,000	-269,000	-269,000	-269,000
TOTAL CHANGE IN IMPERVIOUS SURFACE	**-109,000**	**-187,000**	**-284,000**	**-171,000**

Source: Presidio Trust 2010

[1] *Assumes that all demolition and new construction would be single-story structures.*

[2] *Excludes underground and garage parking because it is assumed that underground parking would be beneath buildings or would have a single level of exposed parking that has been incorporated into the analysis. See Table 16.*

28 CHANGES IN STORMWATER RUNOFF WITHIN THE MAIN POST

	Alternative 1	*Alternative 2*	*Alternative 3*	*Alternative 4*
Change in Impervious Area (acres)[1]	-2.50	-4.29	-6.52	-3.93
Change in Runoff (cubic feet per second)[2]	-1.81	-3.10	-4.71	-2.84

Source: Presidio Trust 2010

[1] *Refer to Table 27 for a summary of the change in impervious area expressed in square feet.*

[2] *Change in runoff (Q) expressed in cubic feet per second (cfs) was derived from Q=CiA with runoff coefficient C equal to 0.85, rainfall intensity i equal to 0.85 inch/hour, and A equal to area of watershed in acres.*

overall storm runoff relative to the current conditions. Refer to Figure 3. (Alternative 1: Circulation and Parking) for the locations of parking lots for Alternative 1. New surface parking lots could degrade surface water quality by increasing the concentration of pollutants such as oils, lubricants, grease, sediment, and other pollutants commonly contained in urban runoff unless properly controlled. Implementation of structural and operational BMPs would address potential impacts from new parking lots. The existing trunk systems serving the district have sufficient capacity to accommodate the expected flows. Smaller local systems would be upgraded to correct deficiencies identified in the 1997 Survey Report and to facilitate connection to new development.

The resulting changes to hydrology, groundwater, and wetlands under this alternative would not be appreciable. As required by PTMP EIS Mitigation Measure NR-16/19 *Stormwater Control*, proponents would develop and implement post-construction BMPs (see Appendix C) appropriate for individual project sites to reduce runoff and protect water quality. BMPs that would be used to treat stormwater include infiltration-based features (disconnected downspouts, vegetated swales, bioretention areas, shallow open infiltration area), underground exfiltration trenches, porous pavements, retention and detention ponds, and created wetlands. Structural BMPs such as treatment manholes and oil/water separators would also be used. Additionally, as required by PTMP EIS Mitigation Measure UT-6 *Stormwater Drainage System Upgrades*, necessary upgrades to the stormwater drainage system would be completed in advance of post-construction impacts.

Short-term construction activities, such as excavation, grading, and stockpiling of soil, could also degrade the quality of surface water. As required by PTMP EIS Mitigation Measure NR-15 *Stormwater Pollution Prevention*, construction site operators would prepare a Stormwater Pollution Prevention Plan (SWPPP) for projects requiring NPDES permit

coverage for their stormwater discharges. The SWPPP would identify potential pollutant sources that could affect the quality of runoff, and identify and implement BMPs to reduce pollutants in stormwater discharges from the construction site. Control measures could include construction of detention structures, installation of siltation fencing, appropriate grading practices, dust control, soil stabilization, and temporary seeding. The SWPPP would specify a monitoring program to monitor storm drain runoff at construction sites. Compliance with the requirements of the Clean Water Act through the SWPPP would prevent stormwater contamination and control sedimentation and erosion.

Alternative 2

Compared to existing conditions, this alternative would decrease the amount of impervious surface by approximately 187,000 square feet, resulting in a decrease in runoff of approximately 3.10 cfs (see Table 28). This runoff decrease would be 1.29 cfs greater than the 1.81-cfs decrease under Alternative 1 (see Table 28). Refer to Figure 6 (Alternative 2: Circulation and Parking) for the locations of parking lots in Alternative 2. The existing trunk systems serving the district would have sufficient capacity to accommodate the expected flows. Smaller and local systems would be upgraded to correct deficiencies identified in the 1997 Survey Report and to facilitate connection to new development. Construction of new surface parking lots could degrade surface water quality unless properly controlled using BMPs (as required by PTMP EIS Mitigation Measures NR-15 and NR-16/19).

Similar to Alternative 1, the resulting changes in hydrology, groundwater, and wetlands would not be appreciable. PTMP EIS Mitigation Measure NR-16/19 *Stormwater Control* requires projects to develop and implement Stormwater Control Plans that include post-construction BMPs appropriate for the sites (see Appendix C) to reduce runoff and protect water quality. Additionally, as required by PTMP EIS Mitigation Measure UT-6 *Stormwater Drainage System Upgrades*, necessary upgrades to the stormwater drainage system would be completed in advance of post-construction impacts.

This alternative proposes construction of underground parking at the lodge site (to be located at the current Building 34 site) and at the north end of the district. According to geotechnical investigations done near the lodge and Bowling Center sites, groundwater is expected to be approximately 50 feet below the ground surface. The investigations also encountered perched groundwater at approximately 19 to 26 feet below the ground surface. Below-grade improvements are not expected to extend into the groundwater but would likely encounter the perched groundwater. If encountered, new below-grade structures would inhibit the current flow path of the perched groundwater. These impacts are expected to be localized, however, as the perched groundwater would migrate around the below-grade structure. A permanent active dewatering system is not expected to be required. An active dewatering system consisting of a series of wells would likely be necessary during excavation. Any groundwater encountered during construction would be subject to the requirements in Mitigation Measure NR-26 *Groundwater Discharge*, requiring that groundwater meet specific water quality standards before if may be discharged into the sewer system.

Construction of underground parking at the north end of the district would likely affect groundwater. As no design has been developed for the underground parking facility, additional site-specific analysis and environmental review would be required to assess site-specific impacts

on groundwater resources. Based on information developed for the Doyle Drive tunnel within the bluff area, underground parking in this area would most likely contain standard drainage features (i.e., a permeable gravel envelope or strip drains) around the structure so that groundwater would be expected to flow from the northern upgradient areas, under the parking, and toward the bay without being impeded. In addition to any requirements identified in the site-specific analysis, groundwater encountered during construction would be subject to the requirements in Mitigation Measure NR-26 *Groundwater Discharge.*

The proposed athletic field located south of Building 386 would be in the vicinity of the wetland identified in Infantry Terrace. The location and design of the athletic field would be modified to avoid impacts on the wetland.

Alternative 3

This alternative would decrease the amount of impervious surface over existing conditions by approximately 284,000 square feet (see Table 27), resulting in a decrease in runoff of approximately 4.71 cfs (see Table 28). This runoff decrease would be 2.90 cfs greater than the 1.81-cfs decrease under Alternative 1. Refer to Figure 9 (Alternative 3: Circulation and Parking) for the locations of parking lots for this alternative. Similar to Alternative 1, the existing trunk systems serving the district would have sufficient capacity to accommodate the expected flows. Smaller and local systems would be upgraded to correct deficiencies identified in the 1997 Survey Report and to facilitate connection to new development. Construction of new surface parking lots could degrade surface water quality unless properly controlled using BMPs.

This alternative proposes underground parking at the history center. Similar to Alternative 2, below-grade improvements are not expected to extend into the groundwater (approximately 50 feet below the ground surface) but would likely encounter perched groundwater (approximately 19 to 26 feet below ground surface). A permanent active dewatering system is not expected to be required. Any groundwater encountered during construction would be subject to the requirements in Mitigation Measure NR-26 *Groundwater Discharge.*

Similar to Alternative 1, short-term construction activities, such as excavation, grading, and stockpiling of soil, could degrade the quality of surface water. PTMP EIS Mitigation Measure NR-15 *Stormwater Pollution Prevention* would require construction site operators to prepare a SWPPP to prevent stormwater pollution.

Alternative 4

Under Alternative 4, no new construction would take place beyond the projects built or permitted to date. Compared to existing conditions, this alternative would result in a 171,000-square-foot reduction of impervious surface (see Table 27) and a 2.84-cfs reduction in stormwater runoff (see Table 28). This runoff decrease would be 1.03 cfs greater than the 1.81-cfs decrease under Alternative 1 (see Table 28).

MITIGATION MEASURES

The following PTMP EIS mitigation measures would be implemented to minimize or avoid potentially adverse effects related to hydrology, wetlands, and water quality.

NR-15 *Stormwater Pollution Prevention* The construction site operator will develop a Stormwater Pollution Prevention Plan (SWPPP) that provides for temporary measures to control sediment and other pollutants during construction.

NR 16/19 *Stormwater Control* The project civil engineer will develop a Stormwater Control Plan to minimize site imperviousness, control pollutant sources, and incorporate treatment and flow-control facilities that retain, detain, or treat runoff. The Stormwater Control Plan will meet the requirements of the NPDES Phase II permit for Post-Construction Runoff Control and incorporate as appropriate the post-construction BMPs included but not limited to those in Appendix C.

UT-6 *Stormwater Drainage System Upgrades* The Trust will make necessary infrastructure upgrades to the stormwater drainage system to ensure that adequate system capacity is provided and also to correct existing operational problems.

In addition, the following new mitigation measure would be implemented.

NR-26 *Groundwater Discharge (new)* If dewatering is necessary during construction, pumped groundwater will be retained in a holding tank to allow suspended particles to settle and testing as required prior to discharging to either the sewer system or storm drain system. If additional treatment is required, project civil engineers will follow the recommendations of the geotechnical engineer or environmental remediation consultant, in consultation with the Trust and in compliance with appropriate standards regarding treatment of pumped groundwater prior the discharge to either the sewer system or storm drain system. Prior to discharging to the storm drain system, the project civil engineer will determine whether a permit from the Regional Water Quality Control Board (RWQCB) under a general NPDES dewatering permit is required.

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3.12 Cumulative Impacts

SUMMARY OF FINAL PTMP EIS CUMULATIVE IMPACT ANALYSIS

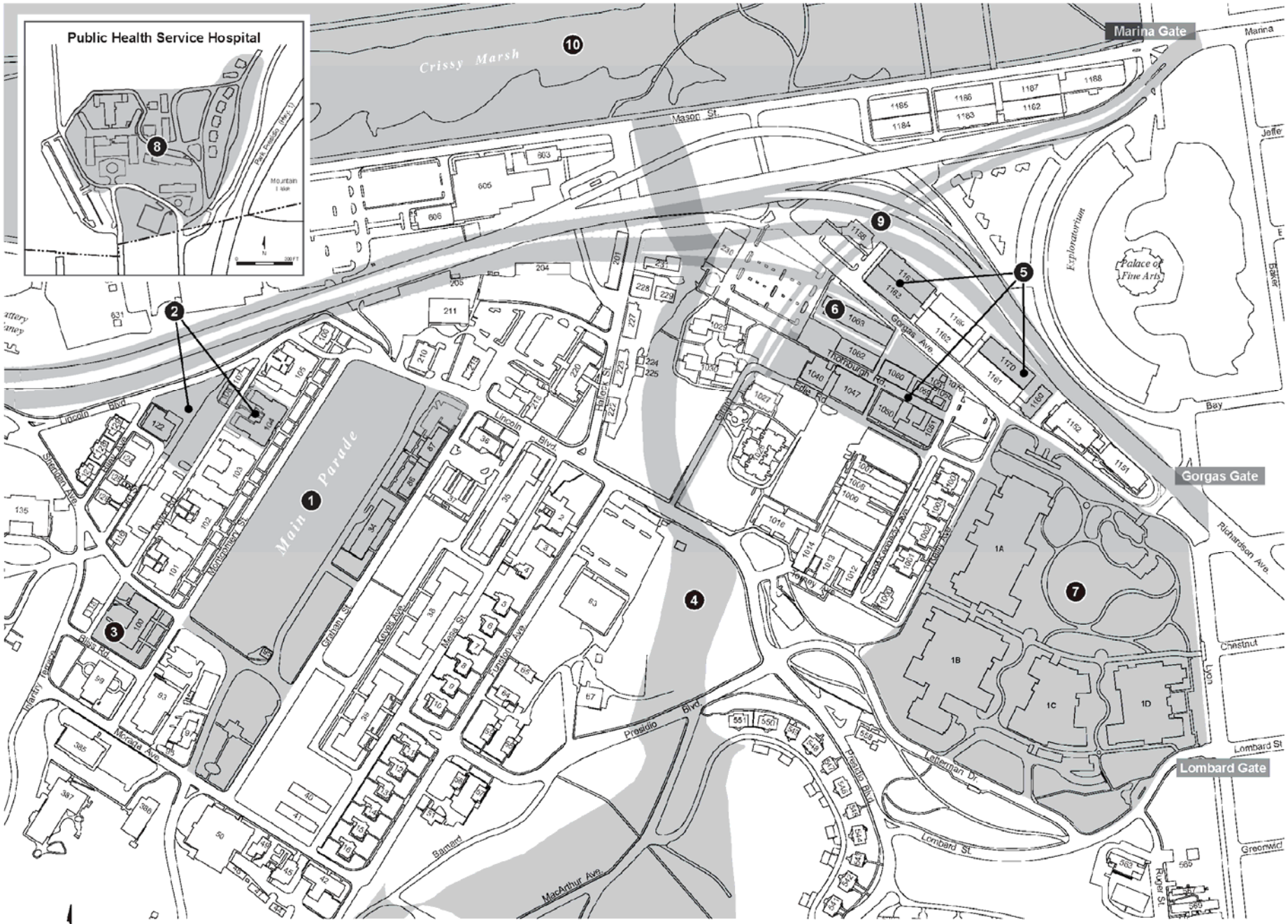
The cumulative impacts[61] of development on the Main Post and other districts within the Presidio were analyzed on pages 363 through 375 of the final PTMP EIS. Table 60 on page 364 of the final PTMP EIS, which provided the context for the discussion, enumerated 21 past, present, and reasonably foreseeable actions, including projects by other agencies (NPS; United States Fish and Wildlife Service; Golden Gate Bridge, Highway and Transportation District; and the City and County of San Francisco) that were specifically considered in the analysis. Background growth was also considered in the analysis. Actions were chosen for analysis based on their proximity to the Presidio, their potential to affect the same resources that could be affected by implementation of the PTMP, and the likelihood of their occurrence. The actions were identified by consulting with various agencies within a project impact zone (which varied for each resource) and investigating their actions in the planning, budgeting, or execution phase. In some cases, cumulative impacts were also compared to appropriate national, state, regional, or community goals to determine whether the total impact would be significant. In all but one of the 25 resource topics that were analyzed, the analysis in the final PTMP EIS determined that cumulative impacts would not be significant and that the resources of concern would not be degraded. Cumulative air quality impacts were found to be potentially significant due to contributions from regional growth (i.e., not due to localized air quality impacts). Development within the Main Post district would contribute to the referenced cumulative impacts. No mitigation measures for cumulative impacts have been previously identified.

[61] *"Cumulative impact" is defined in CEQ's NEPA regulations as the "impact on the environment that results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions ..." (40 CFR 1508.7).*

CUMULATIVE ACTIONS AND RESOURCES AFFECTED

The Trust found the following actions relevant to the cumulative impact analysis because they could have a significant cause-and-effect relationship with the direct and indirect effects of the mitigated preferred alternative (Alternative 2) as well as with other alternatives. These actions are shown in Figure 37.

- Rehabilitation of the approximately 100-acre portion of Crissy Field north of Mason Street (Area A), including removal of 32 historic buildings for the restoration of historic military airfield elements and reintroduction of ecological systems as analyzed in the NPS Crissy Field Plan EA (1996), and, most recently, the relocation of the Crissy Field Center (CFC) to the eastern edge of Crissy Field (Area A) as outlined in the NPS CFC Temporary Relocation Impact Assessment (2009).



Source: Presidio Trust 2010

1. Main Parade
2. Walt Disney Family Museum
3. International Center to End Violence
4. Tennessee Hollow
5. Thornburgh Buildings
6. Presidio Water Recycling Plant
7. Letterman Digital Arts Center
8. Public Health Service Hospital (inset)
9. Doyle Drive
10. Crissy Field (Area A)

- Improvements to the Main Parade as analyzed in the Trust's Main Parade EA (2007a).
- Rehabilitation and new construction at Buildings 104, 122, and 108, as analyzed in the Trust's Walt Disney Family Museum EA (2006a).
- Rehabilitation and new construction at Building 100, as analyzed in the Trust's International Center to End Violence EA (2007b).
- Revitalization of up to 28 acres within Tennessee Hollow, including creek and habitat restoration, new trails, an interpretative garden, reorganization and rehabilitation of playing fields, picnic areas, and other visitor amenities such as a public restrooms, as analyzed in the Trust's Tennessee Hollow Upper Watershed Revitalization Project EA (2007c). Also, creek restoration within the northernmost (lowest) end of Tennessee Hollow known as the Quartermaster Reach, as analyzed in the Trust's Quartermaster Reach EA (2010).
- Rehabilitation of 12 historic Thornburgh buildings, and associated roadway, parking, and landscape improvements in the 37-acre Thornburgh area within the portion of the Letterman district known as West Letterman, as noticed in the Trust's Letter of Intent to Initiate Public Scoping and Prepare an EA (2007d).
- Rehabilitation of Building 1063 for the Presidio water recycling plant at East Letterman, as analyzed in the Trust's Presidio Water Recycling Project EA (2002).
- Development of the Letterman Digital Arts Center (LDAC) at West Letterman, as analyzed in the Trust's Final SEIS for New Development and Uses on 23 Acres within the Letterman Complex (2000) and updated to reflect new information bearing on the action or its impacts.
- Removal of the non-historic "wings" of Building 1801, together with other non-historic buildings and additions, and rehabilitation of Building 1801 and other historic buildings for residential use within the 18-acre Public Health Service Hospital complex, as analyzed in the Trust's Final SEIS for the Public Health Service Hospital at the Presidio of San Francisco (2006b).
- Reconstruction of Doyle Drive based on the preferred Presidio Parkway alternative, as analyzed in the San Francisco County Transportation Authority's Final Environmental Impact Statement/Report (EIS/R) and Final Section 4(f) Evaluation for Doyle Drive, South Access to the Golden Gate Bridge (2008).

CONTRIBUTION OF MITIGATED PREFERRED ALTERNATIVE AND OTHER ALTERNATIVES TO CUMULATIVE IMPACTS

Overall, the incremental impacts associated with the mitigated preferred alternative, as well as with all other alternatives, are not expected to be significant, with the possible exception of historic resources and archaeology. In several instances, the incremental contribution of the mitigated preferred alternative and other alternatives to the cumulative impact on the Main Post and Presidio would be neutral or beneficial. Specific resources that were identified through the scoping process, and/or that may be affected by these cumulative actions, include the following: land use, transportation, parking, air quality, noise, historic resources, archaeology, visual resources, visitation, recreation, and water resources. The following analysis generally focuses on the mitigated

preferred alternative and on cumulative impacts within the Main Post. The other alternatives and districts are also discussed where relevant to reasonably foreseeable, significant cumulative impacts, and where essential to a reasoned choice among alternatives.

Land Use

By accommodating a variety of land uses, removing pavement, and demolishing buildings at the Main Post, the cumulative actions would result in substantially more open space of higher quality than exists today, with only a slight increase in the overall building square footage. Overall, improvements at the Main Parade and El Presidio, restoration of the Tennessee Hollow stream corridor (including Quartermaster Reach), and reconstruction of Doyle Drive represent considerable physical changes to the Main Post's built environment, expanding open space by approximately 70 percent, from 28 acres to 48 acres. Removing large parking areas (Main Parade and El Presidio), redesigning and partial tunneling of the Doyle Drive corridor (Doyle Drive), and removing underground pipes and lined channels along the creek system (Tennessee Hollow and Quartermaster Reach) would substantially alter land use patterns. The projects would provide a more park-like setting at those sites by restoring native plant habitat, enhancing the historic setting, and creating more outdoor recreational space. Due to the cumulative actions, building space at the Main Post would increase by approximately 5 percent to a maximum of 1.215 million square feet under Alternative 1, the PTMP alternative, 14,000 square feet more than under Alternative 2, the mitigated preferred alternative. However, none of the new building area due to the cumulative actions would conflict with adjacent building or land uses or compromise the nature and character of the Main Post, the Presidio at large, or surrounding neighborhoods.

Transportation

The transportation impact analysis presented in Section 3.3 identifies the combined effect of PTMP and updated Main Post assumptions along with changes to land uses elsewhere in the Presidio and projected regional growth, and thus inherently provides a cumulative analysis of future (2030) transportation conditions. Updated assumptions for other parts of the Presidio include:

- Updated trip generation data for the Letterman Digital Arts Center that reflect subleases for restaurant and office space;
- Updated information for the Thornburgh area at West Letterman that reflects the currently planned uses;
- Updated projections for the East Housing district that reflect the restaurant on Ruger Street; and
- Updated projections for the West Crissy Hangar Complex that reflect the specific uses recently added.

Growth in traffic volumes projected for the area, including that which is projected for Alternative 2, would have an impact on the operation of local intersections. Mitigation measures adopted both as part of the final PTMP EIS and the final SEIS, however, would improve intersection operations to acceptable levels under cumulative conditions.

Following implementation of any of the alternatives, the Main Post would account for a large portion of the vehicle trips generated by

activities in Area B of the Presidio, including the cumulative actions.[62] Under Alternative 2, the Main Post would contribute 31 percent of the daily person and vehicle trips generated by Area B. Compared to Alternative 1, the additional PM peak hour vehicle trips generated by Alternative 2 would represent a 10-percent increase in PM peak hour traffic generated by Main Post uses and ultimately a 3-percent increase in future PM peak hour traffic generated throughout the Presidio (Area B).

The transportation network outside the Presidio was assumed to be that presented in the latest San Francisco County Transportation Authority (SFCTA) model, which includes Doyle Drive. However, there are foreseeable modifications to the transportation network in San Francisco that could potentially affect transportation conditions in the Presidio. The San Francisco Municipal Transportation Agency (SFMTA) Transit Effectiveness Project (TEP) proposal includes terminating all 29-Sunset service at Baker Beach in the Presidio, eliminating 82X service to/from the Presidio, rerouting the 43-Masonic service to connect to the Presidio Transit Center, terminating 28 service at the Golden Gate Bridge, extending 28L service to Van Ness Avenue, and eliminating the Golden Gate Bridge toll plaza stop from the 28L route. Some of these changes were implemented in December 2009, but if the TEP changes for the 28, 28L and 43 routes are implemented, Presidio-based ridership on the 43-Masonic route may increase. Extension of the 28L route into the Marina and increased frequency on this route also may make transit a more attractive transportation mode between the Richmond and Marina neighborhoods and therefore potentially reduce the amount of pass-through traffic in the park.

The SFCTA is developing a number of projects that could also potentially affect transportation conditions in the Presidio, although there is not yet a study or analysis of these projects that provides sufficient details to understand the potential impact of these projects or of the TEP:

- Environmental analysis of the Van Ness Avenue Bus Rapid Transit (BRT) project was initiated in March 2007 with a scoping period held in September and October 2007. Preparation of the draft EIR/S for the Van Ness Avenue BRT is currently underway and scheduled to be released in late 2010.
- The Geary Boulevard BRT NEPA Environmental Impact Statement (EIS) and California Environmental Quality Act (CEQA) Environmental Impact Report (EIR) scoping comment period concluded in December 2008. Preliminary engineering is expected to be complete in 2011.

The potential for any of the actions within the alternatives to coincide with construction or implementation of other cumulative actions would increase the likelihood that Presidio residents, visitors, and employees may experience temporary traffic delays and other inconveniences (such as noise) associated with construction activities and would need to use other roadways in the Presidio to reach their destinations. The potential for increased delay and congestion would depend on the timing of construction activities associated with each project. The contribution of

[62] *The level of activity in Area A of the Presidio is generally expected to remain unchanged, although the level of activity in Crissy Field (Area A) is expected to increase slightly due to the planned expansion of programs and activities at the Gulf of the Farallones National Marine Sanctuary. The effect of the modest increase in traffic traveling to and from Area A would be negligible compared to the 2030 transportation conditions described in Section 3.3 of the final SEIS.*

the proposed Main Post actions to these cumulative effects would be minimized through preparation and implementation of construction traffic management plans for individual projects. Additional measures would also be implemented to eliminate or reduce potential impacts (such as public awareness campaigns and increased transit service). At a minimum, in each case, detour and/or other signs would be posted to inform drivers of conditions. Certain areas within the Main Post would be used for construction staging, and people coming to the Presidio may have to park farther away from their destinations.

Parking

Alternatives 2 and 3 would provide sufficient parking within the Main Post district to accommodate expected demand. Alternatives 1 and 4 would have a parking deficit. Under Alternatives 1 and 4, motorists may find parking in the nearby Crissy Field or Letterman planning districts, and make parking more difficult to find in those districts. The Crissy Field district is adjacent to Area A, and spillover effects crossing the Area A/B jurisdictional boundary would be addressed through PTMP EIS Mitigation Measure TR-21 *Presidio-Wide Parking Management.*

Some special events would generate additional cumulative demand for parking beyond that of a typical weekday. Under all alternatives, some excess supply would be available on weekends to accommodate special events. As required by PTMP EIS Mitigation Measure TR-24 *Special Event Parking Management*, special events would need to be scheduled and coordinated according to parking availability and events would be regulated to ensure the adequate parking supply is available to meet cumulative demand.

As required by PTMP EIS Mitigation Measure TR-19 *TDM Program Monitoring*, the Trust would implement a transportation demand management (TDM) program within the district and throughout the Presidio to reduce automobile usage and associated parking demand by all tenants, occupants, and visitors. The availability of alternative transportation modes and the Trust's TDM program provide mitigation measures for these potential indirect environmental effects. The Trust would monitor implementation and effectiveness of the TDM program on an ongoing basis. If TDM goals are not being reached, the Trust would implement more aggressive strategies or intensify components of the existing program, such as requiring tenant participation in more TDM program elements, increasing parking fees, and providing more frequent and/or extensive shuttle service.

Air Quality

None of the alternatives would be inconsistent with the most recent Clean Air Plan (CAP) or cause significant regional air emissions beyond those that were anticipated under the PTMP. Regional growth, land use trends, and transportation projects that are outside the control of the Trust, however, could exceed the levels assumed in the CAP. These projects must be considered in conjunction with PTMP-related growth when assessing cumulative effects. Therefore, the analysis of cumulative effects in the final PTMP EIS determined that cumulative air impacts would be significant. Cumulative actions within the Main Post district would contribute to regional growth but not significantly to localized air quality impacts.

Localized air quality impacts and carbon monoxide (CO) concentrations are based on traffic volumes that combine project traffic with

background traffic, which is projected to increase over time. In this way, this analysis takes into consideration cumulative effects on local air quality. Air quality impacts from motor vehicle emissions and other operating-phase emissions (see Table 21) would contribute to ongoing violations of federal or state ambient air quality standards for ozone, particulate matter less than 10 microns in diameter (PM10), and particulate matter less than 2.5 microns in diameter (PM2.5) in the region. Cumulative emissions under Alternative 2 would cause no more than about 15 pounds per day of ROG, NOx, PM10, or PM2.5 (net of Alternative 1 in Table 21) in addition to those anticipated under the PTMP. To minimize the cumulative effects of these emissions, the Trust would ensure that all alternatives would be consistent with the regional CAP by requiring implementation of the TDM program (PTMP EIS Mitigation Measure NR-21). Additionally, any new stationary sources associated with the alternatives would either be exempt from or subject to Bay Area Air Quality Management District (BAAQMD) permitting regulations and requirements, which would ensure consistency of those emissions with the State Implementation Plan (SIP) and CAP.

Short-term emissions from construction activities could cause cumulative air quality effects if other nearby projects were to be under construction at the same time. Improvements to the Main Parade and other rehabilitation or new construction in the Main Post district would contribute additional construction-related emissions. In the vicinity of the Main Post district, reconstruction of Doyle Drive would cause dust and construction equipment exhaust simultaneously with demolition or construction phases of actions being considered under the alternatives. Implementing the measures specified in the final Doyle Drive EIS/R and the final PTMP EIS would be part of project implementation and would reduce the cumulative impacts of construction dust and exhaust emissions.

Noise

Noise from Main Post district development, including construction/demolition activity and operational traffic noise, would coincide with ongoing use and occupation of the park. Noise from other construction projects, such as the reconstruction of Doyle Drive, would combine with construction/demolition noise from Main Post development. There may be times when construction noise could interfere with indoor activities in nearby uses adjacent to project sites. Noise impacts could be intermittently disruptive or annoying to persons nearby, but, they would be temporary in nature and limited to the period of construction. All construction activities would be conducted in compliance with the San Francisco Noise Ordinance (Article 29 of the San Francisco Police Code), which prescribes working times, types of construction equipment to be used, and permissible noise emissions.

Reconstruction of Doyle Drive would result in potential construction noise impacts on the north end of the Main Post. Occurring over a period of multiple years, construction noise would be intermittent, and the level would vary depending on the type, location, and length of the activity. Construction would cause noise levels of 70 to 80 dBA at a distance of 100 feet and range from the mid- to upper-80s dBA at locations within 100 feet of the project construction limits. Construction equipment would operate in a limited area and then move along the alignment until the completion of the project. Implementing the measures specified in the final Doyle Drive EIS/R and the final PTMP EIS would reduce negative noise effects. Doyle Drive reconstruction is not expected to

create any permanent noise impacts, as traffic noise would not differ noticeably from present conditions and may improve.

The cumulative effects of other foreseeable changes in traffic noise were analyzed in the final PTMP EIS (page 369) and were found to be minor. Various locations, including areas along Lincoln Boulevard, the San Francisco National Cemetery, and the residences along Riley Avenue nearest to Sheridan Avenue, would experience increased noise from traffic generated by cumulative actions. Cumulative peak hour traffic noise at entry gates where the PTMP anticipated 67 to 69 dBA (Lombard and Presidio gates) would be limited to less than a one-decibel increase. While traffic volumes would increase noise above background levels, the increase would not be substantial (i.e., would not exceed applicable standards) and would not warrant mitigation (except the current practice of enforcing noise insulation requirements equivalent to the standards of Title 24 to provide an acceptable interior noise environment following building rehabilitation or new construction). The Trust would review final building plans to ensure that building walls, floor/ceiling assemblies, and windows meet the standards regarding sound transmission.

Historic Resources

The actions of the mitigated preferred alternative (Alternative 2) and Alternative 3 have the potential to affect the National Historic Landmark District (NHLD). With the exception of the removal or relocation of Buildings 40 and 41, the majority of the projects would not have significant impacts – and many, such as building and landscape rehabilitation would have beneficial impacts.

The alternatives would contribute to the overall level of change within the NHL since the writing of the 1993 NHL update, inclusive of projects planned within the foreseeable future. Since 1994, two major projects have been executed, and a third has been recently initiated, in the northeastern quarter of the Presidio. The rehabilitation of Crissy Field (completed in 2001) removed 32 historic buildings to restore earlier historic and natural features and to introduce parking for recreational activities. The construction of the Letterman Digital Arts Center (completed in 2005) replaced non-historic buildings and a large parking lot with compatibly designed new buildings and landscape. The replacement of Doyle Drive (which began construction in 2009) will replace the historic elevated roadway with a new parkway, remove historic buildings and streets, and alter the appearance of the existing bluff to accommodate the parkway. All three of these projects have had or will have impacts on the NHLD due to removal of contributing resources and the introduction of new buildings. Two alternatives would contribute to this cumulative impact by removing or relocating three historic buildings (Alternative 2) and two historic buildings and a historic structure (Alternative 3), and adding new elements that would change the appearance of the Main Post.

The Main Post is important as the only area of the Presidio that includes all eras of history as well as the original resource that resulted in the designation of the Presidio as an NHLD (El Presidio archaeological site). Alteration or removal of the qualities that chronicle the history of this area have the potential to adversely affect the NHLD as a whole, which would constitute a significant impact. The sum of the cumulative actions described below, including Crissy Field rehabilitation, the Letterman Digital Arts Center, the Doyle Drive replacement, as well as the analyzed

alternatives, would cumulatively alter the appearance and character-defining elements in large areas of the NHLD.

Implementation of project parameters, district-wide and site-specific design guidelines, and other stipulations resulting from Section 106 consultation would ensure that new construction is compatible with the historic district, minimizing impacts on the historic scene. Future proposals would adhere to PTMP EIS Mitigation Measure CR-4 *Future Planning to Guide Demolition and New Construction* to ensure that appropriate analysis is undertaken and public input considered to protect the NHLD. These cumulative impacts on historic resources are discussed in more detail below.

Establishing Cumulative Adverse Effect on the National Historic Landmark District One of the first requirements of the federal regulation (36 CFR 800 Protection of Historic Properties) implementing Section 106 of the National Historic Preservation Act (NHPA) is to determine and document the Area of Potential Effects (APE) for each project or undertaking that a federal agency proposes. Establishing an APE includes consideration of a broad range of effects (e.g., construction disturbance or physical changes to character-defining elements, or the introduction of new elements into an historic district). Multiple projects or undertakings occurring in the same planning area would have, at a minimum, overlapping APEs and more likely all projects would have the same APE. It was determined in previous environmental reviews (Main Parade EA and International Center to End Violence EA) that the Main Post is the APE for the projects or undertakings in this district. During Section 106 consultation on the actions described in the draft SEIS, the APE was expanded to include the entire NHLD so that the scale and scope of the SEIS would be adequately addressed (see Figure 15).

Because the Presidio is a National Historic Landmark, the Trust is required "to the maximum extent possible [to] undertake such planning and actions as may be necessary to minimize harm to" the landmark.[63] In response to the NHPA requirements and to establish a threshold for minimizing harm to the NHLD, the Trust has developed planning and guidance materials in several separate documents. The PTMP included management principles to "guide future actions and decisions" and to ensure the long-term preservation of the NHLD. The PTMP further included planning concepts and guidelines for all districts in the Presidio, including the Main Post. Shortly after release of the PTMP, the Trust developed the Main Post cultural landscape assessment (CLA), which both identified the historic sensitivities and provided treatment and planning recommendations that, if followed, would ensure the consistency and compatibility of new projects in the Main Post district. The Trust plans to update its cultural landscape documentation and district-wide planning and design guidelines in order to support these ongoing efforts.

In collaboration with participating agencies and interested parties in the Section 106 consultation, the Trust has worked to avoid, minimize, or mitigate adverse effects of the proposals by developing project parameters and processes for continued consultation on the design and implementation of several projects under the Main Post Update. These measures are described in the Programmatic Agreement for the Main Post Update (PA-MPU) that resolved the Section 106 consultation. The PA-MPU is provided in Appendix B.

[63] *NHPA Section 110(f), 16 USC 470h-2(f).*

Building Rehabilitation Building rehabilitation for compatible new uses requires minimal alteration of the character-defining materials, features, spaces, and spatial relationships of the buildings and their settings. Reuse and rehabilitation of historic buildings on the Main Post and within the NHLD would ensure the preservation of these resources while meeting the National Historic Preservation Act (NHPA) mandate for preferential use of historic properties over new construction. Alternatives 1, 2, and 3 would contribute to these efforts through rehabilitation of the remaining historic buildings in the Main Post. Other cumulative actions planned in the NHLD that include rehabilitation are, the Thornburgh historic buildings in the West Letterman area (Buildings 1040, 1047, 1050, 1056, 1059, 1060, 1062, 1162, 1163, 1167, 1169, and 1170), and the remaining historic or eligible buildings at West Crissy Field (937, 935, 934, 926, 920).

Overall, the rehabilitation of historic buildings that has occurred since 1994, combined with the proposed rehabilitation projects, would have a beneficial impact on the Main Post and the NHLD as a whole.[64]

Stabilization and Maintenance[65] The Main Post district has experienced few and limited problems with building stabilization and maintenance, due in large part to a high level of occupancy that deters vandalism. The Public Health Service Hospital, which had been vacant for more than 20 years, experienced considerable vandalism and deterioration. Rehabilitation of Buildings 1801, 1808, and the Wyman Avenue residences (1809-1815) reversed the problems and revitalized the Public Health Service district. Locating Park Police and other functions at Fort Scott has significantly reduced vandalism in this area. Furthermore, the Trust initiated a substantial three-year preservation maintenance program in 2008 to secure the envelopes of the Fort Scott buildings. These stabilization activities would continue to have a beneficial impact on the NHLD.

Demolition Forty-two historic buildings have been demolished in the Presidio since the property transferred from the U.S. Army in 1994.

[64] *Other substantial rehabilitation projects that have been completed at the Main Post include Upper Funston buildings and landscape (Buildings 11-16), Riley Avenue, Infantry Terrace and Presidio Avenue homes (Buildings 123-129, 325-345, and 56-59), the two Civil War barracks (Buildings 86 and 87), the Post Office (Building 210), the old Military Police Headquarters (Building 36), the Bay School of San Francisco (Building 35), the Presidio Internet Partners (Building 38), the San Francisco Film Centre (Building 39), and the Walt Disney Family Foundation Museum and Offices (Buildings 104, 108, and 122). In all, 56 of the 110 historic buildings on the Main Post either have been or are under construction to be fully rehabilitated.*

(continued)

Presidio-wide, 226 of the 428 historic buildings have been fully rehabilitated.

[65] *"Benign neglect" can lead to some of the most serious preservation problems, as lack of maintenance allows the deterioration of a building's weatherproof envelope. The continuing program of stabilization and maintenance that has been implemented in the Presidio, first by the NPS and then by the Trust, has significantly reduced the amount of deterioration that might have been anticipated with many historic buildings standing vacant over a period of years after the transfer from the U.S. Army. The Trust instituted a stabilization program a few years after it was legislated and has stabilized approximately two to three vacant historic buildings each year since 2003. The size of the building and the remoteness of its location have proven to be two of the most difficult problems in preventing either water penetration or vandalism.*

Thirty-two of these were demolished by the NPS for the Crissy Field restoration. Other demolished buildings were located in various districts around the NHLD. The Doyle Drive project has demolished building 670 and will remove or alter an additional three historic buildings (Buildings 201, 204, and 230) to allow construction of the new parkway. Of those buildings demolished by the Doyle Drive project, the top half of Building 201 will be reinstalled and rehabilitated on Halleck Street in order to maintain the historic streetscape. Alternative 2 includes the demolition or relocation of three historic buildings. Building 46, slated for removal in order to rehabilitate neighboring Buildings 47 and 48 for the archaeology lab and curation facilities, is a 50-square-foot shed located in a service alley behind Building 49. Demolition of Buildings 40 and 41 to facilitate the interpretation of El Presidio would constitute an adverse effect to those individual resources, as well as an adverse effect to the NHLD. As two of five remaining buildings constructed during World War II at the Main Post, and two of 15 buildings remaining of the "temporary" type in the Presidio, the removal of Buildings 40 and 41 would diminish the integrity of the NHLD due to the relative scarcity of similar resources in the landmark today.[66] Removal of these buildings, however, would facilitate the interpretation and commemoration of the El Presidio archaeological site, thus having a beneficial effect on the Spanish Colonial era of history at the Presidio. More intact examples of World War II-era "temporary"-type construction also exist elsewhere in the Golden Gate National Recreation Area (of which the Presidio is a part), such as Fort Cronkhite in Marin County. Relocation of Buildings 40 and 41 to another site in the Main Post or elsewhere in the Presidio would adversely affect the two buildings but would also reduce this impact to a less-than-significant level, as the overall inventory of "temporary"-type buildings in the NHLD would not change.

New Construction Cumulative actions with new construction of note at the Main Post include the courtyard infill additions between the "wings" of Buildings 100 and 104 as executed in the Walt Disney Family Museum and underway in the International Center to End Violence projects, new construction associated with the lodge and cafe on and around the Building 34 site, the addition to the Presidio Theatre, the addition to the Presidio Chapel, and the addition for the archaeology lab and curation facilities.

The International Center to End Violence proposal for Building 100, including the courtyard addition, was certified as meeting the Secretary of the Interior's Standards through the review process for the federal historic preservation tax incentives. This certification is equivalent to a finding of no adverse effect under the Section 106 process. Construction of a new infill addition at the Building 104 courtyard as part of the Walt Disney Family Museum was determined to have no adverse effect through the Section 106 process for that project.

[66] *According to the 1993 NHL update, "all of the 'temporary'-type buildings associated with the World Wars stand out at the Presidio as architectural anomalies, providing striking evidence of the world-wide upheaval and national emergency that necessitated their ascetic design and forced placement" (NPS 1993, page 8-52). The 1993 update goes on to note that the "most intact group…of these buildings stands on Crissy Field" (NPS 1993, page 7-59). This group, however, was removed in 2001 for the rehabilitation of Crissy Field, thus leaving only smaller collections of the "temporary" type buildings at the Main Post, Fort Scott, and the North Cantonment.*

The new construction as currently envisioned under the mitigated preferred alternative (Alternative 2) would avoid or minimize adverse effects on associated buildings and open spaces through the application of project parameters, design guidelines, and additional consultation. The proposed lodge would reinforce the historic separation between the Old and Main Parades using a series of buildings, connected by outdoor passages, arranged in the pattern of historic development of the site, and lower than the remaining historic barracks (Buildings 86 and 87). New additions to the Presidio Theatre and Presidio Chapel would support the rehabilitation of those buildings for their historic uses; scale, massing, and connections to the historic buildings would be directed by historic structures reports (HSRs), site-specific and district-wide design guidelines, and additional consultation. Small-scale (500-square-foot) new construction between Buildings 47 and 48 would facilitate the rehabilitation of the historic garages and provide a secure entrance for the archaeology lab and curation facilities, without adversely affecting the garages or the historic scene.

The mitigated preferred alternative has been the subject of a Section 106 (NHPA) consultation. Extensive consultation among the consulting parties resulted in measures to avoid, minimize, or mitigate adverse effects that had been identified in the final FOE (August 2009).

Cumulative actions with noteworthy new construction outside the Main Post include the Letterman Digital Arts Center; the addition to the rear of the hospital (Building 1801) and the Belles Street housing units in the Public Health Service district; and the new parkway replacement for the historic Doyle Drive, which would introduce a large new roadway structure and associated viaducts into the historic landscape. Compatibility and landscape protection guidelines established through separate consultations on those projects are being applied to further reduce the effects of these actions on the NHLD.

The Public Health Service Hospital project included a three-story addition on top of the rear portion of Building 1801 and a free-standing seven-unit apartment building. It underwent review through the federal historic preservation tax incentives review process and achieved certification for tax incentives, indicating a no adverse effect determination for the project.

Reconstruction of Doyle Drive would result in an adverse effect on the Presidio National Historic Landmark District by:

- Introducing new structural and visual elements (i.e., viaducts, tunnels and an at-grade parkway) that would not resemble the existing historic Doyle Drive facility in overall location, massing, and scale;
- Requiring the destruction of contributing elements, including Buildings 201, 204, 230, and 670 (see above discussion under Demolition) and Doyle Drive itself; and
- Altering contributing roadways, including Young Street, Halleck Street, Gorgas Avenue, Crissy Field Avenue, Girard Road, and Vallejo Street.

Appropriate measures have been negotiated among the cooperating agencies and are finalized in a programmatic agreement (Doyle Drive PA) that addresses resources potentially affected by the Doyle Drive project. The Built Environment Treatment Plan (BETP) required by the Doyle Drive PA establishes treatments for resources and landscape elements that would remain following reconstruction of Doyle Drive while also describing treatments for the replacement of historic buildings

and features that would be removed to make room for the new parkway. Implementing treatments identified in the BETP present opportunities to meet the cultural resource management goals for the Presidio NHLD, including interpretation, treatment, preservation, rehabilitation, and restoration, that would contribute to beneficial cumulative impacts while avoiding, minimizing, and mitigating the adverse effects.

New construction in the Presidio under the cumulative actions described above would alter the association, setting, and feeling of the historic resources within the NHLD. Although certain "aspects of integrity"[67] would be diminished, the vast majority of individual historic properties would endure as contributing resources.

Adherence to PTMP EIS Mitigation Measure CR-4 *Future Planning to Guide Demolition and New Construction* would ensure that the appropriate process is followed to consult on future proposals in order to prevent further significant impacts. The Main Post Update expands concepts, measures, and criteria in the PTMP intended to avoid, minimize, mitigate, or otherwise address adverse effects. The Trust has ensured that building rehabilitation, new construction, and landscape treatments at the Main Post would be subject to terms identified through the PA-MPU and the 2002 PA.

Landscape, Parking and Circulation Changes Improvements at the Main Parade would rehabilitate the existing seven-acre parking lot to create a green open space "heart" of the Main Post. Proposed improvements would recognize the historic military order in the landscape and would include opportunities for interpreting the Presidio's history. Existing site features would be incorporated, and important historic spatial and visual relationships, including the boundaries of the parade ground and the relationships between buildings and open spaces, would be reinforced. Returning or reinforcing historic character-defining elements that have been removed or have deteriorated through time would strengthen the association, setting, and feeling of the historic Main Post area.

Restoration of the historic airfield under the NPS Crissy Field project returned a landscape feature to the historic scene. The project also incorporated design compatibility measures for new landscape improvements. Removal of 32 historic buildings was, however, determined to have adverse effects on the individual resources, but not on the NHLD.

Enhancement of upper Tennessee Hollow would incorporate measures to rehabilitate the historic landscape as well as restore natural systems, and is not anticipated to have an adverse effect on the historic landscape. The landscape rehabilitation at the Public Health Service district in association with the conversion of the hospital building into residential units had no adverse effect on individual historic resources or the NHLD as a whole.

The mitigated preferred alternative (Alternative 2) would include complete or partial conversion of five historic roadways to serve as parking lots or pedestrian walkways, the construction of two new surface parking lots and potentially an underground garage/surface lot. Measures incorporated into these proposed changes to historic circulation patterns and other landscape modifications (width, alignment, and paving materials would be historically compatible) would not significantly

[67] *As defined in the National Register Bulletin, How to Apply the National Register Criteria for Evaluation (NPS 2002).*

impact the cultural resources of the NHLD. Traffic signals will not be installed in the Main Post.

Landscape improvements associated with the lodge and the theatre and chapel additions would be minimal and could help minimize the impact of new construction through vegetation screening. Other historic landscape improvements considered under the mitigated preferred alternative include rehabilitation of the Alameda, Lower Funston Avenue and the streetscape in front of the Montgomery Street Barracks. These projects would conform to the Secretary of the Interior's Standards. Thus, the cumulative landscape improvement projects would not have an adverse effect on the historic landscape of the Presidio. Successful rehabilitation of the landscape would strengthen the association, setting, and feeling of the historic Main Post area and would have a beneficial effect on the NHLD.

Archaeology

While some other archaeological features have been unavoidably affected, the archaeology of the Presidio has benefited from the following cumulative actions to date through project-specific identification efforts that have increased the understanding and preservation of these buried resources:

- The NPS Crissy Field project identified a Native Ohlone prehistoric site (SFr-129) and adapted the design of the new marsh to avoid impacts, while other previously unidentified historic features in the project area were subject to data recovery prior to their destruction.
- The Letterman Digital Arts Complex development identified no contributing features in that location and had no impacts during construction.
- The transformation of Tennessee Hollow has resulted in the further identification of several Spanish Colonial- and Mexican-era features at El Polin. These locations are being preserved and actively researched with continuing project designs incorporating representative features into the landscape and interpretive themes.
- The Main Parade project has been planned to avoid impacts on archaeological features in the project area and will undertake further identification efforts in the near future to inform continuing designs.
- The rehabilitation of the Public Health Service Hospital identified the location of portions of the original Marine Hospital in that location. Impacts on this feature were avoided through a design that preserved remains in their original location.
- Impacts on archaeological resources due to replacement of Doyle Drive were addressed in the NHPA consultation for the project and a programmatic agreement has been executed. In the planning phases for Doyle Drive, the identification effort verified the location of a previously recorded Native Ohlone prehistoric site (SFr-6/26), which is being preserved in place. Identification efforts for historic archaeological features did not encounter additional features, but the scale and scope of the project will likely mean that historic-period features that contribute to the landmark will likely be unavoidably affected. These impacts will be mitigated in accordance with an archaeological treatment plan that calls for data recovery.

Initiatives completed on the Main Post have enhanced public awareness of and implemented conservation strategies to preserve the site of El Presidio, the cornerstone archaeological site in the park. These include:

- Showcasing the history of the last standing adobe from El Presidio by exposing layers of fabric encapsulated in the Mesa Room of the Officers' Club;
- Developing several education opportunities for local schoolchildren to learn about and experience the archaeology of El Presidio and the Main Post in a manner that helps the students and their teachers meet core curriculum standards in California schools;
- Protecting the eastern façade of El Presidio's 19th-century quadrangle as well as important archaeological features outside of the colonial walls to permit future scientific investigations while remediating lead-contaminated soils around the upper Funston Avenue Officers' Quarters (Buildings 11 through 16);
- Developing an interpretive landscape to protect and represent the colonial foundations of El Presidio's chapel and bring the site to life for the public;
- Removing landscaping that requires irrigation from most of the southern façade of El Presidio along Moraga Avenue and from the rear yards of the upper Funston Avenue Officers' Quarters to avoid impacts on the archaeological features; and
- Reusing existing utility trenches, to the extent feasible, during upgrades to the infrastructure within the archaeologically significant areas of El Presidio.

The relocation of the Presidio Archaeology Center to the Main Post and expansion of its program under Alternatives 1 and 2 would further benefit the site of El Presidio, continue to increase public awareness of this archaeological resource, recover data of archaeological significance, and provide for on-site curation of archaeological collections and associated records. However, new construction, building demolition, infrastructure upgrades, and roadway reconstruction associated with Alternatives 1, 2, and 3 could affect archaeological sites and features that contribute to the NHLD. These impacts include effects on contributing archaeological features of the NHLD dating from the Civil War era and the turn of the 20th century. Actions at the Main Post could also adversely affect unknown sites that may be identified through continuing identification efforts or an unanticipated discovery.

The Trust currently requires archaeological review before undertaking or permitting ground-disturbing activities. Any ground-disturbing activities that may affect potential or known archaeological sites would be assessed in the planning phases and subject to a range of requirements, including but not limited to avoidance of the sites, further identification measures, monitoring, and testing and/or data recovery. Some testing and all data recovery would require review under the NHPA as stipulated in executed programmatic agreement documents. Archaeological testing and research for scientific and/or educational purposes is stipulated in the 2002 PA and the PA-MPU, and may proceed without additional consultation provided they follow the adopted processes.

Visual Resources

Under the cumulative actions, visual changes that would occur within the Main Post and elsewhere within the park would be incremental and

localized. Key views within the Presidio would be protected or enhanced, as would views of the Presidio from adjacent areas. Rehabilitation of historic buildings would create a beneficial visual change, as would selective building removal (as at El Presidio). New construction would be limited, but where allowed it would be compatible with the visual setting.

Restoring the Main Parade and reinforcing the edges of the historic open space through new design features would complement the rehabilitated historic buildings and could improve visual quality by reducing pavement, removing cars, and introducing grass and other compatible materials. Main Parade improvements would also allow for opportunities to enhance physical and visual connections to Crissy Field when Doyle Drive is replaced.

Restoration of upper Tennessee Hollow would improve the existing visual setting by expanding natural habitat areas. The restoration would form a unique visual backdrop and ecological corridor in the developed environment.

Removal of the 1950s wings of the hospital building at the Public Health Service district allowed for the restoration of the building's 1930s main facade and entry, which substantially improved the visual integration of the site with the neighborhood. Replacing a 10-story concrete hospital and adjacent research facility with four three- and four-story buildings (with underground parking) arranged around a seven-acre landscaped open space has had a major beneficial effect on the Letterman district's visual setting near the Lombard Gate.

The realignment of Doyle Drive would generally improve views of the shoreline and bay from the Main Post by placing portions of the roadway at or below ground level and eliminating the visual and physical barrier created by the current elevated structure. However, Doyle Drive construction activities would require the presence of substantial amounts of equipment during this three- to four-year process and would include grading, the removal of plants and trees, and demolition of existing structures, resulting in a noticeable visual change.

Visitation

Expanded facilities and programming under the alternatives (except Alternative 4) and cumulative actions would increase visitor use and add to the visitor experience offered at the Presidio. Facilities would continue to be concentrated in the Main Post and at Crissy Field (both Areas A and B). As buildings are rehabilitated, they would host new park tenants and programs. Visitors would be accommodated by diverse park programs and exhibits, food and retail services, wayfinding directions, interpretive media, museum collections, and lodging. Adequate infrastructure would be in place at the Main Post to accommodate visitor parking. Visitors would be informed in advance where to park and would find spaces proximate to use areas. Visitors on foot and bicycle would enjoy more places that would be virtually free of motor vehicle traffic, and non-vehicle use of these areas would increase. The Main Post's transit center would provide many visitors with a stronger sense of arrival to the park (public restrooms, waiting areas, connections to public transit, and information about what to do in the park). Shuttle buses would be provided at the frequency required to meet demand, and bus riders would be served at the transit center. Improved facilities would benefit most visitors by providing clearer information, and convenient access to the park's shuttle system.

Visitors would benefit from the following opportunities and services offered by the cumulative actions:

- Improvements to the Main Parade would rehabilitate the existing seven-acre parking lot to create the green open space "heart" of the Main Post to accommodate an array of new public uses, including historical re-enactments, performances, special events, and everyday activities. Pedestrians and bicyclists would find the Main Parade and some streets free of vehicles, and non-vehicle use of these areas would increase.
- The lodging facility at the Main Post would improve visitor services, provide an opportunity for overnight visitor accommodation and ancillary services, and help establish the district as a vibrant and welcoming visitor destination.
- The Heritage Center and Presidio Archaeology Center would provide opportunities to more deeply engage many park visitors in Presidio history.
- Programming and tenant selection for the Montgomery Street Barracks would locate cultural uses and visitor-serving retail in the ground floors of these buildings.
- The Walt Disney Family Museum contains archival material and holds exhibits to communicate the vision and legacy of Walt Disney within a historical context to school/educational groups and others.
- The El Presidio site would create a compelling destination for visitors to learn about archaeology and would provide opportunities to commemorate this cornerstone of the park and the birthplace of San Francisco.
- Restoration of the upstream portion of Tennessee Hollow would provide trails, smaller pathways, seating, landscaped areas, and interpretive components, and would provide recreational benefits of a more naturalized landscape (nature walks, birdwatching, ecological stewardship, photography, painting, etc.) to improve the visitor experience. Following restoration, the downstream Quartermaster Reach portion of Tennessee Hollow would include a pedestrian trail, spur trail, overlook, and trailhead to allow visitor use and enjoyment of the site.
- Reconstruction of Doyle Drive will provide a new compatibly-designed Presidio entrance (Girard Avenue) in the northeastern part of the Main Post to serve as the main vehicular entry for tenants and visitors to the district. It will also increase open space at the Main Post by about 10 acres by recreating a bluff overlooking Crissy Field. This new space will be landscaped and will contain trails and overlooks that link to the existing Presidio trails system.
- The new 7,200-square-foot, interim Crissy Field Center at the easternmost end of Crissy Field (Area A) allows the community environmental center to continue its programs and workshops that serve school groups, community organizations, and the general public during Doyle Drive replacement.

During the construction periods for cumulative actions, the visitor experience at the Main Post would be degraded as the normal scenic and tranquil setting would be disrupted by the sights and sounds of construction. However, visitors would still have full access and use of the facilities within the Main Post and other districts in the park.

Cumulative actions would be expected to attract between 1.11 million (Alternative 4) and 1.69 million (Alternative 2) visitors annually to the Main Post. During peak visitor use days (summer weekend days and holidays), the cumulative actions could cause some visitors desiring quiet or less social experiences to opt to visit another part of the park, or visit the Main Post at another time or on another day. While some visitors could notice a change from a mostly deserted to a more lively district during peak visitation times, the desires of most visitors would be better met through the range of opportunities that would be available. The Trust currently imposes management controls within property leases (such as parking restrictions, TDM, compliance with sustainability programs and conservation practices, visitor education, and public access and interpretation requirements) to ensure that the Presidio's resources and the overall quality of the visitor experience are protected. Among other management controls discussed in Section 3.9, the Trust would continue to monitor visitation levels to ensure that park uses are not cumulatively resulting in unacceptable impacts on Presidio resources, including visitor experience. Monitoring is being conducted by using a number of methods, including visitor and vehicle counts, resource surveys, site inspections, and visual observations. If, as a result of monitoring, it is determined that an ongoing or proposed use would cause unacceptable impacts on park resources, adjustments would be made to the way the use is conducted, including placing limitations on the use, so as to mitigate the unacceptable impacts. This would be committed to and enforced by the Trust as part of its mitigation program and NEPA administrative record.

Recreation

Alternatives 3, when added to past development of the Letterman Digital Arts Center within the Letterman district, would result in the closure of three Presidio Community YMCA-administered tennis courts in the Presidio. Should these courts not be replaced due to lack of funding, their loss would represent a notable decrease in active recreational space for tennis players at the Presidio, which would affect Presidio Community YMCA tennis facilities and programs. Activities that may occur in the city, specifically, the short-term unavailability and long-term reduction of public courts in Golden Gate Park, would incrementally contribute to the identified adverse cumulative impact on existing tennis facilities and programs in the Presidio and San Francisco. Alternatives 1, 2, and 4 would not contribute to the additional loss of tennis courts at the Presidio.

The ballfield proposed as part of Alternative 2, in combination with the Tennessee Hollow project, would increase the number of playing fields in the Presidio. The Trust would work with the City and County of San Francisco to expand and upgrade Julius Kahn Field as a multi-use field that can accommodate high school soccer or Little League play. The opportunity to build a new field at Fill Site 1 would become available once remediation of the site is completed. Following remediation of the landfill at Pop Hicks, it would also be restored as a playing field. Other field upgrades and improved recreational facilities are planned for the watershed as remediation and creek restoration continue.

Water Resources

Implementation of the alternatives, when combined with the impacts of cumulative actions, would likely improve water quality within the

Northeast watershed of the Presidio. With the exception of the Public Health Service Hospital project, all of the cumulative actions are located within the Northeast watershed and, therefore, have related impacts on water resources. Impacts from building and rehabilitation projects when implemented with required mitigations and Best Management Practices would not be significant. The Tennessee Hollow, Main Parade, and Letterman Digital Arts Center projects either have removed or propose to remove large amounts of impervious surfaces, which would benefit water quality and storm drainage by reducing the peak flow from storm events, reducing non-point source pollution, increasing infiltration, and slowing water flow velocities. The Tennessee Hollow project would remove fill material (Morton Street Field), restore the original creek channel of the eastern tributary of the watershed, and remove impervious surfaces. The project would also provide approximately 22 acres of habitat enhancements in all three reaches (removing non-native vegetation such as eucalyptus and replanting with native plants), and would provide area for temporary stormwater detention. Improvements to the Main Parade would be of particular value because a large source of non-point source pollution would be eliminated. Parking displaced by Main Parade improvements would be replaced at multiple sites throughout the district, including underground parking, and would incorporate post-construction Best Management Practices (BMPs) to address water quality. The Letterman Digital Arts Center project resulted in a major decrease in impervious surface and stormwater flow at the site (compared to its former configuration) and improvement of water quality from stormwater runoff.

Reconstruction of Doyle Drive, which runs across the north end of the watershed, will significantly change the hydrology of the watershed. Doyle Drive stormwater runoff is currently discharged to existing drainage facilities without treatment. Approximately 25 percent of the planned roadway will be in tunnel segments, which will reduce the total area of impervious surface subject to stormwater runoff.[68] This will result in the reduction of total runoff volume and will also likely result in a reduction of pollutant loading associated with the roadway. The co-lead agencies for the project are currently reviewing various proposals to treat, contain, and discharge residual water collected within the tunnel during storms or during washdown (cleaning the tunnels). The various options being considered for stormwater treatment will provide a net benefit to stormwater runoff quality and the quality of receiving waters.

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[68] *The two tunnel segments would be covered with an adequate soil depth to provide infiltration of precipitation.*

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3.13 Other Impacts

ADVERSE IMPACTS THAT CANNOT BE AVOIDED

The previous sections describe the environmental consequences of the mitigated preferred alternative and present the measures available to mitigate the significant environmental effects. The following impacts are those that would still occur despite mitigation.

Air Quality (Cumulative Only)

None of the alternatives would be inconsistent with the most recent Clean Air Plan (CAP) or cause significant regional air emissions beyond those that were anticipated under the PTMP. Regional growth, land use trends, and transportation projects that are outside the control of the Trust, however, could exceed the levels assumed in the CAP. These projects must be considered in conjunction with PTMP-related growth when assessing cumulative effects. Therefore, the analysis of cumulative effects in the final PTMP EIS determined that cumulative air impacts would be significant. Cumulative actions within the Main Post district would contribute to regional growth but not significantly to localized air quality impacts.

Historic Resources Impacts (Project-Specific and Cumulative)

Demolition of Buildings 40 and 41 under the mitigated preferred alternative would result in a significant impact on the Main Post district and the NHLD. Other new construction and building demolition components of the mitigated preferred alternative would result in adverse effects on individual resources but would not rise to the level of a significant impact.

The rehabilitation of Crissy Field, construction of the Letterman Digital Arts Center, and replacement of Doyle Drive have had or will have impacts on the NHLD due to removal of contributing resources and the introduction of new buildings. The mitigated preferred alternative would contribute to the significant cumulative impact. Historic American Building Survey (HABS) recordation of the demolished structures and interpretative materials developed to describe the role of lost resources at the Presidio would be conducted but would not reduce the adverse effect on the resource.

Archaeology Impacts (Project-Specific and Cumulative)

Portions of F:9 United States Quadrangle West Side would be damaged or destroyed during construction of the proposed lodge. Portions of F:21 Quartermasters Complex would be destroyed during the construction of a proposed underground parking lot at the Main Post bluff. Because these contributing archaeological features are assumed to have integrity, damage or destruction would constitute a significant impact on the features. The Trust would prepare an assessment prior to undertaking these projects that may recommend further identification. This assessment would be completed early in the planning phases to inform designs that may avoid or minimize these effects. However, unavoidable impacts are likely to remain

and would be mitigated through a treatment plan that includes data recovery (i.e., archaeological excavation prior to demolition in order to recover important information that would otherwise be lost).

New construction, building demolition, infrastructure upgrades, habitat restoration, environmental remediation, and roadway reconstruction associated with foreseeable cumulative actions (including the mitigated preferred alternative) have and could affect archaeological sites and features that contribute to the NHLD. The cumulative actions could also adversely affect unknown sites that may be identified through continuing identification efforts or an unanticipated discovery.

IMPACTS RELATED TO SHORT-TERM USES OF THE ENVIRONMENT AND IRRETRIEVABLE COMMITMENTS OF RESOURCES

The CEQ NEPA Regulations require that an EIS include discussions of "the relationship between local short-term uses of man's environment and the maintenance and enhancement of long-term productivity" and "any irreversible and irretrievable commitments of resources which would be involved in the proposed action should it be implemented."[69] In general, these sections of a NEPA document are not included as environmental impacts for which significance is defined and mitigation is recommended.

Short-Term Uses of the Environment vs. Maintenance and Enhancement of Long-Term Productivity

The Main Post is developed space and has not been used for natural resource management or renewable resource production (agriculture or forestry) for the past two centuries. The long-term productivity of the site is therefore defined by its potential to serve human economic or cultural needs, including redevelopment of the site for the proposed uses analyzed in the final SEIS.

During the construction and operation of the mitigated preferred alternative, localized environmental disruption would occur in the form of traffic and associated noise and air impacts. Operation-oriented disruption to the physical environment would include the removal of landscape vegetation, the loss of some vacant land, and the introduction of impervious surfaces. Disruptions to the human environment would include a change in the overall character of the site and displacement of existing recreational facilities and commercial businesses. Disruptions primarily would affect Presidio residents, tenants, and visitors. Residents of surrounding neighborhoods, particularly those located to the immediate east, may also experience increased construction- and operation-related impacts, but not beyond levels anticipated in the final PTMP EIS.

The short-term impacts on the environment would be more than offset by the benefits that the mitigated preferred alternative would generate in the long term. Redevelopment of the site would contribute to the vitality of the greater community and elevate the status of the Presidio. The high-quality development of the mitigated preferred alternative would create an attractive cultural destination that would increase the site's usability for national and international visitors. The mitigated preferred alternative would serve as the focal point for attracting additional tenants and investors, which would directly and indirectly enhance the financial viability of the Presidio and contribute to the preservation of its resources. Finally, the wide array of Main Post projects and initiatives would incorporate sustainable practices to prevent pollution, reduce waste,

[69] *See 42 USC 4332 and 40 CFR 1502.16.*

promote alternative modes of transportation, and minimize greenhouse gas emissions to help safeguard the health of our environment.

Irreversible or Irretrievable Commitments of Resources

The removal of historic structures and contributing elements of the cultural landscape plus the disturbance of archaeological sites would be irreversible (i.e., once they are damaged or destroyed, they are lost forever). However, prior to the removal or disturbance to these resources, documentation and data recovery would be completed, thus maintaining the historical record and limiting the impact to the loss of the physical structure and historic associations.

The use of park land, construction materials, energy, labor, and financial resources to implement the mitigated preferred alternative would also, in a practical sense, be an irretrievable commitment of resources.

NON-SIGNIFICANT IMPACTS

Analysis of the following impacts was found unnecessary to support the comparisons of the alternatives. These impacts therefore require no further analysis in the SEIS.

Global Resources

None of the alternatives would generate large enough quantities of greenhouse gases (GHG) to cause a substantial impact related to global climate change or disrupt California Air Resources Board (CARB) progress on achieving the goals of the California Global Warming Solutions Act of 2006 (AB32) and California State Executive Order S-3-05. The alternatives would cause lower levels of GHG than similar development in a non-urban or suburban setting and lower levels than what historically occurred with military activity in the CARB target date of 1990. Also, the Main Post's demand for electricity would be negligible in the context of overall demand within the Presidio and San Francisco, and the proposals being considered under the final SEIS would not require expansion of any industrial or electricity generation source.

Section 3.4, Air Quality, quantifies the emissions of carbon dioxide and small quantities of other GHG resulting from the alternatives that would contribute to global climate change. Compared to baseline conditions, Alternative 2 would add no more than 6,910 pounds per day of carbon dioxide (CO_2), or roughly 1,260 metric tons of CO_2 per year. The maximum change in annual CO_2 emissions of about 1,260 metric tons due to implementation of proposals within the alternative would be less than 0.001 percent of California's target of 427 million metric tons of CO_2-equivalent (MMTCO2e) in 2020. These emissions would occur due to the motor vehicle trips that would be generated and due to other stationary and area sources including energy consumption. No alternative would cause more than the CEQ's Draft NEPA guidance level of 25,000 metric tons or more of direct CO_2-equivalent GHG emissions per year.

Consistent with applicable law and subject to the availability of appropriations, the Trust is committed to meeting comparable greenhouse gas emission reduction targets as those established for California by State Executive Order S-3-05: by 2010, reduce GHG emissions to 2000 levels; by 2020, reduce GHG emissions to 1990 levels; by 2050, reduce GHG emissions to 80 percent below 1990 levels. The Trust would use an environmental management system (EMS) as the primary management approach for establishing these targets and for collecting, analyzing, and reporting of information to measure performance in the implementation of

this measure. The Trust's transportation demand management (TDM) program, air quality mitigation measures, and participation in the Climate Friendly Parks program would reduce GHG emissions related to the mitigated preferred alternative, address the Presidio's (Area B) contribution to climate change, and assist the CARB in achieving the goals of AB32 and Executive Order S-3-05.

Geology and Soils

None of the alternatives, including the mitigated preferred alternative, would increase the threat to public health and safety due to seismic hazards. The Main Post straddles a long narrow canyon that contains low-density artificial fill that was placed over soft Bay Mud, Colma Formation (a firm sandy clay soil), and colluvium (a thick soil composed of particles eroded from nearby slopes). This area has many of the same geologic characteristics as the nearby Marina district that experienced extensive damage during the Loma Prieta earthquake.[70] This geologic subgrade is designated on the California Seismic Hazards Zone Map[71] prepared under the Seismic Hazards Mapping Act of 1990 as a zone requiring investigation for seismically induced liquefaction[72] hazards. Future earthquake ground motion is expected to be quite high due to the soft sandy hydraulic fill and the proximity of the San Andreas fault (about seven miles southwest of the site), the Hayward fault (about 12 miles northeast), and other major, active regional faults. During the permit review process, the Trust requires project proponents to prepare geotechnical reports that assess the nature and severity of the seismic hazards at the site and recommend project design and construction features to reduce the hazards. To ensure compliance with building code[73] provisions to the maximum extent feasible, when the Trust reviews the proposed work, it will determine the adequacy of the engineering and design features for the projects to provide a level of performance that would reduce the risk of life loss or injury during a major seismic event. Therefore, potential damage to the structure from geologic hazards on the individual project sites would be ameliorated through the Trust review of building permit applications. The Trust would approve the work only when the nature and severity of the seismic hazards at the site have been evaluated and appropriate mitigation measures have been proposed.

Construction activities have the potential to disturb and expose soil to forces of erosion. However, completed projects would not significantly alter the overall topography of the sites. As discussed in Section 3.11,

[70] *Both are mapped Quaternary artificial fill (Qaf) by the U.S. Geological Survey (Schlocker 1974).*

[71] *The Seismic Hazards Mapping Act was developed to protect the public from the effects of strong ground shaking, liquefaction, landslides, or other ground failure, and from other hazards caused by earthquakes. The Seismic Hazards Zone Map for San Francisco (California Resources Agency 2000) can be viewed at* http://gmw.consrv.ca.gov/shmp/download/pdf/ozn_sf.pdf. *The Trust uses the map in its land use planning and building permit processes, and requires that site-specific geotechnical investigations be conducted identifying the hazard and formulating mitigation measures prior to permitting most developments designed for human occupancy within areas prone to liquefaction and earthquake-induced landslides.*

[72] *Liquefaction occurs when loose, water-saturated sediments lose strength and fail during strong ground shaking.*

[73] *The Trust uses nationally accepted model building codes, including the 2003 International Building Code, the 2003 International Existing Building Code, and the 2001 State Historical Building Code (SHBC) (Part 8, Title 24, California Code of Regulations).*

Water Resources, the Trust would minimize soil erosion by requiring construction site operators to employ Best Management Practices to contain disturbances within localized areas. Routine monitoring and reporting of BMP performance would be conducted pursuant to Stormwater Pollution Prevention Plans.

Excavations for underground parking proposed under the mitigated preferred alternative would result in the creation of about 58,000 cubic yards of excess soil. If this soil cannot be reused within the park for landscaping or habitat restoration purposes or for compacted fill for Doyle Drive reconstruction and other projects, the soil would be transported and disposed off-site at a licensed landfill in accordance with applicable regulations.

Biological Resources

None of the alternatives, including the mitigated preferred alternative, would have a substantial impact on any riparian habitat or other sensitive natural community, threatened and endangered species, or federally protected wetlands. The project sites are in developed areas with low wildlife values, which do not support or provide habitat for any threatened or endangered wildlife species. The alternatives would not interfere with any native resident or migratory species. No construction activities (such as placement of fill material, mechanized land clearing, land leveling, or road construction) would occur beyond existing developed areas and no existing natural habitat would be displaced. The impacts of light pollution, including harm to nocturnal wildlife and ecosystems, would be minimized through high-quality outdoor lighting and minimal impact lighting techniques. The use of non-native invasive plant species would be restricted and park guidelines for protection of nesting birds[74] would be followed.

Population, Employment and Housing

The alternatives, including the mitigated preferred alternative, would not be expected to induce substantial population growth in the region either directly or indirectly, or add a significant number of employees to the region's economy. None of the alternatives would displace substantial numbers of existing housing units or substantial numbers of people, necessitating the construction of replacement housing in the Presidio or elsewhere.

Schools

The incremental residential growth that would result from the mitigated preferred alternative or other alternatives would not substantially increase the demand for schools or create the need for new schools. The Presidio is within an urban area that is served by the San Francisco Unified School District (SFUSD), which has approximately 55,272 of San Francisco's pre-school, elementary, middle and high school students at 37 preschools, 101 K-12 schools, 8 county/court schools, and 9 charter schools. The SFUSD has witnessed a 10.7-percent decline in enrollment during the past decade (Fall 1998–Fall 2008).

[74] *Bird nests that would be protected are those stipulated in the Migratory Bird Treaty Act (16 USC. 703* et seq.*). However, the United States Fish and Wildlife Service (USFWS) has determined that the protections of the Migratory Bird Treaty Act do not apply to non-native, human-introduced bird species such as the rock pigeon (the familiar "pigeon" of cities and parks) (70 Fed. Reg. 12710-12716 [Mar. 15, 2005]).*

Flooding

The alternatives, including the mitigated preferred alternative, would not have an adverse impact on flooding, because the amount of impervious surface at the Main Post would decrease. No portion of the Main Post is within a 100-year floodplain, and the Main Post is not subject to inundation in the event of reservoir failure or a tsunami.

Water Supply and Wastewater

The alternatives, including the mitigated preferred alternative, would not substantially increase the amount of water used or wastewater generated within the Presidio. The alternatives would use between 145,000 (Alternative 4) and 172,000 gallons (Alternative 2) of water per day.[75] The projected water consumption is an increment of the total increase assumed for planning purposes by the Trust and the San Francisco Public Utilities Commission, and an adequate water supply would be available for the mitigated preferred alternative. Water and sewer lines are adequately sized to handle existing and proposed flows, and no new water delivery or wastewater collection and treatment facilities would be required to service the alternatives, with the exception of new service connections or minor upgrades to connect new construction to the existing system. The buildings and new construction would be designed to incorporate water-conserving measures, such as low-flow fixtures and waterless urinals. Under terms and conditions of their leases, tenants are required to use water efficiently and responsibly, and are kept informed by the Trust of water conservation practices. Practicing water conservation to minimize water usage would also reduce wastewater generation and flows to the city's wastewater system. The alternatives would generate between 130,000 (Alternative 4) and 154,000 gallons (Alternative 2) of wastewater per day[76] for treatment at the city's Southeast Treatment Plant. The plant treats an average dry weather flow of about 67 million gallons per day (mgd) and up to 250 mgd during wet weather.

Energy and Solid Waste

The alternatives, including the mitigated preferred alternative, would not substantially increase the amount of energy used or waste generated within the Presidio. The alternatives would consume between 10.7 (Alternative 4) and 11.0 million kilowatt-hours (kWh) of electricity annually.[77] This increase in demand for electricity would be negligible in the context of overall demand within the Presidio and San Francisco, and would not require a major expansion of power facilities. High-efficiency heating and cooling equipment, lights, and appliances would be installed during construction and rehabilitation of the buildings. The buildings would meet or surpass the energy conservation requirements of the current California Title 24 Energy Code, where these requirements do not conflict with historic preservation objectives. Furthermore, the Trust would require applicants to seek a LEED® (Leadership in Energy and Environmental Design) Silver rating or better for their projects to demonstrate their

[75] *Based on water demand factors provided in Table 1, Domestic Water Demand Calculations, in Appendix H of the final PTMP EIS (Volume III).*

[76] *Based on flows provided in Table 52, Projected Wastewater Generation, on page 333 of the final PTMP EIS (Volume I).*

[77] *Based on energy and demand factors provided in Table 2, Electrical Use Projections – Final Plan Alternative, in Appendix J of the final PTMP EIS (Volume III).*

commitment to employing state-of-the-art strategies for sustainable site development, energy efficiency, materials selection, and indoor environmental quality.

Construction projects at the Main Post, such as building demolition, rehabilitation, and infill construction, would generate between 5,793 tons (Alternative 4) and 10,678 tons (Alternative 2) of mixed construction and demolition[78] (C&D) debris. The Trust would maximize the recycling of materials by requiring that mixed C&D debris be transported off-site by registered transporters and taken to registered facilities that can process and divert from landfill a minimum goal of 65 percent of the material generated from construction, demolition, or rehabilitation, including materials source-separated for reuse or recycling. During operation, tenants would comply with Trust waste management policies, which require them to develop a recycling program in conjunction with their activities at the Presidio, and to coordinate their recycling program with the Trust.

Hazardous Materials

The assessment and clean-up activities related to hazardous substances, pollutants, and contaminants on the Presidio are being conducted by the Trust with oversight by the California Department of Toxic Substances Control (DTSC) and the Regional Water Quality Control Board. This program involves extensive investigation, analysis, reporting, and if necessary remedial design and remedial action strategies. The characterization of contaminated sites, exposure pathways, and potential health risks associated with reuse and redevelopment at the Presidio are addressed under these regulatory controls separate from the NEPA process. Many of the historic buildings within the Presidio may contain asbestos, lead-based paint (LBP), or other hazardous materials, and soil within the drip-line of the buildings may contain LBP. Such hazardous materials are remediated in accordance with remediation/stabilization and removal plans approved by the Trust and all applicable federal and state laws and regulations requiring protection of human health and the environment. Remediation is performed such that exposure does not occur during the course of the clean-up activities. Institutional controls would be in place to protect future workers (e.g., notification to maintenance and construction workers), including adherence to the provisions of land use controls (LUCs) to address residual contamination in soil and groundwater. If remediation is required, it will be performed prior to or concurrently with construction of improvements. The risk of human exposure following remediation is low and precautionary measures would be implemented. Because remedial actions would be protective of human health and the environment and would expedite and enhance the beneficial reuse of identified contaminated areas, potential impacts on human health, safety, and the environment following clean-up would not be significant.

Proposed underground parking in the mitigated preferred alternative includes on-site excavation and removal of roughly 58,000 cubic yards of soil. If residual soil contamination were to exist in areas to be excavated,

[78] *Includes the materials that are discarded from construction and demolition activities including asphalt, concrete, brick, rock, soil, lumber, gypsum wallboard, cardboard and other associated packaging, roofing material, ceramic tile, carpeting, fixtures, plastic pipe, metals, tree stumps, and other vegetative matter resulting from land clearing. Based on solid waste generation factors provided in Table 3, Solid Waste Estimates by PTMP Alternative, in Appendix I of the final PTMP EIS (Volume III).*

contaminated soil could be encountered during excavation and other earth-moving activities. A soil management plan would be prepared and implemented to ensure the appropriate characterization and disposal of excavated soil. The plan would contain policies and procedures to protect site workers from potential health and safety impacts related to contaminated soil and groundwater. The plan would also include measures to minimize public exposure to contaminated soils, including dust control, appropriate site security, restriction on public access, and posting of warning signs.

Fire Hazards and Crime Prevention

None of the alternatives, including the mitigated preferred alternative, would substantially increase the demands for fire department or police services. The Presidio at present receives law enforcement services from the U.S. Park Police San Francisco Field Office (USPP), and fire protection and emergency services from the San Francisco Fire Department (SFFD). Although the mitigated preferred alternative or other alternatives could potentially increase the number of calls received from the area or the level of regulatory oversight that must be provided as a result of the increased concentration of activity on-site, the increase in responsibilities would not likely be substantial in light of the existing demand for police and fire protection services in the Presidio. Furthermore, the increase in demand would not require the construction of any new police or fire prevention facilities. During the permit review process, construction documents and shop drawings would be submitted to the USPP for security code compliance and installation of adequate security systems. At the same time, all alternatives would be required to comply with the requirements of the National Fire Protection Association (NFPA) Fire Codes and Life Safety Codes, including those associated with hydrant water pressure and emergency access.

Under the terms of an agreement between the Trust, NPS, and the City and County of San Francisco, as of October 1, 2010, the San Francisco Fire Department (SFFD) is the authority having jurisdiction for fire protection and emergency services in the Presidio. With federal funding to cover costs, the SFFD operates Station 51 in Building 218 on the Main Post. The SFFD provides the same level of services that is provided in other parts of the city, and staffs its crews to comply with all requirements of federal law and regulation pertaining to the provision of firefighting and emergency services and to local agency standards, policies, and medical protocols. Given the physical location of Station 51 on the Main Post, proposals within the Main Post Update would have no impact on response times or proposed staffing.

Environmental Justice

The alternatives, including the mitigated preferred alternative, would not have a disproportionately high or significant impact on low-income and minority populations. Rather, many of the proposed building uses would expand cultural and educational opportunities for these communities, as well as for the general population. None of the alternatives would substantially increase the burden on the Bayview and Hunters Point neighborhoods community due to wastewater discharges to the city's wastewater systems (a matter raised during scoping). Unlike the city, the Main Post does not have a combined sewer system that collects both wastewater and stormwater in the same network of pipes. As stormwater is treated and discharged directly into the bay, the amount of flows transported to the city's treatment plants is substantially lessened.

Furthermore, since 1990, total annual wastewater flows within the Presidio have been reduced to approximately 145 million gallons, or less than a third of 1990 flows. Current and projected future flows would represent less than one half of one percent of the dry and wet weather capacities of the Southeast Treatment Plant in the city's Bayview/Hunters Point area. Upon completion, the Trust's proposed on-site water recycling project would capture and reuse the majority of the Presidio's wastewater flows that are treated at the Southeast Treatment Plant. Implementation of stringent water conservation practices, including requirements for water-efficient fixtures (toilets, faucets, etc.) in all building rehabilitation projects, would also minimize wastewater generation at the park. Although future contribution would be very small, the Trust is committed to further reducing these flows to the greatest extent practicable and assisting in alleviating any burden placed on the Bayview and Hunters Point neighborhoods.

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Public Involvement and Agency Consultation

This section describes the processes used by the Trust to invite the participation of the public prior to preparation of the final SEIS (see Section 4.1 below), and to concurrently consult with interested parties under Section 106 of the National Historic Preservation Act (NHPA) (see Section 4.2 below). The Section 106 consultation culminated in a programmatic agreement (Appendix B), which takes into account the effects of the project on historic properties. The NEPA process will conclude in a record of decision (ROD) that will fully account for the provisions of the Section 106 consultation.

4.1 Public Participation

The Trust provided numerous opportunities for individuals and organizations to submit comments on the Main Post Update and the draft SEIS and to influence the outcome of Trust decisions. Inviting public comment began with the lodge and the art museum proposals, which were each scoped twice, first as separate actions and again as part of the Main Post Update SEIS. Therefore, the discussion in this section includes separate summaries of the public participation process during each phase of environmental review leading to the final SEIS.

PRESIDIO LODGE EA SCOPING

The public was notified of the lodge proposal on November 6, 2006 through a "scoping notice" sent to approximately 225 individuals, organizations, and agencies on the Trust's Main Post mailing list. The notice announced the proposal and invited the public to attend an informational meeting and to submit comments on the issues, impacts, and alternatives to be addressed in an environmental assessment (EA). On December 16, 2006 the Trust initiated consultation on the lodge proposal under Section 106 of the NHPA. The public meeting was also announced in the Winter 2007 issue of "At the Presidio," the Trust's quarterly publication. The public meeting was held at the Officers' Club on December 11, 2006; it was attended by 50 people and 14 spoke. At the request of meeting attendees, the Trust announced and held a second meeting at the Officers' Club on January 29, 2007 to allow the public to participate in developing the Trust's request for proposals (RFP) process, and to preview draft design guidelines for the project. Forty-three people attended the meeting, which was conducted in a workshop format following a brief presentation. Input from that meeting was incorporated into the final RFP, which the Trust issued in January 2007.

By the close of the 90-day public scoping period for the proposed project (November 10, 2006 – February 8, 2007), or shortly after, the Trust received six letters: those from the National Trust for Historic Preservation (National Trust), the Presidio Historical Association (PHA),

the Pacific Heights Residents Association (PHRA), the Tides Network (Tides, a Presidio tenant), and two letters from interested individuals (Carey Feierabend and Leonard Richardson). See Section 4.1 (Presidio Lodge EA Scoping Process and Issues Raised during Scoping) of the draft SEIS for a summary of the oral and written comments received[79] with responses to the issues raised.

ART MUSEUM EIS SCOPING

The Trust commenced preparation of the EIS by publishing a Notice of Intent (NOI) in the Federal Register on August 14, 2007 (72 FR 43469). The NOI was also widely distributed to interested parties and posted on the Trust's web site. Consultation under Section 106 of the NHPA was initiated on August 8, 2007. The NOI provided descriptions of the proposed action and possible alternatives, the scoping process including time and place of an upcoming public meeting, and contact information. The public meeting was held at the Officers' Club on September 24, 2007, at which 66 members of the public attended and 24 spoke. By the close of or shortly after the 60-day public scoping period for the project (August 14, 2007 – October 15, 2007), the Trust received 87 comment letters and electronic mails, including one petition with more than 125 signatures (Table 28 in draft SEIS). Many of the commentors focused on the appropriateness of a contemporary art museum at the Main Post and requested that the Trust evaluate the proposed museum in the context of other foreseeable actions at the district and to investigate one or more alternative sites. Commentors also raised concerns about the potential traffic and parking impacts that would be caused by the proposed museum, and the potential loss of existing recreational facilities (the bowling center and the tennis court) at the proposed cultural institution site. In addition, commentors were concerned about impacts of new construction on the National Historic Landmark District, on visual resources, and on the relationship of the proposed museum to the Trust's self-sufficiency goals. See Section 4.2 (Art Museum EIS Scoping Process and Issues Raised during Scoping) of the draft SEIS for a summary of the scoping comments received with responses to the key issues raised.

MAIN POST UPDATE SEIS SCOPING

The Trust notified interested parties in the Federal Register notice of October 29, 2007 (72 FR 61191-61192) and through a direct mailing that in response to public concerns it had terminated the separate NEPA and NHPA processes for the lodge and art museum. The notices announced that the Trust would instead prepare a single EIS to analyze these and other reasonably foreseeable actions at the Main Post in a supplement to the PTMP EIS, and would seek public input through scoping. Notice was sent on November 9, 2007 initiating consultation on the Main Post EIS under Section 106 of the NHPA. The Trust held a public meeting on November 28, 2007 at the Officers' Club to accept comments on the scope of the supplemental EIS. Approximately 125 people attended the meeting and 29 spoke. By the close of the public scoping period for the project on December 15, 2007, the Trust received 271 comment letters and electronic mails (Table 29 in draft SEIS). See Section 4.3 (Main Post Update SEIS Scoping Process and Issues Raised during Scoping) of

[79] *Scoping letters and summaries of the comments received at the scoping meetings are available for public review at the Presidio Trust Library, 34 Graham Street, and constitute part of the formal public record.*

the draft SEIS for a summary of the scoping comments received with responses to the key issues raised.

INVITING COMMENTS ON THE MAIN POST UPDATE DRAFT SEIS

The Trust released the draft SEIS for public comment on June 8, 2008. Notice of the availability of the draft SEIS was provided by the U.S. Environmental Protection Agency (EPA) on June 13, 2008 (73 FR 33814). The EPA's notice of availability identified the 45-day time period for public review of the draft SEIS to end July 31, 2008. In response to requests from interested parties, the Trust extended the prescribed comment period by 50 days to September 19, 2008 (73 FR 45092), again by 31 days to October 20, 2008 (73 FR 53295), again by 27 days to November 17, 2008 (73 FR 60368), and again by 28 days to December 15, 2008 (73 FR 67898). By extending the comment period, the Trust anticipated more in-depth comments on the draft SEIS to promote a better-informed decision on the proposed action. More than 300 copies of the draft SEIS were distributed to commenting agencies and the public. The draft SEIS was also made available for review at the Trust Headquarters, at local libraries, and on the Trust's web site.

The public was invited to provide oral comment on the draft SEIS at Trust Board of Directors meetings on July 14, 2008, where approximately 700 people attended and at which 125 spoke, and on December 9, 2008, where approximately 200 people attended and at which 67 spoke.[80] In addition, the Trust conducted approximately 23 guided walks during the summer of 2008 (June 15 to August 27) to provide information, answer questions, and accept public "comment cards" on the draft SEIS and the various proposals being considered. These walks and tours were attended by over 1,500 people. The Trust also hosted five workshops: one on July 28, 2008 attended by approximately 100 people to discuss the transportation and parking analysis section of the draft SEIS; three during the fall of 2008 (September 25, September 28, and October 2[81]) attended by approximately 125 people to provide additional opportunities to discuss the draft SEIS and the alternative concepts for the Main Post; and one on November 19, 2008 attended by approximately 120 people to update the public about the compliance process, familiarize them with the applicable standards for building in a historic site, and introduce most recent strategies that had been developed. Additionally, the Trust participated in numerous meetings with neighborhood groups, resource conservation organizations, professional and civic associations, and various commissions of the City and County of San Francisco, including the Planning Commission and Landmarks Preservation Advisory Board. By the time the supplement to the draft SEIS was circulated in February 2009, the Trust had received comments from 5 public agencies, 1 elected official, 51 organizations, and 2,343 individuals, including form letters.[82] In general, many of the commentors expressed a strong desire to enhance and maintain the historic character of the Main Post, and ensure that the

[80] *Transcripts of the July 14, 2008 and December 9, 2008 public meetings can be viewed at the Presidio Trust Library and on the Trust's web site, and constitute part of the formal public record.*

[81] *Transcripts and a summary (MIG 2008) of the September 25, September 28, and October 2, 2008 Main Post workshop series can be viewed at the Presidio Trust Library and on the Trust's web site.*

[82] *Comment letters are available for review at the Presidio Trust Library and constitute part of the formal public record.*

Main Post is preserved as a place of natural beauty and as an oasis in the city for future users. The same commentors noted how unique the Main Post is and the importance of maintaining its strong sense of place. Many commented that the Main Post should have a high level of public accessibility, particularly in the Montgomery Street Barracks, and that the plan to reveal El Presidio would be an important asset. While most commentors were against the now-withdrawn museum of contemporary art (CAMP) proposal for the Main Post, many were open to the museum being located elsewhere on the Presidio. In addition, though commentors were concerned about new construction, they were also open to the addition of new buildings as long as they were consistent with the character of the Main Post. The provision of lodging on the Main Post was seen as appropriate, particularly in regards to reuse of Pershing Hall. However, there was some skepticism regarding the need for new construction of a freestanding lodge along the eastern edge of the Main Parade. Finally, most supported expanding the Presidio Theatre, converting a portion of Building 50 into a Heritage Center, and developing a state-of-the-art Archaeology Center in the buildings and garages adjacent to Building 50. See Section 2 of the Response to Comments volume of the final SEIS for responses to all substantive public comments received on the draft SEIS.

INVITING COMMENTS ON THE SUPPLEMENT TO THE MAIN POST UPDATE DRAFT SEIS

The Trust announced in a December 8, 2008 press release (Trust 2008), also made available on its web site, and in a December 12, 2008 Federal Register notice (73 FR 75777) that, as the result of the Trust's analysis of the alternatives in the draft SEIS and the analysis developed in the course of consultation under Section 106 of the NHPA, and in consideration of public comment, it had identified a preferred alternative and would analyze the alternative in a supplement to the draft SEIS. In the announcements, the Trust indicated that it elected to address the preferred alternative in a supplement to the draft SEIS to best integrate and satisfy its NEPA and NHPA requirements. The announcements also informed the public that the Trust would continue to accept public comments on the draft SEIS until the deadline for comments on the supplement. The Trust Board of Directors held a public meeting on December 9, 2008 to explain the preferred alternative and accept public comment. Approximately 250 people attended the meeting and 68 offered comments.

The Trust made the supplement to the draft SEIS available to the public at the beginning of the last week of February 2009. The EPA published notice that the supplement was filed by the Trust and received on March 6, 2009 (74 FR 9817-9818). The EPA's notice of availability identified the 45-day time period for public comment to end April 20, 2009, which the Trust extended by 7 days to April 27, 2009 at the request of the public (74 FR 15265), and again by 35 days to June 1, 2009 (74 FR 18706). More than 300 copies of the supplement were transmitted to commenting agencies and individuals. The supplement was also made available for review at the Trust Headquarters, at local libraries, and on the Trust's web site.

The Trust initially decided to hold three public meetings during the comment period for the supplement to provide opportunities for the public to provide oral comment. However, in response to public requests, the format of the third public meeting was changed to a planning workshop that provided an overview of the transportation issues

being analyzed through the Main Post planning and environmental review process. Trust and City and County of San Francisco staff were also on hand to answer questions about transportation issues. The first public meeting on April 1, 2009 was attended by approximately 40 people and 19 spoke. The second meeting, held by the Trust Public Board of Directors on April 7, 2009, was attended by approximately 375 people and 84 spoke. The transportation workshop on April 22, 2009 was attended by approximately 125 people and 23 spoke.[83]

From March 6, 2009 through April 18, 2009, the Trust maintained a drop-in (10:00 AM to noon Fridays and Saturdays) Main Post Information Center in Building 105 for the public to learn more about the preferred alternative and the planning and environmental review process. Illustrations and other information about proposals in the alternative were displayed, and Trust staff were present to answer questions and make comment cards available.

The Trust also held two informal "open houses" on May 18, 2009 and May 20, 2009, at which Trust staff were available to respond to questions about the proposed projects for the Main Post as well as questions about historic resources, transportation and parking, visitor use, and environmental sustainability. Approximately 30 people attended the two sessions.

By the close of or shortly after the 87-day comment period for the supplement (March 6, 2009 – June 1, 2009), the Trust received comments from 7 public agencies, 1 elected official, 51 organizations, and 2,845 individuals, including form letters and those comments received on the draft SEIS.[84] In general, commentors recognized and appreciated the changes the Trust made in plans for the Main Post between the draft SEIS and the supplement but still had key concerns about several of the proposed projects. Some appreciated the improvements to the now-withdrawn CAMP's design, size, and appearance to limit its visual prominence, while others felt the design was as "troubling" as the original proposal. Those commentors that previously were in favor of the lodge and theater welcomed the added improvements to the designs, noting that the changes were a step in the right direction. Others did not support demolition of Buildings 40 and 41 to better interpret the archaeological site of El Presidio. Many also remained concerned about impacts related to traffic and parking, especially on surrounding neighborhoods. See Section 2 of the Response to Comments volume of the final SEIS for responses to all substantive public comments received on the supplement.

[83] *Transcripts of the April 1, 2009 and April 7, 2009 public meetings and the April 22, 2009 workshop can be viewed at the Presidio Trust Library and on the Trust's web site, and constitute part of the formal public record.*

[84] *Comment letters are available for review at the Presidio Trust Library, and constitute part of the formal public record.*

4.2 Consultation under the National Historic Preservation Act

The Section 106 regulatory process takes into account the effects of a federal agency's actions on historic properties. As stipulated in the Trust's 2002 PA for the PTMP, the Trust opened a consultation in accordance with 36 CFR 800.5 when the agency determined that the undertaking had the potential for adverse effect. Section 106 provides an opportunity for members of the public with a demonstrated interest in the project to participate as consulting parties, providing written and oral comments on the undertaking. There are currently 17 consulting parties, including government agencies, neighborhood groups, historic preservation organizations, and project applicants.[85]

Through the Section 106 process, the Trust, in collaboration with consultation parties, established an Area of Potential Effects (APE), which identifies the historic resources that may be affected by the undertaking. For this undertaking, the APE was determined to be the entire Presidio NHLD. The Trust then assessed the effects on historic resources brought about by the undertaking through a draft Finding of Effect (FOE), which was circulated for comment on August 8, 2008. The draft FOE for the revised undertaking was circulated for comment in February 2009. The California State Historic Preservation Officer and Advisory Council on Historic Preservation concurred with the draft FOE's finding of adverse effect, enabling the Trust to issue a final FOE on July 6, 2009 and proceed to the resolution phase of the consultation.

[85] *A list of participants in the consultation process for this undertaking is provided in the final Finding of Effect.*

The Section 106 consultation was resolved through the execution of the Programmatic Agreement for the Main Post (PA-MPU) (Appendix B), which describes how the Presidio Trust will "avoid, minimize, or mitigate" the effects identified in the FOE.[86] Execution of the PA-MPU involved the signatory parties to the 2002 PA: the Advisory Council on Historic Preservation, the California State Historic Preservation Officer, the National Park Service, and the Presidio Trust. Other interested parties involved in the Section 106 consultation process may also concur with the PA-MPU if they choose.

Since initiation of the consultation on November 9, 2007, there have been eight consulting party meetings (December 11, 2007, February 26, 2008; September 16, 2008; December 5, 2008; April 21, 2009; August 18-20, 2009; January 26, 2010; and September 14-15, 2010). Representatives from all consulting parties were invited to attend these meetings. Due to the large number of consulting parties, the Trust also conducted numerous smaller focus meetings with groups of consulting parties over the course of the consultation. The Trust used the meetings to present materials to help parties identify and assess adverse effects, comment on the draft FOE, and develop the draft PA-MPU.

As part of the Section 106 process, the Trust held a two-day design workshop in August 2008 with representatives of the National Park Service. The purpose of the workshop was to apply the Secretary of Interior's Standards to the project proposals described in the draft SEIS and develop alternative concepts for the various elements of the undertaking, including the art museum, the lodge, and the theater.

[86] *See 36 CFR 800.6 (Resolution of Adverse Effects).*

Architects and other historic resource experts from both organizations identified the applicable Secretary of the Interior's Standards for rehabilitation and new construction in a NHLD. The workshop considered the nature of the effects on the resources, including historic buildings, archaeological resources, the cultural landscape, historic views, and the relation of built and open space. Strategies included ways to reduce building size, scale, and mass; ways to orient the buildings to the site; and ways to articulate the buildings with architectural features. The information from the two-day workshop was condensed into a multi-page evaluation matrix based on the applicable Secretary of Interior's Standards, which was made available for public review on the Trust's web site. The Trust presented the information to representatives from the ACHP and SHPO; comments from both agencies were incorporated into the matrix. The evaluation matrix assisted the Trust in its development of the preferred alternative described in the supplement. The Trust has continued to work with project applicants, fellow government agencies, and consultation parties to avoid, minimize, or mitigate the adverse effects identified in the final FOE. Consultation meetings and focused design discussions in 2009 resulted in changes to the undertaking that have dramatically lessened the impacts on historic resources. On November 17, 2009, the Trust released a draft PA-MPU to resolve the Section 106 consultation. Formal consultation meetings and informal "question-and-answer" sessions held in December 2009 and January 2010 further informed the development of the PA-MPU. The PA-MPU was circulated on March 26, 2010, and the final PA-MPU is provided in Appendix B.

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Rosemary Cambra, Chairperson, Muwekma Ohlone Indian Tribe of the San Francisco Bay Area

Jeffrey Chan, Senior Transportation Planner, DMJM Harris | AECOM

Neal Desai, Senior Program Manager, Pacific Region, National Parks Conservation Association

Milford W. Donaldson, State Historic Preservation Officer, Office of Historic Preservation, Department of Parks and Recreation, State of California

Becky Evans, Member, Sierra Club

Jean-Marie Feyling, Amah/Mutsun Tribal Band

John Fowler, Executive Director, Advisory Council on Historic Preservation

Andrew Galvan, Ohlone Indian Tribe

Ramona Garibay, Representative, Trina Marine Ruano Family

Amanda Gassaway, Sales Coordinator, Fort Mason Foundation

Richard Gluckman, FAIA, Architect, Gluckman Mayner Architects

Jack A. Gold, former Executive Director, San Francisco Architectural Heritage

Anthea M. Hartig, Ph.D., Director, Western Office, National Trust for Historic Preservation

Whitney Hall, Presidio Historical Association

Judith Hulka, former President, Neighborhood Association for Presidio Planning

Elaine Jackson-Retondo, National Register and National Historic Landmarks Program, Pacific West Region, National Park Service

Craig Kenkel, former Chief of Cultural Resources and Museum Management, Golden Gate National Recreation Area, National Park Service

Katharine Kerr, Office of Federal Agency Programs, Advisory Council on Historic Preservation

Boyd de Larios, Descendants of the Anza and Portola Expeditions

Mark Luellen, Preservation Coordinator, San Francisco Planning Department

Kyri S. McClellan, Project Manager, Base Reuse & Development, Mayor's Office of Economic and Workforce Development

Amy Meyer, Chair, People for a GGNRA

Victor Meyerhoff, Proprietor, Presidio Bowling Center

Ron Miguel, former President, Planning Association for the Richmond

Richard Moe, former President, National Trust for Historic Preservation

Joy L. Navarrete, Environmental Planner, San Francisco Planning Department

Shelley Niedernhofer, PE, Chief of Administration and Business Services, San Francisco Maritime National Historic Park

Terence J. Reagan, TJ Reagan, Inc.

Ann Marie Sayers, Chairperson, Indian Canyon Mutsun Band of Costanoan

Paul Scolari, Native American Liaison, Golden Gate National Recreation Area, National Park Service

Robert Sindelar, Executive Director, Presidio Community YMCA

Lana Stukov, Administrator, Your Health

Anthony Veerkamp, Senior Program Officer, Western Office, National Trust for Historic Preservation

Sammi Wang, Senior Clerk Typist, Presidio Child Development Center

Gary Widman, President, Presidio Historical Association

Jason Wright, Member, Presidio Historical Association

Irene Zwierlein, Chairperson, Amah/Mutsun Tribal Band

5.3 List of Agencies and Organizations[87]

The following agencies and organizations were sent copies of the final SEIS for their review.

PUBLIC AGENCIES

Advisory Council on Historic Preservation

United States Department of the Interior, National Park Service, Golden Gate National Recreation Area

United States Department of the Interior, National Park Service, Pacific West Region

United States Department of the Interior, Office of the Secretary, Office of Environmental Policy and Compliance, Regional Environmental Office

United States Environmental Protection Agency, Office of Federal Activities

United States Environmental Protection Agency, Region IX

City and County of San Francisco Landmarks Preservation Advisory Board

ELECTED OFFICIALS

Hon. Gavin Newsom, Mayor, City and County of San Francisco

Michela Alioto-Pier, Member, Board of Supervisors, District 2, City and County of San Francisco

NEIGHBORHOOD ORGANIZATIONS

Cow Hollow Association

Lake Street Residents Association

Laurel Heights Improvement Association

Marina Community Association

Neighborhood Associations for Presidio Planning

Pacific Heights Residents Association

Planning Association for the Richmond

Presidio Neighborhood Representative Work Group

NATURAL RESOURCE CONSERVATION ORGANIZATIONS

National Parks Conservation Association

People for a Golden Gate National Recreation Area

Sierra Club Presidio Committee

[87] *Partial listing.*

HISTORIC PRESERVATION ORGANIZATIONS

California Heritage Council
National Trust for Historic Preservation, Western Office
Presidio Historical Association
San Francisco Architectural Heritage

HERITAGE ORGANIZATIONS

Descendants of the Anza and Portola Expeditions
Los Californianos
Society of Hispanic Historical and Ancestral Research
Vaquero Heritage Foundation

ACADEMIC ORGANIZATIONS

Department of Anthropology, Stanford University
San Francisco State University, History Department

OTHER ORGANIZATIONS

American Society on Aging
Presidio Community YMCA
Presidio Interfaith Chapel
San Francisco Film Society

LIBRARIES

San Francisco Main Public Library
San Francisco Public Library, Marina Branch
San Francisco Public Library, Presidio Branch
University of California, Berkeley, Institute of Governmental Studies

Acronyms and Abbreviations

AB	Assembly Bill
ABAG	Association of Bay Area Governments
ACHP	Advisory Council on Historic Preservation
AMA	Archaeological Management Assessment
AMP	Archaeological Monitoring Plan
APE	Area of Potential Effects
BAAQMD	Bay Area Air Quality Management District
BART	Bay Area Rapid Transit
BETP	Built Environmental Treatment Plan
BMP	Best Management Practice
BOQ	Bachelor Officers' Quarters
BRT	Bus Rapid Transit
C&D	construction and demolition
Caltrans	California Department of Transportation
CAP	Clean Air Plan
CARB	California Air Resources Board
CAT	Climate Action Team
CCSF	City and County of San Francisco
CDC	Child Development Center
CEQ	Council on Environmental Quality
CEQA	California Environmental Quality Act
CFR	Code of Federal Regulations
cfs	cubic feet per second
CH_4	methane
CHA	Cow Hollow Association
CLA	Cultural Landscape Assessment
CO	carbon monoxide
CO_2	carbon dioxide
CRS	Center for Resource Solutions
CTBS	Citywide Travel Behavior Survey
CWA	Clean Water Act
dB	decibel
dBA	A-weighted decibels
DTSC	California Department of Toxic Substances Control
EA	Environmental Assessment
EIS	Environmental Impact Statement
EMS	environmental management system
EPA	U. S. Environmental Protection Agency
FHWA	Federal Highway Administration
FOE	Finding of Effect
FONSI	Finding of No Significant Impact
GGNRA	Golden Gate National Recreation Area
GHG	greenhouse gases
GIS	Geographic Information System
GMPA	General Management Plan Amendment
HABS	Historic American Building Survey
HCM	Highway Capacity Manual
HSR	historic structures report
ITE	Institute of Transportation Engineers
LBP	lead-based paint

LDAC	Letterman Digital Arts Center
Ldn	day-night equivalent sound level
LEED	Leadership in Energy and Environmental Design
Leq	equivalent sound level
LOS	level of service
LUC	land use control
MMTCO2e	million metric tons of carbon dioxide equivalent
MOA	Memorandum of Agreement
MS4	Municipal Separate Storm Sewer System
N_20	nitrous oxide
NAC	Noise Abatement Criteria
NAGPRA	Native American Graves Protection and Repatriation Act
NAPA	National Academy for Public Administration
NAPP	Neighborhood Associations for Presidio Planning
NEPA	National Environmental Policy Act
NFPA	National Fire Protection Association
NHL	National Historic Landmark
NHLD	National Historic Landmark District
NHPA	National Historic Preservation Act
NOI	Notice of Intent
NOx	nitrogen oxide
NPCA	National Parks Conservation Association
NPDES	National Pollutant Discharge Elimination System
NPS	National Park Service
NRHP	National Register of Historic Places
OMB	Office of Management and Budget
P.L.	Public Law
PA	Programmatic Agreement
PAR	Planning Association for the Richmond
PGGNRA	People for a Golden Gate National Recreation Area
PHA	Presidio Historical Association
PHRA	Pacific Heights Residents Association
PHSH	Public Health Service Hospital
PM10	particulate matter less than 10 microns in diameter
PM2.5	particulate matter less than 2.5 microns in diameter
PTMP	Presidio Trust Management Plan
RCP	reinforced concrete pipe
RFP	request for proposals
ROD	Record of Decision
ROG	reactive organic gases
RWQCB	Regional Water Quality Control Board
SEIS	Supplemental Environmental Impact Statement
SFCTA	San Francisco County Transportation Authority
SFFD	San Francisco Fire Department
SFUSD	San Francisco Unified School District
SHBC	State Historical Building Code
SHPO	State Historic Preservation Officer
SIP	State Implementation Plan
SMP	Stormwater Management Plan
SWPPP	Stormwater Pollution Prevention Plan
TCM	transportation control measures
TDM	transportation demand management
TEP	Transit Effectiveness Project
USFWS	U. S. Fish and Wildlife Service
USPP	U.S. Park Police San Francisco Field Office
USTA	U. S. Tennis Association
WPA	Works Progress Administration
YMCA	Presidio Community YMCA

Glossary

In order to aid reader understanding, this section provides layperson's terms rather than technical definitions that may apply in a specialized field of knowledge. Some definitions are specific to the Presidio or to a certain environmental topic; for example, the definition of “attainment” (“achievement of air quality standards”) applies specifically to air quality analysis.

Adverse effect Direct or indirect harm to historic properties listed on or eligible for inclusion in the National Register of Historic Places. The National Historic Preservation Act regulations set forth criteria used to assess adverse effects at 36 CFR 800.5.

Advisory Council on Historic Preservation (ACHP) An independent federal agency that promotes the preservation, enhancement, and productive use of the nation’s historic resources and advises the President and Congress on national historic preservation policy.

Air pollutant Foreign or natural substances that are discharged, released, or over-generated into the atmosphere that could result in adverse impacts on humans, animals, vegetation, or materials. Also known as an air contaminant. Examples include but are not limited to smoke, charred paper, dust, soot, grime, carbon, fumes, gases, odors, particulate matter, acids, or any combination thereof.

Air Quality Management District Local government agency charged with controlling air pollution and attaining air quality standards. The Presidio is included in the Bay Area Air Quality Management District.

Alternative mitigation *See* creative mitigation.

Ambient air quality standards Health- and welfare-based standards established by the state or federal government for clean outdoor air that identify the maximum acceptable average concentrations of air pollutants during a specified period of time.

Ambient noise The distinctive acoustical characteristics of a given space consisting of all noise sources audible at that location.

Ambient noise level The normal or existing level of environmental noise at a given location and composed of sound from all sources near and far. In many cases, the term “ambient” is used to describe an existing or pre-project condition and is used as a reference when conducting environmental noise analyses.

Archaeological resource Any material remains or physical manifestation of past human life or activities that are of archaeological interest (i.e., capable of providing scientific or humanistic understanding of past

human behavior and its effects on the environment, cultural adaptation, and related topics through the application of scientific techniques).

Area A The predominately coastal area of the Presidio, comprising about 320 acres, under the jurisdiction and management of the National Park Service.

Area B The area of the Presidio, comprising about 1,160 acres, under the administrative jurisdiction of the Presidio Trust. Area B is defined in Title I of the Presidio Trust Act and includes the interior (non-coastal) portion of the Presidio and nearly all built areas of the park.

Area of Potential Effects (APE) The geographic area or areas within which an undertaking may directly or indirectly cause changes in the character or use of historic properties, if any such properties exist. The APE is influenced by the scale and nature of an undertaking and may be different for different kinds of effects caused by the undertaking. For the purposes of this undertaking, the APE is the entire NHLD.

Attainment Achievement of air quality standards.

Avoidance Accomplished by relocating construction or other potentially harmful activities to areas where there are no known archaeological or historic resources.

Bay Area Air Quality Management District (BAAQMD) The regional government agency that regulates sources of air pollution within the nine San Francisco Bay Area counties.

Best Management Practices (BMPs) Schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the discharge of pollutants to receiving waters.

Carbon monoxide (CO) A colorless, odorless toxic gas produced by the incomplete combustion of carbon-containing substances. It is emitted in the exhaust of gasoline-powered vehicles.

Character-defining features Visual aspects and physical features that comprise the appearance of an historic building. Character-defining features include the overall shape of the building, its materials, craftsmanship, decorative details, and interior spaces and features, as well as the various aspects of the building's site and environment.

Clean Air Plan (CAP) The Bay Area Air Quality Management District's plan to reduce emissions of certain air pollutants (reactive organic gases [ROG] and nitrogen oxides [NOx]) that lead to the formation of ozone, or "smog," in the lower atmosphere.

Climate change A global problem that results from global greenhouse gas emissions. *See also* greenhouse gases.

CNEL (Community Noise Equivalent Level) The 24-hour average noise level, with noise occurring during evening hours (7:00 – 10:00 PM) weighted by a factor of three and noise occurring during nighttime hours weighted by a factor of ten prior to averaging.

Conformity A process mandated in the federal Clean Air Act to insure that federal actions do not impede attainment of the federal health standards. General conformity sets out a process that requires federal agencies to demonstrate that their actions are neutral or beneficial to air quality.

Creative mitigation Alternatives or additions to archaeological data recovery as mitigation for an undertaking's adverse effects. Such

approaches are usually considered as part of a broader mitigation package.

Criteria air pollutants Air pollutants for which the federal or state government has established ambient air quality standards or criteria for outdoor concentration in order to protect public health.

Criteria for Evaluation The National Register's criteria for evaluating the significance of properties that recognize the accomplishments of those who have made a significant contribution to the country's history and heritage. The criteria are designed to guide state and local governments, federal agencies, and others in evaluating potential entries in the National Register.

Cultural landscape A geographic area, including cultural and natural resources and the wildlife or domestic animals therein, associated with a historic event, activity, or person or exhibiting other cultural or aesthetic values. At the Presidio, the cultural landscape is inextricably linked to the Presidio's continuous military occupation since 1776. The 2002 Cultural Landscape Assessment (CLA) for the Main Post describes the changes in the area that occurred through the nine major periods of Presidio history.

Cultural resource An aspect of a cultural system that is representative of or is valued by the group of people with whom it is traditionally associated. A cultural resource can be a tangible entity, but may also include less material forms such as dance styles, folkways, or religious customs. Tangible entities at the Presidio include archaeological resources, cultural landscapes, and historic structures.

Cumulative effects Changes resulting from the impacts of an action combined with other past, present, and reasonably foreseeable future actions, regardless of the agency (federal or non-federal) or individual responsible for undertaking such actions.

Data recovery A common mitigation measure that usually includes scientifically controlled archaeological hand excavation, by which (through implementation of a treatment plan) the information within an archaeological site is retrieved before the site's integrity is compromised or destroyed. This option preserves some of the important scientific information.

dB or dBA A decibel (dB) is the standard unit of sound amplitude, or loudness; decibels are measured on a logarithmic (i.e., non-linear) scale. The A-weighted (dBA) scale is adjusted for human sensitivity.

Development agreement A contract between a private development partner and a government entity, such as the Trust, that may specify conditions, terms, restrictions, and regulations pertaining to all aspects of a development.

Direct effect An impact that occurs as a result of the proposed action or alternative in the same place and at the same time as the action.

Diversion For waste measurement purposes, any combination of waste prevention (source reduction), recycling, reuse, and composting activities that reduces waste disposed at permitted landfills and transformation facilities.

Doyle Drive A critical section of U.S. Highway 101 that connects San Francisco to the Golden Gate Bridge along the Presidio's northern waterfront. Originally constructed in 1936, the roadway is nearing the end of its useful life.

El Presidio de San Francisco (El Presidio) The military settlement and northernmost outpost of colonial New Spain established at the Golden Gate in 1776, and the cornerstone and namesake of the Presidio today.

Environmental Assessment (EA) A concise public document that analyzes the environmental impacts of a proposed federal action and provides sufficient evidence to determine the level of significance of the impacts.

Environmental Impact Statement (EIS) A detailed National Environmental Policy Act (NEPA) document prepared when a proposed action or alternative has the potential for significant impact on the human environment.

Environmental justice When such analysis is required by the NEPA, identifying and addressing, as appropriate, high and adverse human health or environmental effects of federal actions, including effects on minority communities and low-income populations.

Environmental review *See* NEPA process.

Exceedance A monitored level of concentration of any air contaminant higher than federal or state ambient air quality standards.

External trip A trip that originates outside the Presidio and terminates in the Presidio, or originates in the Presidio and terminates outside the Presidio.

Federal Register A daily publication of the National Archives and Records Administration that updates the Code of Federal Regulations, in which the public may review the regulations and legal notices issued by federal agencies.

Financial sustainability The long-term aspect of financial self-sufficiency. The premise that the Presidio must not only meet short-term self-sufficiency requirements in Fiscal Year 2013, but also be capable of sustaining its operations, performing the necessary building- and infrastructure-related capital improvements, and funding replacement reserves in perpetuity. This requires generating sufficient revenues from leasing and other activities to cover these long-term costs.

Fugitive dust Dust particles that are introduced into the air through certain activities, such as excavation and site preparation during construction or some demolition activities, or use of off-road vehicles or any vehicles operating on open fields or dirt roadways.

General Management Plan Amendment (GMPA) The National Park Service management plan for Area A of the Presidio.

General Objectives of the GMPA A directive of Congress incorporated into the Presidio Trust Act with which the Trust must comply. Because the GMPA text does not explicitly identify general objectives, the Trust Board determined and adopted the General Objectives of the GMPA in Trust Board Resolution 99-11. The General Objectives guide Trust policy and decisions about resource protection and land and building use in Area B of the Presidio.

Geologic hazards Natural geologic processes (e.g., earthquakes) that occur or could potentially occur in locations that present a threat to humans or developed areas.

Green Loosely defined, environmentally conscientious.

Green design Construction practices that significantly reduce the negative impact of buildings on the environment by incorporating features that

reduce energy consumption, conserve natural resources, and reduce pollution.

Greenhouse gases (GHG) Gases that trap heat in the atmosphere. The principal greenhouse gases that enter the atmosphere because of human activities are carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride.

Gross building area Total floor area of a building, usually measured from its outside walls.

Groundwater Subsurface water that occurs beneath the water table in soils and geologic formations that are fully saturated. *See also* surface water.

Habitat The natural environment of an organism or ecological community.

Hardscape That part of a property consisting of structures (patios, retaining walls, walkways, etc.) made with hard materials such as concrete or asphalt.

Hazardous substance A substance that is potentially harmful to human health or the environment.

Hazardous waste A waste with properties that make it dangerous or potentially harmful to human health or the environment.

Historic sites The physical evidences, usually augmented by written documentation, of the Spanish, Mexican, and American occupations of the Presidio. These sites could also include evidence of the Ohlone and other native peoples who occupied the Presidio in the 18th and 19th centuries.

Historic property Any prehistoric or historic district, site, building, structure, or object listed on or eligible for inclusion in the National Register of Historic Places. This also includes artifacts, records, and remains related to and located within such properties.

Historic tax credit Established by the Tax Reform Act of 1986 (PL 99-514; Internal Revenue Code Section 47), a rehabilitation tax credit equal to 20 percent of the amount spent in a certified rehabilitation of a designated historic structure and that may be used to offset taxes payable.

Historic views Those views and view corridors that existed at the Presidio during its period of significance.

Impact topics Specific natural, cultural, or socioeconomic resources that would be affected by the proposed action or alternatives (including no action). The magnitude, duration, and timing of the effect on each of these resources are evaluated in the Environmental Consequences section of an EA or EIS.

Indirect effects or impacts Reasonably foreseeable impacts removed in time or place from the proposed action. These are “downstream” impacts, future impacts, or the impacts of reasonably expected connected actions (e.g., growth of an area after a highway leading to it is complete).

Infill construction New construction that is located within an existing developed area, such as a building complex. In the Presidio, infill construction also refers to new development within developable areas.

Infiltration The downward entry of water into the surface of the soil.

Integrity The authenticity of a cultural resource's identity as evidenced by the survival of physical characteristics that were present during the

prehistoric or historic occupation or use. When evaluating National Register of Historic Places eligibility, seven aspects of integrity are assessed: location, design, setting, materials, workmanship, feeling, and association.

Internal trip A trip that both originates and terminates in the Presidio.

Interpretation The telling of a park's resources and history through programs and activities.

Land use controls Administrative and legal tools used to reduce the threat of hazardous substance releases, limit exposure of humans and environmental receptors, supplement engineering remedies, and ensure that engineering controls maintain their integrity and effectiveness. Examples include well drilling prohibitions, digging notifications, and special building permits.

Landfill A waste management unit at which waste is discharged in or on land for disposal.

Lateral spreading A phenomenon in which surficial soil displaces along a shear zone that has formed within an underlying liquefied layer. Upon reaching mobilization, the surficial blocks are transported downslope or in the direction of a free face by earthquake and gravitational forces.

Ldn A day-night average noise level, a 24-hour average L_{eq}; it takes into account the greater annoyance of nighttime noise with a 10-dBA "penalty" added during the hours of 10:00 PM to 7:00 AM.

Lead agency The agency either preparing or taking primary responsibility for preparing the National Environmental Policy Act (NEPA) document.

Lease agreement A written contract between a landlord and a tenant that transfers the right to exclusive possession and use of the landlord's real property to the tenant for a specified period of time and for a stated rent.

LEED® (Leadership in Energy and Environmental Design) Green Building Rating System A voluntary, consensus-based national standard for developing high-performance, sustainable buildings.

L_{eq} The equivalent steady-state sound level, or the average acoustic energy content of noise for a stated period of time. The L_{eq} of two different time-varying noise events are the same if the events deliver the same acoustic energy to the ear during exposure, no matter what time of the day or night they occur, unlike some other measurements that adjust for differences in noise sensitivity at night.

Levantar Meaning "to raise up, awaken, and excite," the draft management strategy that outlines the mission, goals, and programs for archaeology at the Presidio.

Level of Service (LOS) A qualitative measure describing operational conditions within a traffic stream, based on service measures such as delay, speed, and travel time.

Light pollution Outdoor lighting that is directed or reflected to the sky.

Linked trips Internal trips that are made as intermediate stops on the way from an origin to a primary trip destination. For example, a Presidio employee who stops at the post office before traveling home would be a linked trip.

Liquefaction A phenomenon in which saturated, cohesionless soil experiences a temporary loss of strength due to the buildup of excess

pore water pressure, especially during cyclic loading such as that induced by earthquakes. Soil most susceptible to liquefaction is loose, clean, saturated, uniformly graded, fine-grained sand and silt of low plasticity that is relatively free of clay.

Maximum load point The location along a bus route at which the highest level of ridership typically occurs.

Memorandum of Agreement (MOA) A document that, among other conditions, records the terms agreed upon to resolve the adverse effects of an undertaking upon historic properties.

Mitigation A method or measure that, if implemented, would lessen the intensity of an impact on a particular resource.

Mitigation banking The acquisition and preservation of archaeological sites away from the project area in return for doing little or no direct mitigation on sites within the Area of Potential Effects (APE).

Modal split The proportion of trips made by various travel modes, including automobile, transit, bicycle, foot, and other modes.

Mothballing A process through which structures are deactivated for an extended period of time, protected from weather, stabilized, and secured from vandalism.

National Environmental Policy Act (NEPA) Federal legislation enacted in 1969 that establishes the policy that federal entities must take environmental considerations into account in making decisions about federal policies, plans, programs, and projects.

National Historic Landmark (NHL) A nationally significant historic place designated by the Secretary of the Interior because it possesses exceptional value or quality in illustrating or interpreting the heritage of the United States. The Presidio was designated an NHL District (NHLD) in 1962.

National Historic Preservation Act (NHPA) The basic legislation of the national historic preservation program that established the Advisory Council on Historic Preservation and the Section 106 review process. It also authorized the Secretary of the Interior to expand and maintain the National Register of Historic Places, which is composed of districts, sites, structures, and objects significant in American history, archaeology, architecture, engineering, and culture.

NEPA process The process of objectively analyzing a proposed action to determine the significance of its environmental impacts on the human environment, considering alternatives and mitigation to reduce potential impacts, and presenting the analysis to the interested and affected public for review and comment. NEPA process may also be referred to generally as environmental review.

Nitrogen oxides (NOx) Gases formed in great part from atmospheric nitrogen and oxygen when combustion takes place under conditions of high temperature and high pressure. NOx is a criteria air pollutant. *See also* criteria air pollutants.

No action alternative Under the NEPA, a benchmark against which action alternatives are compared.

Noise Unwanted or excessive sound.

Open space As defined in the PTMP, any area that is largely unoccupied by buildings, roads, sidewalks, parking areas, other paved areas, and landscaping around buildings.

Paleosols Former land surfaces with soil development within human history, which are reliable indicators for locations where archaeological remains are possible.

Park A term used interchangeably with the "Presidio" in this document.

Pedestrianize To restrict access to a street to pedestrians only.

Period of significance A defined period of time during which a property established its historical association, meaning, or value.

Permeable surfaces Those surfaces that allow stormwater to infiltrate the underlying soils. Permeable surfaces decrease stormwater runoff and help increase water quality of the ocean and the bay.

Person trip A trip to or from the project made by one person in any mode of transportation: automobile, bus, transit, walking, or bicycle.

Plaza de armas The open space contained within the fortified square of El Presidio, similar to a town square or parade ground. *See also* El Presidio de San Francisco.

PM2.5 "Fine particles" in the air measuring 2.5 micrometers in diameter and smaller. These particles are the major cause of reduced visibility, or haze, in the atmosphere.

PM10 Particles present in the air that are less than 10 micrometers but greater than 2.5 micrometers in diameter. These are "inhalable coarse particles," like those found near roadways and construction areas. Small particles less than 10 micrometers in diameter pose the greatest health risk as they can be inhaled deep into the lungs.

Predicted noise level(s) Future noise levels resulting from predictable natural and mechanical sources and human activity including the project.

Preferred alternative The alternative that the lead federal agency believes would fulfill its statutory mission and responsibilities, giving consideration to economic, environmental, technical, and other factors. CEQ regulations require the identification of a preferred alternative in the final EIS. *See also* proposed action.

Presidio Trust A federal, non-profit government corporation created by Congress in 1996 to preserve and enhance the Presidio, a national park site, in cooperation with the National Park Service. As mandated by the Presidio Trust Act (16 USC 460bb appendix, as amended), the Trust must manage the park to become financially self-sufficient by 2013. The Trust has authority to lease property in order to generate revenues needed to operate the park and undertake capital improvements.

Presidio Trust Act The act that establishes the Presidio Trust as a federal government corporation and authorizes the Trust to manage a majority of the Presidio's land area in accordance with the terms of the act.

Presidio Trust Management Plan (PTMP) The Presidio Trust's comprehensive plan adopted in August 2002 that guides future management and implementation of projects within Area B of the Presidio. The PTMP was developed with broad public involvement.

Programmatic agreement A document that records the terms and conditions that have been agreed upon to resolve the adverse effects of an undertaking upon historic properties. Programmatic agreements are particularly useful when effects on historic properties cannot be fully

determined prior to approval of an undertaking, or when activities are routine or repetitive in scope.

Proposed action Under the NEPA, the proposed action may be, but is not necessarily, the agency's preferred alternative. The proposed action may be a proposal in its initial form before undergoing analysis in the EIS process. The agency may or may not have a "preferred alternative" at the draft EIS stage. In that case the agency may decide at the final EIS stage, on the basis of the draft EIS and the public and agency comments, that an alternative other than the proposed action is the agency's preferred alternative. *See also* preferred alternative.

Public participation The process of providing opportunities for community input in the NEPA process.

Record of Decision (ROD) A written public record identifying a selected course of action and explaining why the lead agency has chosen a particular course of action.

Recycling The process of collecting, sorting, cleansing, treating, and reconstituting materials that would otherwise become solid waste and returning them to the economic mainstream in the form of raw material for new, reused, or reconstituted products that meet the quality standards necessary to be used in the marketplace.

Rehabilitation The act or process of making possible a compatible use for a property through repair, alterations, and additions while preserving those portions or features that convey the property's historical, cultural, or architectural values.

Remediation Clean-up of contaminated soils, groundwater, or surface water present at a site in order to reduce pollutants to health-protective levels.

Request for Qualifications (RFQ) / Request for Proposals (RFP) selection process A competitive leasing process with a defined set of selection criteria and stated time period generally consisting of an RFQ, RFP, and negotiation.

Riparian Relating to the banks of a natural course of water. Riparian habitats are diverse and contribute to overall ecosystem health by filtering out pollutants and preventing erosion.

Scope The types of actions to be included in a project, the range of alternatives, and the impacts to be considered.

Scoping The process by which an agency solicits input from the public and interested agencies on the nature and extent of issues, impacts, and alternatives to be addressed in an environmental review document under the NEPA.

Secretary of Interior's Standards for the Treatment of Historic Properties (Secretary of the Interior's Standards) The Secretary of the Interior's best advice on how to protect a wide range of historic properties. Guidelines contained in the standards pertain to both exterior and interior work on historic buildings of all sizes, materials, and types, but are not meant to be case-specific.

Section 106 The section of the NHPA that requires federal agencies to consider the effects of their actions on historic properties and seek comments from an independent reviewing agency, the Advisory Council

on Historic Preservation. The purpose of Section 106 is to avoid unnecessary harm to historic properties.

Section 110 The section of the NHPA that sets out the broad historic preservation responsibilities of federal agencies to ensure that historic preservation is fully integrated into ongoing programs.

Section 213 Report A report intended to provide useful, independent, and authoritative information to consulting parties regarding a historic property that is the subject of the Section 106 consultation process. It provides a vehicle for the NPS to share its expert opinions on the significance of a historic property, the effects of the proposed undertaking on the property, and the recommendation of measures to avoid, minimize, or mitigate adverse effects to the property. The report can be used as a tool in the Section 106 consultation and is made public record.

Self-sufficiency The requirement, mandated by Congress, that the Trust generate sufficient revenues at the Presidio to support Area B operations without continuing federal appropriations, beginning in Fiscal Year 2013 and every year thereafter. Self-sufficiency has both a short-term and long-term aspect. *See also* financial sustainability.

Solid waste Garbage, refuse, sludge, or other discarded material, including solids, semisolids, liquids, and contained gaseous materials.

State Historic Preservation Officer (SHPO) The state official, as defined in 36 CFR 60, responsible for liaison with federal agencies in implementing the appropriate provisions of the National Historic Preservation Act of 1966, as amended. The SHPO is an essential part of the consultation process regarding the effects of Trust undertakings on historic properties

State Implementation Plan United States Environmental Protection Agency (U.S. EPA)-approved state plans for attaining and maintaining federal air quality standards.

Stormwater Surface water runoff and drainage associated with storm events.

Stormwater Pollution Prevention Plan (SWPPP) A set of protocols developed and implemented to address specific stormwater discharge concerns and often developed for construction sites.

Street wall A line of building facades that creates a mostly uniform and continuous wall facing the street.

Surface water Water that naturally flows or settles on top of natural landforms and vegetation. It is often manifest as freshwater rivers, streams, and lakes.

Sustainability & sustainable To create and maintain conditions under which humans and nature can exist in productive harmony, that permit fulfilling the social, economic, and other requirements of present and future generations. *See also* the equally loose terms green and green design.

Threshold of hearing The lowest sound that can be perceived by the human auditory system, generally considered to be 0 dB for persons with perfect hearing.

Tiering The coverage of general matters in broad EISs with subsequent narrower EISs or EAs incorporating by reference the general discussions and concentrating solely on the issues specific to the subsequent project-specific action.

Toxic Air Contaminant (TAC) An air pollutant, identified in regulation by the California Air Resources Board, that could cause or contribute to an increase in deaths or in serious illness, or could pose a present or potential hazard to human health. TACs are considered under a different regulatory process (California Health and Safety Code 39650 et seq.) from pollutants subject to California Ambient Air Quality Standards. Health effects due to TACs can occur at extremely low levels. It is typically difficult to identify levels of exposure that do not produce adverse health effects.

Transportation Demand Management (TDM) Strategies designed to maximize the people-moving capability of the transportation system by increasing the number of persons in a vehicle, or by influencing the mode of, time of, or need to travel. To accomplish these types of changes, TDM programs must rely on incentives or disincentives to make these shifts in behavior attractive.

Trip generation rate A rate or number that expresses the number of person trips that would be generated by a unit (e.g., square foot or dwelling unit) of a given land use type.

Undertaking A type of federal activity that has the potential to affect historic properties.

Vehicle trip A trip to or from the project made by a transportation vehicle, primarily automobile. Equal to the number of person trips made by automobile divided by the average numbers of persons per automobile.

Viewshed The geographic area from which a site is visible; a collection of viewpoints.

Visitor experience The perceptions, feelings, and reactions a person has while visiting a park.

Visual character A term used to give context and to define a sense of place; generally comprised of elements such as building scale, height, architectural features, colors, building ensemble patterns, designed landscapes, and open spaces.

Waste stream Waste material output of a community, region, or state.

Watershed An area of land that drains or sheds its rainwater and springs into a body of water such as a stream or lake.

Wetlands Those areas that are inundated by surface water or groundwater with a frequency sufficient to support, and under normal circumstances do or would support, a prevalence of vegetative or aquatic life that requires saturated or seasonally saturated soil conditions for growth and reproduction. Wetlands generally include swamps, marshes, bogs, and similar areas such as sloughs, potholes, wet meadows, river overflows, mud flats, and natural ponds.

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Appendix A
Transportation Data

Appendix A: Transportation

Intersection Level of Service Criteria

Intersection Level of Service Calcuations

- Existing Conditions
  - AM Peak Hour
  - PM Peak Hour

- Future Conditions – Unmitigated Conditions
  - AM Peak Hour
    - Alternative 1
    - Alternative 2
    - Alternative 3
    - Alternative 4
  - PM Peak Hour
    - Alternative 1
    - Alternative 2
    - Alternative 3
    - Alternative 4

- Future Conditions – Mitigated Conditions
  - AM Peak Hour
    - Alternative 1
    - Alternative 2
    - Alternative 3
    - Alternative 4
  - PM Peak Hour
    - Alternative 1
    - Alternative 2
    - Alternative 3
    - Alternative 4

Parking Demand Calculations

Transit Ridership Calculations

Level of Service Criteria

Level of Service Criteria			
Level of Service	Signalized Intersections Control Delay per Vehicle (sec/veh)	Unsignalized Two-Way Stop-Controlled Intersections Average Control Delay (sec/veh)	Unsignalized All-Way Stop-Controlled Intersections Control Delay (sec/veh)
A	0-10	0-10	0-10
B	> 10 - 20	> 10 – 15	> 10 – 15
C	> 20 – 35	> 15 – 25	> 15 – 25
D	> 35 – 55	> 25 – 35	> 25 – 35
E	> 55 – 80	> 35 – 50	> 35 – 50
F	> 80	> 50	> 50

Source: *Highway Capacity Manual*, Transportation Research Board, Washington, D.C. 2000.

Existing Conditions – AM Peak Hour

AM Peak Hour Traffic

Volume Type	Northbound Left	Northbound Thru	Northbound Right	Southbound Left	Southbound Thru	Southbound Right	Eastbound Left	Eastbound Thru	Eastbound Right	Westbound Left	Westbound Thru	Westbound Right	Total Volume
#201 Lombard/Divisadero													
Base	166	95	21	80	108	25	0	2448	200	0	1291	63	4497
#202 Lombard/Richardson													
Base	218	1277	0	0	2385	12	0	0	235	0	0	0	4127
#203 Lyon/Lombard													
Base	110	22	12	9	28	156	198	253	130	5	260	17	1200
#204 Greenwich/Divisadero													
Base	12	241	10	39	268	10	14	113	11	9	62	31	820
#205 Greenwich/Lyon													
Base	0	86	3	60	97	0	0	0	0	15	0	58	319
#206 Francisco/Richardson													
Base	0	1306	2	0	2437	4	89	55	7	5	62	48	4015
#207 Richardson/Gorgas													
Base	10	0	4	0	0	133	0	2304	31	0	1467	13	3962
208 Doyle/Marina/Lyon													
Base	0	0	7	150	0	15	0	1608	115	0	416	159	2470
#209 Graham/Lincoln													
Base	13	18	161	18	12	6	9	191	7	72	171	21	699
#210 Lincoln/Halleck													
Base	0	0	0	66	0	83	89	273	0	0	253	121	885
#211 Lincoln/Girard													
Base	0	0	0	10	0	13	49	301	0	0	368	27	768
#212 Presidio/Letterman/Lincoln													
Base	63	314	10	83	218	33	36	73	91	4	46	101	1072
#213 Lombard/Presidio													
Base	0	302	231	159	152	0	0	0	0	229	0	97	1170
#214 Presidio/Pacific													
Base	7	464	21	80	359	17	15	6	6	23	23	53	1074
#215 Presidio/Jackson													
Base	3	377	54	54	310	23	26	118	6	47	126	65	1209
#216 Presidio/Washington													
Base	13	379	23	34	314	22	40	124	14	29	33	20	1045

AM Peak Hour Traffic

Volume Type	Northbound Left	Northbound Thru	Northbound Right	Southbound Left	Southbound Thru	Southbound Right	Eastbound Left	Eastbound Thru	Eastbound Right	Westbound Left	Westbound Thru	Westbound Right	Total Volume
#217 Arguello/Jackson													
Base	0	375	102	47	218	0	0	0	0	53	0	48	843
#218 Arguello/Washington St													
Base	16	453	117	16	243	7	3	8	24	47	2	17	953
#219 Arguello/Moraga													
Base	44	53	257	1	14	2	1	57	43	96	43	1	612
#220 Montgomery/Sheridan													
Base	7	6	1	3	16	28	236	165	7	0	26	10	505

AM Peak Hour Traffic

Impact Analysis Report
Level Of Service

Intersection	LOS	Base Del/ Veh	V/ C
#201 Lombard/Divisadero	B	12.4	0.792
#202 Lombard/Richardson	A	7.0	0.463
#203 Lyon/Lombard	F	68.4	1.192
#204 Greenwich/Divisadero	B	12.8	0.575
#205 Greenwich/Lyon	A	8.3	0.256
#206 Francisco/Richardson	B	11.7	0.604
#207 Richardson/Gorgas	A	6.7	0.600
#208 Doyle/Marina/Lyon	C	26.5	0.681
#209 Graham/Lincoln	B	10.7	0.389
#210 Lincoln/Halleck	C	22.2	0.000
#211 Lincoln/Girard	B	14.6	0.000
#212 Presidio/Letterman/Lincoln	C	18.4	0.787
#213 Lombard/Presidio	E	42.9	1.057
#214 Presidio/Pacific	D	28.5	0.885
#215 Presidio/Jackson	E	37.1	0.955
#216 Presidio/Washington	C	22.9	0.826
#217 Arguello/Jackson	C	15.4	0.737
#218 Arguello/Washington St	C	22.6	0.877
#219 Arguello/Moraga	B	10.4	0.507
#220 Montgomery/Sheridan	B	14.3	0.683

AM Peak Hour Traffic

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #201 Lombard/Divisadero

Cycle (sec): 90 Critical Vol./Cap. (X): 0.792
Loss Time (sec): 1 (Y+R = 4 sec) Average Delay (sec/veh): 12.4
Optimal Cycle: 90 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	27	27	27	27	27	27	54	54	54	54	54	54
Lanes:	1 0	0 1	0	1 0	0 1	0	0 1	1 1	0	0 1	1 1	0
Volume Module: >> Count Date: 23 Jan 2008 << AM Peak Hour												
Base Vol:	166	95	21	80	108	25	0	2448	200	0	1291	63
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	166	95	21	80	108	25	0	2448	200	0	1291	63
User Adj:	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11
PHF Adj:	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
PHF Volume:	189	108	24	91	123	29	0	2793	228	0	1473	72
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	189	108	24	91	123	29	0	2793	228	0	1473	72
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	189	108	24	91	123	29	0	2793	228	0	1473	72
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.51	0.97	0.97	0.54	0.97	0.97	0.91	0.90	0.90	0.91	0.90	0.90
Lanes:	1.00	0.82	0.18	1.00	0.81	0.19	0.00	2.77	0.23	0.00	2.86	0.14
Final Sat.:	977	1514	335	1034	1500	347	0	4742	387	0	4911	240
Capacity Analysis Module:												
Vol/Sat:	0.19	0.07	0.07	0.09	0.08	0.08	0.00	0.59	0.59	0.00	0.30	0.30
Crit Moves:	****							****				
Green/Cycle:	0.30	0.30	0.30	0.30	0.30	0.30	0.00	0.69	0.69	0.00	0.69	0.69
Volume/Cap:	0.65	0.24	0.24	0.29	0.27	0.27	0.00	0.85	0.85	0.00	0.44	0.44
Delay/Veh:	32.3	24.0	24.0	24.7	24.3	24.3	0.0	12.8	12.8	0.0	6.3	6.3
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	32.3	24.0	24.0	24.7	24.3	24.3	0.0	12.8	12.8	0.0	6.3	6.3
HCM2kAvg:	10	3	3	4	3	3	0	24	24	0	6	6

AM Peak Hour Traffic

Level Of Service Computation Report
1994 HCM Operations Method (Base Volume Alternative)

Intersection #202 Lombard/Richardson

Cycle (sec): 90 Critical Vol./Cap. (X): 0.463
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 7.0
Optimal Cycle: 90 Level Of Service: A

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Protected				Permitted				Permitted				Permitted			
Rights:	Include				Include				Ovl				Include			
Min. Green:	25	90	0	0	57	57	0	0	25	0	0	0				
Lanes:	1 0	3 0	0	0 0	2 1	0	0 0	0 1	0 0	0 0	0					
Volume Module: >> Count Date: 23 Jan 2008 << AM Peak Hour																
Base Vol:	218	1277	0	0	2385	12	0	0	235	0	0	0				
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
Initial Bse:	218	1277	0	0	2385	12	0	0	235	0	0	0				
User Adj:	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11				
PHF Adj:	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98				
PHF Volume:	248	1454	0	0	2715	14	0	0	268	0	0	0				
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0				
Reduced Vol:	248	1454	0	0	2715	14	0	0	268	0	0	0				
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
MLF Adj:	1.00	1.10	1.00	1.00	1.10	1.10	1.00	1.00	1.00	1.00	1.00	1.00				
Final Vol.:	248	1599	0	0	2987	15	0	0	268	0	0	0				
Saturation Flow Module:																
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900				
Adjustment:	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.77	1.00	1.00	1.00				
Lanes:	1.00	3.00	0.00	0.00	2.98	0.02	0.00	0.00	1.00	0.00	0.00	0.00				
Final Sat.:	1805	5700	0	0	5671	29	0	0	1463	0	0	0				
Capacity Analysis Module:																
Vol/Sat:	0.14	0.28	0.00	0.00	0.53	0.53	0.00	0.00	0.18	0.00	0.00	0.00				
Crit Moves:		****							****							
Green/Cycle:	0.37	1.00	0.00	0.00	0.63	0.63	0.00	0.00	0.37	0.00	0.00	0.00				
Volume/Cap:	0.37	0.28	0.00	0.00	0.83	0.83	0.00	0.00	0.50	0.00	0.00	0.00				
Delay/Veh:	13.7	0.0	0.0	0.0	9.5	9.5	0.0	0.0	14.9	0.0	0.0	0.0				
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
AdjDel/Veh:	13.7	0.0	0.0	0.0	9.5	9.5	0.0	0.0	14.9	0.0	0.0	0.0				
DesignQueue:	8	0	0	0	64	0	0	0	9	0	0	0				

AM Peak Hour Traffic

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #203 Lyon/Lombard

Cycle (sec): 100 Critical Vol./Cap. (X): 1.192
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 68.4
Optimal Cycle: 0 Level Of Service: F

Street Name:	Lyon St.						Lombard St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T	- R		L - T	- R		L - T	- R		L - T	- R	
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module: >> Count Date: 23 Jan 2008 << AM Peak Hour												
Base Vol:	110	22	12	9	28	156	198	253	130	5	260	17
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	110	22	12	9	28	156	198	253	130	5	260	17
User Adj:	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11
PHF Adj:	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
PHF Volume:	137	27	15	11	35	194	246	314	162	6	323	21
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	137	27	15	11	35	194	246	314	162	6	323	21
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	137	27	15	11	35	194	246	314	162	6	323	21
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.77	0.15	0.08	0.05	0.14	0.81	0.34	0.44	0.22	0.02	0.92	0.06
Final Sat.:	352	70	38	24	75	418	206	264	136	10	504	33
Capacity Analysis Module:												
Vol/Sat:	0.39	0.39	0.39	0.46	0.46	0.46	1.19	1.19	1.19	0.64	0.64	0.64
Crit Moves:	****					****		****			****	
Delay/Veh:	14.5	14.5	14.5	14.8	14.8	14.8	123.2	123	123.2	19.5	19.5	19.5
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	14.5	14.5	14.5	14.8	14.8	14.8	123.2	123	123.2	19.5	19.5	19.5
LOS by Move:	B	B	B	B	B	B	F	F	F	C	C	C
ApproachDel:	14.5			14.8			123.2			19.5		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	14.5			14.8			123.2			19.5		
LOS by Appr:	B			B			F			C		

AM Peak Hour Traffic

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #204 Greenwich/Divisadero

Cycle (sec): 100 Critical Vol./Cap. (X): 0.575
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 12.8
Optimal Cycle: 0 Level Of Service: B

Street Name:	Divisadero						Greenwich					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module: >> Count Date: 23 Jan 2008 << AM Peak Hour												
Base Vol:	12	241	10	39	268	10	14	113	11	9	62	31
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	12	241	10	39	268	10	14	113	11	9	62	31
User Adj:	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11
PHF Adj:	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
PHF Volume:	15	292	12	47	325	12	17	137	13	11	75	38
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	15	292	12	47	325	12	17	137	13	11	75	38
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	15	292	12	47	325	12	17	137	13	11	75	38
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.04	0.92	0.04	0.12	0.85	0.03	0.10	0.82	0.08	0.09	0.61	0.30
Final Sat.:	30	600	25	82	566	21	56	456	44	48	334	167
Capacity Analysis Module:												
Vol/Sat:	0.49	0.49	0.49	0.57	0.57	0.57	0.30	0.30	0.30	0.23	0.23	0.23
Crit Moves:	****			****			****			****		
Delay/Veh:	12.8	12.8	12.8	14.5	14.5	14.5	11.0	11.0	11.0	10.2	10.2	10.2
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	12.8	12.8	12.8	14.5	14.5	14.5	11.0	11.0	11.0	10.2	10.2	10.2
LOS by Move:	B	B	B	B	B	B	B	B	B	B	B	B
ApproachDel:	12.8			14.5			11.0			10.2		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	12.8			14.5			11.0			10.2		
LOS by Appr:	B			B			B			B		

AM Peak Hour Traffic

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #205 Greenwich/Lyon

Cycle (sec): 100 Critical Vol./Cap. (X): 0.256
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 8.3
Optimal Cycle: 0 Level Of Service: A

Street Name:	Lyon						Greenwich					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	0 1	0	0 1	0 0	0	0 0	0 0	0	0 0	1! 0	0
Volume Module: >> Count Date: 23 Jan 2008 << AM Peak Hour												
Base Vol:	0	86	3	60	97	0	0	0	0	15	0	58
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	86	3	60	97	0	0	0	0	15	0	58
User Adj:	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11
PHF Adj:	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
PHF Volume:	0	115	4	80	130	0	0	0	0	20	0	77
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	115	4	80	130	0	0	0	0	20	0	77
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	115	4	80	130	0	0	0	0	20	0	77
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.97	0.03	0.38	0.62	0.00	0.00	0.00	0.00	0.21	0.00	0.79
Final Sat.:	0	790	28	313	506	0	0	0	0	168	0	648
Capacity Analysis Module:												
Vol/Sat:	xxxx	0.15	0.15	0.26	0.26	xxxx	xxxx	xxxx	xxxx	0.12	xxxx	0.12
Crit Moves:	****			****						****		
Delay/Veh:	0.0	8.0	8.0	8.7	8.7	0.0	0.0	0.0	0.0	7.7	0.0	7.7
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	8.0	8.0	8.7	8.7	0.0	0.0	0.0	0.0	7.7	0.0	7.7
LOS by Move:	*	A	A	A	A	*	*	*	*	A	*	A
ApproachDel:	8.0			8.7			xxxxxx			7.7		
Delay Adj:	1.00			1.00			xxxxx			1.00		
ApprAdjDel:	8.0			8.7			xxxxxx			7.7		
LOS by Appr:	A			A			*			A		

AM Peak Hour Traffic

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #206 Francisco/Richardson

Cycle (sec): 90 Critical Vol./Cap. (X): 0.604
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 11.7
Optimal Cycle: 90 Level Of Service: B

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Permitted				Permitted				Permitted				Permitted			
Rights:	Include				Include				Include				Include			
Min. Green:	0	51	51		0	51	51		31	31	31		31	31	31	
Lanes:	0	0 2	1	0	0	0 2	1	0	1	0 0	1	0	0	0 1!	0	0
Volume Module:																
Base Vol:	0	1306	2	0	2437	4	89	55	7	5	62	48				
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
Initial Bse:	0	1306	2	0	2437	4	89	55	7	5	62	48				
User Adj:	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11				
PHF Adj:	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98				
PHF Volume:	0	1475	2	0	2752	5	100	62	8	6	70	54				
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0				
Reduced Vol:	0	1475	2	0	2752	5	100	62	8	6	70	54				
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
Final Vol.:	0	1475	2	0	2752	5	100	62	8	6	70	54				
Saturation Flow Module:																
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900				
Adjustment:	1.00	0.91	0.91	1.00	0.91	0.91	0.75	0.98	0.98	0.94	0.94	0.94				
Lanes:	0.00	2.99	0.01	0.00	2.99	0.01	1.00	0.89	0.11	0.04	0.54	0.42				
Final Sat.:	0	5179	8	0	5179	8	1429	1657	211	78	961	744				
Capacity Analysis Module:																
Vol/Sat:	0.00	0.28	0.28	0.00	0.53	0.53	0.07	0.04	0.04	0.07	0.07	0.07				
Crit Moves:					****						****					
Green/Cycle:	0.00	0.66	0.66	0.00	0.66	0.66	0.34	0.34	0.34	0.34	0.34	0.34				
Volume/Cap:	0.00	0.43	0.43	0.00	0.81	0.81	0.20	0.11	0.11	0.21	0.21	0.21				
Delay/Veh:	0.0	7.6	7.6	0.0	12.9	12.9	21.0	20.2	20.2	21.0	21.0	21.0				
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
AdjDel/Veh:	0.0	7.6	7.6	0.0	12.9	12.9	21.0	20.2	20.2	21.0	21.0	21.0				
HCM2kAvg:	0	7	7	0	21	21	3	1	1	3	3	3				

AM Peak Hour Traffic

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #207 Richardson/Gorgas

Cycle (sec): 90 Critical Vol./Cap. (X): 0.600
Loss Time (sec): 0 (Y+R = 6 sec) Average Delay (sec/veh): 6.7
Optimal Cycle: 90 Level Of Service: A

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Split Phase				Split Phase				Permitted				Permitted			
Rights:	Include				Ovl				Include				Include			
Min. Green:	10	10	10		12	12	12		52	52	52		52	52	52	
Lanes:	1	0 1!	0	0	0	0 0	0	1	0	0 3	0	1	0	0 2	1	0
Volume Module: >> Count Date: 23 Jan 2008 << AM Peak Hour																
Base Vol:	10	0	4	0	0	133	0	2304	31	0	1467	13				
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
Initial Bse:	10	0	4	0	0	133	0	2304	31	0	1467	13				
User Adj:	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11				
PHF Adj:	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98				
PHF Volume:	11	0	5	0	0	151	0	2612	35	0	1663	15				
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0				
Reduced Vol:	11	0	5	0	0	151	0	2612	35	0	1663	15				
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
Final Vol.:	11	0	5	0	0	151	0	2612	35	0	1663	15				
Saturation Flow Module:																
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900				
Adjustment:	0.92	1.00	0.92	1.00	1.00	0.87	1.00	0.91	0.85	1.00	0.91	0.91				
Lanes:	1.56	0.00	0.44	0.00	0.00	1.00	0.00	3.00	1.00	0.00	2.97	0.03				
Final Sat.:	2732	0	781	0	0	1644	0	5187	1615	0	5136	46				
Capacity Analysis Module:																
Vol/Sat:	0.00	0.00	0.01	0.00	0.00	0.09	0.00	0.50	0.02	0.00	0.32	0.32				
Crit Moves:	****					****		****								
Green/Cycle:	0.11	0.00	0.11	0.00	0.00	0.14	0.00	0.75	0.75	0.00	0.75	0.75				
Volume/Cap:	0.04	0.00	0.05	0.00	0.00	0.67	0.00	0.67	0.03	0.00	0.43	0.43				
Delay/Veh:	35.7	0.0	35.8	0.0	0.0	44.5	0.0	6.0	2.8	0.0	4.2	4.2				
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
AdjDel/Veh:	35.7	0.0	35.8	0.0	0.0	44.5	0.0	6.0	2.8	0.0	4.2	4.2				
HCM2kAvg:	0	0	0	0	0	5	0	13	0	0	6	6				

AM Peak Hour Traffic

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #208 Doyle/Marina/Lyon

Cycle (sec): 75 Critical Vol./Cap. (X): 0.681
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 26.5
Optimal Cycle: 75 Level Of Service: C

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Permitted				Permitted				Permitted				Permitted			
Rights:	Include				Include				Include				Ignore			
Min. Green:	0	0	32		32	0	32		0	35	35		0	35	75	
Lanes:	0	0	0	0 1	1	0	0	0 1	0	0	1	1 0	0	0	2	0 1
Volume Module: >> Count Date: 23 Jan 2008 << AM Peak Hour																
Base Vol:	0	0	7		150	0	15		0	1608	115		0	416	159	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	0	0	7		150	0	15		0	1608	115		0	416	159	
User Adj:	1.11	1.11	1.11		1.11	1.11	1.11		1.11	1.11	1.11		1.11	1.11	0.00	
PHF Adj:	0.97	0.97	0.97		0.97	0.97	0.97		0.97	0.97	0.97		0.97	0.97	0.00	
PHF Volume:	0	0	8		172	0	17		0	1846	132		0	478	0	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	0	0	8		172	0	17		0	1846	132		0	478	0	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	0.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	0.00	
Final Vol.:	0	0	8		172	0	17		0	1846	132		0	478	0	
Saturation Flow Module:																
Sat/Lane:	1900	1900	1900		1900	1900	1900		1900	1900	1900		1900	1900	1900	
Adjustment:	1.00	1.00	0.87		0.78	1.00	0.83		1.00	0.92	0.92		1.00	0.93	1.00	
Lanes:	0.00	0.00	1.00		1.00	0.00	1.00		0.00	1.87	0.13		0.00	2.00	1.00	
Final Sat.:	0	0	1644		1475	0	1583		0	3269	234		0	3538	1900	
Capacity Analysis Module:																
Vol/Sat:	0.00	0.00	0.00		0.12	0.00	0.01		0.00	0.56	0.56		0.00	0.13	0.00	
Crit Moves:					****					****						
Green/Cycle:	0.00	0.00	0.43		0.43	0.00	0.43		0.00	0.57	0.57		0.00	0.57	0.00	
Volume/Cap:	0.00	0.00	0.01		0.27	0.00	0.03		0.00	0.98	0.98		0.00	0.24	0.00	
Delay/Veh:	0.0	0.0	12.4		14.2	0.0	12.5		0.0	32.3	32.3		0.0	8.0	0.0	
User DelAdj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
AdjDel/Veh:	0.0	0.0	12.4		14.2	0.0	12.5		0.0	32.3	32.3		0.0	8.0	0.0	
HCM2kAvg:	0	0	0		3	0	0		0	30	30		0	3	0	

AM Peak Hour Traffic

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #209 Graham/Lincoln

Cycle (sec): 100 Critical Vol./Cap. (X): 0.389
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 10.7
Optimal Cycle: 0 Level Of Service: B

Street Name:	Graham St.								Lincoln Blvd.							
Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Stop Sign				Stop Sign				Stop Sign				Stop Sign			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Lanes:	0	0	1!	0 0	0	0	1!	0 0	1	0	0	1 0	1	0	0	1 0
Volume Module: >> Count Date: 17 Jan 2008 << AM Peak Hour																
Base Vol:	13	18	161		18	12	6		9	191	7		72	171	21	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	13	18	161		18	12	6		9	191	7		72	171	21	
User Adj:	1.11	1.11	1.11		1.11	1.11	1.11		1.11	1.11	1.11		1.11	1.11	1.11	
PHF Adj:	0.91	0.91	0.91		0.91	0.91	0.91		0.91	0.91	0.91		0.91	0.91	0.91	
PHF Volume:	16	22	197		22	15	7		11	234	9		88	210	26	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	16	22	197		22	15	7		11	234	9		88	210	26	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Final Vol.:	16	22	197		22	15	7		11	234	9		88	210	26	
Saturation Flow Module:																
Adjustment:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Lanes:	0.07	0.09	0.84		0.50	0.33	0.17		1.00	0.96	0.04		1.00	0.89	0.11	
Final Sat.:	46	64	575		284	189	95		571	603	22		582	572	70	
Capacity Analysis Module:																
Vol/Sat:	0.34	0.34	0.34		0.08	0.08	0.08		0.02	0.39	0.39		0.15	0.37	0.37	
Crit Moves:		****			****					****				****		
Delay/Veh:	10.2	10.2	10.2		9.1	9.1	9.1		8.9	11.5	11.5		9.7	11.1	11.1	
Delay Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
AdjDel/Veh:	10.2	10.2	10.2		9.1	9.1	9.1		8.9	11.5	11.5		9.7	11.1	11.1	
LOS by Move:	B	B	B		A	A	A		A	B	B		A	B	B	
ApproachDel:	10.2				9.1				11.4				10.7			
Delay Adj:	1.00				1.00				1.00				1.00			
ApprAdjDel:	10.2				9.1				11.4				10.7			
LOS by Appr:	B				A				B				B			

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-------------------------------------------------------------------------------
                              AM Peak Hour Traffic
-------------------------------------------------------------------------------
                       Level Of Service Computation Report
             2000 HCM Unsignalized Method (Base Volume Alternative)
*******************************************************************************
Intersection #210 Lincoln/Halleck
*******************************************************************************
Average Delay (sec/veh):      4.6   Worst Case Level Of Service:       C[ 22.2]
*******************************************************************************
Street Name:           Halleck St.                     Lincoln Blvd.
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Stop Sign        Stop Sign       Uncontrolled     Uncontrolled
Rights:           Include          Include          Include          Include
Lanes:        0  0  0  0  0    0  0  1! 0  0    1  0  1  0  0    0  0  0  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 17 Jan 2008 << AM Peak Hour
Base Vol:       0    0     0    66    0    83    89  273     0     0  253   121
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:    0    0     0    66    0    83    89  273     0     0  253   121
User Adj:    1.11 1.11  1.11  1.11 1.11  1.11  1.11 1.11  1.11  1.11 1.11  1.11
PHF Adj:     0.88 0.88  0.88  0.88 0.88  0.88  0.88 0.88  0.88  0.88 0.88  0.88
PHF Volume:     0    0     0    83    0   105   113  345     0     0  320   153
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Final Vol.:     0    0     0    83    0   105   113  345     0     0  320   153
------------|---------------||---------------||---------------||---------------|
Critical Gap Module:
Critical Gp:xxxxx xxxx xxxxx   6.4 xxxx   6.2   4.1 xxxx xxxxx xxxxx xxxx xxxxx
FollowUpTim:xxxxx xxxx xxxxx   3.5 xxxx   3.3   2.2 xxxx xxxxx xxxxx xxxx xxxxx
------------|---------------||---------------||---------------||---------------|
Capacity Module:
Cnflict Vol: xxxx xxxx xxxxx   967 xxxx   396   473 xxxx xxxxx  xxxx xxxx xxxxx
Potent Cap.: xxxx xxxx xxxxx   285 xxxx   657  1100 xxxx xxxxx  xxxx xxxx xxxxx
Move Cap.:   xxxx xxxx xxxxx   262 xxxx   657  1100 xxxx xxxxx  xxxx xxxx xxxxx
Volume/Cap:  xxxx xxxx  xxxx  0.32 xxxx  0.16  0.10 xxxx  xxxx  xxxx xxxx  xxxx
------------|---------------||---------------||---------------||---------------|
Level Of Service Module:
Queue:      xxxxx xxxx xxxxx xxxxx xxxx xxxxx   0.3 xxxx xxxxx xxxxx xxxx xxxxx
Stopped Del:xxxxx xxxx xxxxx xxxxx xxxx xxxxx   8.6 xxxx xxxxx xxxxx xxxx xxxxx
LOS by Move:   *    *     *     *    *     *     A    *     *     *    *     *
Movement:     LT - LTR - RT    LT - LTR - RT    LT - LTR - RT    LT - LTR - RT
Shared Cap.: xxxx xxxx xxxxx  xxxx  394 xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
SharedQueue:xxxxx xxxx xxxxx xxxxx  2.5 xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shrd StpDel:xxxxx xxxx xxxxx xxxxx 22.2 xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shared LOS:    *    *     *     *    C     *     *    *     *     *    *     *
ApproachDel:    xxxxxx             22.2           xxxxxx           xxxxxx
ApproachLOS:        *                C                *                *
```

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-------------------------------------------------------------------------------
                              AM Peak Hour Traffic
-------------------------------------------------------------------------------
                       Level Of Service Computation Report
             2000 HCM Unsignalized Method (Base Volume Alternative)
*******************************************************************************
Intersection #211 Lincoln/Girard
*******************************************************************************
Average Delay (sec/veh):      1.0   Worst Case Level Of Service:       B[ 14.6]
*******************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Stop Sign        Stop Sign       Uncontrolled     Uncontrolled
Rights:           Include          Include          Include          Include
Lanes:        0  0  0  0  0    1  0  0  0  0    1  0  1  0  0    0  0  0  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 17 Jan 2008 << AM Peak Period
Base Vol:       0    0     0    10    0    13    49  301     0     0  368    27
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:    0    0     0    10    0    13    49  301     0     0  368    27
User Adj:    1.11 1.11  1.11  1.11 1.11  1.11  1.11 1.11  1.11  1.11 1.11  1.11
PHF Adj:     0.91 0.91  0.91  0.91 0.91  0.91  0.91 0.91  0.91  0.91 0.91  0.91
PHF Volume:     0    0     0    12    0    16    60  366     0     0  447    33
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Final Vol.:     0    0     0    12    0    16    60  366     0     0  447    33
------------|---------------||---------------||---------------||---------------|
Critical Gap Module:
Critical Gp:xxxxx xxxx xxxxx   6.4 xxxx   6.2   4.1 xxxx xxxxx xxxxx xxxx xxxxx
FollowUpTim:xxxxx xxxx xxxxx   3.5 xxxx   3.3   2.2 xxxx xxxxx xxxxx xxxx xxxxx
------------|---------------||---------------||---------------||---------------|
Capacity Module:
Cnflict Vol: xxxx xxxx xxxxx   948 xxxx   463   480 xxxx xxxxx  xxxx xxxx xxxxx
Potent Cap.: xxxx xxxx xxxxx   292 xxxx   603  1093 xxxx xxxxx  xxxx xxxx xxxxx
Move Cap.:   xxxx xxxx xxxxx   280 xxxx   603  1093 xxxx xxxxx  xxxx xxxx xxxxx
Volume/Cap:  xxxx xxxx  xxxx  0.04 xxxx  0.03  0.05 xxxx  xxxx  xxxx xxxx  xxxx
------------|---------------||---------------||---------------||---------------|
Level Of Service Module:
Queue:      xxxxx xxxx xxxxx xxxxx xxxx xxxxx   0.2 xxxx xxxxx xxxxx xxxx xxxxx
Stopped Del:xxxxx xxxx xxxxx xxxxx xxxx xxxxx   8.5 xxxx xxxxx xxxxx xxxx xxxxx
LOS by Move:   *    *     *     *    *     *     A    *     *     *    *     *
Movement:     LT - LTR - RT    LT - LTR - RT    LT - LTR - RT    LT - LTR - RT
Shared Cap.: xxxx xxxx xxxxx  xxxx  401 xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
SharedQueue:xxxxx xxxx xxxxx xxxxx  0.2 xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shrd StpDel:xxxxx xxxx xxxxx xxxxx 14.6 xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shared LOS:    *    *     *     *    B     *     *    *     *     *    *     *
ApproachDel:    xxxxxx             14.6           xxxxxx           xxxxxx
ApproachLOS:        *                B                *                *
```


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AM Peak Hour Traffic

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #212 Presidio/Letterman/Lincoln

Cycle (sec): 100 Critical Vol./Cap. (X): 0.787
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 18.4
Optimal Cycle: 0 Level Of Service: C

Street Name:	Lincoln/Presidio						Presidio/Letterman					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	0 1	0	0 1	0 1	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module: >> Count Date: 16 Jan 2008 << AM Peak Hour												
Base Vol:	63	314	10	83	218	33	36	73	91	4	46	101
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	63	314	10	83	218	33	36	73	91	4	46	101
User Adj:	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11
PHF Adj:	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
PHF Volume:	81	406	13	107	282	43	47	94	118	5	59	131
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	81	406	13	107	282	43	47	94	118	5	59	131
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	81	406	13	107	282	43	47	94	118	5	59	131
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.97	0.03	0.50	1.30	0.20	0.18	0.37	0.45	0.03	0.30	0.67
Final Sat.:	492	516	16	244	664	103	92	186	232	13	150	330
Capacity Analysis Module:												
Vol/Sat:	0.17	0.79	0.79	0.44	0.42	0.42	0.51	0.51	0.51	0.40	0.40	0.40
Crit Moves:		****		****				****			****	
Delay/Veh:	11.2	28.2	28.2	14.8	14.1	13.7	15.3	15.3	15.3	13.3	13.3	13.3
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	11.2	28.2	28.2	14.8	14.1	13.7	15.3	15.3	15.3	13.3	13.3	13.3
LOS by Move:	B	D	D	B	B	B	C	C	C	B	B	B
ApproachDel:		25.5			14.2			15.3			13.3	
Delay Adj:		1.00			1.00			1.00			1.00	
ApprAdjDel:		25.5			14.2			15.3			13.3	
LOS by Appr:		D			B			C			B	

AM Peak Hour Traffic

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #213 Lombard/Presidio

Cycle (sec): 100 Critical Vol./Cap. (X): 1.057
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 42.9
Optimal Cycle: 0 Level Of Service: E

Street Name:	Presidio Blvd.						Lombard St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	0 1	0	1 0	1 0	0	0 0	0 0	0	1 0	0 0	1
Volume Module: >> Count Date: 16 Jan 2008 << AM Peak Hour												
Base Vol:	0	302	231	159	152	0	0	0	0	229	0	97
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	302	231	159	152	0	0	0	0	229	0	97
User Adj:	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11
PHF Adj:	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
PHF Volume:	0	368	281	194	185	0	0	0	0	279	0	118
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	368	281	194	185	0	0	0	0	279	0	118
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	368	281	194	185	0	0	0	0	279	0	118
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.57	0.43	1.00	1.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Final Sat.:	0	348	266	498	535	0	0	0	0	480	0	569
Capacity Analysis Module:												
Vol/Sat:	xxxx	1.06	1.06	0.39	0.35	xxxx	xxxx	xxxx	xxxx	0.58	xxxx	0.21
Crit Moves:			****	****						****		
Delay/Veh:	0.0	76.0	76.0	14.2	12.7	0.0	0.0	0.0	0.0	19.8	0.0	10.6
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	76.0	76.0	14.2	12.7	0.0	0.0	0.0	0.0	19.8	0.0	10.6
LOS by Move:	*	F	F	B	B	*	*	*	*	C	*	B
ApproachDel:		76.0			13.5			xxxxxx			17.0	
Delay Adj:		1.00			1.00			xxxxx			1.00	
ApprAdjDel:		76.0			13.5			xxxxxx			17.0	
LOS by Appr:		F			B			*			C	

AM Peak Hour Traffic

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #214 Presidio/Pacific

Cycle (sec): 100 Critical Vol./Cap. (X): 0.885
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 28.5
Optimal Cycle: 0 Level Of Service: D

Street Name:	Presidio Blvd.						Pacific Ave.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	7	464	21	80	359	17	15	6	6	23	23	53
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	7	464	21	80	359	17	15	6	6	23	23	53
User Adj:	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11
PHF Adj:	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
PHF Volume:	9	581	26	100	450	21	19	8	8	29	29	66
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	9	581	26	100	450	21	19	8	8	29	29	66
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	9	581	26	100	450	21	19	8	8	29	29	66
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.01	0.95	0.04	0.17	0.79	0.04	0.56	0.22	0.22	0.23	0.23	0.54
Final Sat.:	10	657	30	120	538	25	266	106	106	124	124	285
Capacity Analysis Module:												
Vol/Sat:	0.88	0.88	0.88	0.84	0.84	0.84	0.07	0.07	0.07	0.23	0.23	0.23
Crit Moves:	****					****	****				****	
Delay/Veh:	33.4	33.4	33.4	28.0	28.0	28.0	10.4	10.4	10.4	11.1	11.1	11.1
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	33.4	33.4	33.4	28.0	28.0	28.0	10.4	10.4	10.4	11.1	11.1	11.1
LOS by Move:	D	D	D	D	D	D	B	B	B	B	B	B
ApproachDel:	33.4			28.0			10.4			11.1		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	33.4			28.0			10.4			11.1		
LOS by Appr:	D			D			B			B		

AM Peak Hour Traffic

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #215 Presidio/Jackson

Cycle (sec): 100 Critical Vol./Cap. (X): 0.955
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 37.1
Optimal Cycle: 0 Level Of Service: E

Street Name:	Presidio Blvd.						Jackson St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module: >> Count Date: 16 Jan 2008 << AM Peak Hour												
Base Vol:	3	377	54	54	310	23	26	118	6	47	126	65
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	3	377	54	54	310	23	26	118	6	47	126	65
User Adj:	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11
PHF Adj:	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
PHF Volume:	4	451	65	65	371	28	31	141	7	56	151	78
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	4	451	65	65	371	28	31	141	7	56	151	78
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	4	451	65	65	371	28	31	141	7	56	151	78
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.01	0.87	0.12	0.14	0.80	0.06	0.17	0.79	0.04	0.20	0.53	0.27
Final Sat.:	4	473	68	73	419	31	74	334	17	92	245	127
Capacity Analysis Module:												
Vol/Sat:	0.96	0.96	0.96	0.89	0.89	0.89	0.42	0.42	0.42	0.61	0.61	0.61
Crit Moves:		****			****		****					****
Delay/Veh:	52.0	52.0	52.0	39.1	39.1	39.1	15.8	15.8	15.8	19.9	19.9	19.9
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	52.0	52.0	52.0	39.1	39.1	39.1	15.8	15.8	15.8	19.9	19.9	19.9
LOS by Move:	F	F	F	E	E	E	C	C	C	C	C	C
ApproachDel:	52.0			39.1			15.8			19.9		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	52.0			39.1			15.8			19.9		
LOS by Appr:	F			E			C			C		

AM Peak Hour Traffic

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #216 Presidio/Washington

Cycle (sec): 100 Critical Vol./Cap. (X): 0.826
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 22.9
Optimal Cycle: 0 Level Of Service: C

Street Name:	Presidio Blvd.						Washington St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module: >> Count Date: 16 Jan 2008 << AM Peak Hour												
Base Vol:	13	379	23	34	314	22	40	124	14	29	33	20
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	13	379	23	34	314	22	40	124	14	29	33	20
User Adj:	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	16	468	28	42	388	27	49	153	17	36	41	25
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	16	468	28	42	388	27	49	153	17	36	41	25
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	16	468	28	42	388	27	49	153	17	36	41	25
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.03	0.91	0.06	0.09	0.85	0.06	0.22	0.70	0.08	0.35	0.41	0.24
Final Sat.:	19	567	34	56	514	36	110	342	39	158	180	109
Capacity Analysis Module:												
Vol/Sat:	0.83	0.83	0.83	0.76	0.76	0.76	0.45	0.45	0.45	0.23	0.23	0.23
Crit Moves:	****				****			****			****	
Delay/Veh:	28.6	28.6	28.6	23.1	23.1	23.1	14.2	14.2	14.2	11.7	11.7	11.7
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	28.6	28.6	28.6	23.1	23.1	23.1	14.2	14.2	14.2	11.7	11.7	11.7
LOS by Move:	D	D	D	C	C	C	B	B	B	B	B	B
ApproachDel:	28.6			23.1			14.2			11.7		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	28.6			23.1			14.2			11.7		
LOS by Appr:	D			C			B			B		

AM Peak Hour Traffic

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #217 Arguello/Jackson

Cycle (sec): 100 Critical Vol./Cap. (X): 0.737
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 15.4
Optimal Cycle: 0 Level Of Service: C

Street Name:	Arguello Blvd.						Jackson St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	0 1	0	0 1	0 0	0	0 0	0 0	0	0 0	1! 0	0
Volume Module: >> Count Date: 15 Jan 2008 << AM Peak Hour												
Base Vol:	0	375	102	47	218	0	0	0	0	53	0	48
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	375	102	47	218	0	0	0	0	53	0	48
User Adj:	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11
PHF Adj:	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
PHF Volume:	0	458	125	57	266	0	0	0	0	65	0	59
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	458	125	57	266	0	0	0	0	65	0	59
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	458	125	57	266	0	0	0	0	65	0	59
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.79	0.21	0.18	0.82	0.00	0.00	0.00	0.00	0.52	0.00	0.48
Final Sat.:	0	622	169	127	587	0	0	0	0	306	0	277
Capacity Analysis Module:												
Vol/Sat:	xxxx	0.74	0.74	0.45	0.45	xxxx	xxxx	xxxx	xxxx	0.21	xxxx	0.21
Crit Moves:		****		****								****
Delay/Veh:	0.0	18.6	18.6	11.7	11.7	0.0	0.0	0.0	0.0	9.9	0.0	9.9
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	18.6	18.6	11.7	11.7	0.0	0.0	0.0	0.0	9.9	0.0	9.9
LOS by Move:	*	C	C	B	B	*	*	*	*	A	*	A
ApproachDel:	18.6			11.7			xxxxxx			9.9		
Delay Adj:	1.00			1.00			xxxxx			1.00		
ApprAdjDel:	18.6			11.7			xxxxxx			9.9		
LOS by Appr:	C			B			*			A		

AM Peak Hour Traffic

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #218 Arguello/Washington St

Cycle (sec): 100 Critical Vol./Cap. (X): 0.877
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 22.6
Optimal Cycle: 0 Level Of Service: C

Street Name:	Arguello Blvd.						Washington St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module: >> Count Date: 15 Jan 2008 << AM Peak Hour												
Base Vol:	16	453	117	16	243	7	3	8	24	47	2	17
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	16	453	117	16	243	7	3	8	24	47	2	17
User Adj:	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11
PHF Adj:	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
PHF Volume:	19	536	138	19	288	8	4	9	28	56	2	20
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	19	536	138	19	288	8	4	9	28	56	2	20
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	19	536	138	19	288	8	4	9	28	56	2	20
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.03	0.77	0.20	0.06	0.91	0.03	0.09	0.23	0.68	0.71	0.03	0.26
Final Sat.:	22	611	158	42	636	18	48	129	387	389	17	141
Capacity Analysis Module:												
Vol/Sat:	0.88	0.88	0.88	0.45	0.45	0.45	0.07	0.07	0.07	0.14	0.14	0.14
Crit Moves:	****			****			****			****		
Delay/Veh:	29.7	29.7	29.7	11.9	11.9	11.9	9.3	9.3	9.3	10.1	10.1	10.1
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	29.7	29.7	29.7	11.9	11.9	11.9	9.3	9.3	9.3	10.1	10.1	10.1
LOS by Move:	D	D	D	B	B	B	A	A	A	B	B	B
ApproachDel:	29.7			11.9			9.3			10.1		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	29.7			11.9			9.3			10.1		
LOS by Appr:	D			B			A			B		

AM Peak Hour Traffic

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #219 Arguello/Moraga

Cycle (sec): 100 Critical Vol./Cap. (X): 0.507
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 10.4
Optimal Cycle: 0 Level Of Service: B

Street Name:	Arguello						Moraga					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module: >> Count Date: 16 Jan 2008 << AM Peak Hour												
Base Vol:	44	53	257	1	14	2	1	57	43	96	43	1
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	44	53	257	1	14	2	1	57	43	96	43	1
User Adj:	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11
PHF Adj:	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
PHF Volume:	52	63	304	1	17	2	1	67	51	113	51	1
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	52	63	304	1	17	2	1	67	51	113	51	1
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	52	63	304	1	17	2	1	67	51	113	51	1
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.12	0.15	0.73	0.06	0.82	0.12	0.01	0.56	0.43	0.68	0.31	0.01
Final Sat.:	103	124	600	39	545	78	7	389	293	450	201	5
Capacity Analysis Module:												
Vol/Sat:	0.51	0.51	0.51	0.03	0.03	0.03	0.17	0.17	0.17	0.25	0.25	0.25
Crit Moves:	****			****				****			****	
Delay/Veh:	11.2	11.2	11.2	8.2	8.2	8.2	8.7	8.7	8.7	9.7	9.7	9.7
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	11.2	11.2	11.2	8.2	8.2	8.2	8.7	8.7	8.7	9.7	9.7	9.7
LOS by Move:	B	B	B	A	A	A	A	A	A	A	A	A
ApproachDel:	11.2			8.2			8.7			9.7		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	11.2			8.2			8.7			9.7		
LOS by Appr:	B			A			A			A		

AM Peak Hour Traffic

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #220 Montgomery/Sheridan

Cycle (sec): 100 Critical Vol./Cap. (X): 0.683
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 14.3
Optimal Cycle: 0 Level Of Service: B

Street Name:	Montgomery St.						Sheridan Ave.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0	0 0	0 1	0
Volume Module: >> Count Date: 17 Jan 2008 << AM Peak Hour												
Base Vol:	7	6	1	3	16	28	236	165	7	0	26	10
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	7	6	1	3	16	28	236	165	7	0	26	10
User Adj:	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11
PHF Adj:	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79
PHF Volume:	10	8	1	4	22	39	330	231	10	0	36	14
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	10	8	1	4	22	39	330	231	10	0	36	14
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	10	8	1	4	22	39	330	231	10	0	36	14
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.50	0.43	0.07	0.06	0.34	0.60	0.58	0.40	0.02	0.00	0.72	0.28
Final Sat.:	300	257	43	42	224	392	483	338	14	0	553	213
Capacity Analysis Module:												
Vol/Sat:	0.03	0.03	0.03	0.10	0.10	0.10	0.68	0.68	0.68	xxxx	0.07	0.07
Crit Moves:	****			****			****				****	
Delay/Veh:	8.6	8.6	8.6	8.4	8.4	8.4	15.8	15.8	15.8	0.0	7.8	7.8
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	8.6	8.6	8.6	8.4	8.4	8.4	15.8	15.8	15.8	0.0	7.8	7.8
LOS by Move:	A	A	A	A	A	A	C	C	C	*	A	A
ApproachDel:	8.6			8.4			15.8			7.8		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	8.6			8.4			15.8			7.8		
LOS by Appr:	A			A			C			A		

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Existing Conditions – PM Peak Hour

PM Peak Hours

Volume Type	Northbound Left	Northbound Thru	Northbound Right	Southbound Left	Southbound Thru	Southbound Right	Eastbound Left	Eastbound Thru	Eastbound Right	Westbound Left	Westbound Thru	Westbound Right	Total Volume
#201 Lombard/Divisadero													
Base	166	138	20	68	139	47	1	1603	190	0	2216	106	4694
#202 Lombard/Richardson													
Base	198	2259	0	0	1509	16	0	0	231	0	0	0	4213
#203 Lyon/Lombard													
Base	124	37	10	21	40	224	176	211	93	10	240	22	1208
#204 Greenwich/Divisadero													
Base	9	276	9	29	236	11	22	94	8	23	120	31	868
#205 Greenwich/Lyon													
Base	0	90	2	67	85	0	0	0	0	18	0	93	355
#206 Francisco/Richardson													
Base	0	2288	2	0	1541	3	100	53	6	2	89	107	4191
#207 Richardson/Gorgas													
Base	91	0	40	0	0	59	0	1442	54	0	2448	29	4163
#208 Doyle/Marina/Lyon													
Base	0	0	43	219	0	68	0	657	23	0	1138	284	2432
#209 Graham/Lincoln													
Base	14	15	129	30	26	23	8	94	1	91	230	9	670
#210 Lincoln/Halleck													
Base	0	0	0	121	0	116	58	176	0	0	243	141	855
#211 Lincoln/Girard													
Base	0	0	0	30	0	30	16	296	0	0	360	15	747
#212 Presidio/Letterman/Lincoln													
Base	47	249	9	66	353	8	20	38	84	9	41	101	1025
#213 Lombard/Presidio													
Base	0	210	213	192	256	0	0	0	0	312	0	105	1288
#214 Presidio/Pacific													
Base	5	393	9	44	499	24	6	7	2	19	26	39	1073
#215 Presidio/Jackson													
Base	9	346	38	29	458	32	35	73	10	32	94	27	1183
#216 Presidio/Washington													
Base	10	343	29	15	436	41	39	70	11	16	45	23	1078

PM Peak Hours

Volume Type	Northbound Left	Northbound Thru	Northbound Right	Southbound Left	Southbound Thru	Southbound Right	Eastbound Left	Eastbound Thru	Eastbound Right	Westbound Left	Westbound Thru	Westbound Right	Total Volume
#217 Arguello/Jackson													
Base	0	244	50	37	408	0	0	0	0	76	0	39	854
#218 Arguello/Washington St													
Base	19	276	34	15	464	9	4	6	24	72	9	13	945
#219 Arguello/Moraga													
Base	50	23	115	2	36	2	0	30	77	210	38	3	586
#220 Montgomery/Sheridan													
Base	6	5	3	12	30	26	64	102	7	1	37	6	299

PM Peak Hours

Impact Analysis Report
Level Of Service

Intersection	LOS	Base Del/ Veh	V/ C
#201 Lombard/Divisadero	B	12.0	0.777
#202 Lombard/Richardson	A	4.5	0.693
#203 Lyon/Lombard	E	38.0	1.011
#204 Greenwich/Divisadero	B	13.0	0.543
#205 Greenwich/Lyon	A	8.3	0.244
#206 Francisco/Richardson	B	11.5	0.641
#207 Richardson/Gorgas	A	7.2	0.638
#208 Doyle/Marina/Lyon	B	11.0	0.525
#209 Graham/Lincoln	B	10.5	0.444
#210 Lincoln/Halleck	C	19.9	0.000
#211 Lincoln/Girard	B	14.3	0.000
#212 Presidio/Letterman/Lincoln	B	12.7	0.520
#213 Lombard/Presidio	C	24.7	0.846
#214 Presidio/Pacific	C	23.4	0.872
#215 Presidio/Jackson	D	29.6	0.933
#216 Presidio/Washington	C	21.5	0.838
#217 Arguello/Jackson	B	14.0	0.677
#218 Arguello/Washington St	C	18.6	0.800
#219 Arguello/Moraga	B	10.1	0.431
#220 Montgomery/Sheridan	A	8.2	0.245

PM Peak Hours

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #201 Lombard/Divisadero

Cycle (sec): 90 Critical Vol./Cap. (X): 0.777
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 12.0
Optimal Cycle: 90 Level Of Service: B

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Permitted				Permitted				Permitted				Permitted			
Rights:	Include				Include				Include				Include			
Min. Green:	27	27	27		27	27	27		54	54	54		54	54	54	
Lanes:	1 0	0 1	0		1 0	0 1	0		0 1	1 1	0		0 1	1 1	0	
Volume Module: >> Count Date: 23 Jan 2008 << PM Peak Hour																
Base Vol:	166	138	20		68	139	47		1	1603	190		0	2216	106	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	166	138	20		68	139	47		1	1603	190		0	2216	106	
User Adj:	1.11	1.11	1.11		1.11	1.11	1.11		1.11	1.11	1.11		1.11	1.11	1.11	
PHF Adj:	0.94	0.94	0.94		0.94	0.94	0.94		0.94	0.94	0.94		0.94	0.94	0.94	
PHF Volume:	197	163	24		81	165	56		1	1899	225		0	2625	126	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	197	163	24		81	165	56		1	1899	225		0	2625	126	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Final Vol.:	197	163	24		81	165	56		1	1899	225		0	2625	126	
Saturation Flow Module:																
Sat/Lane:	1900	1900	1900		1900	1900	1900		1900	1900	1900		1900	1900	1900	
Adjustment:	0.43	0.98	0.98		0.47	0.96	0.96		0.84	0.84	0.84		0.91	0.90	0.90	
Lanes:	1.00	0.87	0.13		1.00	0.75	0.25		0.01	2.68	0.31		0.00	2.86	0.14	
Final Sat.:	809	1628	236		897	1366	462		3	4287	508		0	4916	235	
Capacity Analysis Module:																
Vol/Sat:	0.24	0.10	0.10		0.09	0.12	0.12		0.44	0.44	0.44		0.00	0.53	0.53	
Crit Moves:	****													****		
Green/Cycle:	0.31	0.31	0.31		0.31	0.31	0.31		0.69	0.69	0.69		0.00	0.69	0.69	
Volume/Cap:	0.78	0.32	0.32		0.29	0.39	0.39		0.64	0.64	0.64		0.00	0.78	0.78	
Delay/Veh:	42.2	24.0	24.0		23.9	24.6	24.6		8.3	8.3	8.3		0.0	10.6	10.6	
User DelAdj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
AdjDel/Veh:	42.2	24.0	24.0		23.9	24.6	24.6		8.3	8.3	8.3		0.0	10.6	10.6	
HCM2kAvg:	13	4	4		4	5	5		12	12	12		0	19	19	

PM Peak Hours

Level Of Service Computation Report
1994 HCM Operations Method (Base Volume Alternative)

Intersection #202 Lombard/Richardson

Cycle (sec): 90 Critical Vol./Cap. (X): 0.693
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 4.5
Optimal Cycle: 90 Level Of Service: A

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Protected				Permitted				Permitted				Permitted			
Rights:	Include				Include				Ovl				Include			
Min. Green:	33	90	0	0	49	49	0	0	33	0	0	0				
Lanes:	1	0	3	0 0	0	0	2	1 0	0	0	0	0 1	0	0	0	0 0
Volume Module: >> Count Date: 23 Jan 2008 << PM Peak Hour																
Base Vol:	198	2259	0	0	1509	16	0	0	231	0	0	0				
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
Initial Bse:	198	2259	0	0	1509	16	0	0	231	0	0	0				
User Adj:	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11				
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95				
PHF Volume:	231	2637	0	0	1761	19	0	0	270	0	0	0				
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0				
Reduced Vol:	231	2637	0	0	1761	19	0	0	270	0	0	0				
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
MLF Adj:	1.00	1.10	1.00	1.00	1.10	1.10	1.00	1.00	1.00	1.00	1.00	1.00				
Final Vol.:	231	2900	0	0	1937	21	0	0	270	0	0	0				
Saturation Flow Module:																
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900				
Adjustment:	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.77	1.00	1.00	1.00				
Lanes:	1.00	3.00	0.00	0.00	2.97	0.03	0.00	0.00	1.00	0.00	0.00	0.00				
Final Sat.:	1805	5700	0	0	5640	60	0	0	1463	0	0	0				
Capacity Analysis Module:																
Vol/Sat:	0.13	0.51	0.00	0.00	0.34	0.34	0.00	0.00	0.18	0.00	0.00	0.00				
Crit Moves:		****							****							
Green/Cycle:	0.46	1.00	0.00	0.00	0.54	0.54	0.00	0.00	0.46	0.00	0.00	0.00				
Volume/Cap:	0.28	0.51	0.00	0.00	0.63	0.63	0.00	0.00	0.40	0.00	0.00	0.00				
Delay/Veh:	9.9	0.1	0.0	0.0	9.5	9.5	0.0	0.0	10.8	0.0	0.0	0.0				
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
AdjDel/Veh:	9.9	0.1	0.0	0.0	9.5	9.5	0.0	0.0	10.8	0.0	0.0	0.0				
DesignQueue:	6	0	0	0	49	1	0	0	8	0	0	0				

PM Peak Hours

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #203 Lyon/Lombard

Cycle (sec): 100 Critical Vol./Cap. (X): 1.011
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 38.0
Optimal Cycle: 0 Level Of Service: E

Street Name:	Lyon St.								Lombard St.							
Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Stop Sign				Stop Sign				Stop Sign				Stop Sign			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0	0	1!	0 0	0	0	1!	0 0	0	0	1!	0 0	0	0	1!	0 0
Volume Module: >> Count Date: 23 Jan 2008 << PM Peak Hour																
Base Vol:	124	37	10	21	40	224	176	211	93	10	240	22				
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
Initial Bse:	124	37	10	21	40	224	176	211	93	10	240	22				
User Adj:	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11				
PHF Adj:	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94				
PHF Volume:	146	44	12	25	47	263	207	248	109	12	282	26				
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0				
Reduced Vol:	146	44	12	25	47	263	207	248	109	12	282	26				
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
Final Vol.:	146	44	12	25	47	263	207	248	109	12	282	26				
Saturation Flow Module:																
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
Lanes:	0.72	0.22	0.06	0.07	0.14	0.79	0.37	0.44	0.19	0.04	0.88	0.08				
Final Sat.:	318	95	26	38	72	405	205	246	108	18	440	40				
Capacity Analysis Module:																
Vol/Sat:	0.46	0.46	0.46	0.65	0.65	0.65	1.01	1.01	1.01	0.64	0.64	0.64				
Crit Moves:		****			****			****			****					
Delay/Veh:	16.3	16.3	16.3	20.5	20.5	20.5	66.0	66.0	66.0	20.6	20.6	20.6				
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
AdjDel/Veh:	16.3	16.3	16.3	20.5	20.5	20.5	66.0	66.0	66.0	20.6	20.6	20.6				
LOS by Move:	C	C	C	C	C	C	F	F	F	C	C	C				
ApproachDel:	16.3				20.5			66.0			20.6					
Delay Adj:	1.00				1.00			1.00			1.00					
ApprAdjDel:	16.3				20.5			66.0			20.6					
LOS by Appr:	C				C			F			C					

PM Peak Hours

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #204 Greenwich/Divisadero

Cycle (sec): 100 Critical Vol./Cap. (X): 0.543
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 13.0
Optimal Cycle: 0 Level Of Service: B

Street Name:	Divisadero						Greenwich					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module: >> Count Date: 23 Jan 2008 << PM Peak Hour												
Base Vol:	9	276	9	29	236	11	22	94	8	23	120	31
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	9	276	9	29	236	11	22	94	8	23	120	31
User Adj:	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11
PHF Adj:	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
PHF Volume:	11	325	11	34	278	13	26	111	9	27	141	36
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	11	325	11	34	278	13	26	111	9	27	141	36
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	11	325	11	34	278	13	26	111	9	27	141	36
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.03	0.94	0.03	0.10	0.86	0.04	0.18	0.76	0.06	0.13	0.69	0.18
Final Sat.:	19	598	19	66	539	25	94	403	34	74	388	100
Capacity Analysis Module:												
Vol/Sat:	0.54	0.54	0.54	0.52	0.52	0.52	0.27	0.27	0.27	0.36	0.36	0.36
Crit Moves:		****		****			****			****		
Delay/Veh:	14.1	14.1	14.1	13.6	13.6	13.6	10.9	10.9	10.9	11.7	11.7	11.7
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	14.1	14.1	14.1	13.6	13.6	13.6	10.9	10.9	10.9	11.7	11.7	11.7
LOS by Move:	B	B	B	B	B	B	B	B	B	B	B	B
ApproachDel:	14.1			13.6			10.9			11.7		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	14.1			13.6			10.9			11.7		
LOS by Appr:	B			B			B			B		

PM Peak Hours

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #205 Greenwich/Lyon

Cycle (sec): 100 Critical Vol./Cap. (X): 0.244
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 8.3
Optimal Cycle: 0 Level Of Service: A

Street Name:	Lyon						Greenwich					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	0 1	0	0 1	0 0	0	0 0	0 0	0	0 0	1! 0	0
Volume Module: >> Count Date: 23 Jan 2008 << PM Peak Hour												
Base Vol:	0	90	2	67	85	0	0	0	0	18	0	93
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	90	2	67	85	0	0	0	0	18	0	93
User Adj:	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11
PHF Adj:	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
PHF Volume:	0	115	3	85	108	0	0	0	0	23	0	119
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	115	3	85	108	0	0	0	0	23	0	119
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	115	3	85	108	0	0	0	0	23	0	119
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.98	0.02	0.44	0.56	0.00	0.00	0.00	0.00	0.16	0.00	0.84
Final Sat.:	0	776	17	350	445	0	0	0	0	135	0	696
Capacity Analysis Module:												
Vol/Sat:	xxxx	0.15	0.15	0.24	0.24	xxxx	xxxx	xxxx	xxxx	0.17	xxxx	0.17
Crit Moves:		****		****						****		
Delay/Veh:	0.0	8.1	8.1	8.8	8.8	0.0	0.0	0.0	0.0	7.9	0.0	7.9
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	8.1	8.1	8.8	8.8	0.0	0.0	0.0	0.0	7.9	0.0	7.9
LOS by Move:	*	A	A	A	A	*	*	*	*	A	*	A
ApproachDel:	8.1			8.8			xxxxxx			7.9		
Delay Adj:	1.00			1.00			xxxxx			1.00		
ApprAdjDel:	8.1			8.8			xxxxxx			7.9		
LOS by Appr:	A			A			*			A		

PM Peak Hours

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #206 Francisco/Richardson

Cycle (sec): 90 Critical Vol./Cap. (X): 0.641
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 11.5
Optimal Cycle: 90 Level Of Service: B

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Permitted				Permitted				Permitted				Permitted			
Rights:	Include				Include				Include				Include			
Min. Green:	0	51	51		0	51	51		31	31	31		31	31	31	
Lanes:	0	0 2	1	0	0	0 2	1	0	1	0 0	1	0	0	0 1!	0	0
Volume Module: >> Count Date: 23 Jan 2008 << PM Peak Hour																
Base Vol:	0	2288	2	0	1541	3	100	53	6	2	89	107				
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
Initial Bse:	0	2288	2	0	1541	3	100	53	6	2	89	107				
User Adj:	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11				
PHF Adj:	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96				
PHF Volume:	0	2648	2	0	1784	3	116	61	7	2	103	124				
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0				
Reduced Vol:	0	2648	2	0	1784	3	116	61	7	2	103	124				
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
Final Vol.:	0	2648	2	0	1784	3	116	61	7	2	103	124				
Saturation Flow Module:																
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900				
Adjustment:	1.00	0.91	0.91	1.00	0.91	0.91	0.76	0.99	0.99	0.93	0.93	0.93				
Lanes:	0.00	2.99	0.01	0.00	2.99	0.01	1.00	0.90	0.10	0.01	0.45	0.54				
Final Sat.:	0	5182	5	0	5177	10	1442	1681	190	18	791	951				
Capacity Analysis Module:																
Vol/Sat:	0.00	0.51	0.51	0.00	0.34	0.34	0.08	0.04	0.04	0.13	0.13	0.13				
Crit Moves:		****									****					
Green/Cycle:	0.00	0.66	0.66	0.00	0.66	0.66	0.34	0.34	0.34	0.34	0.34	0.34				
Volume/Cap:	0.00	0.78	0.78	0.00	0.53	0.53	0.23	0.11	0.11	0.38	0.38	0.38				
Delay/Veh:	0.0	12.1	12.1	0.0	8.3	8.3	21.3	20.1	20.1	22.6	22.6	22.6				
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
AdjDel/Veh:	0.0	12.1	12.1	0.0	8.3	8.3	21.3	20.1	20.1	22.6	22.6	22.6				
HCM2kAvg:	0	19	19	0	9	9	3	1	1	5	5	5				

PM Peak Hours

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #207 Richardson/Gorgas

Cycle (sec): 90 Critical Vol./Cap. (X): 0.638
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 7.2
Optimal Cycle: 90 Level Of Service: A

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Split Phase				Split Phase				Permitted				Permitted			
Rights:	Include				Include				Include				Include			
Min. Green:	10	10	10		12	12	12		52	52	52		52	52	52	
Lanes:	1	0 1!	0	0	0	0 0	0	1	0	0 3	0	1	0	0 2	1	0
Volume Module: >> Count Date: 23 Jan 2008 << PM Peak Hour																
Base Vol:	91	0	40	0	0	59	0	1442	54	0	2448	29				
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
Initial Bse:	91	0	40	0	0	59	0	1442	54	0	2448	29				
User Adj:	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11				
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95				
PHF Volume:	106	0	47	0	0	69	0	1678	63	0	2848	34				
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0				
Reduced Vol:	106	0	47	0	0	69	0	1678	63	0	2848	34				
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
Final Vol.:	106	0	47	0	0	69	0	1678	63	0	2848	34				
Saturation Flow Module:																
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900				
Adjustment:	0.92	1.00	0.92	1.00	1.00	0.87	1.00	0.91	0.85	1.00	0.91	0.91				
Lanes:	1.53	0.00	0.47	0.00	0.00	1.00	0.00	3.00	1.00	0.00	2.96	0.04				
Final Sat.:	2683	0	819	0	0	1644	0	5187	1615	0	5116	61				
Capacity Analysis Module:																
Vol/Sat:	0.04	0.00	0.06	0.00	0.00	0.04	0.00	0.32	0.04	0.00	0.56	0.56				
Crit Moves:	****					****					****					
Green/Cycle:	0.11	0.00	0.11	0.00	0.00	0.13	0.00	0.76	0.76	0.00	0.76	0.76				
Volume/Cap:	0.36	0.00	0.51	0.00	0.00	0.31	0.00	0.43	0.05	0.00	0.74	0.74				
Delay/Veh:	37.5	0.0	39.2	0.0	0.0	36.1	0.0	4.1	2.8	0.0	6.8	6.8				
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
AdjDel/Veh:	37.5	0.0	39.2	0.0	0.0	36.1	0.0	4.1	2.8	0.0	6.8	6.8				
HCM2kAvg:	2	0	3	0	0	2	0	6	0	0	16	16				

PM Peak Hours

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #208 Doyle/Marina/Lyon

Cycle (sec): 75 Critical Vol./Cap. (X): 0.525
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 11.0
Optimal Cycle: 75 Level Of Service: B

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Permitted				Permitted				Permitted				Permitted			
Rights:	Include				Include				Include				Ignore			
Min. Green:	0	0	32		32	0	32		0	35	35		0	35	75	
Lanes:	0	0	0	0 1	1	0	0	0 1	0	0	1	1 0	0	0	2	0 1
Volume Module: >> Count Date: 23 Jan 2008 << PM Peak Hour																
Base Vol:	0	0	43		219	0	68		0	657	23		0	1138	284	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	0	0	43		219	0	68		0	657	23		0	1138	284	
User Adj:	1.11	1.11	1.11		1.11	1.11	1.11		1.11	1.11	1.11		1.11	1.11	0.00	
PHF Adj:	0.98	0.98	0.98		0.98	0.98	0.98		0.98	0.98	0.98		0.98	0.98	0.00	
PHF Volume:	0	0	49		248	0	77		0	745	26		0	1290	0	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	0	0	49		248	0	77		0	745	26		0	1290	0	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	0.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	0.00	
Final Vol.:	0	0	49		248	0	77		0	745	26		0	1290	0	
Saturation Flow Module:																
Sat/Lane:	1900	1900	1900		1900	1900	1900		1900	1900	1900		1900	1900	1900	
Adjustment:	1.00	1.00	0.87		0.78	1.00	0.85		1.00	0.95	0.95		1.00	0.95	1.00	
Lanes:	0.00	0.00	1.00		1.00	0.00	1.00		0.00	1.93	0.07		0.00	2.00	1.00	
Final Sat.:	0	0	1644		1484	0	1615		0	3470	121		0	3610	1900	
Capacity Analysis Module:																
Vol/Sat:	0.00	0.00	0.03		0.17	0.00	0.05		0.00	0.21	0.21		0.00	0.36	0.00	
Crit Moves:					****									****		
Green/Cycle:	0.00	0.00	0.43		0.43	0.00	0.43		0.00	0.57	0.57		0.00	0.57	0.00	
Volume/Cap:	0.00	0.00	0.07		0.39	0.00	0.11		0.00	0.37	0.37		0.00	0.62	0.00	
Delay/Veh:	0.0	0.0	12.7		15.2	0.0	13.0		0.0	8.8	8.8		0.0	11.2	0.0	
User DelAdj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
AdjDel/Veh:	0.0	0.0	12.7		15.2	0.0	13.0		0.0	8.8	8.8		0.0	11.2	0.0	
HCM2kAvg:	0	0	1		5	0	1		0	5	5		0	11	0	

PM Peak Hours

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #209 Graham/Lincoln

Cycle (sec): 100 Critical Vol./Cap. (X): 0.444
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 10.5
Optimal Cycle: 0 Level Of Service: B

Street Name:	Graham St.								Lincoln Blvd.							
Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Stop Sign				Stop Sign				Stop Sign				Stop Sign			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Lanes:	0	0	1!	0 0	0	0	1!	0 0	1	0	0	1 0	1	0	0	1 0
Volume Module: >> Count Date: 17 Jan 2008 << PM Peak Hour																
Base Vol:	14	15	129		30	26	23		8	94	1		91	230	9	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	14	15	129		30	26	23		8	94	1		91	230	9	
User Adj:	1.11	1.11	1.11		1.11	1.11	1.11		1.11	1.11	1.11		1.11	1.11	1.11	
PHF Adj:	0.91	0.91	0.91		0.91	0.91	0.91		0.91	0.91	0.91		0.91	0.91	0.91	
PHF Volume:	17	18	157		37	32	28		10	115	1		111	281	11	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	17	18	157		37	32	28		10	115	1		111	281	11	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Final Vol.:	17	18	157		37	32	28		10	115	1		111	281	11	
Saturation Flow Module:																
Adjustment:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Lanes:	0.09	0.09	0.82		0.38	0.33	0.29		1.00	0.99	0.01		1.00	0.96	0.04	
Final Sat.:	61	66	566		235	204	180		554	596	6		598	631	25	
Capacity Analysis Module:																
Vol/Sat:	0.28	0.28	0.28		0.16	0.16	0.16		0.02	0.19	0.19		0.19	0.44	0.44	
Crit Moves:		****				****				****					****	
Delay/Veh:	9.6	9.6	9.6		9.3	9.3	9.3		9.0	9.6	9.6		9.9	12.0	12.0	
Delay Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
AdjDel/Veh:	9.6	9.6	9.6		9.3	9.3	9.3		9.0	9.6	9.6		9.9	12.0	12.0	
LOS by Move:	A	A	A		A	A	A		A	A	A		A	B	B	
ApproachDel:	9.6				9.3				9.6				11.4			
Delay Adj:	1.00				1.00				1.00				1.00			
ApprAdjDel:	9.6				9.3				9.6				11.4			
LOS by Appr:	A				A				A				B			

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--------------------------------------------------------------------------------
                                  PM Peak Hours
--------------------------------------------------------------------------------
                       Level Of Service Computation Report
             2000 HCM Unsignalized Method (Base Volume Alternative)
********************************************************************************
Intersection #210 Lincoln/Halleck
********************************************************************************
Average Delay (sec/veh):      6.1   Worst Case Level Of Service:       C[ 19.9]
********************************************************************************
Street Name:           Halleck St.                     Lincoln Blvd.
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Stop Sign        Stop Sign       Uncontrolled     Uncontrolled
Rights:           Include          Channel          Include          Include
Lanes:        0  0  0  0  0    0  0  1! 0  0    1  0  0  1  0    0  0  0  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 17 Jan 2008 << PM Peak Hour
Base Vol:       0    0     0   121    0   116    58  176     0     0  243   141
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:    0    0     0   121    0   116    58  176     0     0  243   141
User Adj:    1.11 1.11  1.11  1.11 1.11  1.11  1.11 1.11  1.11  1.11 1.11  1.11
PHF Adj:     0.99 0.99  0.99  0.99 0.99  0.99  0.99 0.99  0.99  0.99 0.99  0.99
PHF Volume:     0    0     0   136    0   131    65  198     0     0  274   159
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Final Vol.:     0    0     0   136    0   131    65  198     0     0  274   159
------------|---------------||---------------||---------------||---------------|
Critical Gap Module:
Critical Gp:xxxxx xxxx xxxxx   6.4 xxxx   6.2   4.1 xxxx xxxxx xxxxx xxxx xxxxx
FollowUpTim:xxxxx xxxx xxxxx   3.5 xxxx   3.3   2.2 xxxx xxxxx xxxxx xxxx xxxxx
------------|---------------||---------------||---------------||---------------|
Capacity Module:
Cnflict Vol: xxxx xxxx xxxxx   682 xxxx   353   433 xxxx xxxxx  xxxx xxxx xxxxx
Potent Cap.: xxxx xxxx xxxxx   418 xxxx   695  1138 xxxx xxxxx  xxxx xxxx xxxxx
Move Cap.:   xxxx xxxx xxxxx   400 xxxx   695  1138 xxxx xxxxx  xxxx xxxx xxxxx
Volume/Cap:  xxxx xxxx  xxxx  0.34 xxxx  0.19  0.06 xxxx  xxxx  xxxx xxxx  xxxx
------------|---------------||---------------||---------------||---------------|
Level Of Service Module:
Queue:      xxxxx xxxx xxxxx xxxxx xxxx xxxxx   0.2 xxxx xxxxx xxxxx xxxx xxxxx
Stopped Del:xxxxx xxxx xxxxx xxxxx xxxx xxxxx   8.4 xxxx xxxxx xxxxx xxxx xxxxx
LOS by Move:   *    *     *     *    *     *     A    *     *     *    *     *
Movement:     LT - LTR - RT    LT - LTR - RT    LT - LTR - RT    LT - LTR - RT
Shared Cap.: xxxx xxxx xxxxx  xxxx  505 xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
SharedQueue:xxxxx xxxx xxxxx xxxxx  3.1 xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shrd StpDel:xxxxx xxxx xxxxx xxxxx 19.9 xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shared LOS:    *    *     *     *    C     *     *    *     *     *    *     *
ApproachDel:    xxxxxx             19.9           xxxxxx           xxxxxx
ApproachLOS:        *                C                *                *
```

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--------------------------------------------------------------------------------
                                  PM Peak Hours
--------------------------------------------------------------------------------
                       Level Of Service Computation Report
             2000 HCM Unsignalized Method (Base Volume Alternative)
********************************************************************************
Intersection #211 Lincoln/Girard
********************************************************************************
Average Delay (sec/veh):      1.3   Worst Case Level Of Service:       B[ 14.3]
********************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Stop Sign        Stop Sign       Uncontrolled     Uncontrolled
Rights:           Include          Include          Include          Include
Lanes:        0  0  0  0  0    0  0  1! 0  0    1  0  1  0  0    0  0  0  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 17 Jan 2008 << PM Peak Hour
Base Vol:       0    0     0    30    0    30    16  296     0     0  360    15
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:    0    0     0    30    0    30    16  296     0     0  360    15
User Adj:    1.11 1.11  1.11  1.11 1.11  1.11  1.11 1.11  1.11  1.11 1.11  1.11
PHF Adj:     0.97 0.97  0.97  0.97 0.97  0.97  0.97 0.97  0.97  0.97 0.97  0.97
PHF Volume:     0    0     0    34    0    34    18  339     0     0  413    17
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Final Vol.:     0    0     0    34    0    34    18  339     0     0  413    17
------------|---------------||---------------||---------------||---------------|
Critical Gap Module:
Critical Gp:xxxxx xxxx xxxxx   6.4 xxxx   6.2   4.1 xxxx xxxxx xxxxx xxxx xxxxx
FollowUpTim:xxxxx xxxx xxxxx   3.5 xxxx   3.3   2.2 xxxx xxxxx xxxxx xxxx xxxxx
------------|---------------||---------------||---------------||---------------|
Capacity Module:
Cnflict Vol: xxxx xxxx xxxxx   798 xxxx   421   430 xxxx xxxxx  xxxx xxxx xxxxx
Potent Cap.: xxxx xxxx xxxxx   358 xxxx   636  1140 xxxx xxxxx  xxxx xxxx xxxxx
Move Cap.:   xxxx xxxx xxxxx   354 xxxx   636  1140 xxxx xxxxx  xxxx xxxx xxxxx
Volume/Cap:  xxxx xxxx  xxxx  0.10 xxxx  0.05  0.02 xxxx  xxxx  xxxx xxxx  xxxx
------------|---------------||---------------||---------------||---------------|
Level Of Service Module:
Queue:      xxxxx xxxx xxxxx xxxxx xxxx xxxxx   0.0 xxxx xxxxx xxxxx xxxx xxxxx
Stopped Del:xxxxx xxxx xxxxx xxxxx xxxx xxxxx   8.2 xxxx xxxxx xxxxx xxxx xxxxx
LOS by Move:   *    *     *     *    *     *     A    *     *     *    *     *
Movement:     LT - LTR - RT    LT - LTR - RT    LT - LTR - RT    LT - LTR - RT
Shared Cap.: xxxx xxxx xxxxx  xxxx  455 xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
SharedQueue:xxxxx xxxx xxxxx xxxxx  0.5 xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shrd StpDel:xxxxx xxxx xxxxx xxxxx 14.3 xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shared LOS:    *    *     *     *    B     *     *    *     *     *    *     *
ApproachDel:    xxxxxx             14.3           xxxxxx           xxxxxx
ApproachLOS:        *                B                *                *
```


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PM Peak Hours

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #212 Presidio/Letterman/Lincoln

Cycle (sec): 100 Critical Vol./Cap. (X): 0.520
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 12.7
Optimal Cycle: 0 Level Of Service: B

Street Name:	Lincoln/Presidio						Presidio/Letterman					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	0 1	0	0 1	0 1	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module: >> Count Date: 16 Jan 2008 << PM Peak Hour												
Base Vol:	47	249	9	66	353	8	20	38	84	9	41	101
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	47	249	9	66	353	8	20	38	84	9	41	101
User Adj:	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11
PHF Adj:	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
PHF Volume:	54	286	10	76	405	9	23	44	96	10	47	116
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	54	286	10	76	405	9	23	44	96	10	47	116
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	54	286	10	76	405	9	23	44	96	10	47	116
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.97	0.03	0.31	1.65	0.04	0.14	0.27	0.59	0.06	0.27	0.67
Final Sat.:	523	550	20	177	964	22	78	148	328	34	153	377
Capacity Analysis Module:												
Vol/Sat:	0.10	0.52	0.52	0.43	0.42	0.42	0.29	0.29	0.29	0.31	0.31	0.31
Crit Moves:		****		****			****			****		
Delay/Veh:	10.1	14.8	14.8	13.1	12.8	12.6	11.1	11.1	11.1	11.2	11.2	11.2
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	10.1	14.8	14.8	13.1	12.8	12.6	11.1	11.1	11.1	11.2	11.2	11.2
LOS by Move:	B	B	B	B	B	B	B	B	B	B	B	B
ApproachDel:	14.1			12.8			11.1			11.2		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	14.1			12.8			11.1			11.2		
LOS by Appr:	B			B			B			B		

PM Peak Hours

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #213 Lombard/Presidio

Cycle (sec): 100 Critical Vol./Cap. (X): 0.846
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 24.7
Optimal Cycle: 0 Level Of Service: C

Street Name:	Presidio Blvd.						Lombard St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	0 1	0	1 0	1 0	0	0 0	0 0	0	1 0	0 0	1
Volume Module: >> Count Date: 16 Jan 2008 << PM Peak Hour												
Base Vol:	0	210	213	192	256	0	0	0	0	312	0	105
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	210	213	192	256	0	0	0	0	312	0	105
User Adj:	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11
PHF Adj:	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
PHF Volume:	0	240	244	220	293	0	0	0	0	357	0	120
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	240	244	220	293	0	0	0	0	357	0	120
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	240	244	220	293	0	0	0	0	357	0	120
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.50	0.50	1.00	1.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Final Sat.:	0	284	288	483	518	0	0	0	0	475	0	562
Capacity Analysis Module:												
Vol/Sat:	xxxx	0.85	0.85	0.45	0.57	xxxx	xxxx	xxxx	xxxx	0.75	xxxx	0.21
Crit Moves:			****		****					****		
Delay/Veh:	0.0	33.7	33.7	15.8	17.7	0.0	0.0	0.0	0.0	28.4	0.0	10.6
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	33.7	33.7	15.8	17.7	0.0	0.0	0.0	0.0	28.4	0.0	10.6
LOS by Move:	*	D	D	C	C	*	*	*	*	D	*	B
ApproachDel:	33.7			16.9			xxxxxx			23.9		
Delay Adj:	1.00			1.00			xxxxx			1.00		
ApprAdjDel:	33.7			16.9			xxxxxx			23.9		
LOS by Appr:	D			C			*			C		

PM Peak Hours

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #214 Presidio/Pacific

Cycle (sec): 100 Critical Vol./Cap. (X): 0.872
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 23.4
Optimal Cycle: 0 Level Of Service: C

Street Name:	Presidio Blvd.						Pacific Ave.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module: >> Count Date: 16 Jan 2008 << PM Peak Hour												
Base Vol:	5	393	9	44	499	24	6	7	2	19	26	39
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	5	393	9	44	499	24	6	7	2	19	26	39
User Adj:	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11
PHF Adj:	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
PHF Volume:	6	451	10	50	572	28	7	8	2	22	30	45
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	6	451	10	50	572	28	7	8	2	22	30	45
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	6	451	10	50	572	28	7	8	2	22	30	45
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.01	0.97	0.02	0.08	0.88	0.04	0.40	0.47	0.13	0.23	0.31	0.46
Final Sat.:	9	685	16	58	656	32	197	229	66	123	169	253
Capacity Analysis Module:												
Vol/Sat:	0.66	0.66	0.66	0.87	0.87	0.87	0.03	0.03	0.03	0.18	0.18	0.18
Crit Moves:		****		****				****			****	
Delay/Veh:	16.6	16.6	16.6	30.5	30.5	30.5	9.8	9.8	9.8	10.3	10.3	10.3
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	16.6	16.6	16.6	30.5	30.5	30.5	9.8	9.8	9.8	10.3	10.3	10.3
LOS by Move:	C	C	C	D	D	D	A	A	A	B	B	B
ApproachDel:		16.6			30.5			9.8			10.3	
Delay Adj:		1.00			1.00			1.00			1.00	
ApprAdjDel:		16.6			30.5			9.8			10.3	
LOS by Appr:		C			D			A			B	

PM Peak Hours

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #215 Presidio/Jackson

Cycle (sec): 100 Critical Vol./Cap. (X): 0.933
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 29.6
Optimal Cycle: 0 Level Of Service: D

Street Name:	Presidio Blvd.						Jackson St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module: >> Count Date: 16 Jan 2008 << PM Peak Hour												
Base Vol:	9	346	38	29	458	32	35	73	10	32	94	27
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	9	346	38	29	458	32	35	73	10	32	94	27
User Adj:	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11
PHF Adj:	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
PHF Volume:	10	392	43	33	519	36	40	83	11	36	107	31
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	10	392	43	33	519	36	40	83	11	36	107	31
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	10	392	43	33	519	36	40	83	11	36	107	31
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.02	0.88	0.10	0.06	0.88	0.06	0.30	0.62	0.08	0.21	0.61	0.18
Final Sat.:	14	526	58	35	557	39	137	287	39	101	297	85
Capacity Analysis Module:												
Vol/Sat:	0.75	0.75	0.75	0.93	0.93	0.93	0.29	0.29	0.29	0.36	0.36	0.36
Crit Moves:	****					****		****				****
Delay/Veh:	22.7	22.7	22.7	43.4	43.4	43.4	12.6	12.6	12.6	13.2	13.2	13.2
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	22.7	22.7	22.7	43.4	43.4	43.4	12.6	12.6	12.6	13.2	13.2	13.2
LOS by Move:	C	C	C	E	E	E	B	B	B	B	B	B
ApproachDel:		22.7			43.4			12.6			13.2	
Delay Adj:		1.00			1.00			1.00			1.00	
ApprAdjDel:		22.7			43.4			12.6			13.2	
LOS by Appr:		C			E			B			B	

PM Peak Hours

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #216 Presidio/Washington

Cycle (sec): 100 Critical Vol./Cap. (X): 0.838
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 21.5
Optimal Cycle: 0 Level Of Service: C

Street Name:	Presidio Blvd.						Washington St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module: >> Count Date: 16 Jan 2008 << PM Peak Hour												
Base Vol:	10	343	29	15	436	41	39	70	11	16	45	23
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	10	343	29	15	436	41	39	70	11	16	45	23
User Adj:	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11
PHF Adj:	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
PHF Volume:	12	395	33	17	503	47	45	81	13	18	52	27
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	12	395	33	17	503	47	45	81	13	18	52	27
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	12	395	33	17	503	47	45	81	13	18	52	27
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.03	0.90	0.07	0.03	0.89	0.08	0.32	0.59	0.09	0.19	0.54	0.27
Final Sat.:	17	582	49	21	600	56	161	289	45	93	261	133
Capacity Analysis Module:												
Vol/Sat:	0.68	0.68	0.68	0.84	0.84	0.84	0.28	0.28	0.28	0.20	0.20	0.20
Crit Moves:		****			****		****				****	
Delay/Veh:	18.4	18.4	18.4	28.2	28.2	28.2	11.7	11.7	11.7	10.9	10.9	10.9
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	18.4	18.4	18.4	28.2	28.2	28.2	11.7	11.7	11.7	10.9	10.9	10.9
LOS by Move:	C	C	C	D	D	D	B	B	B	B	B	B
ApproachDel:		18.4			28.2			11.7			10.9	
Delay Adj:		1.00			1.00			1.00			1.00	
ApprAdjDel:		18.4			28.2			11.7			10.9	
LOS by Appr:		C			D			B			B	

PM Peak Hours

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #217 Arguello/Jackson

Cycle (sec): 100 Critical Vol./Cap. (X): 0.677
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 14.0
Optimal Cycle: 0 Level Of Service: B

Street Name:	Arguello Blvd.						Jackson St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	0 1	0	0 1	0 0	0	0 0	0 0	0	0 0	1! 0	0
Volume Module: >> Count Date: 15 Jan 2008 << PM Peak Hour												
Base Vol:	0	244	50	37	408	0	0	0	0	76	0	39
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	244	50	37	408	0	0	0	0	76	0	39
User Adj:	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11
PHF Adj:	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
PHF Volume:	0	282	58	43	471	0	0	0	0	88	0	45
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	282	58	43	471	0	0	0	0	88	0	45
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	282	58	43	471	0	0	0	0	88	0	45
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.83	0.17	0.08	0.92	0.00	0.00	0.00	0.00	0.66	0.01	0.33
Final Sat.:	0	612	126	63	696	0	0	0	0	385	0	198
Capacity Analysis Module:												
Vol/Sat:	xxxx	0.46	0.46	0.68	0.68	xxxx	xxxx	xxxx	xxxx	0.23	0.00	0.23
Crit Moves:			****	****						****		
Delay/Veh:	0.0	11.5	11.5	16.6	16.6	0.0	0.0	0.0	0.0	10.1	10.1	10.1
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	11.5	11.5	16.6	16.6	0.0	0.0	0.0	0.0	10.1	10.1	10.1
LOS by Move:	*	B	B	C	C	*	*	*	*	B	B	B
ApproachDel:		11.5			16.6			xxxxxx			10.1	
Delay Adj:		1.00			1.00			xxxxx			1.00	
ApprAdjDel:		11.5			16.6			xxxxxx			10.1	
LOS by Appr:		B			C			*			B	

PM Peak Hours

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #218 Arguello/Washington St

Cycle (sec): 100 Critical Vol./Cap. (X): 0.800
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 18.6
Optimal Cycle: 0 Level Of Service: C

Street Name:	Arguello Blvd.						Washington St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module: >> Count Date: 15 Jan 2008 << PM Peak Hour												
Base Vol:	19	276	34	15	464	9	4	6	24	72	9	13
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	19	276	34	15	464	9	4	6	24	72	9	13
User Adj:	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11
PHF Adj:	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
PHF Volume:	23	332	41	18	558	11	5	7	29	87	11	16
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	23	332	41	18	558	11	5	7	29	87	11	16
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	23	332	41	18	558	11	5	7	29	87	11	16
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.06	0.84	0.10	0.03	0.95	0.02	0.12	0.18	0.70	0.77	0.09	0.14
Final Sat.:	40	585	72	23	697	14	62	93	373	403	50	73
Capacity Analysis Module:												
Vol/Sat:	0.57	0.57	0.57	0.80	0.80	0.80	0.08	0.08	0.08	0.22	0.22	0.22
Crit Moves:			****		****			****			****	
Delay/Veh:	14.1	14.1	14.1	23.7	23.7	23.7	9.4	9.4	9.4	10.7	10.7	10.7
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	14.1	14.1	14.1	23.7	23.7	23.7	9.4	9.4	9.4	10.7	10.7	10.7
LOS by Move:	B	B	B	C	C	C	A	A	A	B	B	B
ApproachDel:	14.1			23.7			9.4			10.7		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	14.1			23.7			9.4			10.7		
LOS by Appr:	B			C			A			B		

PM Peak Hours

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #219 Arguello/Moraga

Cycle (sec): 100 Critical Vol./Cap. (X): 0.431
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 10.1
Optimal Cycle: 0 Level Of Service: B

Street Name:	Arguello						Moraga					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	0 0	0 1	0	0 0	1! 0	0
Volume Module: >> Count Date: 16 Jan 2008 << PM Peak Hour												
Base Vol:	50	23	115	2	36	2	0	30	77	210	38	3
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	50	23	115	2	36	2	0	30	77	210	38	3
User Adj:	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11
PHF Adj:	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
PHF Volume:	61	28	140	2	44	2	0	37	94	256	46	4
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	61	28	140	2	44	2	0	37	94	256	46	4
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	61	28	140	2	44	2	0	37	94	256	46	4
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.27	0.12	0.61	0.05	0.90	0.05	0.00	0.28	0.72	0.84	0.15	0.01
Final Sat.:	192	88	442	31	565	31	0	209	537	595	108	8
Capacity Analysis Module:												
Vol/Sat:	0.32	0.32	0.32	0.08	0.08	0.08	xxxx	0.17	0.17	0.43	0.43	0.43
Crit Moves:		****			****				****		****	
Delay/Veh:	9.7	9.7	9.7	8.6	8.6	8.6	0.0	8.4	8.4	11.3	11.3	11.3
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	9.7	9.7	9.7	8.6	8.6	8.6	0.0	8.4	8.4	11.3	11.3	11.3
LOS by Move:	A	A	A	A	A	A	*	A	A	B	B	B
ApproachDel:	9.7			8.6			8.4			11.3		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	9.7			8.6			8.4			11.3		
LOS by Appr:	A			A			A			B		

PM Peak Hours

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #220 Montgomery/Sheridan

Cycle (sec): 100 Critical Vol./Cap. (X): 0.245
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 8.2
Optimal Cycle: 0 Level Of Service: A

Street Name:	Montgomery St.						Sheridan Ave.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module: >> Count Date: 17 Jan 2008 << PM Peak Hour												
Base Vol:	6	5	3	12	30	26	64	102	7	1	37	6
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	6	5	3	12	30	26	64	102	7	1	37	6
User Adj:	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11
PHF Adj:	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
PHF Volume:	7	6	4	14	36	31	76	121	8	1	44	7
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	7	6	4	14	36	31	76	121	8	1	44	7
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	7	6	4	14	36	31	76	121	8	1	44	7
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.43	0.36	0.21	0.18	0.44	0.38	0.37	0.59	0.04	0.02	0.84	0.14
Final Sat.:	324	270	162	141	353	306	310	495	34	19	694	112
Capacity Analysis Module:												
Vol/Sat:	0.02	0.02	0.02	0.10	0.10	0.10	0.25	0.25	0.25	0.06	0.06	0.06
Crit Moves:	****			****					****		****	
Delay/Veh:	7.6	7.6	7.6	7.7	7.7	7.7	8.5	8.5	8.5	7.5	7.5	7.5
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	7.6	7.6	7.6	7.7	7.7	7.7	8.5	8.5	8.5	7.5	7.5	7.5
LOS by Move:	A	A	A	A	A	A	A	A	A	A	A	A
ApproachDel:	7.6			7.7			8.5			7.5		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	7.6			7.7			8.5			7.5		
LOS by Appr:	A			A			A			A		

Alternative 1 – AM Peak Hour

Scenario Report

Scenario:	AM 2030-PTMP
Command:	AM PTMP
Volume:	AM 2030
Geometry:	AM 2030
Impact Fee:	Default Impact Fee
Trip Generation:	AM 2030-PTMP
Trip Distribution:	Main Post SEIS
Paths:	Main Post SEIS
Routes:	Default Routes
Configuration:	Default Configuration

Trip Generation Report

Forecast for AM 2030-PTMP

Zone #	Subzone	Amount	Units	Rate In	Rate Out	Trips In	Trips Out	Total Trips	% Of Total
14	West Crissy	1.00	mixed use	14.00	36.00	14	36	50	10.4
	Zone 14 Subtotal					14	36	50	10.4
15	Ruger & Simo	1.00	mixed use	16.00	21.00	16	21	37	7.7
	Zone 15 Subtotal					16	21	37	7.7
32	S. Main Post	1.00	mixed use	1.00	0.00	1	0	1	0.2
	Zone 32 Subtotal					1	0	1	0.2
33	W. Main Post	1.00	Mixed Use	11.00	52.00	11	52	63	13.1
	Zone 33 Subtotal					11	52	63	13.1
34	E. Main Post	1.00	mixed use	-27.00	9.00	-27	9	-18	-3.8
	Zone 34 Subtotal					-27	9	-18	-3.8
35	N. Main Post	1.00	mixed use	-20.00	-19.00	-20	-19	-39	-8.1
	Zone 35 Subtotal					-20	-19	-39	-8.1
36	West Letterm	1.00	mixed use	12.00	-35.00	12	-35	-23	-4.8
	Zone 36 Subtotal					12	-35	-23	-4.8
753	LDA	1.00	mixed use	106.00	53.00	106	53	159	33.1
	Zone 753 Subtotal					106	53	159	33.1
767	Commissary/P	1.00	mixed use	90.00	160.00	90	160	250	52.1
	Zone 767 Subtotal					90	160	250	52.1
TOTAL						203	277	480	100.0

Trip Distribution Report

Percent Of Trips M POST SEIS

Zone	To Gates 5	14	16	17	22	28	36
14	0.0	25.0	0.0	10.0	15.0	50.0	0.0
15	0.0	0.0	25.0	0.0	67.5	0.0	7.5
32	0.0	5.0	10.0	10.0	68.0	5.0	2.0
33	0.0	5.0	10.0	10.0	68.0	5.0	2.0
34	0.0	5.0	10.0	10.0	68.0	5.0	2.0
35	0.0	5.0	10.0	10.0	68.0	5.0	2.0
36	0.0	10.0	20.0	15.0	40.0	15.0	0.0
753	20.0	5.0	10.0	5.0	55.0	0.0	5.0
767	14.0	0.0	10.0	10.0	14.0	50.0	2.0

Volume Type	NB Link In	Out	Total	SB Link In	Out	Total	EB Link In	Out	Total	WB Link In	Out	Total	Total Volume
#201 Lombard/Divisadero													
Base	353	390	743	266	195	461	3488	2383	5871	2225	3364	5589	12664
Added	0	0	0	0	0	0	86	65	151	65	86	151	302
Total	353	390	743	266	195	461	3574	2448	6022	2290	3450	5740	12966
#202 Lombard/Richardson													
Base	2387	3417	5804	3196	2233	5429	226	159	385	0	0	0	11618
Added	65	86	151	18	0	18	68	65	133	0	0	0	302
Total	2452	3503	5955	3214	2233	5447	294	224	518	0	0	0	11920
#203 Lyon/Lombard													
Base	159	253	412	366	254	620	539	378	917	95	274	369	2318
Added	8	8	16	0	0	0	76	73	149	65	68	133	298
Total	167	261	428	366	254	620	615	451	1066	160	342	502	2616
#204 Greenwich/Divisadero													
Base	335	361	696	396	358	754	186	125	311	142	215	357	2118
Added	0	0	0	0	0	0	8	8	16	8	8	16	32
Total	335	361	696	396	358	754	194	133	327	150	223	373	2150
#205 Greenwich/Lyon													
Base	107	164	271	248	173	421	0	0	0	88	106	194	886
Added	0	0	0	8	8	16	0	0	0	8	8	16	32
Total	107	164	271	256	181	437	0	0	0	96	114	210	918
#206 Francisco/Richardson													
Base	2222	3170	5392	3113	2529	5642	287	57	344	198	64	262	11640
Added	0	18	18	18	0	18	0	0	0	0	0	0	36
Total	2222	3188	5410	3131	2529	5660	287	57	344	198	64	262	11676
#207 Richardson/Gorgas													
Base	17	37	54	160	16	176	3137	2682	5819	2526	3105	5631	11680
Added	18	0	18	0	0	0	0	0	0	0	18	18	36
Total	35	37	72	160	16	176	3137	2682	5819	2526	3123	5649	11716
#208 Doyle/Marina/Lyon													
Base	12	41	53	128	321	449	1349	291	1640	606	1442	2048	4190
Added	0	0	0	100	50	150	-5	2	-3	52	95	147	294
Total	12	41	53	228	371	599	1344	293	1637	658	1537	2195	4484
#209 Graham/Lincoln													
Base	277	180	457	44	92	136	465	421	886	571	664	1235	2714
Added	18	15	33	-1	0	-1	62	19	81	34	79	113	226
Total	295	195	490	43	92	135	527	440	967	605	743	1348	2940
#210 Lincoln/Halleck													
Base	0	0	0	300	379	679	620	652	1272	688	577	1265	3216
Added	0	0	0	45	19	64	84	32	116	28	106	134	314
Total	0	0	0	345	398	743	704	684	1388	716	683	1399	3530

Volume Type	NB Link In	NB Link Out	NB Link Total	SB Link In	SB Link Out	SB Link Total	EB Link In	EB Link Out	EB Link Total	WB Link In	WB Link Out	WB Link Total	Total Volume
#211 Lincoln/Girard													
Base	0	0	0	548	393	941	605	681	1286	575	654	1229	3456
Added	0	0	0	-12	51	39	108	12	120	24	57	81	240
Total	0	0	0	536	444	980	713	693	1406	599	711	1310	3696
#212 Presidio/Letterman/Lincoln													
Base	528	557	1085	644	632	1276	289	198	487	66	140	206	3054
Added	26	53	79	50	26	76	3	-8	-5	8	16	24	174
Total	554	610	1164	694	658	1352	292	190	482	74	156	230	3228
#213 Lombard/Presidio													
Base	746	660	1406	560	512	1072	0	0	0	412	546	958	3436
Added	35	31	66	53	26	79	0	0	0	19	50	69	214
Total	781	691	1472	613	538	1151	0	0	0	431	596	1027	3650
#214 Presidio/Pacific													
Base	698	649	1347	671	716	1387	83	70	153	93	110	203	3090
Added	23	24	47	24	23	47	0	0	0	0	0	0	94
Total	721	673	1394	695	739	1434	83	70	153	93	110	203	3184
#215 Presidio/Jackson													
Base	683	632	1315	654	701	1355	171	171	342	263	267	530	3542
Added	23	24	47	24	23	47	0	0	0	0	0	0	94
Total	706	656	1362	678	724	1402	171	171	342	263	267	530	3636
#216 Presidio/Washington													
Base	654	489	1143	524	694	1218	239	144	383	135	225	360	3104
Added	23	24	47	24	23	47	0	0	0	0	0	0	94
Total	677	513	1190	548	717	1265	239	144	383	135	225	360	3198
#217 Arguello/Jackson													
Base	625	512	1137	464	553	1017	0	0	0	163	187	350	2504
Added	14	21	35	21	14	35	0	0	0	0	0	0	70
Total	639	533	1172	485	567	1052	0	0	0	163	187	350	2574
#218 Arguello/Washington St													
Base	751	561	1312	502	624	1126	37	51	88	102	156	258	2784
Added	14	21	35	21	14	35	0	0	0	0	0	0	70
Total	765	582	1347	523	638	1161	37	51	88	102	156	258	2854
#219 Arguello/Moraga													
Base	485	354	839	0	0	0	119	186	305	374	438	812	1956
Added	15	22	37	0	0	0	4	3	7	19	13	32	76
Total	500	376	876	0	0	0	123	189	312	393	451	844	2032
#220 Montgomery/Sheridan													
Base	34	176	210	90	540	630	661	69	730	0	0	0	1570
Added	31	1	32	14	62	76	31	13	44	0	0	0	152
Total	65	177	242	104	602	706	692	82	774	0	0	0	1722

Impact Analysis Report
Level Of Service

Intersection	Base LOS	Base Del/ Veh	Base V/ C	Future LOS	Future Del/ Veh	Future V/ C	Change in
#201 Lombard/Divisadero	B	13.9	0.914	B	15.1	0.930	+ 1.212 D/V
#202 Lombard/Richardson	A	6.0	0.431	A	6.5	0.431	+ 0.468 D/V
#203 Lyon/Lombard	C	21.3	0.843	E	37.4	1.003	+ 0.160 V/C
#204 Greenwich/Divisadero	B	13.9	0.614	B	14.1	0.623	+ 0.008 V/C
#205 Greenwich/Lyon	A	8.5	0.300	A	8.6	0.311	+ 0.012 V/C
#206 Francisco/Richardson	B	15.1	0.753	B	15.4	0.756	+ 0.233 D/V
#207 Richardson/Gorgas	A	8.1	0.699	A	8.1	0.701	+ 0.088 D/V
#208 Doyle/Marina/Lyon	C	34.6	0.450	C	34.0	0.505	-0.570 D/V
#209 Graham/Lincoln	C	20.5	0.784	D	28.2	0.912	+ 0.128 V/C
#210 Lincoln/Halleck	F	170.0	0.000	F	374.2	0.000	+204.180 D/V
#211 Lincoln/Girard	F	672.2	0.000	F	993.5	0.000	+321.346 D/V
#212 Presidio/Letterman/Lincoln	C	20.0	0.788	C	24.0	0.866	+ 0.078 V/C
#213 Lombard/Presidio	F	78.5	1.271	F	93.5	1.354	+ 0.083 V/C
#214 Presidio/Pacific	F	60.6	1.052	F	70.2	1.087	+ 0.035 V/C
#215 Presidio/Jackson	F	116.3	1.270	F	130.4	1.313	+ 0.043 V/C
#216 Presidio/Washington	F	64.5	1.142	F	76.6	1.196	+ 0.053 V/C
#217 Arguello/Jackson	B	14.1	0.670	B	14.8	0.702	+ 0.032 V/C
#218 Arguello/Washington St	E	41.4	1.023	E	46.1	1.049	+ 0.026 V/C
#219 Arguello/Moraga	B	14.9	0.667	C	16.0	0.696	+ 0.029 V/C
#220 Montgomery/Sheridan	C	18.7	0.786	C	22.8	0.848	+ 0.062 V/C

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #201 Lombard/Divisadero

Cycle (sec): 100 Critical Vol./Cap. (X): 0.930
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 15.1
Optimal Cycle: 90 Level Of Service: B

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Permitted				Permitted				Permitted				Permitted			
Rights:	Include				Include				Include				Include			
Min. Green:	24	24	24		24	24	24		59	59	59		59	59	59	
Lanes:	1 0	0 1	0		1 0	0 1	0		0 1	1 1	0		0 1	1 1	0	
Volume Module:																
Base Vol:	204	119	30		96	140	30		0	3238	250		0	2149	76	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	204	119	30		96	140	30		0	3238	250		0	2149	76	
Added Vol:	0	0	0		0	0	0		0	86	0		0	65	0	
PasserByVol:	0	0	0		0	0	0		0	0	0		0	0	0	
Initial Fut:	204	119	30		96	140	30		0	3324	250		0	2214	76	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Volume:	204	119	30		96	140	30		0	3324	250		0	2214	76	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	204	119	30		96	140	30		0	3324	250		0	2214	76	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Final Vol.:	204	119	30		96	140	30		0	3324	250		0	2214	76	
Saturation Flow Module:																
Sat/Lane:	1900	1900	1900		1900	1900	1900		1900	1900	1900		1900	1900	1900	
Adjustment:	0.46	0.97	0.97		0.49	0.97	0.97		0.91	0.90	0.90		0.91	0.91	0.91	
Lanes:	1.00	0.80	0.20		1.00	0.82	0.18		0.00	2.79	0.21		0.00	2.90	0.10	
Final Sat.:	872	1472	371		937	1524	327		0	4776	359		0	4990	171	
Capacity Analysis Module:																
Vol/Sat:	0.23	0.08	0.08		0.10	0.09	0.09		0.00	0.70	0.70		0.00	0.44	0.44	
Crit Moves:	****									****						
Green/Cycle:	0.27	0.27	0.27		0.27	0.27	0.27		0.00	0.73	0.73		0.00	0.73	0.73	
Volume/Cap:	0.88	0.30	0.30		0.38	0.34	0.34		0.00	0.95	0.95		0.00	0.61	0.61	
Uniform Del:	31.6	26.3	26.3		27.0	26.6	26.6		0.0	10.5	10.5		0.0	5.8	5.8	
IncremntDel:	29.1	0.4	0.4		1.0	0.4	0.4		0.0	6.4	6.4		0.0	0.3	0.3	
Delay Adj:	1.00	1.00	1.00		1.00	1.00	1.00		0.00	1.00	1.00		0.00	1.00	1.00	
Delay/Veh:	60.7	26.7	26.7		27.9	27.1	27.1		0.0	16.9	16.9		0.0	6.0	6.0	
User DelAdj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
AdjDel/Veh:	60.7	26.7	26.7		27.9	27.1	27.1		0.0	16.9	16.9		0.0	6.0	6.0	
HCM2kAvg:	15	3	3		5	4	4		0	35	35		0	11	11	

Level Of Service Computation Report
1994 HCM Operations Method (Future Volume Alternative)

Intersection #202 Lombard/Richardson

Cycle (sec): 90 Critical Vol./Cap. (X): 0.431
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 6.5
Optimal Cycle: 90 Level Of Service: A

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Protected				Protected				Protected				Protected			
Rights:	Include				Include				Ovl				Include			
Min. Green:	25	90	0		0	57	57		0	0	25		0	0	0	
Lanes:	1 0	3 0	0		0 0	2 1	0		0 0	0 0	1		0 0	0 0	0	
Volume Module:																
Base Vol:	154	2233	0		0	3191	5		0	0	226		0	0	0	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	154	2233	0		0	3191	5		0	0	226		0	0	0	
Added Vol:	65	0	0		0	18	0		0	0	68		0	0	0	
PasserByVol:	0	0	0		0	0	0		0	0	0		0	0	0	
Initial Fut:	219	2233	0		0	3209	5		0	0	294		0	0	0	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Volume:	219	2233	0		0	3209	5		0	0	294		0	0	0	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	219	2233	0		0	3209	5		0	0	294		0	0	0	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.10	1.00		1.00	1.10	1.10		1.00	1.00	1.00		1.00	1.00	1.00	
Final Vol.:	219	2456	0		0	3530	6		0	0	294		0	0	0	
Saturation Flow Module:																
Sat/Lane:	1900	1900	1900		1900	1900	1900		1900	1900	1900		1900	1900	1900	
Adjustment:	0.95	1.00	1.00		1.00	1.00	1.00		1.00	1.00	0.77		1.00	1.00	1.00	
Lanes:	1.00	3.00	0.00		0.00	2.99	0.01		0.00	0.00	1.00		0.00	0.00	0.00	
Final Sat.:	1805	5700	0		0	5691	9		0	0	1463		0	0	0	
Capacity Analysis Module:																
Vol/Sat:	0.12	0.43	0.00		0.00	0.62	0.62		0.00	0.00	0.20		0.00	0.00	0.00	
Crit Moves:		****			****				****							
Green/Cycle:	0.30	1.00	0.00		0.00	0.70	0.70		0.00	0.00	0.30		0.00	0.00	0.00	
Volume/Cap:	0.40	0.43	0.00		0.00	0.89	0.89		0.00	0.00	0.66		0.00	0.00	0.00	
Uniform Del:	18.8	0.0	0.0		0.0	8.4	8.4		0.0	0.0	20.7		0.0	0.0	0.0	
IncremntDel:	0.3	0.0	0.0		0.0	2.1	2.1		0.0	0.0	2.5		0.0	0.0	0.0	
Delay Adj:	0.85	0.85	0.00		0.00	0.85	0.85		0.00	0.00	0.85		0.00	0.00	0.00	
Delay/Veh:	16.2	0.0	0.0		0.0	9.3	9.3		0.0	0.0	20.1		0.0	0.0	0.0	
User DelAdj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
AdjDel/Veh:	16.2	0.0	0.0		0.0	9.3	9.3		0.0	0.0	20.1		0.0	0.0	0.0	
DesignQueue:	8	0	0		0	64	0		0	0	11		0	0	0	

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #203 Lyon/Lombard

Cycle (sec): 100 Critical Vol./Cap. (X): 1.003
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 37.4
Optimal Cycle: 0 Level Of Service: E

Street Name:	Lyon St.						Lombard St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	114	37	8	21	151	194	197	245	97	5	70	20
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	114	37	8	21	151	194	197	245	97	5	70	20
Added Vol:	8	0	0	0	0	0	0	68	8	0	65	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	122	37	8	21	151	194	197	313	105	5	135	20
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	122	37	8	21	151	194	197	313	105	5	135	20
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	122	37	8	21	151	194	197	313	105	5	135	20
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	122	37	8	21	151	194	197	313	105	5	135	20
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.73	0.22	0.05	0.06	0.41	0.53	0.32	0.51	0.17	0.03	0.84	0.13
Final Sat.:	354	107	23	33	234	300	196	312	105	16	424	63
Capacity Analysis Module:												
Vol/Sat:	0.35	0.35	0.35	0.65	0.65	0.65	1.00	1.00	1.00	0.32	0.32	0.32
Crit Moves:		****			****			****			****	
Delay/Veh:	13.6	13.6	13.6	19.5	19.5	19.5	61.0	61.0	61.0	12.6	12.6	12.6
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	13.6	13.6	13.6	19.5	19.5	19.5	61.0	61.0	61.0	12.6	12.6	12.6
LOS by Move:	B	B	B	C	C	C	F	F	F	B	B	B
ApproachDel:		13.6			19.5			61.0			12.6	
Delay Adj:		1.00			1.00			1.00			1.00	
ApprAdjDel:		13.6			19.5			61.0			12.6	
LOS by Appr:		B			C			F			B	

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #204 Greenwich/Divisadero

Cycle (sec): 100 Critical Vol./Cap. (X): 0.623
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 14.1
Optimal Cycle: 0 Level Of Service: B

Street Name:	Divisadero						Greenwich					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	19	304	12	47	337	12	17	156	13	11	94	37
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	19	304	12	47	337	12	17	156	13	11	94	37
Added Vol:	0	0	0	0	0	0	0	8	0	0	8	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	19	304	12	47	337	12	17	164	13	11	102	37
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	19	304	12	47	337	12	17	164	13	11	102	37
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	19	304	12	47	337	12	17	164	13	11	102	37
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	19	304	12	47	337	12	17	164	13	11	102	37
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.06	0.91	0.03	0.12	0.85	0.03	0.09	0.84	0.07	0.07	0.68	0.25
Final Sat.:	35	564	22	75	541	19	47	453	36	38	356	129
Capacity Analysis Module:												
Vol/Sat:	0.54	0.54	0.54	0.62	0.62	0.62	0.36	0.36	0.36	0.29	0.29	0.29
Crit Moves:		****		****			****				****	
Delay/Veh:	14.2	14.2	14.2	16.2	16.2	16.2	12.0	12.0	12.0	11.1	11.1	11.1
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	14.2	14.2	14.2	16.2	16.2	16.2	12.0	12.0	12.0	11.1	11.1	11.1
LOS by Move:	B	B	B	C	C	C	B	B	B	B	B	B
ApproachDel:		14.2			16.2			12.0			11.1	
Delay Adj:		1.00			1.00			1.00			1.00	
ApprAdjDel:		14.2			16.2			12.0			11.1	
LOS by Appr:		B			C			B			B	

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #205 Greenwich/Lyon

Cycle (sec): 100 Critical Vol./Cap. (X): 0.311
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 8.6
Optimal Cycle: 0 Level Of Service: A

Street Name:	Lyon									Greenwich		
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	0 1	0	0 1	0 0	0	0 0	0 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	0	103	4	102	146	0	0	0	0	18	0	70
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	103	4	102	146	0	0	0	0	18	0	70
Added Vol:	0	0	0	8	0	0	0	0	0	0	0	8
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	103	4	110	146	0	0	0	0	18	0	78
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	103	4	110	146	0	0	0	0	18	0	78
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	103	4	110	146	0	0	0	0	18	0	78
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	103	4	110	146	0	0	0	0	18	0	78
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.96	0.04	0.43	0.57	0.00	0.00	0.00	0.00	0.19	0.00	0.81
Final Sat.:	0	777	30	353	469	0	0	0	0	150	0	650
Capacity Analysis Module:												
Vol/Sat:	xxxx	0.13	0.13	0.31	0.31	xxxx	xxxx	xxxx	xxxx	0.12	xxxx	0.12
Crit Moves:		****			****							****
Delay/Veh:	0.0	8.0	8.0	9.2	9.2	0.0	0.0	0.0	0.0	7.7	0.0	7.7
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	8.0	8.0	9.2	9.2	0.0	0.0	0.0	0.0	7.7	0.0	7.7
LOS by Move:	*	A	A	A	A	*	*	*	*	A	*	A
ApproachDel:		8.0			9.2			xxxxxx			7.7	
Delay Adj:		1.00			1.00			xxxxx			1.00	
ApprAdjDel:		8.0			9.2			xxxxxx			7.7	
LOS by Appr:		A			A			*			A	

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #206 Francisco/Richardson

Cycle (sec): 90 Critical Vol./Cap. (X): 0.756
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 15.4
Optimal Cycle: 90 Level Of Service: B

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L - T - R				L - T - R				L - T - R				L - T - R			
Control:	Permitted				Permitted				Permitted				Permitted			
Rights:	Include				Include				Include				Include			
Min. Green:	51	51	51		51	51	51		31	31	31		31	31	31	
Lanes:	0 0	2 1	0		0 0	2 1	0		0 1	0 1	0		0 0	1! 0	0	
Volume Module:																
Base Vol:	0	2222	0		0	3113	0		177	64	46		11	57	130	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	0	2222	0		0	3113	0		177	64	46		11	57	130	
Added Vol:	0	0	0		0	18	0		0	0	0		0	0	0	
PasserByVol:	0	0	0		0	0	0		0	0	0		0	0	0	
Initial Fut:	0	2222	0		0	3131	0		177	64	46		11	57	130	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Volume:	0	2222	0		0	3131	0		177	64	46		11	57	130	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	0	2222	0		0	3131	0		177	64	46		11	57	130	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Final Vol.:	0	2222	0		0	3131	0		177	64	46		11	57	130	
Saturation Flow Module:																
Sat/Lane:	1900	1900	1900		1900	1900	1900		1900	1900	1900		1900	1900	1900	
Adjustment:	1.00	0.91	0.91		1.00	0.91	0.91		0.61	0.61	0.61		0.89	0.89	0.89	
Lanes:	0.00	3.00	0.00		0.00	3.00	0.00		1.00	0.58	0.42		0.05	0.29	0.66	
Final Sat.:	0	5187	0		0	5187	0		1159	674	485		94	488	1114	
Capacity Analysis Module:																
Vol/Sat:	0.00	0.43	0.00		0.00	0.60	0.00		0.15	0.09	0.09		0.12	0.12	0.12	
Crit Moves:						****			****							
Green/Cycle:	0.00	0.66	0.00		0.00	0.66	0.00		0.34	0.34	0.34		0.34	0.34	0.34	
Volume/Cap:	0.00	0.65	0.00		0.00	0.92	0.00		0.44	0.28	0.28		0.34	0.34	0.34	
Uniform Del:	0.0	9.3	0.0		0.0	13.5	0.0		22.8	21.4	21.4		21.9	21.9	21.9	
IncrmntDel:	0.0	0.5	0.0		0.0	4.7	0.0		0.5	0.1	0.1		0.3	0.3	0.3	
Delay Adj:	0.00	1.00	0.00		0.00	1.00	0.00		1.00	1.00	1.00		1.00	1.00	1.00	
Delay/Veh:	0.0	9.8	0.0		0.0	18.2	0.0		23.3	21.5	21.5		22.2	22.2	22.2	
User DelAdj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
AdjDel/Veh:	0.0	9.8	0.0		0.0	18.2	0.0		23.3	21.5	21.5		22.2	22.2	22.2	
HCM2kAvg:	0	13	0		0	30	0		6	3	3		4	4	4	

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #207 Richardson/Gorgas

Cycle (sec): 90 Critical Vol./Cap. (X): 0.701
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 8.1
Optimal Cycle: 90 Level Of Service: A

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Split Phase				Split Phase				Permitted				Permitted			
Rights:	Include				Include				Include				Include			
Min. Green:	10	10	10		12	12	12		52	52	52		52	52	52	
Lanes:	1 0	1! 0	0		0 0	0 0	1		0 0	3 0	1		0 0	2 1	0	
Volume Module:																
Base Vol:	12	0	5		0	0	160		0	3100	37		0	2510	16	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	12	0	5		0	0	160		0	3100	37		0	2510	16	
Added Vol:	0	0	18		0	0	0		0	0	0		0	0	0	
PasserByVol:	0	0	0		0	0	0		0	0	0		0	0	0	
Initial Fut:	12	0	23		0	0	160		0	3100	37		0	2510	16	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Volume:	12	0	23		0	0	160		0	3100	37		0	2510	16	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	12	0	23		0	0	160		0	3100	37		0	2510	16	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Final Vol.:	12	0	23		0	0	160		0	3100	37		0	2510	16	
Saturation Flow Module:																
Sat/Lane:	1900	1900	1900		1900	1900	1900		1900	1900	1900		1900	1900	1900	
Adjustment:	0.89	1.00	0.89		1.00	1.00	0.87		1.00	0.91	0.85		1.00	0.91	0.91	
Lanes:	1.21	0.00	0.79		0.00	0.00	1.00		0.00	3.00	1.00		0.00	2.98	0.02	
Final Sat.:	2031	0	1335		0	0	1644		0	5187	1615		0	5149	33	
Capacity Analysis Module:																
Vol/Sat:	0.01	0.00	0.02		0.00	0.00	0.10		0.00	0.60	0.02		0.00	0.49	0.49	
Crit Moves:	****						****			****						
Green/Cycle:	0.11	0.00	0.11		0.00	0.00	0.13		0.00	0.76	0.76		0.00	0.76	0.76	
Volume/Cap:	0.05	0.00	0.16		0.00	0.00	0.73		0.00	0.79	0.03		0.00	0.65	0.65	
Uniform Del:	35.8	0.0	36.2		0.0	0.0	37.4		0.0	6.7	2.8		0.0	5.2	5.2	
IncremntDel:	0.0	0.0	0.3		0.0	0.0	11.8		0.0	1.1	0.0		0.0	0.4	0.4	
Delay Adj:	1.00	0.00	1.00		0.00	0.00	1.00		0.00	1.00	1.00		0.00	1.00	1.00	
Delay/Veh:	35.8	0.0	36.5		0.0	0.0	49.2		0.0	7.8	2.8		0.0	5.6	5.6	
User DelAdj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
AdjDel/Veh:	35.8	0.0	36.5		0.0	0.0	49.2		0.0	7.8	2.8		0.0	5.6	5.6	
HCM2kAvg:	0	0	1		0	0	6		0	19	0		0	12	12	

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #208 Doyle/Marina/Lyon

Cycle (sec): 75 Critical Vol./Cap. (X): 0.505
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 34.0
Optimal Cycle: 96 Level Of Service: C

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Protected				Protected				Permitted				Permitted			
Rights:	Include				Include				Include				Include			
Min. Green:	29	0	29		29	0	29		0	38	38		38	38	38	
Lanes:	1 0	0 0	1		1 0	0 0	1		0 0	1 1	0		0 0	1 1	0	
Volume Module:																
Base Vol:	0	0	12		122	0	6		0	1308	41		0	285	321	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	0	0	12		122	0	6		0	1308	41		0	285	321	
Added Vol:	0	0	0		100	0	0		0	-5	0		0	2	50	
PasserByVol:	0	0	0		0	0	0		0	0	0		0	0	0	
Initial Fut:	0	0	12		222	0	6		0	1303	41		0	287	371	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Volume:	0	0	12		222	0	6		0	1303	41		0	287	371	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	0	0	12		222	0	6		0	1303	41		0	287	371	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Final Vol.:	0	0	12		222	0	6		0	1303	41		0	287	371	
Saturation Flow Module:																
Sat/Lane:	1900	1900	1900		1900	1900	1900		1900	1900	1900		1900	1900	1900	
Adjustment:	1.00	1.00	0.85		0.95	1.00	0.85		1.00	0.95	0.95		1.00	0.87	0.87	
Lanes:	1.00	0.00	1.00		1.00	0.00	1.00		0.00	1.94	0.06		0.00	1.00	1.00	
Final Sat.:	1900	0	1615		1805	0	1615		0	3482	110		0	1652	1652	
Capacity Analysis Module:																
Vol/Sat:	0.00	0.00	0.01		0.12	0.00	0.00		0.00	0.37	0.37		0.00	0.17	0.22	
Crit Moves:			****		****					****						
Green/Cycle:	0.00	0.00	0.30		0.30	0.00	0.60		0.00	0.40	0.40		0.00	0.40	0.40	
Volume/Cap:	0.00	0.00	0.02		0.41	0.00	0.01		0.00	0.95	0.95		0.00	0.44	0.57	
Uniform Del:	0.0	0.0	23.6		26.7	0.0	7.5		0.0	28.0	28.0		0.0	21.2	22.6	
IncremntDel:	0.0	0.0	0.0		0.5	0.0	0.0		0.0	13.0	13.0		0.0	0.2	0.7	
Delay Adj:	0.00	0.00	1.00		1.00	0.00	1.00		0.00	1.00	1.00		0.00	1.00	1.00	
Delay/Veh:	0.0	0.0	23.6		27.2	0.0	7.6		0.0	41.0	41.0		0.0	21.4	23.3	
User DelAdj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
AdjDel/Veh:	0.0	0.0	23.6		27.2	0.0	7.6		0.0	41.0	41.0		0.0	21.4	23.3	
HCM2kAvg:	0	0	0		6	0	0		0	24	24		0	6	9	

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #209 Graham/Lincoln

Cycle (sec): 100 Critical Vol./Cap. (X): 0.912
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 28.2
Optimal Cycle: 0 Level Of Service: D

Street Name:	Graham St.						Lincoln Blvd.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	1 0	0 1	0	1 0	0 1	0
Volume Module:												
Base Vol:	27	30	220	18	10	16	20	426	19	151	378	42
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	27	30	220	18	10	16	20	426	19	151	378	42
Added Vol:	0	0	18	-1	0	0	0	62	0	15	19	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	27	30	238	17	10	16	20	488	19	166	397	42
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	27	30	238	17	10	16	20	488	19	166	397	42
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	27	30	238	17	10	16	20	488	19	166	397	42
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	27	30	238	17	10	16	20	488	19	166	397	42
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.09	0.10	0.81	0.40	0.23	0.37	1.00	0.96	0.04	1.00	0.90	0.10
Final Sat.:	50	56	442	171	101	161	508	535	21	513	509	54
Capacity Analysis Module:												
Vol/Sat:	0.54	0.54	0.54	0.10	0.10	0.10	0.04	0.91	0.91	0.32	0.78	0.78
Crit Moves:		****			****				****		****	
Delay/Veh:	15.7	15.7	15.7	11.2	11.2	11.2	9.9	43.5	43.5	12.8	27.1	27.1
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	15.7	15.7	15.7	11.2	11.2	11.2	9.9	43.5	43.5	12.8	27.1	27.1
LOS by Move:	C	C	C	B	B	B	A	E	E	B	D	D
ApproachDel:	15.7			11.2			42.2			23.2		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	15.7			11.2			42.2			23.2		
LOS by Appr:	C			B			E			C		

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #210 Lincoln/Halleck

Average Delay (sec/veh): 74.1 Worst Case Level Of Service: F[374.2]

Street Name:	Halleck St.						Lincoln Blvd.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0	0 0	0	0 0	1! 0	0	1 0	1 0	0	0 0	0 1	0
Volume Module:												
Base Vol:	0	0	0	123	0	177	166	454	0	0	475	213
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	123	0	177	166	454	0	0	475	213
Added Vol:	0	0	0	32	0	13	10	74	0	0	19	9
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	155	0	190	176	528	0	0	494	222
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	155	0	190	176	528	0	0	494	222
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	0	0	0	155	0	190	176	528	0	0	494	222
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	6.4	xxxx	6.2	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	3.5	xxxx	3.3	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	1485	xxxx	605	716	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	139	xxxx	501	894	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	118	xxxx	501	894	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	1.32	xxxx	0.38	0.20	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.7	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	10.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	B	*	*	*	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	203	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	23.3	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	374	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	F	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			374.2			xxxxxx			xxxxxx		
ApproachLOS:	*			F			*			*		

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #211 Lincoln/Girard

Average Delay (sec/veh): 289.7 Worst Case Level Of Service: F[993.5]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Stop Sign				Stop Sign				Uncontrolled				Uncontrolled			
Rights:	Include				Include				Include				Include			
Lanes:	0	0	0	0 0	0	0	1!	0 0	1	0	1	0 0	0	0	0	1 0
Volume Module:																
Base Vol:	0	0	0	276	0	272	227	378	0	0	409	166				
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
Initial Bse:	0	0	0	276	0	272	227	378	0	0	409	166				
Added Vol:	0	0	0	0	0	-12	51	57	0	0	24	0				
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0				
Initial Fut:	0	0	0	276	0	260	278	435	0	0	433	166				
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
PHF Volume:	0	0	0	276	0	260	278	435	0	0	433	166				
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0				
Final Vol.:	0	0	0	276	0	260	278	435	0	0	433	166				
Critical Gap Module:																
Critical Gp:	xxxxx	xxxx	xxxxx	6.4	xxxx	6.2	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
FollowUpTim:	xxxxx	xxxx	xxxxx	3.5	xxxx	3.3	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
Capacity Module:																
Cnflict Vol:	xxxx	xxxx	xxxxx	1507	xxxx	516	599	xxxx	xxxxx	xxxx	xxxx	xxxxx				
Potent Cap.:	xxxx	xxxx	xxxxx	134	xxxx	563	988	xxxx	xxxxx	xxxx	xxxx	xxxxx				
Move Cap.:	xxxx	xxxx	xxxxx	105	xxxx	563	988	xxxx	xxxxx	xxxx	xxxx	xxxxx				
Volume/Cap:	xxxx	xxxx	xxxx	2.62	xxxx	0.46	0.28	xxxx	xxxx	xxxx	xxxx	xxxx				
Level Of Service Module:																
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	1.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	10.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
LOS by Move:	*	*	*	*	*	*	B	*	*	*	*	*				
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT				
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	174	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx				
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	49.4	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	994	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
Shared LOS:	*	*	*	*	F	*	*	*	*	*	*	*				
ApproachDel:	xxxxxx				993.5		xxxxxx			xxxxxx						
ApproachLOS:	*				F		*			*						

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #212 Presidio/Letterman/Lincoln

Cycle (sec): 100 Critical Vol./Cap. (X): 0.866
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 24.0
Optimal Cycle: 0 Level Of Service: C

Street Name:	Lincoln/Presidio						Presidio/Letterman					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	0	1	0	0	1	0	1	0	0	0	1! 0 0
Volume Module:												
Base Vol:	104	415	9	101	464	79	174	30	85	8	15	43
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	104	415	9	101	464	79	174	30	85	8	15	43
Added Vol:	-8	23	11	5	45	0	0	0	3	5	0	3
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	96	438	20	106	509	79	174	30	88	13	15	46
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	96	438	20	106	509	79	174	30	88	13	15	46
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	96	438	20	106	509	79	174	30	88	13	15	46
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	96	438	20	106	509	79	174	30	88	13	15	46
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.96	0.04	0.30	1.47	0.23	0.60	0.10	0.30	0.18	0.20	0.62
Final Sat.:	487	506	23	159	784	124	302	52	153	78	90	275
Capacity Analysis Module:												
Vol/Sat:	0.20	0.87	0.87	0.66	0.65	0.64	0.58	0.58	0.58	0.17	0.17	0.17
Crit Moves:		****		****				****				****
Delay/Veh:	11.7	37.8	37.8	21.5	20.4	19.4	17.9	17.9	17.9	11.6	11.6	11.6
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	11.7	37.8	37.8	21.5	20.4	19.4	17.9	17.9	17.9	11.6	11.6	11.6
LOS by Move:	B	E	E	C	C	C	C	C	C	B	B	B
ApproachDel:	33.2			20.5			17.9			11.6		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	33.2			20.5			17.9			11.6		
LOS by Appr:	D			C			C			B		

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #213 Lombard/Presidio

Cycle (sec): 100 Critical Vol./Cap. (X): 1.354
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 93.5
Optimal Cycle: 0 Level Of Service: F

Street Name:	Presidio Blvd.						Lombard St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	0	1 0	1 0	1 0	0	0 0	0 0	0	1 0	0 0	1
Volume Module:												
Base Vol:	0	391	355	191	369	0	0	0	0	291	0	121
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	391	355	191	369	0	0	0	0	291	0	121
Added Vol:	0	19	16	34	19	0	0	0	0	12	0	7
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	410	371	225	388	0	0	0	0	303	0	128
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	410	371	225	388	0	0	0	0	303	0	128
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	410	371	225	388	0	0	0	0	303	0	128
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	410	371	225	388	0	0	0	0	303	0	128
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.52	0.48	1.00	1.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Final Sat.:	0	303	274	489	526	0	0	0	0	461	0	542
Capacity Analysis Module:												
Vol/Sat:	xxxx	1.35	1.35	0.46	0.74	xxxx	xxxx	xxxx	xxxx	0.66	xxxx	0.24
Crit Moves:		****			****					****		
Delay/Veh:	0.0	190	189.7	16.0	26.1	0.0	0.0	0.0	0.0	23.8	0.0	11.3
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	190	189.7	16.0	26.1	0.0	0.0	0.0	0.0	23.8	0.0	11.3
LOS by Move:	*	F	F	C	D	*	*	*	*	C	*	B
ApproachDel:	189.7				22.4		xxxxxx			20.1		
Delay Adj:	1.00				1.00		xxxxx			1.00		
ApprAdjDel:	189.7				22.4		xxxxxx			20.1		
LOS by Appr:	F				C		*			C		

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #214 Presidio/Pacific

Cycle (sec): 100 Critical Vol./Cap. (X): 1.087
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 70.2
Optimal Cycle: 0 Level Of Service: F

Street Name:	Presidio Blvd.						Pacific Ave.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	12	655	31	46	593	32	32	33	18	38	26	29
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	12	655	31	46	593	32	32	33	18	38	26	29
Added Vol:	0	23	0	0	24	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	12	678	31	46	617	32	32	33	18	38	26	29
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	12	678	31	46	617	32	32	33	18	38	26	29
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	12	678	31	46	617	32	32	33	18	38	26	29
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	12	678	31	46	617	32	32	33	18	38	26	29
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.02	0.94	0.04	0.07	0.89	0.04	0.38	0.40	0.22	0.41	0.28	0.31
Final Sat.:	11	624	29	44	588	30	190	195	107	204	140	156
Capacity Analysis Module:												
Vol/Sat:	1.09	1.09	1.09	1.05	1.05	1.05	0.17	0.17	0.17	0.19	0.19	0.19
Crit Moves:		****			****			****			****	
Delay/Veh:	83.2	83.2	83.2	71.5	71.5	71.5	11.6	11.6	11.6	11.7	11.7	11.7
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	83.2	83.2	83.2	71.5	71.5	71.5	11.6	11.6	11.6	11.7	11.7	11.7
LOS by Move:	F	F	F	F	F	F	B	B	B	B	B	B
ApproachDel:	83.2			71.5			11.6			11.7		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	83.2			71.5			11.6			11.7		
LOS by Appr:	F			F			B			B		

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #215 Presidio/Jackson

Cycle (sec): 100 Critical Vol./Cap. (X): 1.313
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 130.4
Optimal Cycle: 0 Level Of Service: F

Street Name:	Presidio Blvd.						Jackson St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	9	615	59	59	565	30	11	149	11	56	132	75
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	9	615	59	59	565	30	11	149	11	56	132	75
Added Vol:	0	23	0	0	24	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	9	638	59	59	589	30	11	149	11	56	132	75
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	9	638	59	59	589	30	11	149	11	56	132	75
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	9	638	59	59	589	30	11	149	11	56	132	75
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	9	638	59	59	589	30	11	149	11	56	132	75
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.01	0.91	0.08	0.09	0.87	0.04	0.06	0.88	0.06	0.21	0.50	0.29
Final Sat.:	7	486	45	47	465	24	28	377	28	100	235	133
Capacity Analysis Module:												
Vol/Sat:	1.31	1.31	1.31	1.27	1.27	1.27	0.40	0.40	0.40	0.56	0.56	0.56
Crit Moves:		****			****		****				****	
Delay/Veh:	174.4	174	174.4	156.4	156	156.4	16.0	16.0	16.0	19.6	19.6	19.6
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	174.4	174	174.4	156.4	156	156.4	16.0	16.0	16.0	19.6	19.6	19.6
LOS by Move:	F	F	F	F	F	F	C	C	C	C	C	C
ApproachDel:	174.4			156.4			16.0			19.6		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	174.4			156.4			16.0			19.6		
LOS by Appr:	F			F			C			C		

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #216 Presidio/Washington

Cycle (sec): 100 Critical Vol./Cap. (X): 1.196
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 76.6
Optimal Cycle: 0 Level Of Service: F

Street Name:	Presidio Blvd.						Washington St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	15	610	29	38	440	46	59	158	22	27	83	25
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	15	610	29	38	440	46	59	158	22	27	83	25
Added Vol:	0	23	0	0	24	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	15	633	29	38	464	46	59	158	22	27	83	25
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	15	633	29	38	464	46	59	158	22	27	83	25
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	15	633	29	38	464	46	59	158	22	27	83	25
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	15	633	29	38	464	46	59	158	22	27	83	25
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.02	0.94	0.04	0.07	0.85	0.08	0.25	0.66	0.09	0.20	0.61	0.19
Final Sat.:	13	529	24	39	477	47	117	312	43	88	272	82
Capacity Analysis Module:												
Vol/Sat:	1.20	1.20	1.20	0.97	0.97	0.97	0.51	0.51	0.51	0.31	0.31	0.31
Crit Moves:	****			****				****				****
Delay/Veh:	126.6	127	126.6	56.0	56.0	56.0	17.6	17.6	17.6	14.1	14.1	14.1
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	126.6	127	126.6	56.0	56.0	56.0	17.6	17.6	17.6	14.1	14.1	14.1
LOS by Move:	F	F	F	F	F	F	C	C	C	B	B	B
ApproachDel:	126.6			56.0			17.6			14.1		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	126.6			56.0			17.6			14.1		
LOS by Appr:	F			F			C			B		

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #217 Arguello/Jackson

Cycle (sec): 100 Critical Vol./Cap. (X): 0.702
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 14.8
Optimal Cycle: 0 Level Of Service: B

Street Name:	Arguello Blvd.						Jackson St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1	1 0	0 1	0 0	0	0 0	0 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	0	486	139	48	416	0	0	0	0	96	0	67
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	486	139	48	416	0	0	0	0	96	0	67
Added Vol:	0	14	0	0	21	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	500	139	48	437	0	0	0	0	96	0	67
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	500	139	48	437	0	0	0	0	96	0	67
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	500	139	48	437	0	0	0	0	96	0	67
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	500	139	48	437	0	0	0	0	96	0	67
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	1.56	0.44	0.10	0.90	0.00	0.00	0.00	0.00	0.59	0.00	0.41
Final Sat.:	0	1042	300	68	623	0	0	0	0	331	0	231
Capacity Analysis Module:												
Vol/Sat:	xxxx	0.48	0.46	0.70	0.70	xxxx	xxxx	xxxx	xxxx	0.29	xxxx	0.29
Crit Moves:		****			****							****
Delay/Veh:	0.0	12.8	12.1	18.9	18.9	0.0	0.0	0.0	0.0	11.1	0.0	11.1
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	12.8	12.1	18.9	18.9	0.0	0.0	0.0	0.0	11.1	0.0	11.1
LOS by Move:	*	B	B	C	C	*	*	*	*	B	*	B
ApproachDel:		12.6			18.9			xxxxxx			11.1	
Delay Adj:		1.00			1.00			xxxxx			1.00	
ApprAdjDel:		12.6			18.9			xxxxxx			11.1	
LOS by Appr:		B			C			*			B	

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #218 Arguello/Washington St

Cycle (sec): 100 Critical Vol./Cap. (X): 1.049
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 46.1
Optimal Cycle: 0 Level Of Service: E

Street Name:	Arguello Blvd.						Washington St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	23	592	136	9	471	22	4	11	22	68	6	28
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	23	592	136	9	471	22	4	11	22	68	6	28
Added Vol:	0	14	0	0	21	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	23	606	136	9	492	22	4	11	22	68	6	28
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	23	606	136	9	492	22	4	11	22	68	6	28
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	23	606	136	9	492	22	4	11	22	68	6	28
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	23	606	136	9	492	22	4	11	22	68	6	28
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.03	0.79	0.18	0.02	0.94	0.04	0.11	0.30	0.59	0.67	0.06	0.27
Final Sat.:	22	578	130	12	644	29	55	151	301	342	30	141
Capacity Analysis Module:												
Vol/Sat:	1.05	1.05	1.05	0.76	0.76	0.76	0.07	0.07	0.07	0.20	0.20	0.20
Crit Moves:		****			****			****		****		
Delay/Veh:	68.4	68.4	68.4	22.8	22.8	22.8	10.1	10.1	10.1	11.2	11.2	11.2
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	68.4	68.4	68.4	22.8	22.8	22.8	10.1	10.1	10.1	11.2	11.2	11.2
LOS by Move:	F	F	F	C	C	C	B	B	B	B	B	B
ApproachDel:		68.4			22.8			10.1			11.2	
Delay Adj:		1.00			1.00			1.00			1.00	
ApprAdjDel:		68.4			22.8			10.1			11.2	
LOS by Appr:		F			C			B			B	

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #219 Arguello/Moraga

Cycle (sec): 100 Critical Vol./Cap. (X): 0.696
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 16.0
Optimal Cycle: 0 Level Of Service: C

Street Name:	Arguello						Moraga					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	0 0	0 1	0	0 1	0 0	0
Volume Module:												
Base Vol:	113	0	372	0	0	0	0	66	53	301	73	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	113	0	372	0	0	0	0	66	53	301	73	0
Added Vol:	2	0	13	0	0	0	0	0	4	18	1	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	115	0	385	0	0	0	0	66	57	319	74	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	115	0	385	0	0	0	0	66	57	319	74	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	115	0	385	0	0	0	0	66	57	319	74	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	115	0	385	0	0	0	0	66	57	319	74	0
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.23	0.00	0.77	0.00	1.00	0.00	0.00	0.54	0.46	0.81	0.19	0.00
Final Sat.:	165	0	553	0	0	0	0	324	279	513	119	0
Capacity Analysis Module:												
Vol/Sat:	0.70	xxxx	0.70	xxxx	xxxx	xxxx	xxxx	0.20	0.20	0.62	0.62	xxxx
Crit Moves:	****							****		****		
Delay/Veh:	17.3	0.0	17.3	0.0	0.0	0.0	0.0	9.7	9.7	16.4	16.4	0.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	17.3	0.0	17.3	0.0	0.0	0.0	0.0	9.7	9.7	16.4	16.4	0.0
LOS by Move:	C	*	C	*	*	*	*	A	A	C	C	*
ApproachDel:	17.3			xxxxxx				9.7			16.4	
Delay Adj:	1.00			xxxxx				1.00			1.00	
ApprAdjDel:	17.3			xxxxxx				9.7			16.4	
LOS by Appr:	C			*				A			C	

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #220 Montgomery/Sheridan

Cycle (sec): 100 Critical Vol./Cap. (X): 0.848
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 22.8
Optimal Cycle: 0 Level Of Service: C

Street Name:	Montgomery St.						Sheridan Ave.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 1	0 0	0	0 0	0 1	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	13	21	0	0	34	56	519	0	142	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	13	21	0	0	34	56	519	0	142	0	0	0
Added Vol:	0	31	0	0	1	13	31	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	13	52	0	0	35	69	550	0	142	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	13	52	0	0	35	69	550	0	142	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	13	52	0	0	35	69	550	0	142	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	13	52	0	0	35	69	550	0	142	0	0	0
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.20	0.80	0.00	0.00	0.34	0.66	0.79	0.00	0.21	0.00	1.00	0.00
Final Sat.:	120	480	0	0	221	435	649	0	167	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.11	0.11	xxxx	xxxx	0.16	0.16	0.85	xxxx	0.85	xxxx	xxxx	xxxx
Crit Moves:		****				****	****					
Delay/Veh:	9.3	9.3	0.0	0.0	9.1	9.1	26.1	0.0	26.1	0.0	0.0	0.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	9.3	9.3	0.0	0.0	9.1	9.1	26.1	0.0	26.1	0.0	0.0	0.0
LOS by Move:	A	A	*	*	A	A	D	*	D	*	*	*
ApproachDel:	9.3			9.1			26.1			xxxxxx		
Delay Adj:	1.00			1.00			1.00			xxxxx		
ApprAdjDel:	9.3			9.1			26.1			xxxxxx		
LOS by Appr:	A			A			D			*		

Alternative 2 – AM Peak Hour

Scenario Report

Scenario:	AM 2030-MPU
Command:	AM MPU
Volume:	AM 2030
Geometry:	AM 2030
Impact Fee:	Default Impact Fee
Trip Generation:	AM 2030-MPU
Trip Distribution:	Main Post SEIS
Paths:	Main Post SEIS
Routes:	Default Routes
Configuration:	Default Configuration

Trip Generation Report

Forecast for AM 2030-MPU

Zone #	Subzone	Amount	Units	Rate In	Rate Out	Trips In	Trips Out	Total Trips	% Of Total
14	West Crissy	1.00	mixed use	14.00	36.00	14	36	50	9.1
	Zone 14 Subtotal					14	36	50	9.1
15	Ruger & Simo	1.00	mixed use	16.00	21.00	16	21	37	6.7
	Zone 15 Subtotal					16	21	37	6.7
32	S. Main Post	1.00	mixed use	-6.00	-2.00	-6	-2	-8	-1.4
	Zone 32 Subtotal					-6	-2	-8	-1.4
33	W. Main Post	1.00	Mixed Use	8.00	55.00	8	55	63	11.4
	Zone 33 Subtotal					8	55	63	11.4
34	E. Main Post	1.00	mixed use	-26.00	3.00	-26	3	-23	-4.2
	Zone 34 Subtotal					-26	3	-23	-4.2
35	N. Main Post	1.00	mixed use	26.00	21.00	26	21	47	8.5
	Zone 35 Subtotal					26	21	47	8.5
36	West Letterm	1.00	mixed use	12.00	-35.00	12	-35	-23	-4.2
	Zone 36 Subtotal					12	-35	-23	-4.2
753	LDA	1.00	mixed use	106.00	53.00	106	53	159	28.8
	Zone 753 Subtotal					106	53	159	28.8
767	Commissary/P	1.00	mixed use	90.00	160.00	90	160	250	45.3
	Zone 767 Subtotal					90	160	250	45.3
TOTAL						240	312	552	100.0

Trip Distribution Report

Percent Of Trips M POST SEIS

Zone	To Gates 5	14	16	17	22	28	36
14	0.0	25.0	0.0	10.0	15.0	50.0	0.0
15	0.0	0.0	25.0	0.0	67.5	0.0	7.5
32	0.0	5.0	10.0	10.0	68.0	5.0	2.0
33	0.0	5.0	10.0	10.0	68.0	5.0	2.0
34	0.0	5.0	10.0	10.0	68.0	5.0	2.0
35	0.0	5.0	10.0	10.0	68.0	5.0	2.0
36	0.0	10.0	20.0	15.0	40.0	15.0	0.0
753	20.0	5.0	10.0	5.0	55.0	0.0	5.0
767	14.0	0.0	10.0	10.0	14.0	50.0	2.0

Volume Type	NB Link In	Out	Total	SB Link In	Out	Total	EB Link In	Out	Total	WB Link In	Out	Total	Total Volume
#201 Lombard/Divisadero													
Base	353	390	743	266	195	461	3488	2383	5871	2225	3364	5589	12664
Added	0	0	0	0	0	0	109	90	199	90	109	199	398
Total	353	390	743	266	195	461	3597	2473	6070	2315	3473	5788	13062
#202 Lombard/Richardson													
Base	2387	3417	5804	3196	2233	5429	226	159	385	0	0	0	11618
Added	90	109	199	35	18	53	74	72	146	0	0	0	398
Total	2477	3526	6003	3231	2251	5482	300	231	531	0	0	0	12016
#203 Lyon/Lombard													
Base	159	253	412	366	254	620	539	378	917	95	274	369	2318
Added	8	9	17	0	0	0	83	80	163	72	74	146	326
Total	167	262	429	366	254	620	622	458	1080	167	348	515	2644
#204 Greenwich/Divisadero													
Base	335	361	696	396	358	754	186	125	311	142	215	357	2118
Added	0	0	0	0	0	0	9	8	17	8	9	17	34
Total	335	361	696	396	358	754	195	133	328	150	224	374	2152
#205 Greenwich/Lyon													
Base	107	164	271	248	173	421	0	0	0	88	106	194	886
Added	0	0	0	9	8	17	0	0	0	8	9	17	34
Total	107	164	271	257	181	438	0	0	0	96	115	211	920
#206 Francisco/Richardson													
Base	2222	3170	5392	3113	2529	5642	287	57	344	198	64	262	11640
Added	18	35	53	35	18	53	0	0	0	0	0	0	106
Total	2240	3205	5445	3148	2547	5695	287	57	344	198	64	262	11746
#207 Richardson/Gorgas													
Base	17	37	54	160	16	176	3137	2682	5819	2526	3105	5631	11680
Added	35	0	35	0	0	0	0	18	18	18	35	53	106
Total	52	37	89	160	16	176	3137	2700	5837	2544	3140	5684	11786
#208 Doyle/Marina/Lyon													
Base	12	41	53	128	321	449	1349	291	1640	606	1442	2048	4190
Added	0	0	0	102	52	154	-5	2	-3	54	97	151	302
Total	12	41	53	230	373	603	1344	293	1637	660	1539	2199	4492
#209 Graham/Lincoln													
Base	277	180	457	44	92	136	465	421	886	571	664	1235	2714
Added	21	12	33	1	0	1	64	16	80	28	86	114	228
Total	298	192	490	45	92	137	529	437	966	599	750	1349	2942
#210 Lincoln/Halleck													
Base	0	0	0	300	379	679	620	652	1272	688	577	1265	3216
Added	0	0	0	81	62	143	87	27	114	58	137	195	452
Total	0	0	0	381	441	822	707	679	1386	746	714	1460	3668

Volume Type	NB Link In	NB Link Out	NB Link Total	SB Link In	SB Link Out	SB Link Total	EB Link In	EB Link Out	EB Link Total	WB Link In	WB Link Out	WB Link Total	Total Volume
#211 Lincoln/Girard													
Base	0	0	0	548	393	941	605	681	1286	575	654	1229	3456
Added	0	0	0	9	71	80	140	43	183	34	69	103	366
Total	0	0	0	557	464	1021	745	724	1469	609	723	1332	3822
#212 Presidio/Letterman/Lincoln													
Base	528	557	1085	644	632	1276	289	198	487	66	140	206	3054
Added	37	63	100	62	37	99	1	-8	-7	8	16	24	216
Total	565	620	1185	706	669	1375	290	190	480	74	156	230	3270
#213 Lombard/Presidio													
Base	746	660	1406	560	512	1072	0	0	0	412	546	958	3436
Added	38	34	72	63	37	100	0	0	0	27	57	84	256
Total	784	694	1478	623	549	1172	0	0	0	439	603	1042	3692
#214 Presidio/Pacific													
Base	698	649	1347	671	716	1387	83	70	153	93	110	203	3090
Added	26	27	53	27	26	53	0	0	0	0	0	0	106
Total	724	676	1400	698	742	1440	83	70	153	93	110	203	3196
#215 Presidio/Jackson													
Base	683	632	1315	654	701	1355	171	171	342	263	267	530	3542
Added	26	27	53	27	26	53	0	0	0	0	0	0	106
Total	709	659	1368	681	727	1408	171	171	342	263	267	530	3648
#216 Presidio/Washington													
Base	654	489	1143	524	694	1218	239	144	383	135	225	360	3104
Added	26	27	53	27	26	53	0	0	0	0	0	0	106
Total	680	516	1196	551	720	1271	239	144	383	135	225	360	3210
#217 Arguello/Jackson													
Base	625	512	1137	464	553	1017	0	0	0	163	187	350	2504
Added	18	25	43	25	18	43	0	0	0	0	0	0	86
Total	643	537	1180	489	571	1060	0	0	0	163	187	350	2590
#218 Arguello/Washington St													
Base	751	561	1312	502	624	1126	37	51	88	102	156	258	2784
Added	18	25	43	25	18	43	0	0	0	0	0	0	86
Total	769	586	1355	527	642	1169	37	51	88	102	156	258	2870
#219 Arguello/Moraga													
Base	485	354	839	0	0	0	119	186	305	374	438	812	1956
Added	18	24	42	0	0	0	1	-4	-3	16	15	31	70
Total	503	378	881	0	0	0	120	182	302	390	453	843	2026
#220 Montgomery/Sheridan													
Base	34	176	210	90	540	630	661	69	730	0	0	0	1570
Added	33	0	33	12	64	76	31	12	43	0	0	0	152
Total	67	176	243	102	604	706	692	81	773	0	0	0	1722

Impact Analysis Report
Level Of Service

Intersection	Base LOS	Base Del/ Veh	Base V/ C	Future LOS	Future Del/ Veh	Future V/ C	Change in
#201 Lombard/Divisadero	B	13.9	0.914	B	15.5	0.934	+ 1.635 D/V
#202 Lombard/Richardson	B	6.0	0.431	B	6.6	0.434	+ 0.598 D/V
#203 Lyon/Lombard	C	21.3	0.843	E	39.4	1.018	+ 0.175 V/C
#204 Greenwich/Divisadero	B	13.9	0.614	B	14.1	0.623	+ 0.009 V/C
#205 Greenwich/Lyon	A	8.5	0.300	A	8.6	0.313	+ 0.013 V/C
#206 Francisco/Richardson	B	15.1	0.753	B	15.6	0.760	+ 0.481 D/V
#207 Richardson/Gorgas	A	8.1	0.699	A	8.2	0.701	+ 0.188 D/V
#208 Doyle/Marina/Lyon	C	34.6	0.450	C	34.0	0.506	-0.572 D/V
#209 Graham/Lincoln	C	20.5	0.784	D	28.6	0.918	+ 0.134 V/C
#210 Lincoln/Halleck	F	170.0	0.000	F	525.2	0.000	+355.173 D/V
#211 Lincoln/Girard	F	672.2	0.000	F	OVRFL	0.000	+481.344 D/V
#212 Presidio/Letterman/Lincoln	C	20.0	0.788	D	25.3	0.888	+ 0.100 V/C
#213 Lombard/Presidio	F	78.5	1.271	F	94.9	1.364	+ 0.093 V/C
#214 Presidio/Pacific	F	60.6	1.052	F	71.5	1.092	+ 0.039 V/C
#215 Presidio/Jackson	F	116.3	1.270	F	132.2	1.318	+ 0.048 V/C
#216 Presidio/Washington	F	64.5	1.142	F	78.2	1.203	+ 0.060 V/C
#217 Arguello/Jackson	B	14.1	0.670	B	15.0	0.708	+ 0.038 V/C
#218 Arguello/Washington St	E	41.4	1.023	E	47.4	1.056	+ 0.033 V/C
#219 Arguello/Moraga	B	14.9	0.667	C	16.0	0.697	+ 0.031 V/C
#220 Montgomery/Sheridan	C	18.7	0.786	C	22.8	0.848	+ 0.062 V/C

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #201 Lombard/Divisadero

Cycle (sec): 100 Critical Vol./Cap. (X): 0.934
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 15.5
Optimal Cycle: 90 Level Of Service: B

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Permitted				Permitted				Permitted				Permitted			
Rights:	Include				Include				Include				Include			
Min. Green:	24	24	24		24	24	24		59	59	59		59	59	59	
Lanes:	1 0	0 1	0		1 0	0 1	0		0 1	1 1	0		0 1	1 1	0	
Volume Module:																
Base Vol:	204	119	30		96	140	30		0	3238	250		0	2149	76	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	204	119	30		96	140	30		0	3238	250		0	2149	76	
Added Vol:	0	0	0		0	0	0		0	109	0		0	90	0	
PasserByVol:	0	0	0		0	0	0		0	0	0		0	0	0	
Initial Fut:	204	119	30		96	140	30		0	3347	250		0	2239	76	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Volume:	204	119	30		96	140	30		0	3347	250		0	2239	76	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	204	119	30		96	140	30		0	3347	250		0	2239	76	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Final Vol.:	204	119	30		96	140	30		0	3347	250		0	2239	76	
Saturation Flow Module:																
Sat/Lane:	1900	1900	1900		1900	1900	1900		1900	1900	1900		1900	1900	1900	
Adjustment:	0.46	0.97	0.97		0.49	0.97	0.97		0.91	0.90	0.90		0.91	0.91	0.91	
Lanes:	1.00	0.80	0.20		1.00	0.82	0.18		0.00	2.79	0.21		0.00	2.90	0.10	
Final Sat.:	872	1472	371		937	1524	327		0	4778	357		0	4992	169	
Capacity Analysis Module:																
Vol/Sat:	0.23	0.08	0.08		0.10	0.09	0.09		0.00	0.70	0.70		0.00	0.45	0.45	
Crit Moves:	****									****						
Green/Cycle:	0.27	0.27	0.27		0.27	0.27	0.27		0.00	0.73	0.73		0.00	0.73	0.73	
Volume/Cap:	0.88	0.30	0.30		0.38	0.34	0.34		0.00	0.96	0.96		0.00	0.61	0.61	
Uniform Del:	31.6	26.3	26.3		27.0	26.6	26.6		0.0	10.7	10.7		0.0	5.8	5.8	
IncremntDel:	29.1	0.4	0.4		1.0	0.4	0.4		0.0	7.0	7.0		0.0	0.3	0.3	
Delay Adj:	1.00	1.00	1.00		1.00	1.00	1.00		0.00	1.00	1.00		0.00	1.00	1.00	
Delay/Veh:	60.7	26.7	26.7		27.9	27.1	27.1		0.0	17.7	17.7		0.0	6.1	6.1	
User DelAdj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
AdjDel/Veh:	60.7	26.7	26.7		27.9	27.1	27.1		0.0	17.7	17.7		0.0	6.1	6.1	
HCM2kAvg:	15	3	3		5	4	4		0	36	36		0	11	11	

Level Of Service Computation Report
1994 HCM Operations Method (Future Volume Alternative)

Intersection #202 Lombard/Richardson

Cycle (sec): 90 Critical Vol./Cap. (X): 0.434
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 6.6
Optimal Cycle: 90 Level Of Service: B

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Protected				Protected				Protected				Protected			
Rights:	Include				Include				Ovl				Include			
Min. Green:	25	90	0		0	57	57		0	0	25		0	0	0	
Lanes:	1 0	3 0	0		0 0	2 1	0		0 0	0 0	1		0 0	0 0	0	
Volume Module:																
Base Vol:	154	2233	0		0	3191	5		0	0	226		0	0	0	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	154	2233	0		0	3191	5		0	0	226		0	0	0	
Added Vol:	72	18	0		0	35	0		0	0	74		0	0	0	
PasserByVol:	0	0	0		0	0	0		0	0	0		0	0	0	
Initial Fut:	226	2251	0		0	3226	5		0	0	300		0	0	0	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Volume:	226	2251	0		0	3226	5		0	0	300		0	0	0	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	226	2251	0		0	3226	5		0	0	300		0	0	0	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.10	1.00		1.00	1.10	1.10		1.00	1.00	1.00		1.00	1.00	1.00	
Final Vol.:	226	2476	0		0	3549	6		0	0	300		0	0	0	
Saturation Flow Module:																
Sat/Lane:	1900	1900	1900		1900	1900	1900		1900	1900	1900		1900	1900	1900	
Adjustment:	0.95	1.00	1.00		1.00	1.00	1.00		1.00	1.00	0.77		1.00	1.00	1.00	
Lanes:	1.00	3.00	0.00		0.00	2.99	0.01		0.00	0.00	1.00		0.00	0.00	0.00	
Final Sat.:	1805	5700	0		0	5691	9		0	0	1463		0	0	0	
Capacity Analysis Module:																
Vol/Sat:	0.13	0.43	0.00		0.00	0.62	0.62		0.00	0.00	0.21		0.00	0.00	0.00	
Crit Moves:		****			****				****							
Green/Cycle:	0.30	1.00	0.00		0.00	0.70	0.70		0.00	0.00	0.30		0.00	0.00	0.00	
Volume/Cap:	0.41	0.43	0.00		0.00	0.90	0.90		0.00	0.00	0.67		0.00	0.00	0.00	
Uniform Del:	18.9	0.0	0.0		0.0	8.4	8.4		0.0	0.0	20.8		0.0	0.0	0.0	
IncremntDel:	0.3	0.0	0.0		0.0	2.3	2.3		0.0	0.0	2.7		0.0	0.0	0.0	
Delay Adj:	0.85	0.85	0.00		0.00	0.85	0.85		0.00	0.00	0.85		0.00	0.00	0.00	
Delay/Veh:	16.4	0.0	0.0		0.0	9.4	9.4		0.0	0.0	20.4		0.0	0.0	0.0	
User DelAdj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
AdjDel/Veh:	16.4	0.0	0.0		0.0	9.4	9.4		0.0	0.0	20.4		0.0	0.0	0.0	
DesignQueue:	8	0	0		0	65	0		0	0	11		0	0	0	

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #203 Lyon/Lombard

Cycle (sec): 100 Critical Vol./Cap. (X): 1.018
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 39.4
Optimal Cycle: 0 Level Of Service: E

Street Name:	Lyon St.						Lombard St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	114	37	8	21	151	194	197	245	97	5	70	20
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	114	37	8	21	151	194	197	245	97	5	70	20
Added Vol:	8	0	0	0	0	0	0	74	9	0	72	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	122	37	8	21	151	194	197	319	106	5	142	20
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	122	37	8	21	151	194	197	319	106	5	142	20
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	122	37	8	21	151	194	197	319	106	5	142	20
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	122	37	8	21	151	194	197	319	106	5	142	20
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.73	0.22	0.05	0.06	0.41	0.53	0.32	0.51	0.17	0.03	0.85	0.12
Final Sat.:	352	107	23	32	233	299	193	313	104	15	427	60
Capacity Analysis Module:												
Vol/Sat:	0.35	0.35	0.35	0.65	0.65	0.65	1.02	1.02	1.02	0.33	0.33	0.33
Crit Moves:		****			****			****			****	
Delay/Veh:	13.6	13.6	13.6	19.7	19.7	19.7	65.1	65.1	65.1	12.8	12.8	12.8
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	13.6	13.6	13.6	19.7	19.7	19.7	65.1	65.1	65.1	12.8	12.8	12.8
LOS by Move:	B	B	B	C	C	C	F	F	F	B	B	B
ApproachDel:		13.6			19.7			65.1			12.8	
Delay Adj:		1.00			1.00			1.00			1.00	
ApprAdjDel:		13.6			19.7			65.1			12.8	
LOS by Appr:		B			C			F			B	

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #204 Greenwich/Divisadero

Cycle (sec): 100 Critical Vol./Cap. (X): 0.623
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 14.1
Optimal Cycle: 0 Level Of Service: B

Street Name:	Divisadero						Greenwich					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	19	304	12	47	337	12	17	156	13	11	94	37
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	19	304	12	47	337	12	17	156	13	11	94	37
Added Vol:	0	0	0	0	0	0	0	9	0	0	8	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	19	304	12	47	337	12	17	165	13	11	102	37
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	19	304	12	47	337	12	17	165	13	11	102	37
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	19	304	12	47	337	12	17	165	13	11	102	37
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	19	304	12	47	337	12	17	165	13	11	102	37
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.06	0.91	0.03	0.12	0.85	0.03	0.09	0.84	0.07	0.07	0.68	0.25
Final Sat.:	35	563	22	75	541	19	47	453	36	38	355	129
Capacity Analysis Module:												
Vol/Sat:	0.54	0.54	0.54	0.62	0.62	0.62	0.36	0.36	0.36	0.29	0.29	0.29
Crit Moves:		****		****					****		****	
Delay/Veh:	14.2	14.2	14.2	16.3	16.3	16.3	12.0	12.0	12.0	11.1	11.1	11.1
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	14.2	14.2	14.2	16.3	16.3	16.3	12.0	12.0	12.0	11.1	11.1	11.1
LOS by Move:	B	B	B	C	C	C	B	B	B	B	B	B
ApproachDel:		14.2			16.3			12.0			11.1	
Delay Adj:		1.00			1.00			1.00			1.00	
ApprAdjDel:		14.2			16.3			12.0			11.1	
LOS by Appr:		B			C			B			B	

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #205 Greenwich/Lyon

Cycle (sec): 100 Critical Vol./Cap. (X): 0.313
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 8.6
Optimal Cycle: 0 Level Of Service: A

Street Name:	Lyon									Greenwich		
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	0 1	0	0 1	0 0	0	0 0	0 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	0	103	4	102	146	0	0	0	0	18	0	70
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	103	4	102	146	0	0	0	0	18	0	70
Added Vol:	0	0	0	9	0	0	0	0	0	0	0	8
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	103	4	111	146	0	0	0	0	18	0	78
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	103	4	111	146	0	0	0	0	18	0	78
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	103	4	111	146	0	0	0	0	18	0	78
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	103	4	111	146	0	0	0	0	18	0	78
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.96	0.04	0.43	0.57	0.00	0.00	0.00	0.00	0.19	0.00	0.81
Final Sat.:	0	777	30	355	467	0	0	0	0	150	0	649
Capacity Analysis Module:												
Vol/Sat:	xxxx	0.13	0.13	0.31	0.31	xxxx	xxxx	xxxx	xxxx	0.12	xxxx	0.12
Crit Moves:		****			****							****
Delay/Veh:	0.0	8.0	8.0	9.2	9.2	0.0	0.0	0.0	0.0	7.7	0.0	7.7
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	8.0	8.0	9.2	9.2	0.0	0.0	0.0	0.0	7.7	0.0	7.7
LOS by Move:	*	A	A	A	A	*	*	*	*	A	*	A
ApproachDel:		8.0			9.2			xxxxxx			7.7	
Delay Adj:		1.00			1.00			xxxxx			1.00	
ApprAdjDel:		8.0			9.2			xxxxxx			7.7	
LOS by Appr:		A			A			*			A	

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #206 Francisco/Richardson

Cycle (sec): 90 Critical Vol./Cap. (X): 0.760
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 15.6
Optimal Cycle: 90 Level Of Service: B

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L - T - R				L - T - R				L - T - R				L - T - R			
Control:	Permitted				Permitted				Permitted				Permitted			
Rights:	Include				Include				Include				Include			
Min. Green:	51	51	51		51	51	51		31	31	31		31	31	31	
Lanes:	0 0	2 1	0		0 0	2 1	0		0 1	0 1	0		0 0	1! 0	0	
Volume Module:																
Base Vol:	0	2222	0		0	3113	0		177	64	46		11	57	130	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	0	2222	0		0	3113	0		177	64	46		11	57	130	
Added Vol:	0	18	0		0	35	0		0	0	0		0	0	0	
PasserByVol:	0	0	0		0	0	0		0	0	0		0	0	0	
Initial Fut:	0	2240	0		0	3148	0		177	64	46		11	57	130	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Volume:	0	2240	0		0	3148	0		177	64	46		11	57	130	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	0	2240	0		0	3148	0		177	64	46		11	57	130	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Final Vol.:	0	2240	0		0	3148	0		177	64	46		11	57	130	
Saturation Flow Module:																
Sat/Lane:	1900	1900	1900		1900	1900	1900		1900	1900	1900		1900	1900	1900	
Adjustment:	1.00	0.91	0.91		1.00	0.91	0.91		0.61	0.61	0.61		0.89	0.89	0.89	
Lanes:	0.00	3.00	0.00		0.00	3.00	0.00		1.00	0.58	0.42		0.05	0.29	0.66	
Final Sat.:	0	5187	0		0	5187	0		1159	674	485		94	488	1114	
Capacity Analysis Module:																
Vol/Sat:	0.00	0.43	0.00		0.00	0.61	0.00		0.15	0.09	0.09		0.12	0.12	0.12	
Crit Moves:						****			****							
Green/Cycle:	0.00	0.66	0.00		0.00	0.66	0.00		0.34	0.34	0.34		0.34	0.34	0.34	
Volume/Cap:	0.00	0.66	0.00		0.00	0.93	0.00		0.44	0.28	0.28		0.34	0.34	0.34	
Uniform Del:	0.0	9.4	0.0		0.0	13.6	0.0		22.8	21.4	21.4		21.9	21.9	21.9	
IncrmntDel:	0.0	0.5	0.0		0.0	5.1	0.0		0.5	0.1	0.1		0.3	0.3	0.3	
Delay Adj:	0.00	1.00	0.00		0.00	1.00	0.00		1.00	1.00	1.00		1.00	1.00	1.00	
Delay/Veh:	0.0	9.9	0.0		0.0	18.6	0.0		23.3	21.5	21.5		22.2	22.2	22.2	
User DelAdj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
AdjDel/Veh:	0.0	9.9	0.0		0.0	18.6	0.0		23.3	21.5	21.5		22.2	22.2	22.2	
HCM2kAvg:	0	13	0		0	30	0		6	3	3		4	4	4	

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #207 Richardson/Gorgas

Cycle (sec): 90 Critical Vol./Cap. (X): 0.701
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 8.2
Optimal Cycle: 90 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Split Phase			Split Phase			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	10	10	10	12	12	12	52	52	52	52	52	52
Lanes:	1 0	1! 0	0	0 0	0 0	1	0 0	3 0	1	0 0	2 1	0
Volume Module:												
Base Vol:	12	0	5	0	0	160	0	3100	37	0	2510	16
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	12	0	5	0	0	160	0	3100	37	0	2510	16
Added Vol:	0	0	35	0	0	0	0	0	0	0	18	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	12	0	40	0	0	160	0	3100	37	0	2528	16
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	12	0	40	0	0	160	0	3100	37	0	2528	16
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	12	0	40	0	0	160	0	3100	37	0	2528	16
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	12	0	40	0	0	160	0	3100	37	0	2528	16
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.88	1.00	0.88	1.00	1.00	0.87	1.00	0.91	0.85	1.00	0.91	0.91
Lanes:	1.13	0.00	0.87	0.00	0.00	1.00	0.00	3.00	1.00	0.00	2.98	0.02
Final Sat.:	1880	0	1446	0	0	1644	0	5187	1615	0	5149	33
Capacity Analysis Module:												
Vol/Sat:	0.01	0.00	0.03	0.00	0.00	0.10	0.00	0.60	0.02	0.00	0.49	0.49
Crit Moves:	****					****		****				
Green/Cycle:	0.11	0.00	0.11	0.00	0.00	0.13	0.00	0.76	0.76	0.00	0.76	0.76
Volume/Cap:	0.06	0.00	0.25	0.00	0.00	0.73	0.00	0.79	0.03	0.00	0.65	0.65
Uniform Del:	35.8	0.0	36.6	0.0	0.0	37.4	0.0	6.7	2.8	0.0	5.3	5.3
IncremntDel:	0.0	0.0	0.6	0.0	0.0	11.8	0.0	1.1	0.0	0.0	0.4	0.4
Delay Adj:	1.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00
Delay/Veh:	35.8	0.0	37.2	0.0	0.0	49.2	0.0	7.8	2.8	0.0	5.7	5.7
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	35.8	0.0	37.2	0.0	0.0	49.2	0.0	7.8	2.8	0.0	5.7	5.7
HCM2kAvg:	0	0	1	0	0	6	0	19	0	0	12	12

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #208 Doyle/Marina/Lyon

Cycle (sec): 75 Critical Vol./Cap. (X): 0.506
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 34.0
Optimal Cycle: 96 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	29	0	29	29	0	29	0	38	38	38	38	38
Lanes:	1 0	0 0	1	1 0	0 0	1	0 0	1 1	0	0 0	1 1	0
Volume Module:												
Base Vol:	0	0	12	122	0	6	0	1308	41	0	285	321
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	12	122	0	6	0	1308	41	0	285	321
Added Vol:	0	0	0	102	0	0	0	-5	0	0	2	52
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	12	224	0	6	0	1303	41	0	287	373
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	12	224	0	6	0	1303	41	0	287	373
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	12	224	0	6	0	1303	41	0	287	373
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	0	12	224	0	6	0	1303	41	0	287	373
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	0.85	0.95	1.00	0.85	1.00	0.95	0.95	1.00	0.87	0.87
Lanes:	1.00	0.00	1.00	1.00	0.00	1.00	0.00	1.94	0.06	0.00	1.00	1.00
Final Sat.:	1900	0	1615	1805	0	1615	0	3482	110	0	1652	1652
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.01	0.12	0.00	0.00	0.00	0.37	0.37	0.00	0.17	0.23
Crit Moves:			****	****				****				
Green/Cycle:	0.00	0.00	0.30	0.30	0.00	0.60	0.00	0.40	0.40	0.00	0.40	0.40
Volume/Cap:	0.00	0.00	0.02	0.41	0.00	0.01	0.00	0.95	0.95	0.00	0.44	0.57
Uniform Del:	0.0	0.0	23.6	26.7	0.0	7.5	0.0	28.0	28.0	0.0	21.2	22.6
IncremntDel:	0.0	0.0	0.0	0.5	0.0	0.0	0.0	13.0	13.0	0.0	0.2	0.7
Delay Adj:	0.00	0.00	1.00	1.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00
Delay/Veh:	0.0	0.0	23.6	27.2	0.0	7.6	0.0	41.0	41.0	0.0	21.4	23.3
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	23.6	27.2	0.0	7.6	0.0	41.0	41.0	0.0	21.4	23.3
HCM2kAvg:	0	0	0	6	0	0	0	24	24	0	6	9

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #209 Graham/Lincoln

Cycle (sec): 100 Critical Vol./Cap. (X): 0.918
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 28.6
Optimal Cycle: 0 Level Of Service: D

Street Name:	Graham St.						Lincoln Blvd.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	1 0	0 1	0	1 0	0 1	0
Volume Module:												
Base Vol:	27	30	220	18	10	16	20	426	19	151	378	42
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	27	30	220	18	10	16	20	426	19	151	378	42
Added Vol:	0	0	21	1	0	0	0	64	0	12	16	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	27	30	241	19	10	16	20	490	19	163	394	42
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	27	30	241	19	10	16	20	490	19	163	394	42
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	27	30	241	19	10	16	20	490	19	163	394	42
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	27	30	241	19	10	16	20	490	19	163	394	42
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.09	0.10	0.81	0.42	0.22	0.36	1.00	0.96	0.04	1.00	0.90	0.10
Final Sat.:	50	55	443	182	96	153	507	534	21	511	505	54
Capacity Analysis Module:												
Vol/Sat:	0.54	0.54	0.54	0.10	0.10	0.10	0.04	0.92	0.92	0.32	0.78	0.78
Crit Moves:		****			****			****			****	
Delay/Veh:	15.9	15.9	15.9	11.3	11.3	11.3	10.0	44.6	44.6	12.7	27.1	27.1
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	15.9	15.9	15.9	11.3	11.3	11.3	10.0	44.6	44.6	12.7	27.1	27.1
LOS by Move:	C	C	C	B	B	B	A	E	E	B	D	D
ApproachDel:	15.9			11.3			43.3			23.2		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	15.9			11.3			43.3			23.2		
LOS by Appr:	C			B			E			C		

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #210 Lincoln/Halleck

Average Delay (sec/veh): 110.1 Worst Case Level Of Service: F[525.2]

Street Name:	Halleck St.						Lincoln Blvd.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0	0 0	0	0 0	1! 0	0	1 0	1 0	0	0 0	0 1	0
Volume Module:												
Base Vol:	0	0	0	123	0	177	166	454	0	0	475	213
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	123	0	177	166	454	0	0	475	213
Added Vol:	0	0	0	64	0	17	14	73	0	0	10	48
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	187	0	194	180	527	0	0	485	261
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	187	0	194	180	527	0	0	485	261
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	0	0	0	187	0	194	180	527	0	0	485	261
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	6.4	xxxx	6.2	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	3.5	xxxx	3.3	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	1503	xxxx	616	746	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	135	xxxx	495	871	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	114	xxxx	495	871	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	1.64	xxxx	0.39	0.21	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.8	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	10.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	B	*	*	*	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	187	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	29.1	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	525	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	F	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			525.2			xxxxxx			xxxxxx		
ApproachLOS:	*			F			*			*		

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                        Level Of Service Computation Report
            2000 HCM Unsignalized Method (Future Volume Alternative)
******************************************************************************
Intersection #211 Lincoln/Girard
******************************************************************************
Average Delay (sec/veh):    337.8   Worst Case Level Of Service:       F[1153.5]
******************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Stop Sign        Stop Sign       Uncontrolled     Uncontrolled
Rights:           Include          Include          Include          Include
Lanes:        0  0  0  0  0    0  0  1! 0  0    1  0  1  0  0    0  0  0  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       0    0     0   276    0   272   227  378     0     0  409   166
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:    0    0     0   276    0   272   227  378     0     0  409   166
Added Vol:      0    0     0     0    0     9    71   69     0     0   34     0
PasserByVol:    0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:    0    0     0   276    0   281   298  447     0     0  443   166
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:     0    0     0   276    0   281   298  447     0     0  443   166
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Final Vol.:     0    0     0   276    0   281   298  447     0     0  443   166
Critical Gap Module:
Critical Gp:xxxxx xxxx xxxxx   6.4 xxxx   6.2   4.1 xxxx xxxxx xxxxx xxxx xxxxx
FollowUpTim:xxxxx xxxx xxxxx   3.5 xxxx   3.3   2.2 xxxx xxxxx xxxxx xxxx xxxxx
------------|---------------||---------------||---------------||---------------|
Capacity Module:
Cnflict Vol: xxxx xxxx xxxxx  1569 xxxx   526   609 xxxx xxxxx  xxxx xxxx xxxxx
Potent Cap.: xxxx xxxx xxxxx   123 xxxx   556   979 xxxx xxxxx  xxxx xxxx xxxxx
Move Cap.:   xxxx xxxx xxxxx    94 xxxx   556   979 xxxx xxxxx  xxxx xxxx xxxxx
Volume/Cap:  xxxx xxxx  xxxx  2.93 xxxx  0.51  0.30 xxxx  xxxx  xxxx xxxx  xxxx
------------|---------------||---------------||---------------||---------------|
Level Of Service Module:
Queue:      xxxxx xxxx xxxxx xxxxx xxxx xxxxx   1.3 xxxx xxxxx xxxxx xxxx xxxxx
Stopped Del:xxxxx xxxx xxxxx xxxxx xxxx xxxxx  10.3 xxxx xxxxx xxxxx xxxx xxxxx
LOS by Move:   *    *     *     *    *     *     B    *     *     *    *     *
Movement:     LT - LTR - RT    LT - LTR - RT    LT - LTR - RT    LT - LTR - RT
Shared Cap.: xxxx xxxx xxxxx  xxxx  162 xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
SharedQueue:xxxxx xxxx xxxxx xxxxx 53.3 xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shrd StpDel:xxxxx xxxx xxxxx xxxxx 1154 xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shared LOS:    *    *     *     *    F     *     *    *     *     *    *     *
ApproachDel:    xxxxxx           1153.5           xxxxxx           xxxxxx
ApproachLOS:        *                F                *                *
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                        Level Of Service Computation Report
            2000 HCM 4-Way Stop Method (Future Volume Alternative)
******************************************************************************
Intersection #212 Presidio/Letterman/Lincoln
******************************************************************************
Cycle (sec):        100                 Critical Vol./Cap. (X):        0.888
Loss Time (sec):      0 (Y+R =  4 sec) Average Delay (sec/veh):        25.3
Optimal Cycle:        0                 Level Of Service:                  D
******************************************************************************
Street Name:         Lincoln/Presidio                 Presidio/Letterman
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Stop Sign        Stop Sign        Stop Sign        Stop Sign
Rights:           Include          Include          Include          Include
Min. Green:     0    0     0     0    0     0     0    0     0     0    0     0
Lanes:        1  0  0  1  0    0  1  0  1  0    0  0  1! 0  0    0  0  1! 0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:     104  415     9   101  464    79   174   30    85     8   15    43
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:  104  415     9   101  464    79   174   30    85     8   15    43
Added Vol:     -8   34    11     5   57     0     0    0     1     5    0     3
PasserByVol:    0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:   96  449    20   106  521    79   174   30    86    13   15    46
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:    96  449    20   106  521    79   174   30    86    13   15    46
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:   96  449    20   106  521    79   174   30    86    13   15    46
PCE Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Final Vol.:    96  449    20   106  521    79   174   30    86    13   15    46
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Adjustment:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Lanes:       1.00 0.96  0.04  0.30 1.48  0.22  0.60 0.10  0.30  0.18 0.20  0.62
Final Sat.:   486  506    23   156  788   122   303   52   150    78   90   275
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.20 0.89  0.89  0.68 0.66  0.65  0.57 0.57  0.57  0.17 0.17  0.17
Crit Moves:              ****  ****                 ****        ****
Delay/Veh:   11.8 41.1  41.1  22.2 21.1  20.0  18.0 18.0  18.0  11.7 11.7  11.7
Delay Adj:   1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
AdjDel/Veh:  11.8 41.1  41.1  22.2 21.1  20.0  18.0 18.0  18.0  11.7 11.7  11.7
LOS by Move:   B    E     E     C    C     C     C    C     C     B    B     B
ApproachDel:      36.1             21.1             18.0             11.7
Delay Adj:        1.00             1.00             1.00             1.00
ApprAdjDel:       36.1             21.1             18.0             11.7
LOS by Appr:        E                C                C                B
******************************************************************************
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Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #213 Lombard/Presidio

Cycle (sec): 100 Critical Vol./Cap. (X): 1.364
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 94.9
Optimal Cycle: 0 Level Of Service: F

Street Name:	Presidio Blvd.						Lombard St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	0	1 0	1 0	1 0	0 0	0 0	0 0	0 0	1 0	0 0	1
Volume Module:												
Base Vol:	0	391	355	191	369	0	0	0	0	291	0	121
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	391	355	191	369	0	0	0	0	291	0	121
Added Vol:	0	22	16	41	22	0	0	0	0	12	0	15
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	413	371	232	391	0	0	0	0	303	0	136
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	413	371	232	391	0	0	0	0	303	0	136
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	413	371	232	391	0	0	0	0	303	0	136
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	413	371	232	391	0	0	0	0	303	0	136
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.53	0.47	1.00	1.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Final Sat.:	0	303	272	488	525	0	0	0	0	460	0	541
Capacity Analysis Module:												
Vol/Sat:	xxxx	1.36	1.36	0.48	0.75	xxxx	xxxx	xxxx	xxxx	0.66	xxxx	0.25
Crit Moves:			****		****					****		
Delay/Veh:	0.0	194	194.0	16.4	26.7	0.0	0.0	0.0	0.0	23.9	0.0	11.4
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	194	194.0	16.4	26.7	0.0	0.0	0.0	0.0	23.9	0.0	11.4
LOS by Move:	*	F	F	C	D	*	*	*	*	C	*	B
ApproachDel:	194.0				22.9		xxxxxx			20.0		
Delay Adj:	1.00				1.00		xxxxx			1.00		
ApprAdjDel:	194.0				22.9		xxxxxx			20.0		
LOS by Appr:	F				C		*			C		

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #214 Presidio/Pacific

Cycle (sec): 100 Critical Vol./Cap. (X): 1.092
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 71.5
Optimal Cycle: 0 Level Of Service: F

Street Name:	Presidio Blvd.						Pacific Ave.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1!	0 0	0 0	1!	0 0	0 0	1!	0 0	0 0	1!	0 0
Volume Module:												
Base Vol:	12	655	31	46	593	32	32	33	18	38	26	29
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	12	655	31	46	593	32	32	33	18	38	26	29
Added Vol:	0	26	0	0	27	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	12	681	31	46	620	32	32	33	18	38	26	29
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	12	681	31	46	620	32	32	33	18	38	26	29
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	12	681	31	46	620	32	32	33	18	38	26	29
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	12	681	31	46	620	32	32	33	18	38	26	29
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.02	0.94	0.04	0.07	0.89	0.04	0.38	0.40	0.22	0.41	0.28	0.31
Final Sat.:	11	624	28	44	588	30	190	195	107	204	140	156
Capacity Analysis Module:												
Vol/Sat:	1.09	1.09	1.09	1.05	1.05	1.05	0.17	0.17	0.17	0.19	0.19	0.19
Crit Moves:		****			****			****			****	
Delay/Veh:	84.7	84.7	84.7	72.8	72.8	72.8	11.6	11.6	11.6	11.7	11.7	11.7
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	84.7	84.7	84.7	72.8	72.8	72.8	11.6	11.6	11.6	11.7	11.7	11.7
LOS by Move:	F	F	F	F	F	F	B	B	B	B	B	B
ApproachDel:		84.7			72.8			11.6			11.7	
Delay Adj:		1.00			1.00			1.00			1.00	
ApprAdjDel:		84.7			72.8			11.6			11.7	
LOS by Appr:		F			F			B			B	

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #215 Presidio/Jackson

Cycle (sec): 100 Critical Vol./Cap. (X): 1.318
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 132.2
Optimal Cycle: 0 Level Of Service: F

Street Name:	Presidio Blvd.						Jackson St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	9	615	59	59	565	30	11	149	11	56	132	75
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	9	615	59	59	565	30	11	149	11	56	132	75
Added Vol:	0	26	0	0	27	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	9	641	59	59	592	30	11	149	11	56	132	75
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	9	641	59	59	592	30	11	149	11	56	132	75
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	9	641	59	59	592	30	11	149	11	56	132	75
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	9	641	59	59	592	30	11	149	11	56	132	75
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.01	0.91	0.08	0.09	0.87	0.04	0.06	0.88	0.06	0.21	0.50	0.29
Final Sat.:	7	486	45	46	465	24	28	377	28	100	235	133
Capacity Analysis Module:												
Vol/Sat:	1.32	1.32	1.32	1.27	1.27	1.27	0.40	0.40	0.40	0.56	0.56	0.56
Crit Moves:		****			****			****			****	
Delay/Veh:	176.7	177	176.7	158.7	159	158.7	16.0	16.0	16.0	19.6	19.6	19.6
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	176.7	177	176.7	158.7	159	158.7	16.0	16.0	16.0	19.6	19.6	19.6
LOS by Move:	F	F	F	F	F	F	C	C	C	C	C	C
ApproachDel:	176.7			158.7			16.0			19.6		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	176.7			158.7			16.0			19.6		
LOS by Appr:	F			F			C			C		

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #216 Presidio/Washington

Cycle (sec): 100 Critical Vol./Cap. (X): 1.203
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 78.2
Optimal Cycle: 0 Level Of Service: F

Street Name:	Presidio Blvd.						Washington St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	15	610	29	38	440	46	59	158	22	27	83	25
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	15	610	29	38	440	46	59	158	22	27	83	25
Added Vol:	0	26	0	0	27	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	15	636	29	38	467	46	59	158	22	27	83	25
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	15	636	29	38	467	46	59	158	22	27	83	25
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	15	636	29	38	467	46	59	158	22	27	83	25
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	15	636	29	38	467	46	59	158	22	27	83	25
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.02	0.94	0.04	0.07	0.85	0.08	0.25	0.66	0.09	0.20	0.61	0.19
Final Sat.:	12	529	24	39	478	47	117	313	44	88	271	82
Capacity Analysis Module:												
Vol/Sat:	1.20	1.20	1.20	0.98	0.98	0.98	0.51	0.51	0.51	0.31	0.31	0.31
Crit Moves:		****			****			****				****
Delay/Veh:	129.3	129	129.3	57.3	57.3	57.3	17.6	17.6	17.6	14.1	14.1	14.1
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	129.3	129	129.3	57.3	57.3	57.3	17.6	17.6	17.6	14.1	14.1	14.1
LOS by Move:	F	F	F	F	F	F	C	C	C	B	B	B
ApproachDel:	129.3			57.3			17.6			14.1		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	129.3			57.3			17.6			14.1		
LOS by Appr:	F			F			C			B		

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #217 Arguello/Jackson

Cycle (sec): 100 Critical Vol./Cap. (X): 0.708
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 15.0
Optimal Cycle: 0 Level Of Service: B

Street Name:	Arguello Blvd.						Jackson St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1	1 0	0 1	0	0 0	0 0	0	0 0	0 0	1!	0 0
Volume Module:												
Base Vol:	0	486	139	48	416	0	0	0	0	96	0	67
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	486	139	48	416	0	0	0	0	96	0	67
Added Vol:	0	18	0	0	25	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	504	139	48	441	0	0	0	0	96	0	67
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	504	139	48	441	0	0	0	0	96	0	67
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	504	139	48	441	0	0	0	0	96	0	67
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	504	139	48	441	0	0	0	0	96	0	67
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	1.57	0.43	0.10	0.90	0.00	0.00	0.00	0.00	0.59	0.00	0.41
Final Sat.:	0	1043	298	68	623	0	0	0	0	330	0	231
Capacity Analysis Module:												
Vol/Sat:	xxxx	0.48	0.47	0.71	0.71	xxxx	xxxx	xxxx	xxxx	0.29	xxxx	0.29
Crit Moves:		****		****						****		
Delay/Veh:	0.0	12.9	12.2	19.2	19.2	0.0	0.0	0.0	0.0	11.1	0.0	11.1
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	12.9	12.2	19.2	19.2	0.0	0.0	0.0	0.0	11.1	0.0	11.1
LOS by Move:	*	B	B	C	C	*	*	*	*	B	*	B
ApproachDel:		12.7			19.2			xxxxxx			11.1	
Delay Adj:		1.00			1.00			xxxxx			1.00	
ApprAdjDel:		12.7			19.2			xxxxxx			11.1	
LOS by Appr:		B			C			*			B	

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #218 Arguello/Washington St

Cycle (sec): 100 Critical Vol./Cap. (X): 1.056
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 47.4
Optimal Cycle: 0 Level Of Service: E

Street Name:	Arguello Blvd.						Washington St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1!	0 0	0 0	1!	0 0	0 0	1!	0 0	0 0	1!	0 0
Volume Module:												
Base Vol:	23	592	136	9	471	22	4	11	22	68	6	28
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	23	592	136	9	471	22	4	11	22	68	6	28
Added Vol:	0	18	0	0	25	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	23	610	136	9	496	22	4	11	22	68	6	28
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	23	610	136	9	496	22	4	11	22	68	6	28
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	23	610	136	9	496	22	4	11	22	68	6	28
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	23	610	136	9	496	22	4	11	22	68	6	28
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.03	0.79	0.18	0.02	0.94	0.04	0.11	0.30	0.59	0.67	0.06	0.27
Final Sat.:	22	578	129	12	645	29	55	151	301	341	30	141
Capacity Analysis Module:												
Vol/Sat:	1.06	1.06	1.06	0.77	0.77	0.77	0.07	0.07	0.07	0.20	0.20	0.20
Crit Moves:	****				****			****		****		
Delay/Veh:	70.5	70.5	70.5	23.2	23.2	23.2	10.1	10.1	10.1	11.3	11.3	11.3
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	70.5	70.5	70.5	23.2	23.2	23.2	10.1	10.1	10.1	11.3	11.3	11.3
LOS by Move:	F	F	F	C	C	C	B	B	B	B	B	B
ApproachDel:		70.5			23.2			10.1			11.3	
Delay Adj:		1.00			1.00			1.00			1.00	
ApprAdjDel:		70.5			23.2			10.1			11.3	
LOS by Appr:		F			C			B			B	

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #219 Arguello/Moraga

Cycle (sec): 100 Critical Vol./Cap. (X): 0.697
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 16.0
Optimal Cycle: 0 Level Of Service: C

Street Name:	Arguello						Moraga					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	0 0	0 1	0	0 1	0 0	0
Volume Module:												
Base Vol:	113	0	372	0	0	0	0	66	53	301	73	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	113	0	372	0	0	0	0	66	53	301	73	0
Added Vol:	1	0	17	0	0	0	0	-2	3	21	-5	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	114	0	389	0	0	0	0	64	56	322	68	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	114	0	389	0	0	0	0	64	56	322	68	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	114	0	389	0	0	0	0	64	56	322	68	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	114	0	389	0	0	0	0	64	56	322	68	0
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.23	0.00	0.77	0.00	1.00	0.00	0.00	0.53	0.47	0.83	0.17	0.00
Final Sat.:	163	0	558	0	0	0	0	322	281	520	110	0
Capacity Analysis Module:												
Vol/Sat:	0.70	xxxx	0.70	xxxx	xxxx	xxxx	xxxx	0.20	0.20	0.62	0.62	xxxx
Crit Moves:	****							****		****		
Delay/Veh:	17.3	0.0	17.3	0.0	0.0	0.0	0.0	9.7	9.7	16.3	16.3	0.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	17.3	0.0	17.3	0.0	0.0	0.0	0.0	9.7	9.7	16.3	16.3	0.0
LOS by Move:	C	*	C	*	*	*	*	A	A	C	C	*
ApproachDel:	17.3			xxxxxx				9.7			16.3	
Delay Adj:	1.00			xxxxx				1.00			1.00	
ApprAdjDel:	17.3			xxxxxx				9.7			16.3	
LOS by Appr:	C			*				A			C	

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #220 Montgomery/Sheridan

Cycle (sec): 100 Critical Vol./Cap. (X): 0.848
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 22.8
Optimal Cycle: 0 Level Of Service: C

Street Name:	Montgomery St.						Sheridan Ave.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 1	0 0	0	0 0	0 1	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	13	21	0	0	34	56	519	0	142	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	13	21	0	0	34	56	519	0	142	0	0	0
Added Vol:	0	33	0	0	0	12	31	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	13	54	0	0	34	68	550	0	142	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	13	54	0	0	34	68	550	0	142	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	13	54	0	0	34	68	550	0	142	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	13	54	0	0	34	68	550	0	142	0	0	0
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.19	0.81	0.00	0.00	0.33	0.67	0.79	0.00	0.21	0.00	1.00	0.00
Final Sat.:	117	484	0	0	218	437	649	0	167	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.11	0.11	xxxx	xxxx	0.16	0.16	0.85	xxxx	0.85	xxxx	xxxx	xxxx
Crit Moves:		****				****	****					
Delay/Veh:	9.3	9.3	0.0	0.0	9.1	9.1	26.1	0.0	26.1	0.0	0.0	0.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	9.3	9.3	0.0	0.0	9.1	9.1	26.1	0.0	26.1	0.0	0.0	0.0
LOS by Move:	A	A	*	*	A	A	D	*	D	*	*	*
ApproachDel:	9.3			9.1			26.1			xxxxxx		
Delay Adj:	1.00			1.00			1.00			xxxxx		
ApprAdjDel:	9.3			9.1			26.1			xxxxxx		
LOS by Appr:	A			A			D			*		

Alternative 3 – AM Peak Hour

Scenario Report

Scenario:	AM 2030-History
Command:	AM Limited
Volume:	AM 2030 - History
Geometry:	AM 2030
Impact Fee:	Default Impact Fee
Trip Generation:	AM 2030-Limited
Trip Distribution:	Main Post SEIS
Paths:	History
Routes:	Default Routes
Configuration:	Default Configuration

Trip Generation Report

Forecast for AM 2030-Limited

Zone #	Subzone	Amount	Units	Rate In	Rate Out	Trips In	Trips Out	Total Trips	% Of Total
14	West Crissy	1.00	mixed use	14.00	36.00	14	36	50	13.3
	Zone 14 Subtotal					14	36	50	13.3
15	Ruger & Simo	1.00	mixed use	16.00	21.00	16	21	37	9.8
	Zone 15 Subtotal					16	21	37	9.8
32	S. Main Post	1.00	mixed use	1.00	0.00	1	0	1	0.3
	Zone 32 Subtotal					1	0	1	0.3
33	W. Main Post	1.00	Mixed Use	-25.00	-9.00	-25	-9	-34	-9.0
	Zone 33 Subtotal					-25	-9	-34	-9.0
34	E. Main Post	1.00	mixed use	-37.00	2.00	-37	2	-35	-9.3
	Zone 34 Subtotal					-37	2	-35	-9.3
35	N. Main Post	1.00	mixed use	-10.00	-18.00	-10	-18	-28	-7.4
	Zone 35 Subtotal					-10	-18	-28	-7.4
36	West Letterm	1.00	mixed use	12.00	-35.00	12	-35	-23	-6.1
	Zone 36 Subtotal					12	-35	-23	-6.1
753	LDA	1.00	mixed use	106.00	53.00	106	53	159	42.2
	Zone 753 Subtotal					106	53	159	42.2
767	Commissary/P	1.00	mixed use	90.00	160.00	90	160	250	66.3
	Zone 767 Subtotal					90	160	250	66.3
TOTAL						167	210	377	100.0

Trip Distribution Report

Percent Of Trips M POST SEIS

Zone	To Gates 5	14	16	17	22	28	36
14	0.0	25.0	0.0	10.0	15.0	50.0	0.0
15	0.0	0.0	25.0	0.0	67.5	0.0	7.5
32	0.0	5.0	10.0	10.0	68.0	5.0	2.0
33	0.0	5.0	10.0	10.0	68.0	5.0	2.0
34	0.0	5.0	10.0	10.0	68.0	5.0	2.0
35	0.0	5.0	10.0	10.0	68.0	5.0	2.0
36	0.0	10.0	20.0	15.0	40.0	15.0	0.0
753	20.0	5.0	10.0	5.0	55.0	0.0	5.0
767	14.0	0.0	10.0	10.0	14.0	50.0	2.0

Volume Type	NB Link In	Out	Total	SB Link In	Out	Total	EB Link In	Out	Total	WB Link In	Out	Total	Total Volume
#201 Lombard/Divisadero													
Base	353	390	743	266	195	461	3488	2383	5871	2225	3364	5589	12664
Added	0	0	0	0	0	0	54	40	94	40	54	94	188
Total	353	390	743	266	195	461	3542	2423	5965	2265	3418	5683	12852
#202 Lombard/Richardson													
Base	2387	3417	5804	3196	2233	5429	226	159	385	0	0	0	11618
Added	40	53	93	0	-13	-13	53	53	106	0	0	0	186
Total	2427	3470	5897	3196	2220	5416	279	212	491	0	0	0	11804
#203 Lyon/Lombard													
Base	159	253	412	291	195	486	480	303	783	95	274	369	2050
Added	7	7	14	0	0	0	60	60	120	53	53	106	240
Total	166	260	426	291	195	486	540	363	903	148	327	475	2290
#204 Greenwich/Divisadero													
Base	335	361	696	396	358	754	186	125	311	142	215	357	2118
Added	0	0	0	0	0	0	7	7	14	7	7	14	28
Total	335	361	696	396	358	754	193	132	325	149	222	371	2146
#205 Greenwich/Lyon													
Base	107	164	271	248	173	421	0	0	0	88	106	194	886
Added	0	0	0	7	7	14	0	0	0	7	7	14	28
Total	107	164	271	255	180	435	0	0	0	95	113	208	914
#206 Francisco/Richardson													
Base	2222	3170	5392	3113	2469	5582	227	57	284	198	64	262	11520
Added	-13	0	-13	0	-13	-13	0	0	0	0	0	0	-26
Total	2209	3170	5379	3113	2456	5569	227	57	284	198	64	262	11494
#207 Richardson/Gorgas													
Base	17	37	54	160	16	176	3137	2622	5759	2466	3105	5571	11560
Added	0	0	0	0	0	0	0	-13	-13	-13	0	-13	-26
Total	17	37	54	160	16	176	3137	2609	5746	2453	3105	5558	11534
#208 Doyle/Marina/Lyon													
Base	12	41	53	128	321	449	1349	291	1640	606	1442	2048	4190
Added	0	0	0	97	48	145	-5	2	-3	50	92	142	284
Total	12	41	53	225	369	594	1344	293	1637	656	1534	2190	4474
#209 Graham/Lincoln													
Base	437	374	811	44	92	136	465	421	886	765	824	1589	3422
Added	10	10	20	-1	0	-1	14	-9	5	1	23	24	48
Total	447	384	831	43	92	135	479	412	891	766	847	1613	3470
#210 Lincoln/Halleck													
Base	0	0	0	300	379	679	780	846	1626	882	737	1619	3924
Added	0	0	0	44	25	69	25	-1	24	5	50	55	148
Total	0	0	0	344	404	748	805	845	1650	887	787	1674	4072

Volume Type	NB Link In	NB Link Out	NB Link Total	SB Link In	SB Link Out	SB Link Total	EB Link In	EB Link Out	EB Link Total	WB Link In	WB Link Out	WB Link Total	Total Volume
#211 Lincoln/Girard													
Base	0	0	0	692	453	1145	765	875	1640	475	604	1079	3864
Added	0	0	0	-32	15	-17	54	-16	38	16	39	55	76
Total	0	0	0	660	468	1128	819	859	1678	491	643	1134	3940
#212 Presidio/Letterman/Lincoln													
Base	453	513	966	594	532	1126	130	73	203	66	125	191	2486
Added	16	32	48	31	19	50	1	-11	-10	8	16	24	112
Total	469	545	1014	625	551	1176	131	62	193	74	141	215	2598
#213 Lombard/Presidio													
Base	746	660	1406	560	437	997	0	0	0	337	546	883	3286
Added	31	24	55	33	15	48	0	0	0	12	37	49	152
Total	777	684	1461	593	452	1045	0	0	0	349	583	932	3438
#214 Presidio/Pacific													
Base	698	649	1347	671	716	1387	83	70	153	93	110	203	3090
Added	19	17	36	17	19	36	0	0	0	0	0	0	72
Total	717	666	1383	688	735	1423	83	70	153	93	110	203	3162
#215 Presidio/Jackson													
Base	683	632	1315	654	701	1355	171	171	342	263	267	530	3542
Added	19	17	36	17	19	36	0	0	0	0	0	0	72
Total	702	649	1351	671	720	1391	171	171	342	263	267	530	3614
#216 Presidio/Washington													
Base	654	489	1143	524	694	1218	239	144	383	135	225	360	3104
Added	19	17	36	17	19	36	0	0	0	0	0	0	72
Total	673	506	1179	541	713	1254	239	144	383	135	225	360	3176
#217 Arguello/Jackson													
Base	625	512	1137	464	553	1017	0	0	0	163	187	350	2504
Added	10	15	25	15	10	25	0	0	0	0	0	0	50
Total	635	527	1162	479	563	1042	0	0	0	163	187	350	2554
#218 Arguello/Washington St													
Base	751	561	1312	502	624	1126	37	51	88	102	156	258	2784
Added	10	15	25	15	10	25	0	0	0	0	0	0	50
Total	761	576	1337	517	634	1151	37	51	88	102	156	258	2834
#219 Arguello/Moraga													
Base	485	354	839	374	438	812	119	186	305	0	0	0	1956
Added	11	15	26	12	9	21	4	3	7	0	0	0	54
Total	496	369	865	386	447	833	123	189	312	0	0	0	2010
#220 Montgomery/Sheridan													
Base	44	178	222	67	280	347	661	69	730	32	277	309	1608
Added	-5	-2	-7	4	15	19	20	6	26	0	0	0	38
Total	39	176	215	71	295	366	681	75	756	32	277	309	1646

Impact Analysis Report
Level Of Service

Intersection	Base LOS	Base Del/ Veh	Base V/ C	Future LOS	Future Del/ Veh	Future V/ C	Change in
#201 Lombard/Divisadero	B	13.9	0.914	B	14.6	0.924	+ 0.746 D/V
#202 Lombard/Richardson	A	6.0	0.431	A	6.3	0.428	+ 0.287 D/V
#203 Lyon/Lombard	C	15.3	0.717	C	20.0	0.832	+ 0.115 V/C
#204 Greenwich/Divisadero	B	13.9	0.614	B	14.1	0.622	+ 0.007 V/C
#205 Greenwich/Lyon	A	8.5	0.300	A	8.6	0.310	+ 0.010 V/C
#206 Francisco/Richardson	B	15.0	0.717	B	15.0	0.717	-0.009 D/V
#207 Richardson/Gorgas	A	8.0	0.699	A	8.0	0.699	-0.008 D/V
#208 Doyle/Marina/Lyon	C	34.6	0.450	C	34.0	0.503	-0.568 D/V
#209 Graham/Lincoln	D	32.7	0.899	E	35.3	0.932	+ 0.033 V/C
#210 Lincoln/Halleck	F	487.7	0.000	F	723.6	0.000	+235.893 D/V
#211 Lincoln/Girard	F	OVRFL	0.000	F	OVRFL	0.000	+167.362 D/V
#212 Presidio/Letterman/Lincoln	C	15.1	0.692	C	16.6	0.745	+ 0.053 V/C
#213 Lombard/Presidio	F	76.3	1.246	F	89.9	1.316	+ 0.070 V/C
#214 Presidio/Pacific	F	60.6	1.052	F	67.9	1.081	+ 0.029 V/C
#215 Presidio/Jackson	F	116.3	1.270	F	127.1	1.305	+ 0.035 V/C
#216 Presidio/Washington	F	64.5	1.142	F	73.8	1.185	+ 0.043 V/C
#217 Arguello/Jackson	B	14.1	0.670	B	14.6	0.693	+ 0.023 V/C
#218 Arguello/Washington St	E	41.4	1.023	E	44.7	1.041	+ 0.019 V/C
#219 Arguello/Moraga	B	13.4	0.642	B	13.9	0.661	+ 0.018 V/C
#220 Montgomery/Sheridan	C	17.6	0.773	C	18.9	0.797	+ 0.024 V/C

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #201 Lombard/Divisadero

Cycle (sec): 100 Critical Vol./Cap. (X): 0.924
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 14.6
Optimal Cycle: 90 Level Of Service: B

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Permitted						Permitted						Permitted						Permitted					
Rights:	Include						Include						Include						Include					
Min. Green:	24		24		24		24		24		24		59		59		59		59		59		59	
Lanes:	1	0	0	1	0		1	0	0	1	0		0	1	1	1	0		0	1	1	1	0	
Volume Module:																								
Base Vol:	204	119		30		96	140		30		0	3238	250		0	2149		76						
Growth Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00	1.00		1.00	1.00		1.00						
Initial Bse:	204	119		30		96	140		30		0	3238	250		0	2149		76						
Added Vol:	0	0		0		0	0		0		0	54	0		0	40		0						
PasserByVol:	0	0		0		0	0		0		0	0	0		0	0		0						
Initial Fut:	204	119		30		96	140		30		0	3292	250		0	2189		76						
User Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00	1.00		1.00	1.00		1.00						
PHF Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00	1.00		1.00	1.00		1.00						
PHF Volume:	204	119		30		96	140		30		0	3292	250		0	2189		76						
Reduct Vol:	0	0		0		0	0		0		0	0	0		0	0		0						
Reduced Vol:	204	119		30		96	140		30		0	3292	250		0	2189		76						
PCE Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00	1.00		1.00	1.00		1.00						
MLF Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00	1.00		1.00	1.00		1.00						
Final Vol.:	204	119		30		96	140		30		0	3292	250		0	2189		76						
Saturation Flow Module:																								
Sat/Lane:	1900	1900		1900		1900	1900		1900		1900	1900	1900		1900	1900		1900						
Adjustment:	0.46	0.97		0.97		0.49	0.97		0.97		0.91	0.90	0.90		0.91	0.91		0.91						
Lanes:	1.00	0.80		0.20		1.00	0.82		0.18		0.00	2.79	0.21		0.00	2.90		0.10						
Final Sat.:	872	1472		371		937	1524		327		0	4768	362		0	4988		173						
Capacity Analysis Module:																								
Vol/Sat:	0.23	0.08		0.08		0.10	0.09		0.09		0.00	0.69	0.69		0.00	0.44		0.44						
Crit Moves:	****											****												
Green/Cycle:	0.27	0.27		0.27		0.27	0.27		0.27		0.00	0.73	0.73		0.00	0.73		0.73						
Volume/Cap:	0.88	0.30		0.30		0.38	0.34		0.34		0.00	0.94	0.94		0.00	0.60		0.60						
Uniform Del:	31.6	26.3		26.3		27.0	26.6		26.6		0.0	10.3	10.3		0.0	5.7		5.7						
IncremntDel:	29.1	0.4		0.4		1.0	0.4		0.4		0.0	5.7	5.7		0.0	0.3		0.3						
Delay Adj:	1.00	1.00		1.00		1.00	1.00		1.00		0.00	1.00	1.00		0.00	1.00		1.00						
Delay/Veh:	60.7	26.7		26.7		27.9	27.1		27.1		0.0	16.1	16.1		0.0	6.0		6.0						
User DelAdj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00	1.00		1.00	1.00		1.00						
AdjDel/Veh:	60.7	26.7		26.7		27.9	27.1		27.1		0.0	16.1	16.1		0.0	6.0		6.0						
HCM2kAvg:	15	3		3		5	4		4		0	34	34		0	10		10						

Level Of Service Computation Report
1994 HCM Operations Method (Future Volume Alternative)

Intersection #202 Lombard/Richardson

Cycle (sec): 90 Critical Vol./Cap. (X): 0.428
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 6.3
Optimal Cycle: 90 Level Of Service: A

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Protected						Protected						Protected						Protected					
Rights:	Include						Include						Ovl						Include					
Min. Green:	25		90		0		0		57		57		0		0		25		0		0		0	
Lanes:	1	0	3	0	0		0	0	2	1	0		0	0	0	0	1		0	0	0	0	0	
Volume Module:																								
Base Vol:	154	2233		0		0	3191		5		0		0		226		0		0		0			
Growth Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00	1.00		1.00	1.00		1.00						
Initial Bse:	154	2233		0		0	3191		5		0		0		226		0		0					
Added Vol:	53	-13		0		0	0		0		0		0		53		0		0					
PasserByVol:	0	0		0		0	0		0		0		0		0		0		0					
Initial Fut:	207	2220		0		0	3191		5		0		0		279		0		0					
User Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00	1.00		1.00	1.00		1.00						
PHF Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00	1.00		1.00	1.00		1.00						
PHF Volume:	207	2220		0		0	3191		5		0		0		279		0		0					
Reduct Vol:	0	0		0		0	0		0		0		0		0		0		0					
Reduced Vol:	207	2220		0		0	3191		5		0		0		279		0		0					
PCE Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00	1.00		1.00	1.00		1.00						
MLF Adj:	1.00	1.10		1.00		1.00	1.10		1.10		1.00	1.00	1.00		1.00	1.00		1.00						
Final Vol.:	207	2442		0		0	3510		6		0		0		279		0		0					
Saturation Flow Module:																								
Sat/Lane:	1900	1900		1900		1900	1900		1900		1900	1900	1900		1900	1900		1900						
Adjustment:	0.95	1.00		1.00		1.00	1.00		1.00		1.00	1.00	1.00		1.00	1.00		1.00						
Lanes:	1.00	3.00		0.00		0.00	2.99		0.01		0.00	0.00	1.00		0.00	0.00		0.00						
Final Sat.:	1805	5700		0		0	5691		9		0		0		1463		0		0					
Capacity Analysis Module:																								
Vol/Sat:	0.11	0.43		0.00		0.00	0.62		0.62		0.00	0.00	0.19		0.00	0.00		0.00						
Crit Moves:		****				****					****													
Green/Cycle:	0.30	1.00		0.00		0.00	0.70		0.70		0.00	0.00	0.30		0.00	0.00		0.00						
Volume/Cap:	0.38	0.43		0.00		0.00	0.89		0.89		0.00	0.00	0.63		0.00	0.00		0.00						
Uniform Del:	18.7	0.0		0.0		0.0	8.3		8.3		0.0	0.0	20.4		0.0	0.0		0.0						
IncremntDel:	0.2	0.0		0.0		0.0	2.0		2.0		0.0	0.0	2.0		0.0	0.0		0.0						
Delay Adj:	0.85	0.85		0.00		0.00	0.85		0.85		0.00	0.00	0.85		0.00	0.00		0.00						
Delay/Veh:	16.1	0.0		0.0		0.0	9.1		9.1		0.0	0.0	19.3		0.0	0.0		0.0						
User DelAdj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00	1.00		1.00	1.00		1.00						
AdjDel/Veh:	16.1	0.0		0.0		0.0	9.1		9.1		0.0	0.0	19.3		0.0	0.0		0.0						
DesignQueue:	7	0		0		0	64		0		0		0		10		0		0					

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #203 Lyon/Lombard

Cycle (sec): 100 Critical Vol./Cap. (X): 0.832
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 20.0
Optimal Cycle: 0 Level Of Service: C

Street Name:	Lyon St.						Lombard St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	114	37	8	21	151	119	138	245	97	5	70	20
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	114	37	8	21	151	119	138	245	97	5	70	20
Added Vol:	7	0	0	0	0	0	0	53	7	0	53	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	121	37	8	21	151	119	138	298	104	5	123	20
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	121	37	8	21	151	119	138	298	104	5	123	20
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	121	37	8	21	151	119	138	298	104	5	123	20
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	121	37	8	21	151	119	138	298	104	5	123	20
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.73	0.22	0.05	0.07	0.52	0.41	0.26	0.55	0.19	0.03	0.83	0.14
Final Sat.:	368	113	24	41	294	232	166	358	125	18	441	72
Capacity Analysis Module:												
Vol/Sat:	0.33	0.33	0.33	0.51	0.51	0.51	0.83	0.83	0.83	0.28	0.28	0.28
Crit Moves:		****		****				****		****		
Delay/Veh:	12.2	12.2	12.2	14.1	14.1	14.1	28.1	28.1	28.1	11.1	11.1	11.1
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	12.2	12.2	12.2	14.1	14.1	14.1	28.1	28.1	28.1	11.1	11.1	11.1
LOS by Move:	B	B	B	B	B	B	D	D	D	B	B	B
ApproachDel:	12.2			14.1			28.1			11.1		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	12.2			14.1			28.1			11.1		
LOS by Appr:	B			B			D			B		

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #204 Greenwich/Divisadero

Cycle (sec): 100 Critical Vol./Cap. (X): 0.622
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 14.1
Optimal Cycle: 0 Level Of Service: B

Street Name:	Divisadero						Greenwich					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	19	304	12	47	337	12	17	156	13	11	94	37
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	19	304	12	47	337	12	17	156	13	11	94	37
Added Vol:	0	0	0	0	0	0	0	7	0	0	7	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	19	304	12	47	337	12	17	163	13	11	101	37
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	19	304	12	47	337	12	17	163	13	11	101	37
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	19	304	12	47	337	12	17	163	13	11	101	37
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	19	304	12	47	337	12	17	163	13	11	101	37
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.06	0.91	0.03	0.12	0.85	0.03	0.09	0.84	0.07	0.07	0.68	0.25
Final Sat.:	35	565	22	76	542	19	47	453	36	39	355	130
Capacity Analysis Module:												
Vol/Sat:	0.54	0.54	0.54	0.62	0.62	0.62	0.36	0.36	0.36	0.28	0.28	0.28
Crit Moves:		****			****			****			****	
Delay/Veh:	14.2	14.2	14.2	16.2	16.2	16.2	11.9	11.9	11.9	11.0	11.0	11.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	14.2	14.2	14.2	16.2	16.2	16.2	11.9	11.9	11.9	11.0	11.0	11.0
LOS by Move:	B	B	B	C	C	C	B	B	B	B	B	B
ApproachDel:	14.2			16.2			11.9			11.0		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	14.2			16.2			11.9			11.0		
LOS by Appr:	B			C			B			B		

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #205 Greenwich/Lyon

Cycle (sec): 100 Critical Vol./Cap. (X): 0.310
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 8.6
Optimal Cycle: 0 Level Of Service: A

Street Name:	Lyon									Greenwich		
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0	0 0	1 0	0	1 0	0 0	0	0 0	0 0	0	0 1!	0 0
Volume Module:												
Base Vol:	0	103	4	102	146	0	0	0	0	18	0	70
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	103	4	102	146	0	0	0	0	18	0	70
Added Vol:	0	0	0	7	0	0	0	0	0	0	0	7
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	103	4	109	146	0	0	0	0	18	0	77
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	103	4	109	146	0	0	0	0	18	0	77
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	103	4	109	146	0	0	0	0	18	0	77
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	103	4	109	146	0	0	0	0	18	0	77
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.96	0.04	0.43	0.57	0.00	0.00	0.00	0.00	0.19	0.00	0.81
Final Sat.:	0	778	30	352	471	0	0	0	0	151	0	648
Capacity Analysis Module:												
Vol/Sat:	xxxx	0.13	0.13	0.31	0.31	xxxx	xxxx	xxxx	xxxx	0.12	xxxx	0.12
Crit Moves:		****			****					****		
Delay/Veh:	0.0	8.0	8.0	9.2	9.2	0.0	0.0	0.0	0.0	7.7	0.0	7.7
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	8.0	8.0	9.2	9.2	0.0	0.0	0.0	0.0	7.7	0.0	7.7
LOS by Move:	*	A	A	A	A	*	*	*	*	A	*	A
ApproachDel:		8.0			9.2			xxxxxx			7.7	
Delay Adj:		1.00			1.00			xxxxx			1.00	
ApprAdjDel:		8.0			9.2			xxxxxx			7.7	
LOS by Appr:		A			A			*			A	

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #206 Francisco/Richardson

Cycle (sec): 90 Critical Vol./Cap. (X): 0.717
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 15.0
Optimal Cycle: 90 Level Of Service: B

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L - T - R				L - T - R				L - T - R				L - T - R			
Control:	Permitted				Permitted				Permitted				Permitted			
Rights:	Include				Include				Include				Include			
Min. Green:	51	51	51	51	51	51	51	51	31	31	31	31	31	31	31	31
Lanes:	0	0 2	1 0		0	0 2	1 0		0	1 0	1 0		0	0 1!	0 0	
Volume Module:																
Base Vol:	0	2222	0	0	3113	0			117	64	46		11	57	130	
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00			1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	0	2222	0	0	3113	0			117	64	46		11	57	130	
Added Vol:	0	-13	0	0	0	0			0	0	0		0	0	0	
PasserByVol:	0	0	0	0	0	0			0	0	0		0	0	0	
Initial Fut:	0	2209	0	0	3113	0			117	64	46		11	57	130	
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00			1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00			1.00	1.00	1.00		1.00	1.00	1.00	
PHF Volume:	0	2209	0	0	3113	0			117	64	46		11	57	130	
Reduct Vol:	0	0	0	0	0	0			0	0	0		0	0	0	
Reduced Vol:	0	2209	0	0	3113	0			117	64	46		11	57	130	
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00			1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00			1.00	1.00	1.00		1.00	1.00	1.00	
Final Vol.:	0	2209	0	0	3113	0			117	64	46		11	57	130	
Saturation Flow Module:																
Sat/Lane:	1900	1900	1900	1900	1900	1900			1900	1900	1900		1900	1900	1900	
Adjustment:	1.00	0.91	0.91	1.00	0.91	0.91			0.66	0.66	0.66		0.89	0.89	0.89	
Lanes:	0.00	3.00	0.00	0.00	3.00	0.00			1.00	0.58	0.42		0.05	0.29	0.66	
Final Sat.:	0	5187	0	0	5187	0			1248	726	522		94	489	1116	
Capacity Analysis Module:																
Vol/Sat:	0.00	0.43	0.00	0.00	0.60	0.00			0.09	0.09	0.09		0.12	0.12	0.12	
Crit Moves:					****									****		
Green/Cycle:	0.00	0.66	0.00	0.00	0.66	0.00			0.34	0.34	0.34		0.34	0.34	0.34	
Volume/Cap:	0.00	0.65	0.00	0.00	0.92	0.00			0.27	0.26	0.26		0.34	0.34	0.34	
Uniform Del:	0.0	9.3	0.0	0.0	13.4	0.0			21.3	21.2	21.2		21.9	21.9	21.9	
IncremntDel:	0.0	0.4	0.0	0.0	4.4	0.0			0.2	0.2	0.2		0.3	0.3	0.3	
Delay Adj:	0.00	1.00	0.00	0.00	1.00	0.00			1.00	1.00	1.00		1.00	1.00	1.00	
Delay/Veh:	0.0	9.7	0.0	0.0	17.8	0.0			21.5	21.4	21.4		22.2	22.2	22.2	
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00			1.00	1.00	1.00		1.00	1.00	1.00	
AdjDel/Veh:	0.0	9.7	0.0	0.0	17.8	0.0			21.5	21.4	21.4		22.2	22.2	22.2	
HCM2kAvg:	0	13	0	0	29	0			3	3	3		4	4	4	

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #207 Richardson/Gorgas

Cycle (sec): 90 Critical Vol./Cap. (X): 0.699
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 8.0
Optimal Cycle: 90 Level Of Service: A

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Split Phase				Split Phase				Permitted				Permitted			
Rights:	Include				Include				Include				Include			
Min. Green:	10	10	10		12	12	12		52	52	52		52	52	52	
Lanes:	1	0	1!	0 0	0	0	0	0 1	0	0	3	0 1	0	0	2	1 0
Volume Module:																
Base Vol:	12	0	5	0	0	160	0	3100	37	0	2450	16				
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
Initial Bse:	12	0	5	0	0	160	0	3100	37	0	2450	16				
Added Vol:	0	0	0	0	0	0	0	0	0	0	-13	0				
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0				
Initial Fut:	12	0	5	0	0	160	0	3100	37	0	2437	16				
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
PHF Volume:	12	0	5	0	0	160	0	3100	37	0	2437	16				
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0				
Reduced Vol:	12	0	5	0	0	160	0	3100	37	0	2437	16				
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
Final Vol.:	12	0	5	0	0	160	0	3100	37	0	2437	16				
Saturation Flow Module:																
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900				
Adjustment:	0.92	1.00	0.92	1.00	1.00	0.87	1.00	0.91	0.85	1.00	0.91	0.91				
Lanes:	1.55	0.00	0.45	0.00	0.00	1.00	0.00	3.00	1.00	0.00	2.98	0.02				
Final Sat.:	2712	0	798	0	0	1644	0	5187	1615	0	5148	34				
Capacity Analysis Module:																
Vol/Sat:	0.00	0.00	0.01	0.00	0.00	0.10	0.00	0.60	0.02	0.00	0.47	0.47				
Crit Moves:	****					****		****								
Green/Cycle:	0.11	0.00	0.11	0.00	0.00	0.13	0.00	0.76	0.76	0.00	0.76	0.76				
Volume/Cap:	0.04	0.00	0.06	0.00	0.00	0.73	0.00	0.79	0.03	0.00	0.63	0.63				
Uniform Del:	35.7	0.0	35.8	0.0	0.0	37.4	0.0	6.7	2.8	0.0	5.1	5.1				
IncremntDel:	0.0	0.0	0.1	0.0	0.0	11.8	0.0	1.1	0.0	0.0	0.3	0.3				
Delay Adj:	1.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00				
Delay/Veh:	35.8	0.0	35.9	0.0	0.0	49.2	0.0	7.8	2.8	0.0	5.4	5.4				
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
AdjDel/Veh:	35.8	0.0	35.9	0.0	0.0	49.2	0.0	7.8	2.8	0.0	5.4	5.4				
HCM2kAvg:	0	0	0	0	0	6	0	19	0	0	11	11				

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #208 Doyle/Marina/Lyon

Cycle (sec): 75 Critical Vol./Cap. (X): 0.503
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 34.0
Optimal Cycle: 96 Level Of Service: C

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Protected				Protected				Permitted				Permitted			
Rights:	Include				Include				Include				Include			
Min. Green:	29	0	29		29	0	29		0	38	38		38	38	38	
Lanes:	1	0	0	0 1	1	0	0	0 1	0	0	1	1 0	0	0	1	1 0
Volume Module:																
Base Vol:	0	0	12	122	0	6	0	1308	41	0	285	321				
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
Initial Bse:	0	0	12	122	0	6	0	1308	41	0	285	321				
Added Vol:	0	0	0	97	0	0	0	-5	0	0	2	48				
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0				
Initial Fut:	0	0	12	219	0	6	0	1303	41	0	287	369				
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
PHF Volume:	0	0	12	219	0	6	0	1303	41	0	287	369				
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0				
Reduced Vol:	0	0	12	219	0	6	0	1303	41	0	287	369				
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
Final Vol.:	0	0	12	219	0	6	0	1303	41	0	287	369				
Saturation Flow Module:																
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900				
Adjustment:	1.00	1.00	0.85	0.95	1.00	0.85	1.00	0.95	0.95	1.00	0.87	0.87				
Lanes:	1.00	0.00	1.00	1.00	0.00	1.00	0.00	1.94	0.06	0.00	1.00	1.00				
Final Sat.:	1900	0	1615	1805	0	1615	0	3482	110	0	1653	1653				
Capacity Analysis Module:																
Vol/Sat:	0.00	0.00	0.01	0.12	0.00	0.00	0.00	0.37	0.37	0.00	0.17	0.22				
Crit Moves:			****	****				****								
Green/Cycle:	0.00	0.00	0.30	0.30	0.00	0.60	0.00	0.40	0.40	0.00	0.40	0.40				
Volume/Cap:	0.00	0.00	0.02	0.40	0.00	0.01	0.00	0.95	0.95	0.00	0.44	0.56				
Uniform Del:	0.0	0.0	23.6	26.6	0.0	7.5	0.0	28.0	28.0	0.0	21.2	22.6				
IncremntDel:	0.0	0.0	0.0	0.5	0.0	0.0	0.0	13.0	13.0	0.0	0.2	0.6				
Delay Adj:	0.00	0.00	1.00	1.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00				
Delay/Veh:	0.0	0.0	23.6	27.1	0.0	7.6	0.0	41.0	41.0	0.0	21.4	23.2				
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
AdjDel/Veh:	0.0	0.0	23.6	27.1	0.0	7.6	0.0	41.0	41.0	0.0	21.4	23.2				
HCM2kAvg:	0	0	0	6	0	0	0	24	24	0	6	9				

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #209 Graham/Lincoln

Cycle (sec): 100 Critical Vol./Cap. (X): 0.932
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 35.3
Optimal Cycle: 0 Level Of Service: E

Street Name:	Graham St.						Lincoln Blvd.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	1 0	0 1	0	1 0	0 1	0
Volume Module:												
Base Vol:	27	30	380	18	10	16	20	426	19	345	378	42
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	27	30	380	18	10	16	20	426	19	345	378	42
Added Vol:	0	0	10	-1	0	0	0	14	0	10	-9	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	27	30	390	17	10	16	20	440	19	355	369	42
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	27	30	390	17	10	16	20	440	19	355	369	42
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	27	30	390	17	10	16	20	440	19	355	369	42
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	27	30	390	17	10	16	20	440	19	355	369	42
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.06	0.07	0.87	0.40	0.23	0.37	1.00	0.96	0.04	1.00	0.90	0.10
Final Sat.:	33	37	481	158	93	149	457	472	20	472	458	52
Capacity Analysis Module:												
Vol/Sat:	0.81	0.81	0.81	0.11	0.11	0.11	0.04	0.93	0.93	0.75	0.81	0.81
Crit Moves:			****		****			****			****	
Delay/Veh:	29.9	29.9	29.9	12.2	12.2	12.2	10.9	51.2	51.2	29.5	32.2	32.2
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	29.9	29.9	29.9	12.2	12.2	12.2	10.9	51.2	51.2	29.5	32.2	32.2
LOS by Move:	D	D	D	B	B	B	B	F	F	D	D	D
ApproachDel:	29.9			12.2			49.5			30.9		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	29.9			12.2			49.5			30.9		
LOS by Appr:	D			B			E			D		

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #210 Lincoln/Halleck

Average Delay (sec/veh): 123.2 Worst Case Level Of Service: F[723.6]

Street Name:	Halleck St.						Lincoln Blvd.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0	0 0	0	0 0	1! 0	0	1 0	1 0	0	0 0	0 1	0
Volume Module:												
Base Vol:	0	0	0	123	0	177	166	614	0	0	669	213
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	123	0	177	166	614	0	0	669	213
Added Vol:	0	0	0	33	0	11	8	17	0	0	-12	17
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	156	0	188	174	631	0	0	657	230
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	156	0	188	174	631	0	0	657	230
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	0	0	0	156	0	188	174	631	0	0	657	230
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	6.4	xxxx	6.2	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	3.5	xxxx	3.3	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	1751	xxxx	772	887	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	95	xxxx	403	772	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	79	xxxx	403	772	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	1.98	xxxx	0.47	0.23	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.9	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	11.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	B	*	*	*	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	140	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	29.8	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	724	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	F	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			723.6			xxxxxx			xxxxxx		
ApproachLOS:	*			F			*			*		

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #211 Lincoln/Girard

Average Delay (sec/veh): 430.9 Worst Case Level Of Service: F[1279.9]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Stop Sign				Stop Sign				Uncontrolled				Uncontrolled			
Rights:	Include				Include				Include				Include			
Lanes:	0	0	0	0 0	0	0	1!	0 0	1	0	1	0 0	0	0	0	1 0
Volume Module:																
Base Vol:	0	0	0	226	0	466	387	378	0	0	409	66				
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
Initial Bse:	0	0	0	226	0	466	387	378	0	0	409	66				
Added Vol:	0	0	0	0	0	-32	15	39	0	0	16	0				
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0				
Initial Fut:	0	0	0	226	0	434	402	417	0	0	425	66				
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
PHF Volume:	0	0	0	226	0	434	402	417	0	0	425	66				
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0				
Final Vol.:	0	0	0	226	0	434	402	417	0	0	425	66				
Critical Gap Module:																
Critical Gp:	xxxxx	xxxx	xxxxx	6.4	xxxx	6.2	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
FollowUpTim:	xxxxx	xxxx	xxxxx	3.5	xxxx	3.3	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
Capacity Module:																
Cnflict Vol:	xxxx	xxxx	xxxxx	1679	xxxx	458	491	xxxx	xxxxx	xxxx	xxxx	xxxxx				
Potent Cap.:	xxxx	xxxx	xxxxx	105	xxxx	607	1083	xxxx	xxxxx	xxxx	xxxx	xxxxx				
Move Cap.:	xxxx	xxxx	xxxxx	75	xxxx	607	1083	xxxx	xxxxx	xxxx	xxxx	xxxxx				
Volume/Cap:	xxxx	xxxx	xxxx	3.01	xxxx	0.71	0.37	xxxx	xxxx	xxxx	xxxx	xxxx				
Level Of Service Module:																
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	1.7	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	10.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
LOS by Move:	*	*	*	*	*	*	B	*	*	*	*	*				
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT				
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	177	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx				
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	64.2	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	1280	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
Shared LOS:	*	*	*	*	F	*	*	*	*	*	*	*				
ApproachDel:	xxxxxx			1279.9			xxxxxx			xxxxxx						
ApproachLOS:	*			F			*			*						

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #212 Presidio/Letterman/Lincoln

Cycle (sec): 100 Critical Vol./Cap. (X): 0.745
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 16.6
Optimal Cycle: 0 Level Of Service: C

Street Name:	Lincoln/Presidio						Presidio/Letterman					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	0	1	0	0	1	0	1	0	0	0	1! 0 0
Volume Module:												
Base Vol:	29	415	9	101	464	29	74	15	41	8	15	43
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	29	415	9	101	464	29	74	15	41	8	15	43
Added Vol:	-11	16	11	5	26	0	0	0	1	5	0	3
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	18	431	20	106	490	29	74	15	42	13	15	46
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	18	431	20	106	490	29	74	15	42	13	15	46
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	18	431	20	106	490	29	74	15	42	13	15	46
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	18	431	20	106	490	29	74	15	42	13	15	46
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.96	0.04	0.34	1.57	0.09	0.57	0.11	0.32	0.18	0.20	0.62
Final Sat.:	548	579	27	205	968	58	292	59	166	89	103	315
Capacity Analysis Module:												
Vol/Sat:	0.03	0.74	0.74	0.52	0.51	0.50	0.25	0.25	0.25	0.15	0.15	0.15
Crit Moves:		****		****				****		****		
Delay/Veh:	9.3	23.1	23.1	14.5	14.0	13.6	11.3	11.3	11.3	10.2	10.2	10.2
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	9.3	23.1	23.1	14.5	14.0	13.6	11.3	11.3	11.3	10.2	10.2	10.2
LOS by Move:	A	C	C	B	B	B	B	B	B	B	B	B
ApproachDel:	22.5			14.1			11.3			10.2		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	22.5			14.1			11.3			10.2		
LOS by Appr:	C			B			B			B		

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #213 Lombard/Presidio

Cycle (sec): 100 Critical Vol./Cap. (X): 1.316
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 89.9
Optimal Cycle: 0 Level Of Service: F

Street Name:	Presidio Blvd.						Lombard St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	0	1 0	1 0	1 0	0	0 0	0 0	0	1 0	0 0	1
Volume Module:												
Base Vol:	0	391	355	191	369	0	0	0	0	291	0	46
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	391	355	191	369	0	0	0	0	291	0	46
Added Vol:	0	15	16	21	12	0	0	0	0	12	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	406	371	212	381	0	0	0	0	303	0	46
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	406	371	212	381	0	0	0	0	303	0	46
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	406	371	212	381	0	0	0	0	303	0	46
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	406	371	212	381	0	0	0	0	303	0	46
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.52	0.48	1.00	1.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Final Sat.:	0	308	282	499	536	0	0	0	0	462	0	544
Capacity Analysis Module:												
Vol/Sat:	xxxx	1.32	1.32	0.42	0.71	xxxx	xxxx	xxxx	xxxx	0.66	xxxx	0.08
Crit Moves:			****		****					****		
Delay/Veh:	0.0	173	173.4	15.0	23.8	0.0	0.0	0.0	0.0	23.6	0.0	9.8
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	173	173.4	15.0	23.8	0.0	0.0	0.0	0.0	23.6	0.0	9.8
LOS by Move:	*	F	F	B	C	*	*	*	*	C	*	A
ApproachDel:	173.4				20.6		xxxxxx				21.8	
Delay Adj:	1.00				1.00		xxxxx				1.00	
ApprAdjDel:	173.4				20.6		xxxxxx				21.8	
LOS by Appr:	F				C		*				C	

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #214 Presidio/Pacific

Cycle (sec): 100 Critical Vol./Cap. (X): 1.081
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 67.9
Optimal Cycle: 0 Level Of Service: F

Street Name:	Presidio Blvd.						Pacific Ave.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	12	655	31	46	593	32	32	33	18	38	26	29
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	12	655	31	46	593	32	32	33	18	38	26	29
Added Vol:	0	19	0	0	17	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	12	674	31	46	610	32	32	33	18	38	26	29
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	12	674	31	46	610	32	32	33	18	38	26	29
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	12	674	31	46	610	32	32	33	18	38	26	29
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	12	674	31	46	610	32	32	33	18	38	26	29
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.02	0.94	0.04	0.07	0.89	0.04	0.38	0.40	0.22	0.41	0.28	0.31
Final Sat.:	11	623	29	44	587	31	190	195	107	204	140	156
Capacity Analysis Module:												
Vol/Sat:	1.08	1.08	1.08	1.04	1.04	1.04	0.17	0.17	0.17	0.19	0.19	0.19
Crit Moves:	****			****				****			****	
Delay/Veh:	81.2	81.2	81.2	68.4	68.4	68.4	11.6	11.6	11.6	11.7	11.7	11.7
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	81.2	81.2	81.2	68.4	68.4	68.4	11.6	11.6	11.6	11.7	11.7	11.7
LOS by Move:	F	F	F	F	F	F	B	B	B	B	B	B
ApproachDel:	81.2			68.4			11.6			11.7		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	81.2			68.4			11.6			11.7		
LOS by Appr:	F			F			B			B		

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #215 Presidio/Jackson

Cycle (sec): 100 Critical Vol./Cap. (X): 1.305
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 127.1
Optimal Cycle: 0 Level Of Service: F

Street Name:	Presidio Blvd.						Jackson St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	9	615	59	59	565	30	11	149	11	56	132	75
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	9	615	59	59	565	30	11	149	11	56	132	75
Added Vol:	0	19	0	0	17	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	9	634	59	59	582	30	11	149	11	56	132	75
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	9	634	59	59	582	30	11	149	11	56	132	75
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	9	634	59	59	582	30	11	149	11	56	132	75
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	9	634	59	59	582	30	11	149	11	56	132	75
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.01	0.91	0.08	0.09	0.87	0.04	0.06	0.88	0.06	0.21	0.50	0.29
Final Sat.:	7	486	45	47	464	24	28	377	28	100	235	133
Capacity Analysis Module:												
Vol/Sat:	1.31	1.31	1.31	1.25	1.25	1.25	0.40	0.40	0.40	0.56	0.56	0.56
Crit Moves:	****				****		****			****		
Delay/Veh:	171.3	171	171.3	151.2	151	151.2	16.0	16.0	16.0	19.6	19.6	19.6
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	171.3	171	171.3	151.2	151	151.2	16.0	16.0	16.0	19.6	19.6	19.6
LOS by Move:	F	F	F	F	F	F	C	C	C	C	C	C
ApproachDel:	171.3			151.2			16.0			19.6		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	171.3			151.2			16.0			19.6		
LOS by Appr:	F			F			C			C		

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #216 Presidio/Washington

Cycle (sec): 100 Critical Vol./Cap. (X): 1.185
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 73.8
Optimal Cycle: 0 Level Of Service: F

Street Name:	Presidio Blvd.						Washington St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	15	610	29	38	440	46	59	158	22	27	83	25
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	15	610	29	38	440	46	59	158	22	27	83	25
Added Vol:	0	19	0	0	17	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	15	629	29	38	457	46	59	158	22	27	83	25
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	15	629	29	38	457	46	59	158	22	27	83	25
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	15	629	29	38	457	46	59	158	22	27	83	25
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	15	629	29	38	457	46	59	158	22	27	83	25
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.02	0.94	0.04	0.07	0.84	0.09	0.25	0.66	0.09	0.20	0.61	0.19
Final Sat.:	13	531	24	40	476	48	117	313	44	88	271	82
Capacity Analysis Module:												
Vol/Sat:	1.18	1.18	1.18	0.96	0.96	0.96	0.51	0.51	0.51	0.31	0.31	0.31
Crit Moves:	****					****		****			****	
Delay/Veh:	122.3	122	122.3	53.1	53.1	53.1	17.5	17.5	17.5	14.1	14.1	14.1
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	122.3	122	122.3	53.1	53.1	53.1	17.5	17.5	17.5	14.1	14.1	14.1
LOS by Move:	F	F	F	F	F	F	C	C	C	B	B	B
ApproachDel:	122.3			53.1			17.5			14.1		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	122.3			53.1			17.5			14.1		
LOS by Appr:	F			F			C			B		

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #217 Arguello/Jackson

Cycle (sec): 100 Critical Vol./Cap. (X): 0.693
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 14.6
Optimal Cycle: 0 Level Of Service: B

Street Name:	Arguello Blvd.						Jackson St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1	1 0	0 1	0	0 0	0 0	0	0 0	0 0	1!	0 0
Volume Module:												
Base Vol:	0	486	139	48	416	0	0	0	0	96	0	67
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	486	139	48	416	0	0	0	0	96	0	67
Added Vol:	0	10	0	0	15	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	496	139	48	431	0	0	0	0	96	0	67
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	496	139	48	431	0	0	0	0	96	0	67
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	496	139	48	431	0	0	0	0	96	0	67
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	496	139	48	431	0	0	0	0	96	0	67
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	1.56	0.44	0.10	0.90	0.00	0.00	0.00	0.00	0.59	0.00	0.41
Final Sat.:	0	1042	303	69	622	0	0	0	0	332	0	232
Capacity Analysis Module:												
Vol/Sat:	xxxx	0.48	0.46	0.69	0.69	xxxx	xxxx	xxxx	xxxx	0.29	xxxx	0.29
Crit Moves:		****			****							****
Delay/Veh:	0.0	12.7	12.0	18.5	18.5	0.0	0.0	0.0	0.0	11.1	0.0	11.1
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	12.7	12.0	18.5	18.5	0.0	0.0	0.0	0.0	11.1	0.0	11.1
LOS by Move:	*	B	B	C	C	*	*	*	*	B	*	B
ApproachDel:		12.5			18.5			xxxxxx			11.1	
Delay Adj:		1.00			1.00			xxxxx			1.00	
ApprAdjDel:		12.5			18.5			xxxxxx			11.1	
LOS by Appr:		B			C			*			B	

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #218 Arguello/Washington St

Cycle (sec): 100 Critical Vol./Cap. (X): 1.041
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 44.7
Optimal Cycle: 0 Level Of Service: E

Street Name:	Arguello Blvd.						Washington St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1!	0 0	0 0	1!	0 0	0 0	1!	0 0	0 0	1!	0 0
Volume Module:												
Base Vol:	23	592	136	9	471	22	4	11	22	68	6	28
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	23	592	136	9	471	22	4	11	22	68	6	28
Added Vol:	0	10	0	0	15	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	23	602	136	9	486	22	4	11	22	68	6	28
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	23	602	136	9	486	22	4	11	22	68	6	28
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	23	602	136	9	486	22	4	11	22	68	6	28
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	23	602	136	9	486	22	4	11	22	68	6	28
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.03	0.79	0.18	0.02	0.94	0.04	0.11	0.30	0.59	0.67	0.06	0.27
Final Sat.:	22	578	131	12	644	29	55	151	301	342	30	141
Capacity Analysis Module:												
Vol/Sat:	1.04	1.04	1.04	0.75	0.75	0.75	0.07	0.07	0.07	0.20	0.20	0.20
Crit Moves:		****			****			****		****		
Delay/Veh:	66.2	66.2	66.2	22.2	22.2	22.2	10.1	10.1	10.1	11.2	11.2	11.2
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	66.2	66.2	66.2	22.2	22.2	22.2	10.1	10.1	10.1	11.2	11.2	11.2
LOS by Move:	F	F	F	C	C	C	B	B	B	B	B	B
ApproachDel:		66.2			22.2			10.1			11.2	
Delay Adj:		1.00			1.00			1.00			1.00	
ApprAdjDel:		66.2			22.2			10.1			11.2	
LOS by Appr:		F			C			B			B	

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #219 Arguello/Moraga

Cycle (sec): 100 Critical Vol./Cap. (X): 0.661
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 13.9
Optimal Cycle: 0 Level Of Service: B

Street Name:	Arguello						Moraga					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 1	0 0	0	0 0	0 1	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	113	372	0	0	301	73	66	0	53	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	113	372	0	0	301	73	66	0	53	0	0	0
Added Vol:	2	9	0	0	11	1	0	0	4	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	115	381	0	0	312	74	66	0	57	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	115	381	0	0	312	74	66	0	57	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	115	381	0	0	312	74	66	0	57	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	115	381	0	0	312	74	66	0	57	0	0	0
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.23	0.77	0.00	0.00	0.81	0.19	0.54	0.00	0.46	0.00	1.00	0.00
Final Sat.:	174	577	0	0	605	144	310	0	267	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.66	0.66	xxxx	xxxx	0.52	0.52	0.21	xxxx	0.21	xxxx	xxxx	xxxx
Crit Moves:		****				****			****			
Delay/Veh:	16.1	16.1	0.0	0.0	12.4	12.4	9.9	0.0	9.9	0.0	0.0	0.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	16.1	16.1	0.0	0.0	12.4	12.4	9.9	0.0	9.9	0.0	0.0	0.0
LOS by Move:	C	C	*	*	B	B	A	*	A	*	*	*
ApproachDel:	16.1			12.4			9.9			xxxxxx		
Delay Adj:	1.00			1.00			1.00			xxxxx		
ApprAdjDel:	16.1			12.4			9.9			xxxxxx		
LOS by Appr:	C			B			A			*		

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #220 Montgomery/Sheridan

Cycle (sec): 100 Critical Vol./Cap. (X): 0.797
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 18.9
Optimal Cycle: 0 Level Of Service: C

Street Name:	Montgomery St.						Sheridan Ave.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	13	21	10	2	34	31	254	265	142	2	25	5
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	13	21	10	2	34	31	254	265	142	2	25	5
Added Vol:	0	-5	0	0	-2	6	20	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	13	16	10	2	32	37	274	265	142	2	25	5
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	13	16	10	2	32	37	274	265	142	2	25	5
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	13	16	10	2	32	37	274	265	142	2	25	5
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	13	16	10	2	32	37	274	265	142	2	25	5
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.33	0.41	0.26	0.03	0.45	0.52	0.40	0.39	0.21	0.06	0.78	0.16
Final Sat.:	204	251	157	18	290	335	344	333	178	45	560	112
Capacity Analysis Module:												
Vol/Sat:	0.06	0.06	0.06	0.11	0.11	0.11	0.80	0.80	0.80	0.04	0.04	0.04
Crit Moves:			****			****		****		****		
Delay/Veh:	8.8	8.8	8.8	8.8	8.8	8.8	21.0	21.0	21.0	8.0	8.0	8.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	8.8	8.8	8.8	8.8	8.8	8.8	21.0	21.0	21.0	8.0	8.0	8.0
LOS by Move:	A	A	A	A	A	A	C	C	C	A	A	A
ApproachDel:	8.8			8.8			21.0			8.0		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	8.8			8.8			21.0			8.0		
LOS by Appr:	A			A			C			A		

Alternative 4 – AM Peak Hour

Scenario Report

Scenario:	AM 2030-Status Quo
Command:	AM Status Quo
Volume:	AM 2030
Geometry:	AM 2030
Impact Fee:	Default Impact Fee
Trip Generation:	AM 2030-Status Quo
Trip Distribution:	Main Post SEIS
Paths:	Main Post SEIS
Routes:	Default Routes
Configuration:	Default Configuration

Trip Generation Report

Forecast for AM 2030-Status Quo

Zone #	Subzone	Amount	Units	Rate In	Rate Out	Trips In	Trips Out	Total Trips	% Of Total
14	West Crissy	1.00	mixed use	14.00	36.00	14	36	50	12.4
	Zone 14 Subtotal					14	36	50	12.4
15	Ruger & Simo	1.00	mixed use	16.00	21.00	16	21	37	9.2
	Zone 15 Subtotal					16	21	37	9.2
32	S. Main Post	1.00	mixed use	-1.00	4.00	-1	4	3	0.7
	Zone 32 Subtotal					-1	4	3	0.7
33	W. Main Post	1.00	Mixed Use	-23.00	-15.00	-23	-15	-38	-9.5
	Zone 33 Subtotal					-23	-15	-38	-9.5
34	E. Main Post	1.00	mixed use	-17.00	9.00	-17	9	-8	-2.0
	Zone 34 Subtotal					-17	9	-8	-2.0
35	N. Main Post	1.00	mixed use	-10.00	-18.00	-10	-18	-28	-7.0
	Zone 35 Subtotal					-10	-18	-28	-7.0
36	West Letterm	1.00	mixed use	12.00	-35.00	12	-35	-23	-5.7
	Zone 36 Subtotal					12	-35	-23	-5.7
753	LDA	1.00	mixed use	106.00	53.00	106	53	159	39.6
	Zone 753 Subtotal					106	53	159	39.6
767	Commissary/P	1.00	mixed use	90.00	160.00	90	160	250	62.2
	Zone 767 Subtotal					90	160	250	62.2
TOTAL						187	215	402	100.0

Trip Distribution Report

Percent Of Trips M POST SEIS

Zone	To Gates 5	14	16	17	22	28	36
14	0.0	25.0	0.0	10.0	15.0	50.0	0.0
15	0.0	0.0	25.0	0.0	67.5	0.0	7.5
32	0.0	5.0	10.0	10.0	68.0	5.0	2.0
33	0.0	5.0	10.0	10.0	68.0	5.0	2.0
34	0.0	5.0	10.0	10.0	68.0	5.0	2.0
35	0.0	5.0	10.0	10.0	68.0	5.0	2.0
36	0.0	10.0	20.0	15.0	40.0	15.0	0.0
753	20.0	5.0	10.0	5.0	55.0	0.0	5.0
767	14.0	0.0	10.0	10.0	14.0	50.0	2.0

Volume Type	NB Link In	Out	Total	SB Link In	Out	Total	EB Link In	Out	Total	WB Link In	Out	Total	Total Volume
#201 Lombard/Divisadero													
Base	353	390	743	266	195	461	3488	2383	5871	2225	3364	5589	12664
Added	0	0	0	0	0	0	44	54	98	54	44	98	196
Total	353	390	743	266	195	461	3532	2437	5969	2279	3408	5687	12860
#202 Lombard/Richardson													
Base	2387	3417	5804	3196	2233	5429	226	159	385	0	0	0	11618
Added	54	44	98	-13	-8	-21	57	62	119	0	0	0	196
Total	2441	3461	5902	3183	2225	5408	283	221	504	0	0	0	11814
#203 Lyon/Lombard													
Base	159	253	412	366	254	620	539	378	917	95	274	369	2318
Added	7	7	14	0	0	0	64	69	133	62	57	119	266
Total	166	260	426	366	254	620	603	447	1050	157	331	488	2584
#204 Greenwich/Divisadero													
Base	335	361	696	396	358	754	186	125	311	142	215	357	2118
Added	0	0	0	0	0	0	7	7	14	7	7	14	28
Total	335	361	696	396	358	754	193	132	325	149	222	371	2146
#205 Greenwich/Lyon													
Base	107	164	271	248	173	421	0	0	0	88	106	194	886
Added	0	0	0	7	7	14	0	0	0	7	7	14	28
Total	107	164	271	255	180	435	0	0	0	95	113	208	914
#206 Francisco/Richardson													
Base	2222	3170	5392	3113	2529	5642	287	57	344	198	64	262	11640
Added	-8	-13	-21	-13	-8	-21	0	0	0	0	0	0	-42
Total	2214	3157	5371	3100	2521	5621	287	57	344	198	64	262	11598
#207 Richardson/Gorgas													
Base	17	37	54	160	16	176	3137	2682	5819	2526	3105	5631	11680
Added	-13	0	-13	0	0	0	0	-8	-8	-8	-13	-21	-42
Total	4	37	41	160	16	176	3137	2674	5811	2518	3092	5610	11638
#208 Doyle/Marina/Lyon													
Base	12	41	53	128	321	449	1349	291	1640	606	1442	2048	4190
Added	0	0	0	97	49	146	-5	2	-3	51	92	143	286
Total	12	41	53	225	370	595	1344	293	1637	657	1534	2191	4476
#209 Graham/Lincoln													
Base	277	180	457	44	92	136	465	421	886	571	664	1235	2714
Added	15	9	24	-1	0	-1	10	-7	3	2	24	26	52
Total	292	189	481	43	92	135	475	414	889	573	688	1261	2766
#210 Lincoln/Halleck													
Base	0	0	0	300	379	679	620	652	1272	688	577	1265	3216
Added	0	0	0	45	25	70	29	0	29	5	54	59	158
Total	0	0	0	345	404	749	649	652	1301	693	631	1324	3374

Volume Type	NB Link In	NB Link Out	NB Link Total	SB Link In	SB Link Out	SB Link Total	EB Link In	EB Link Out	EB Link Total	WB Link In	WB Link Out	WB Link Total	Total Volume
#211 Lincoln/Girard													
Base	0	0	0	548	393	941	605	681	1286	575	654	1229	3456
Added	0	0	0	-21	17	-4	55	-5	50	16	38	54	100
Total	0	0	0	527	410	937	660	676	1336	591	692	1283	3556
#212 Presidio/Letterman/Lincoln													
Base	528	557	1085	644	632	1276	289	198	487	66	140	206	3054
Added	22	34	56	31	19	50	3	-5	-2	8	16	24	128
Total	550	591	1141	675	651	1326	292	193	485	74	156	230	3182
#213 Lombard/Presidio													
Base	746	660	1406	560	512	1072	0	0	0	412	546	958	3436
Added	33	24	57	34	21	55	0	0	0	16	38	54	166
Total	779	684	1463	594	533	1127	0	0	0	428	584	1012	3602
#214 Presidio/Pacific													
Base	698	649	1347	671	716	1387	83	70	153	93	110	203	3090
Added	21	18	39	18	21	39	0	0	0	0	0	0	78
Total	719	667	1386	689	737	1426	83	70	153	93	110	203	3168
#215 Presidio/Jackson													
Base	683	632	1315	654	701	1355	171	171	342	263	267	530	3542
Added	21	18	39	18	21	39	0	0	0	0	0	0	78
Total	704	650	1354	672	722	1394	171	171	342	263	267	530	3620
#216 Presidio/Washington													
Base	654	489	1143	524	694	1218	239	144	383	135	225	360	3104
Added	21	18	39	18	21	39	0	0	0	0	0	0	78
Total	675	507	1182	542	715	1257	239	144	383	135	225	360	3182
#217 Arguello/Jackson													
Base	625	512	1137	464	553	1017	0	0	0	163	187	350	2504
Added	12	15	27	15	12	27	0	0	0	0	0	0	54
Total	637	527	1164	479	565	1044	0	0	0	163	187	350	2558
#218 Arguello/Washington St													
Base	751	561	1312	502	624	1126	37	51	88	102	156	258	2784
Added	12	15	27	15	12	27	0	0	0	0	0	0	54
Total	763	576	1339	517	636	1153	37	51	88	102	156	258	2838
#219 Arguello/Moraga													
Base	485	354	839	0	0	0	119	186	305	374	438	812	1956
Added	12	15	27	0	0	0	7	0	7	10	14	24	58
Total	497	369	866	0	0	0	126	186	312	384	452	836	2014
#220 Montgomery/Sheridan													
Base	34	176	210	90	540	630	661	69	730	0	0	0	1570
Added	-9	-2	-11	4	9	13	18	6	24	0	0	0	26
Total	25	174	199	94	549	643	679	75	754	0	0	0	1596

Impact Analysis Report
Level Of Service

Intersection	Base LOS	Base Del/ Veh	Base V/ C	Future LOS	Future Del/ Veh	Future V/ C	Change in
#201 Lombard/Divisadero	B	13.9	0.914	B	14.5	0.922	+ 0.586 D/V
#202 Lombard/Richardson	A	6.0	0.431	A	6.3	0.429	+ 0.241 D/V
#203 Lyon/Lombard	C	21.3	0.843	D	34.3	0.981	+ 0.138 V/C
#204 Greenwich/Divisadero	B	13.9	0.614	B	14.1	0.622	+ 0.007 V/C
#205 Greenwich/Lyon	A	8.5	0.300	A	8.6	0.310	+ 0.010 V/C
#206 Francisco/Richardson	B	15.1	0.753	B	15.0	0.750	-0.164 D/V
#207 Richardson/Gorgas	A	8.1	0.699	A	8.0	0.698	-0.030 D/V
#208 Doyle/Marina/Lyon	C	34.6	0.450	C	34.0	0.503	-0.569 D/V
#209 Graham/Lincoln	C	20.5	0.784	C	21.4	0.810	+ 0.026 V/C
#210 Lincoln/Halleck	F	170.0	0.000	F	301.5	0.000	+131.462 D/V
#211 Lincoln/Girard	F	672.2	0.000	F	796.6	0.000	+124.477 D/V
#212 Presidio/Letterman/Lincoln	C	20.0	0.788	C	22.9	0.849	+ 0.061 V/C
#213 Lombard/Presidio	F	78.5	1.271	F	92.4	1.346	+ 0.075 V/C
#214 Presidio/Pacific	F	60.6	1.052	F	68.6	1.084	+ 0.032 V/C
#215 Presidio/Jackson	F	116.3	1.270	F	128.0	1.309	+ 0.039 V/C
#216 Presidio/Washington	F	64.5	1.142	F	74.6	1.189	+ 0.047 V/C
#217 Arguello/Jackson	B	14.1	0.670	B	14.6	0.693	+ 0.023 V/C
#218 Arguello/Washington St	E	41.4	1.023	E	45.2	1.044	+ 0.021 V/C
#219 Arguello/Moraga	B	14.9	0.667	C	15.7	0.689	+ 0.022 V/C
#220 Montgomery/Sheridan	C	18.7	0.786	C	19.9	0.805	+ 0.019 V/C

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #201 Lombard/Divisadero

Cycle (sec): 100 Critical Vol./Cap. (X): 0.922
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 14.5
Optimal Cycle: 90 Level Of Service: B

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Permitted				Permitted				Permitted				Permitted			
Rights:	Include				Include				Include				Include			
Min. Green:	24	24	24		24	24	24		59	59	59		59	59	59	
Lanes:	1	0	0	1 0	1	0	0	1 0	0	1	1	1 0	0	1	1	1 0
Volume Module:																
Base Vol:	204	119	30		96	140	30		0	3238	250		0	2149	76	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	204	119	30		96	140	30		0	3238	250		0	2149	76	
Added Vol:	0	0	0		0	0	0		0	44	0		0	54	0	
PasserByVol:	0	0	0		0	0	0		0	0	0		0	0	0	
Initial Fut:	204	119	30		96	140	30		0	3282	250		0	2203	76	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Volume:	204	119	30		96	140	30		0	3282	250		0	2203	76	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	204	119	30		96	140	30		0	3282	250		0	2203	76	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Final Vol.:	204	119	30		96	140	30		0	3282	250		0	2203	76	
Saturation Flow Module:																
Sat/Lane:	1900	1900	1900		1900	1900	1900		1900	1900	1900		1900	1900	1900	
Adjustment:	0.46	0.97	0.97		0.49	0.97	0.97		0.91	0.90	0.90		0.91	0.91	0.91	
Lanes:	1.00	0.80	0.20		1.00	0.82	0.18		0.00	2.79	0.21		0.00	2.90	0.10	
Final Sat.:	872	1472	371		937	1524	327		0	4767	363		0	4989	172	
Capacity Analysis Module:																
Vol/Sat:	0.23	0.08	0.08		0.10	0.09	0.09		0.00	0.69	0.69		0.00	0.44	0.44	
Crit Moves:	****									****						
Green/Cycle:	0.27	0.27	0.27		0.27	0.27	0.27		0.00	0.73	0.73		0.00	0.73	0.73	
Volume/Cap:	0.88	0.30	0.30		0.38	0.34	0.34		0.00	0.94	0.94		0.00	0.60	0.60	
Uniform Del:	31.6	26.3	26.3		27.0	26.6	26.6		0.0	10.3	10.3		0.0	5.7	5.7	
IncremntDel:	29.1	0.4	0.4		1.0	0.4	0.4		0.0	5.5	5.5		0.0	0.3	0.3	
Delay Adj:	1.00	1.00	1.00		1.00	1.00	1.00		0.00	1.00	1.00		0.00	1.00	1.00	
Delay/Veh:	60.7	26.7	26.7		27.9	27.1	27.1		0.0	15.8	15.8		0.0	6.0	6.0	
User DelAdj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
AdjDel/Veh:	60.7	26.7	26.7		27.9	27.1	27.1		0.0	15.8	15.8		0.0	6.0	6.0	
HCM2kAvg:	15	3	3		5	4	4		0	33	33		0	11	11	

Level Of Service Computation Report
1994 HCM Operations Method (Future Volume Alternative)

Intersection #202 Lombard/Richardson

Cycle (sec): 90 Critical Vol./Cap. (X): 0.429
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 6.3
Optimal Cycle: 90 Level Of Service: A

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Protected				Protected				Protected				Protected			
Rights:	Include				Include				Ovl				Include			
Min. Green:	25	90	0		0	57	57		0	0	25		0	0	0	
Lanes:	1	0	3	0 0	0	0	2	1 0	0	0	0	0 1	0	0	0	0 0
Volume Module:																
Base Vol:	154	2233	0		0	3191	5		0	0	226		0	0	0	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	154	2233	0		0	3191	5		0	0	226		0	0	0	
Added Vol:	62	-8	0		0	-13	0		0	0	57		0	0	0	
PasserByVol:	0	0	0		0	0	0		0	0	0		0	0	0	
Initial Fut:	216	2225	0		0	3178	5		0	0	283		0	0	0	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Volume:	216	2225	0		0	3178	5		0	0	283		0	0	0	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	216	2225	0		0	3178	5		0	0	283		0	0	0	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.10	1.00		1.00	1.10	1.10		1.00	1.00	1.00		1.00	1.00	1.00	
Final Vol.:	216	2447	0		0	3496	6		0	0	283		0	0	0	
Saturation Flow Module:																
Sat/Lane:	1900	1900	1900		1900	1900	1900		1900	1900	1900		1900	1900	1900	
Adjustment:	0.95	1.00	1.00		1.00	1.00	1.00		1.00	1.00	0.77		1.00	1.00	1.00	
Lanes:	1.00	3.00	0.00		0.00	2.99	0.01		0.00	0.00	1.00		0.00	0.00	0.00	
Final Sat.:	1805	5700	0		0	5691	9		0	0	1463		0	0	0	
Capacity Analysis Module:																
Vol/Sat:	0.12	0.43	0.00		0.00	0.61	0.61		0.00	0.00	0.19		0.00	0.00	0.00	
Crit Moves:		****			****				****							
Green/Cycle:	0.30	1.00	0.00		0.00	0.70	0.70		0.00	0.00	0.30		0.00	0.00	0.00	
Volume/Cap:	0.39	0.43	0.00		0.00	0.88	0.88		0.00	0.00	0.63		0.00	0.00	0.00	
Uniform Del:	18.8	0.0	0.0		0.0	8.2	8.2		0.0	0.0	20.5		0.0	0.0	0.0	
IncremntDel:	0.2	0.0	0.0		0.0	2.0	2.0		0.0	0.0	2.1		0.0	0.0	0.0	
Delay Adj:	0.85	0.85	0.00		0.00	0.85	0.85		0.00	0.00	0.85		0.00	0.00	0.00	
Delay/Veh:	16.2	0.0	0.0		0.0	9.0	9.0		0.0	0.0	19.5		0.0	0.0	0.0	
User DelAdj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
AdjDel/Veh:	16.2	0.0	0.0		0.0	9.0	9.0		0.0	0.0	19.5		0.0	0.0	0.0	
DesignQueue:	8	0	0		0	64	0		0	0	10		0	0	0	

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #203 Lyon/Lombard

Cycle (sec): 100 Critical Vol./Cap. (X): 0.981
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 34.3
Optimal Cycle: 0 Level Of Service: D

Street Name:	Lyon St.						Lombard St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T	- R		L - T	- R		L - T	- R		L - T	- R	
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	114	37	8	21	151	194	197	245	97	5	70	20
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	114	37	8	21	151	194	197	245	97	5	70	20
Added Vol:	7	0	0	0	0	0	0	57	7	0	62	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	121	37	8	21	151	194	197	302	104	5	132	20
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	121	37	8	21	151	194	197	302	104	5	132	20
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	121	37	8	21	151	194	197	302	104	5	132	20
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	121	37	8	21	151	194	197	302	104	5	132	20
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.73	0.22	0.05	0.06	0.41	0.53	0.33	0.50	0.17	0.03	0.84	0.13
Final Sat.:	354	108	23	33	234	301	201	308	106	16	423	64
Capacity Analysis Module:												
Vol/Sat:	0.34	0.34	0.34	0.64	0.64	0.64	0.98	0.98	0.98	0.31	0.31	0.31
Crit Moves:		****			****			****			****	
Delay/Veh:	13.4	13.4	13.4	19.1	19.1	19.1	54.9	54.9	54.9	12.4	12.4	12.4
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	13.4	13.4	13.4	19.1	19.1	19.1	54.9	54.9	54.9	12.4	12.4	12.4
LOS by Move:	B	B	B	C	C	C	F	F	F	B	B	B
ApproachDel:	13.4			19.1			54.9			12.4		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	13.4			19.1			54.9			12.4		
LOS by Appr:	B			C			F			B		

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #204 Greenwich/Divisadero

Cycle (sec): 100 Critical Vol./Cap. (X): 0.622
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 14.1
Optimal Cycle: 0 Level Of Service: B

Street Name:	Divisadero						Greenwich					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T	- R		L - T	- R		L - T	- R		L - T	- R	
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	19	304	12	47	337	12	17	156	13	11	94	37
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	19	304	12	47	337	12	17	156	13	11	94	37
Added Vol:	0	0	0	0	0	0	0	7	0	0	7	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	19	304	12	47	337	12	17	163	13	11	101	37
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	19	304	12	47	337	12	17	163	13	11	101	37
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	19	304	12	47	337	12	17	163	13	11	101	37
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	19	304	12	47	337	12	17	163	13	11	101	37
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.06	0.91	0.03	0.12	0.85	0.03	0.09	0.84	0.07	0.07	0.68	0.25
Final Sat.:	35	565	22	76	542	19	47	453	36	39	355	130
Capacity Analysis Module:												
Vol/Sat:	0.54	0.54	0.54	0.62	0.62	0.62	0.36	0.36	0.36	0.28	0.28	0.28
Crit Moves:		****			****			****			****	
Delay/Veh:	14.2	14.2	14.2	16.2	16.2	16.2	11.9	11.9	11.9	11.0	11.0	11.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	14.2	14.2	14.2	16.2	16.2	16.2	11.9	11.9	11.9	11.0	11.0	11.0
LOS by Move:	B	B	B	C	C	C	B	B	B	B	B	B
ApproachDel:	14.2			16.2			11.9			11.0		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	14.2			16.2			11.9			11.0		
LOS by Appr:	B			C			B			B		

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #205 Greenwich/Lyon

Cycle (sec): 100 Critical Vol./Cap. (X): 0.310
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 8.6
Optimal Cycle: 0 Level Of Service: A

Street Name:	Lyon									Greenwich		
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	0 1	0	0 1	0 0	0	0 0	0 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	0	103	4	102	146	0	0	0	0	18	0	70
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	103	4	102	146	0	0	0	0	18	0	70
Added Vol:	0	0	0	7	0	0	0	0	0	0	0	7
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	103	4	109	146	0	0	0	0	18	0	77
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	103	4	109	146	0	0	0	0	18	0	77
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	103	4	109	146	0	0	0	0	18	0	77
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	103	4	109	146	0	0	0	0	18	0	77
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.96	0.04	0.43	0.57	0.00	0.00	0.00	0.00	0.19	0.00	0.81
Final Sat.:	0	778	30	352	471	0	0	0	0	151	0	648
Capacity Analysis Module:												
Vol/Sat:	xxxx	0.13	0.13	0.31	0.31	xxxx	xxxx	xxxx	xxxx	0.12	xxxx	0.12
Crit Moves:		****			****					****		
Delay/Veh:	0.0	8.0	8.0	9.2	9.2	0.0	0.0	0.0	0.0	7.7	0.0	7.7
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	8.0	8.0	9.2	9.2	0.0	0.0	0.0	0.0	7.7	0.0	7.7
LOS by Move:	*	A	A	A	A	*	*	*	*	A	*	A
ApproachDel:		8.0			9.2			xxxxxx			7.7	
Delay Adj:		1.00			1.00			xxxxx			1.00	
ApprAdjDel:		8.0			9.2			xxxxxx			7.7	
LOS by Appr:		A			A			*			A	

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #206 Francisco/Richardson

Cycle (sec): 90 Critical Vol./Cap. (X): 0.750
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 15.0
Optimal Cycle: 90 Level Of Service: B

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L - T - R				L - T - R				L - T - R				L - T - R			
Control:	Permitted				Permitted				Permitted				Permitted			
Rights:	Include				Include				Include				Include			
Min. Green:	51	51	51	51	51	51	51	51	31	31	31	31	31	31	31	31
Lanes:	0 0	2 1	0	0	0 0	2 1	0	0	0 1	0 1	0	0	0 0	1! 0	0	
Volume Module:																
Base Vol:	0	2222	0	0	3113	0	177	64	46	11	57	130				
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
Initial Bse:	0	2222	0	0	3113	0	177	64	46	11	57	130				
Added Vol:	0	-8	0	0	-13	0	0	0	0	0	0	0				
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0				
Initial Fut:	0	2214	0	0	3100	0	177	64	46	11	57	130				
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
PHF Volume:	0	2214	0	0	3100	0	177	64	46	11	57	130				
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0				
Reduced Vol:	0	2214	0	0	3100	0	177	64	46	11	57	130				
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
Final Vol.:	0	2214	0	0	3100	0	177	64	46	11	57	130				
Saturation Flow Module:																
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900				
Adjustment:	1.00	0.91	0.91	1.00	0.91	0.91	0.61	0.61	0.61	0.89	0.89	0.89				
Lanes:	0.00	3.00	0.00	0.00	3.00	0.00	1.00	0.58	0.42	0.05	0.29	0.66				
Final Sat.:	0	5187	0	0	5187	0	1159	674	485	94	488	1114				
Capacity Analysis Module:																
Vol/Sat:	0.00	0.43	0.00	0.00	0.60	0.00	0.15	0.09	0.09	0.12	0.12	0.12				
Crit Moves:					****		****									
Green/Cycle:	0.00	0.66	0.00	0.00	0.66	0.00	0.34	0.34	0.34	0.34	0.34	0.34				
Volume/Cap:	0.00	0.65	0.00	0.00	0.91	0.00	0.44	0.28	0.28	0.34	0.34	0.34				
Uniform Del:	0.0	9.3	0.0	0.0	13.3	0.0	22.8	21.4	21.4	21.9	21.9	21.9				
IncremntDel:	0.0	0.5	0.0	0.0	4.2	0.0	0.5	0.1	0.1	0.3	0.3	0.3				
Delay Adj:	0.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00				
Delay/Veh:	0.0	9.8	0.0	0.0	17.5	0.0	23.3	21.5	21.5	22.2	22.2	22.2				
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
AdjDel/Veh:	0.0	9.8	0.0	0.0	17.5	0.0	23.3	21.5	21.5	22.2	22.2	22.2				
HCM2kAvg:	0	13	0	0	29	0	6	3	3	4	4	4				

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #207 Richardson/Gorgas

Cycle (sec): 90 Critical Vol./Cap. (X): 0.698
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 8.0
Optimal Cycle: 90 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Split Phase			Split Phase			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	10	10	10	12	12	12	52	52	52	52	52	52
Lanes:	1 0	1! 0	0	0 0	0 0	1	0 0	3 0	1	0 0	2 1	0
Volume Module:												
Base Vol:	12	0	5	0	0	160	0	3100	37	0	2510	16
Growth Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	12	0	5	0	0	160	0	3100	37	0	2510	16
Added Vol:	0	0	-13	0	0	0	0	0	0	0	-8	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	12	0	0	0	0	160	0	3100	37	0	2502	16
User Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	12	0	0	0	0	160	0	3100	37	0	2502	16
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	12	0	0	0	0	160	0	3100	37	0	2502	16
PCE Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	12	0	0	0	0	160	0	3100	37	0	2502	16
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	1.00	1.00	1.00	1.00	0.87	1.00	0.91	0.85	1.00	0.91	0.91
Lanes:	2.00	0.00	0.00	0.00	0.00	1.00	0.00	3.00	1.00	0.00	2.98	0.02
Final Sat.:	3618	0	0	0	0	1644	0	5187	1615	0	5149	33
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.00	0.00	0.10	0.00	0.60	0.02	0.00	0.49	0.49
Crit Moves:	****					****		****				
Green/Cycle:	0.11	0.00	0.00	0.00	0.00	0.13	0.00	0.76	0.76	0.00	0.76	0.76
Volume/Cap:	0.03	0.00	0.00	0.00	0.00	0.73	0.00	0.79	0.03	0.00	0.64	0.64
Uniform Del:	35.7	0.0	0.0	0.0	0.0	37.4	0.0	6.7	2.8	0.0	5.2	5.2
IncremntDel:	0.0	0.0	0.0	0.0	0.0	11.8	0.0	1.1	0.0	0.0	0.4	0.4
Delay Adj:	1.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00
Delay/Veh:	35.7	0.0	0.0	0.0	0.0	49.2	0.0	7.8	2.8	0.0	5.6	5.6
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	35.7	0.0	0.0	0.0	0.0	49.2	0.0	7.8	2.8	0.0	5.6	5.6
HCM2kAvg:	0	0	0	0	0	6	0	19	0	0	12	12

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #208 Doyle/Marina/Lyon

Cycle (sec): 75 Critical Vol./Cap. (X): 0.503
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 34.0
Optimal Cycle: 96 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	29	0	29	29	0	29	0	38	38	38	38	38
Lanes:	1 0	0 0	1	1 0	0 0	1	0 0	1 1	0	0 0	1 1	0
Volume Module:												
Base Vol:	0	0	12	122	0	6	0	1308	41	0	285	321
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	12	122	0	6	0	1308	41	0	285	321
Added Vol:	0	0	0	97	0	0	0	-5	0	0	2	49
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	12	219	0	6	0	1303	41	0	287	370
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	12	219	0	6	0	1303	41	0	287	370
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	12	219	0	6	0	1303	41	0	287	370
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	0	12	219	0	6	0	1303	41	0	287	370
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	0.85	0.95	1.00	0.85	1.00	0.95	0.95	1.00	0.87	0.87
Lanes:	1.00	0.00	1.00	1.00	0.00	1.00	0.00	1.94	0.06	0.00	1.00	1.00
Final Sat.:	1900	0	1615	1805	0	1615	0	3482	110	0	1653	1653
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.01	0.12	0.00	0.00	0.00	0.37	0.37	0.00	0.17	0.22
Crit Moves:			****	****				****				
Green/Cycle:	0.00	0.00	0.30	0.30	0.00	0.60	0.00	0.40	0.40	0.00	0.40	0.40
Volume/Cap:	0.00	0.00	0.02	0.40	0.00	0.01	0.00	0.95	0.95	0.00	0.44	0.57
Uniform Del:	0.0	0.0	23.6	26.6	0.0	7.5	0.0	28.0	28.0	0.0	21.2	22.6
IncremntDel:	0.0	0.0	0.0	0.5	0.0	0.0	0.0	13.0	13.0	0.0	0.2	0.7
Delay Adj:	0.00	0.00	1.00	1.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00
Delay/Veh:	0.0	0.0	23.6	27.1	0.0	7.6	0.0	41.0	41.0	0.0	21.4	23.2
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	23.6	27.1	0.0	7.6	0.0	41.0	41.0	0.0	21.4	23.2
HCM2kAvg:	0	0	0	6	0	0	0	24	24	0	6	9

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #209 Graham/Lincoln

Cycle (sec): 100 Critical Vol./Cap. (X): 0.810
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 21.4
Optimal Cycle: 0 Level Of Service: C

Street Name:	Graham St.						Lincoln Blvd.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	1 0	0 1	0	1 0	0 1	0
Volume Module:												
Base Vol:	27	30	220	18	10	16	20	426	19	151	378	42
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	27	30	220	18	10	16	20	426	19	151	378	42
Added Vol:	0	0	15	-1	0	0	0	10	0	9	-7	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	27	30	235	17	10	16	20	436	19	160	371	42
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	27	30	235	17	10	16	20	436	19	160	371	42
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	27	30	235	17	10	16	20	436	19	160	371	42
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	27	30	235	17	10	16	20	436	19	160	371	42
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.09	0.10	0.81	0.40	0.23	0.37	1.00	0.96	0.04	1.00	0.90	0.10
Final Sat.:	52	57	449	171	101	161	514	538	23	522	516	58
Capacity Analysis Module:												
Vol/Sat:	0.52	0.52	0.52	0.10	0.10	0.10	0.04	0.81	0.81	0.31	0.72	0.72
Crit Moves:		****			****				****		****	
Delay/Veh:	14.8	14.8	14.8	10.8	10.8	10.8	9.8	29.5	29.5	12.3	22.4	22.4
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	14.8	14.8	14.8	10.8	10.8	10.8	9.8	29.5	29.5	12.3	22.4	22.4
LOS by Move:	B	B	B	B	B	B	A	D	D	B	C	C
ApproachDel:	14.8			10.8			28.7			19.6		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	14.8			10.8			28.7			19.6		
LOS by Appr:	B			B			D			C		

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #210 Lincoln/Halleck

Average Delay (sec/veh): 62.7 Worst Case Level Of Service: F[301.5]

Street Name:	Halleck St.						Lincoln Blvd.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0	0 0	0	0 0	1! 0	0	1 0	1 0	0	0 0	0 1	0
Volume Module:												
Base Vol:	0	0	0	123	0	177	166	454	0	0	475	213
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	123	0	177	166	454	0	0	475	213
Added Vol:	0	0	0	33	0	12	8	21	0	0	-12	17
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	156	0	189	174	475	0	0	463	230
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	156	0	189	174	475	0	0	463	230
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	0	0	0	156	0	189	174	475	0	0	463	230
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	6.4	xxxx	6.2	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	3.5	xxxx	3.3	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	1401	xxxx	578	693	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	156	xxxx	519	912	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	133	xxxx	519	912	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	1.17	xxxx	0.36	0.19	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.7	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	9.9	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	A	*	*	*	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	225	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	21.2	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	302	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	F	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			301.5			xxxxxx			xxxxxx		
ApproachLOS:	*			F			*			*		

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #211 Lincoln/Girard

Average Delay (sec/veh): 237.5 Worst Case Level Of Service: F[796.6]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Stop Sign				Stop Sign				Uncontrolled				Uncontrolled			
Rights:	Include				Include				Include				Include			
Lanes:	0	0	0	0 0	0	0	1!	0 0	1	0	1	0 0	0	0	0	1 0
Volume Module:																
Base Vol:	0	0	0	276	0	272	227	378	0	0	409	166				
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
Initial Bse:	0	0	0	276	0	272	227	378	0	0	409	166				
Added Vol:	0	0	0	0	0	-21	17	38	0	0	16	0				
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0				
Initial Fut:	0	0	0	276	0	251	244	416	0	0	425	166				
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
PHF Volume:	0	0	0	276	0	251	244	416	0	0	425	166				
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0				
Final Vol.:	0	0	0	276	0	251	244	416	0	0	425	166				
Critical Gap Module:																
Critical Gp:	xxxxx	xxxx	xxxxx	6.4	xxxx	6.2	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
FollowUpTim:	xxxxx	xxxx	xxxxx	3.5	xxxx	3.3	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
Capacity Module:																
Cnflict Vol:	xxxx	xxxx	xxxxx	1412	xxxx	508	591	xxxx	xxxxx	xxxx	xxxx	xxxxx				
Potent Cap.:	xxxx	xxxx	xxxxx	154	xxxx	569	995	xxxx	xxxxx	xxxx	xxxx	xxxxx				
Move Cap.:	xxxx	xxxx	xxxxx	125	xxxx	569	995	xxxx	xxxxx	xxxx	xxxx	xxxxx				
Volume/Cap:	xxxx	xxxx	xxxx	2.22	xxxx	0.44	0.25	xxxx	xxxx	xxxx	xxxx	xxxx				
Level Of Service Module:																
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	1.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	9.8	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
LOS by Move:	*	*	*	*	*	*	A	*	*	*	*	*				
Movement:	LT - LTR - RT				LT - LTR - RT				LT - LTR - RT				LT - LTR - RT			
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	198	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx				
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	45.4	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	797	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
Shared LOS:	*	*	*	*	F	*	*	*	*	*	*	*				
ApproachDel:	xxxxxx				796.6		xxxxxx			xxxxxx						
ApproachLOS:	*				F		*			*						

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #212 Presidio/Letterman/Lincoln

Cycle (sec): 100 Critical Vol./Cap. (X): 0.849
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 22.9
Optimal Cycle: 0 Level Of Service: C

Street Name:	Lincoln/Presidio						Presidio/Letterman					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	0	1 0	0 1	0	0	0 0	1!	0 0	0 0	1!	0 0
Volume Module:												
Base Vol:	104	415	9	101	464	79	174	30	85	8	15	43
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	104	415	9	101	464	79	174	30	85	8	15	43
Added Vol:	-5	16	11	5	26	0	0	0	3	5	0	3
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	99	431	20	106	490	79	174	30	88	13	15	46
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	99	431	20	106	490	79	174	30	88	13	15	46
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	99	431	20	106	490	79	174	30	88	13	15	46
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	99	431	20	106	490	79	174	30	88	13	15	46
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.96	0.04	0.31	1.46	0.23	0.60	0.10	0.30	0.18	0.20	0.62
Final Sat.:	489	508	24	164	778	128	304	52	154	78	90	276
Capacity Analysis Module:												
Vol/Sat:	0.20	0.85	0.85	0.65	0.63	0.62	0.57	0.57	0.57	0.17	0.17	0.17
Crit Moves:		****		****				****				****
Delay/Veh:	11.7	35.4	35.4	20.6	19.6	18.6	17.7	17.7	17.7	11.6	11.6	11.6
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	11.7	35.4	35.4	20.6	19.6	18.6	17.7	17.7	17.7	11.6	11.6	11.6
LOS by Move:	B	E	E	C	C	C	C	C	C	B	B	B
ApproachDel:	31.1			19.6			17.7			11.6		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	31.1			19.6			17.7			11.6		
LOS by Appr:	D			C			C			B		

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #213 Lombard/Presidio

Cycle (sec): 100 Critical Vol./Cap. (X): 1.346
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 92.4
Optimal Cycle: 0 Level Of Service: F

Street Name:	Presidio Blvd.						Lombard St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	0	1 0	1 0	1 0	0	0 0	0 0	0	1 0	0 0	1
Volume Module:												
Base Vol:	0	391	355	191	369	0	0	0	0	291	0	121
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	391	355	191	369	0	0	0	0	291	0	121
Added Vol:	0	17	16	22	12	0	0	0	0	12	0	4
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	408	371	213	381	0	0	0	0	303	0	125
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	408	371	213	381	0	0	0	0	303	0	125
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	408	371	213	381	0	0	0	0	303	0	125
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	408	371	213	381	0	0	0	0	303	0	125
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.52	0.48	1.00	1.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Final Sat.:	0	303	276	489	526	0	0	0	0	462	0	544
Capacity Analysis Module:												
Vol/Sat:	xxxx	1.35	1.35	0.44	0.72	xxxx	xxxx	xxxx	xxxx	0.66	xxxx	0.23
Crit Moves:		****			****					****		
Delay/Veh:	0.0	186	186.1	15.5	25.1	0.0	0.0	0.0	0.0	23.7	0.0	11.2
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	186	186.1	15.5	25.1	0.0	0.0	0.0	0.0	23.7	0.0	11.2
LOS by Move:	*	F	F	C	D	*	*	*	*	C	*	B
ApproachDel:	186.1				21.7		xxxxxx			20.0		
Delay Adj:	1.00				1.00		xxxxx			1.00		
ApprAdjDel:	186.1				21.7		xxxxxx			20.0		
LOS by Appr:	F				C		*			C		

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #214 Presidio/Pacific

Cycle (sec): 100 Critical Vol./Cap. (X): 1.084
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 68.6
Optimal Cycle: 0 Level Of Service: F

Street Name:	Presidio Blvd.						Pacific Ave.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	12	655	31	46	593	32	32	33	18	38	26	29
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	12	655	31	46	593	32	32	33	18	38	26	29
Added Vol:	0	21	0	0	18	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	12	676	31	46	611	32	32	33	18	38	26	29
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	12	676	31	46	611	32	32	33	18	38	26	29
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	12	676	31	46	611	32	32	33	18	38	26	29
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	12	676	31	46	611	32	32	33	18	38	26	29
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.02	0.94	0.04	0.07	0.89	0.04	0.38	0.40	0.22	0.41	0.28	0.31
Final Sat.:	11	623	29	44	587	31	190	195	107	204	140	156
Capacity Analysis Module:												
Vol/Sat:	1.08	1.08	1.08	1.04	1.04	1.04	0.17	0.17	0.17	0.19	0.19	0.19
Crit Moves:		****			****			****			****	
Delay/Veh:	82.2	82.2	82.2	68.8	68.8	68.8	11.6	11.6	11.6	11.7	11.7	11.7
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	82.2	82.2	82.2	68.8	68.8	68.8	11.6	11.6	11.6	11.7	11.7	11.7
LOS by Move:	F	F	F	F	F	F	B	B	B	B	B	B
ApproachDel:	82.2			68.8			11.6			11.7		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	82.2			68.8			11.6			11.7		
LOS by Appr:	F			F			B			B		

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #215 Presidio/Jackson

Cycle (sec): 100 Critical Vol./Cap. (X): 1.309
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 128.0
Optimal Cycle: 0 Level Of Service: F

Street Name:	Presidio Blvd.						Jackson St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	9	615	59	59	565	30	11	149	11	56	132	75
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	9	615	59	59	565	30	11	149	11	56	132	75
Added Vol:	0	21	0	0	18	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	9	636	59	59	583	30	11	149	11	56	132	75
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	9	636	59	59	583	30	11	149	11	56	132	75
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	9	636	59	59	583	30	11	149	11	56	132	75
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	9	636	59	59	583	30	11	149	11	56	132	75
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.01	0.91	0.08	0.09	0.87	0.04	0.06	0.88	0.06	0.21	0.50	0.29
Final Sat.:	7	486	45	47	464	24	28	377	28	100	235	133
Capacity Analysis Module:												
Vol/Sat:	1.31	1.31	1.31	1.26	1.26	1.26	0.40	0.40	0.40	0.56	0.56	0.56
Crit Moves:			****		****		****			****		
Delay/Veh:	172.8	173	172.8	151.9	152	151.9	16.0	16.0	16.0	19.6	19.6	19.6
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	172.8	173	172.8	151.9	152	151.9	16.0	16.0	16.0	19.6	19.6	19.6
LOS by Move:	F	F	F	F	F	F	C	C	C	C	C	C
ApproachDel:	172.8			151.9			16.0			19.6		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	172.8			151.9			16.0			19.6		
LOS by Appr:	F			F			C			C		

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #216 Presidio/Washington

Cycle (sec): 100 Critical Vol./Cap. (X): 1.189
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 74.6
Optimal Cycle: 0 Level Of Service: F

Street Name:	Presidio Blvd.						Washington St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	15	610	29	38	440	46	59	158	22	27	83	25
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	15	610	29	38	440	46	59	158	22	27	83	25
Added Vol:	0	21	0	0	18	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	15	631	29	38	458	46	59	158	22	27	83	25
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	15	631	29	38	458	46	59	158	22	27	83	25
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	15	631	29	38	458	46	59	158	22	27	83	25
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	15	631	29	38	458	46	59	158	22	27	83	25
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.02	0.94	0.04	0.07	0.85	0.08	0.25	0.66	0.09	0.20	0.61	0.19
Final Sat.:	13	531	24	40	476	48	117	312	44	88	272	82
Capacity Analysis Module:												
Vol/Sat:	1.19	1.19	1.19	0.96	0.96	0.96	0.51	0.51	0.51	0.31	0.31	0.31
Crit Moves:		****		****			****					****
Delay/Veh:	123.9	124	123.9	53.5	53.5	53.5	17.5	17.5	17.5	14.1	14.1	14.1
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	123.9	124	123.9	53.5	53.5	53.5	17.5	17.5	17.5	14.1	14.1	14.1
LOS by Move:	F	F	F	F	F	F	C	C	C	B	B	B
ApproachDel:	123.9			53.5			17.5			14.1		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	123.9			53.5			17.5			14.1		
LOS by Appr:	F			F			C			B		

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #217 Arguello/Jackson

Cycle (sec): 100 Critical Vol./Cap. (X): 0.693
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 14.6
Optimal Cycle: 0 Level Of Service: B

Street Name:	Arguello Blvd.						Jackson St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1	1 0	0 1	0	0 0	0 0	0	0 0	0 0	1!	0 0
Volume Module:												
Base Vol:	0	486	139	48	416	0	0	0	0	96	0	67
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	486	139	48	416	0	0	0	0	96	0	67
Added Vol:	0	12	0	0	15	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	498	139	48	431	0	0	0	0	96	0	67
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	498	139	48	431	0	0	0	0	96	0	67
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	498	139	48	431	0	0	0	0	96	0	67
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	498	139	48	431	0	0	0	0	96	0	67
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	1.56	0.44	0.10	0.90	0.00	0.00	0.00	0.00	0.59	0.00	0.41
Final Sat.:	0	1043	302	69	622	0	0	0	0	332	0	232
Capacity Analysis Module:												
Vol/Sat:	xxxx	0.48	0.46	0.69	0.69	xxxx	xxxx	xxxx	xxxx	0.29	xxxx	0.29
Crit Moves:		****			****					****		
Delay/Veh:	0.0	12.7	12.1	18.5	18.5	0.0	0.0	0.0	0.0	11.1	0.0	11.1
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	12.7	12.1	18.5	18.5	0.0	0.0	0.0	0.0	11.1	0.0	11.1
LOS by Move:	*	B	B	C	C	*	*	*	*	B	*	B
ApproachDel:		12.6			18.5			xxxxxx			11.1	
Delay Adj:		1.00			1.00			xxxxx			1.00	
ApprAdjDel:		12.6			18.5			xxxxxx			11.1	
LOS by Appr:		B			C			*			B	

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #218 Arguello/Washington St

Cycle (sec): 100 Critical Vol./Cap. (X): 1.044
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 45.2
Optimal Cycle: 0 Level Of Service: E

Street Name:	Arguello Blvd.						Washington St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1!	0 0	0 0	1!	0 0	0 0	1!	0 0	0 0	1!	0 0
Volume Module:												
Base Vol:	23	592	136	9	471	22	4	11	22	68	6	28
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	23	592	136	9	471	22	4	11	22	68	6	28
Added Vol:	0	12	0	0	15	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	23	604	136	9	486	22	4	11	22	68	6	28
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	23	604	136	9	486	22	4	11	22	68	6	28
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	23	604	136	9	486	22	4	11	22	68	6	28
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	23	604	136	9	486	22	4	11	22	68	6	28
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.03	0.79	0.18	0.02	0.94	0.04	0.11	0.30	0.59	0.67	0.06	0.27
Final Sat.:	22	578	130	12	644	29	55	151	301	342	30	141
Capacity Analysis Module:												
Vol/Sat:	1.04	1.04	1.04	0.75	0.75	0.75	0.07	0.07	0.07	0.20	0.20	0.20
Crit Moves:		****			****			****		****		
Delay/Veh:	67.0	67.0	67.0	22.2	22.2	22.2	10.1	10.1	10.1	11.2	11.2	11.2
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	67.0	67.0	67.0	22.2	22.2	22.2	10.1	10.1	10.1	11.2	11.2	11.2
LOS by Move:	F	F	F	C	C	C	B	B	B	B	B	B
ApproachDel:		67.0			22.2			10.1			11.2	
Delay Adj:		1.00			1.00			1.00			1.00	
ApprAdjDel:		67.0			22.2			10.1			11.2	
LOS by Appr:		F			C			B			B	

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #219 Arguello/Moraga

Cycle (sec): 100 Critical Vol./Cap. (X): 0.689
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 15.7
Optimal Cycle: 0 Level Of Service: C

Street Name:	Arguello						Moraga					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	0 0	0 1	0	0 1	0 0	0
Volume Module:												
Base Vol:	113	0	372	0	0	0	0	66	53	301	73	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	113	0	372	0	0	0	0	66	53	301	73	0
Added Vol:	1	0	11	0	0	0	0	3	4	11	-1	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	114	0	383	0	0	0	0	69	57	312	72	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	114	0	383	0	0	0	0	69	57	312	72	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	114	0	383	0	0	0	0	69	57	312	72	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	114	0	383	0	0	0	0	69	57	312	72	0
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.23	0.00	0.77	0.00	1.00	0.00	0.00	0.55	0.45	0.81	0.19	0.00
Final Sat.:	165	0	556	0	0	0	0	332	274	513	118	0
Capacity Analysis Module:												
Vol/Sat:	0.69	xxxx	0.69	xxxx	xxxx	xxxx	xxxx	0.21	0.21	0.61	0.61	xxxx
Crit Moves:	****								****		****	
Delay/Veh:	17.0	0.0	17.0	0.0	0.0	0.0	0.0	9.7	9.7	15.9	15.9	0.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	17.0	0.0	17.0	0.0	0.0	0.0	0.0	9.7	9.7	15.9	15.9	0.0
LOS by Move:	C	*	C	*	*	*	*	A	A	C	C	*
ApproachDel:	17.0			xxxxxx			9.7			15.9		
Delay Adj:	1.00			xxxxx			1.00			1.00		
ApprAdjDel:	17.0			xxxxxx			9.7			15.9		
LOS by Appr:	C			*			A			C		

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #220 Montgomery/Sheridan

Cycle (sec): 100 Critical Vol./Cap. (X): 0.805
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 19.9
Optimal Cycle: 0 Level Of Service: C

Street Name:	Montgomery St.						Sheridan Ave.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 1	0 0	0	0 0	0 1	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	13	21	0	0	34	56	519	0	142	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	13	21	0	0	34	56	519	0	142	0	0	0
Added Vol:	0	-9	0	0	-2	6	18	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	13	12	0	0	32	62	537	0	142	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	13	12	0	0	32	62	537	0	142	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	13	12	0	0	32	62	537	0	142	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	13	12	0	0	32	62	537	0	142	0	0	0
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.52	0.48	0.00	0.00	0.34	0.66	0.79	0.00	0.21	0.00	1.00	0.00
Final Sat.:	310	286	0	0	226	439	667	0	176	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.04	0.04	xxxx	xxxx	0.14	0.14	0.81	xxxx	0.81	xxxx	xxxx	xxxx
Crit Moves:		****				****	****					
Delay/Veh:	8.8	8.8	0.0	0.0	8.8	8.8	21.9	0.0	21.9	0.0	0.0	0.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	8.8	8.8	0.0	0.0	8.8	8.8	21.9	0.0	21.9	0.0	0.0	0.0
LOS by Move:	A	A	*	*	A	A	C	*	C	*	*	*
ApproachDel:	8.8			8.8			21.9			xxxxxx		
Delay Adj:	1.00			1.00			1.00			xxxxx		
ApprAdjDel:	8.8			8.8			21.9			xxxxxx		
LOS by Appr:	A			A			C			*		

Alternative 1 – PM Peak Hour

Scenario Report

Scenario:	PM 2030-PTMP
Command:	PM PTMP
Volume:	PM 2030
Geometry:	PM 2030
Impact Fee:	Default Impact Fee
Trip Generation:	PM 2030-PTMP
Trip Distribution:	Main Post SEIS
Paths:	Main Post SEIS
Routes:	Default Routes
Configuration:	Default Configuration

Trip Generation Report

Forecast for PM 2030-PTMP

Zone #	Subzone	Amount	Units	Rate In	Rate Out	Trips In	Trips Out	Total Trips	% Of Total
14	West Crissy	1.00	mixed use	43.00	35.00	43	35	78	7.8
	Zone 14 Subtotal					43	35	78	7.8
15	Ruger & Simo	1.00	mixed use	43.00	41.00	43	41	84	8.4
	Zone 15 Subtotal					43	41	84	8.4
32	S. Main Post	1.00	mixed use	1.00	1.00	1	1	2	0.2
	Zone 32 Subtotal					1	1	2	0.2
33	W. Main Post	1.00	Mixed Use	109.00	83.00	109	83	192	19.3
	Zone 33 Subtotal					109	83	192	19.3
34	E. Main Post	1.00	mixed use	93.00	32.00	93	32	125	12.6
	Zone 34 Subtotal					93	32	125	12.6
35	N. Main Post	1.00	mixed use	-26.00	-37.00	-26	-37	-63	-6.3
	Zone 35 Subtotal					-26	-37	-63	-6.3
36	West Letterm	1.00	mixed use	-59.00	-15.00	-59	-15	-74	-7.4
	Zone 36 Subtotal					-59	-15	-74	-7.4
753	LDA	1.00	mixed use	126.00	188.00	126	188	314	31.5
	Zone 753 Subtotal					126	188	314	31.5
767	Commissary/P	1.00	mixed use	169.00	169.00	169	169	338	33.9
	Zone 767 Subtotal					169	169	338	33.9
TOTAL						499	497	996	100.0

Trip Distribution Report

Percent Of Trips M POST SEIS

Zone	To Gates 5	14	16	17	22	28	36
14	0.0	25.0	0.0	10.0	15.0	50.0	0.0
15	0.0	0.0	25.0	0.0	67.5	0.0	7.5
32	0.0	5.0	10.0	10.0	68.0	5.0	2.0
33	0.0	5.0	10.0	10.0	68.0	5.0	2.0
34	0.0	5.0	10.0	10.0	68.0	5.0	2.0
35	0.0	5.0	10.0	10.0	68.0	5.0	2.0
36	0.0	10.0	20.0	15.0	40.0	15.0	0.0
753	20.0	5.0	10.0	5.0	55.0	0.0	5.0
767	14.0	0.0	10.0	10.0	14.0	50.0	2.0

Volume Type	NB Link In	Out	Total	SB Link In	Out	Total	EB Link In	Out	Total	WB Link In	Out	Total	Total Volume
#201 Lombard/Divisadero													
Base	378	385	763	298	285	583	2398	3242	5640	3117	2279	5396	12382
Added	0	0	0	0	0	0	208	225	433	225	208	433	866
Total	378	385	763	298	285	583	2606	3467	6073	3342	2487	5829	13248
#202 Lombard/Richardson													
Base	3319	2500	5819	2171	3119	5290	329	200	529	0	0	0	11638
Added	225	207	432	57	84	141	150	141	291	0	0	0	864
Total	3544	2707	6251	2228	3203	5431	479	341	820	0	0	0	12502
#203 Lyon/Lombard													
Base	217	183	400	318	325	643	569	517	1086	223	302	525	2654
Added	16	17	33	0	0	0	167	157	324	141	150	291	648
Total	233	200	433	318	325	643	736	674	1410	364	452	816	3302
#204 Greenwich/Divisadero													
Base	345	332	677	343	385	728	145	164	309	203	155	358	2072
Added	0	0	0	0	0	0	17	16	33	16	17	33	66
Total	345	332	677	343	385	728	162	180	342	219	172	391	2138
#205 Greenwich/Lyon													
Base	107	120	227	177	214	391	0	0	0	130	80	210	828
Added	0	0	0	17	16	33	0	0	0	16	17	33	66
Total	107	120	227	194	230	424	0	0	0	146	97	243	894
#206 Francisco/Richardson													
Base	3119	2250	5369	2217	3331	5548	251	69	320	145	82	227	11464
Added	84	57	141	57	84	141	0	0	0	0	0	0	282
Total	3203	2307	5510	2274	3415	5689	251	69	320	145	82	227	11746
#207 Richardson/Gorgas													
Base	253	63	316	69	34	103	2150	3439	5589	3298	2234	5532	11540
Added	57	0	57	0	0	0	0	84	84	84	57	141	282
Total	310	63	373	69	34	103	2150	3523	5673	3382	2291	5673	11822
#208 Doyle/Marina/Lyon													
Base	40	25	65	247	491	738	922	1549	2471	2009	1153	3162	6436
Added	0	0	0	106	115	221	-2	-9	-11	106	104	210	420
Total	40	25	65	353	606	959	920	1540	2460	2115	1257	3372	6856
#209 Graham/Lincoln													
Base	152	134	286	22	7	29	434	391	825	508	584	1092	2232
Added	32	37	69	-2	0	-2	90	123	213	160	120	280	560
Total	184	171	355	20	7	27	524	514	1038	668	704	1372	2792
#210 Lincoln/Halleck													
Base	0	3	3	314	340	654	542	543	1085	584	554	1138	2880
Added	0	0	0	43	48	91	139	164	303	169	139	308	702
Total	0	3	3	357	388	745	681	707	1388	753	693	1446	3582

Volume Type	NB Link In	NB Link Out	NB Link Total	SB Link In	SB Link Out	SB Link Total	EB Link In	EB Link Out	EB Link Total	WB Link In	WB Link Out	WB Link Total	Total Volume
#211 Lincoln/Girard													
Base	0	0	0	336	497	833	589	585	1174	600	443	1043	3050
Added	0	0	0	139	65	204	129	218	347	79	64	143	694
Total	0	0	0	475	562	1037	718	803	1521	679	507	1186	3744
#212 Presidio/Letterman/Lincoln													
Base	539	546	1085	463	601	1064	237	188	425	148	52	200	2774
Added	98	84	182	61	66	127	10	28	38	28	19	47	394
Total	637	630	1267	524	667	1191	247	216	463	176	71	247	3168
#213 Lombard/Presidio													
Base	733	676	1409	549	597	1146	0	0	0	529	538	1067	3622
Added	66	73	139	84	97	181	0	0	0	94	74	168	488
Total	799	749	1548	633	694	1327	0	0	0	623	612	1235	4110
#214 Presidio/Pacific													
Base	731	630	1361	686	743	1429	14	66	80	89	81	170	3040
Added	46	51	97	51	46	97	0	0	0	0	0	0	194
Total	777	681	1458	737	789	1526	14	66	80	89	81	170	3234
#215 Presidio/Jackson													
Base	637	654	1291	661	677	1338	160	168	328	250	209	459	3416
Added	46	51	97	51	46	97	0	0	0	0	0	0	194
Total	683	705	1388	712	723	1435	160	168	328	250	209	459	3610
#216 Presidio/Washington													
Base	664	599	1263	658	705	1363	206	130	336	110	204	314	3276
Added	46	51	97	51	46	97	0	0	0	0	0	0	194
Total	710	650	1360	709	751	1460	206	130	336	110	204	314	3470
#217 Arguello/Jackson													
Base	488	603	1091	546	454	1000	0	0	0	123	100	223	2314
Added	36	35	71	35	36	71	0	0	0	0	0	0	142
Total	524	638	1162	581	490	1071	0	0	0	123	100	223	2456
#218 Arguello/Washington St													
Base	542	657	1199	582	485	1067	32	36	68	107	85	192	2526
Added	36	35	71	35	36	71	0	0	0	0	0	0	142
Total	578	692	1270	617	521	1138	32	36	68	107	85	192	2668
#219 Arguello/Moraga													
Base	431	449	880	0	0	0	180	188	368	377	351	728	1976
Added	36	36	72	0	0	0	5	5	10	33	33	66	148
Total	467	485	952	0	0	0	185	193	378	410	384	794	2124
#220 Montgomery/Sheridan													
Base	62	196	258	85	226	311	341	66	407	0	0	0	976
Added	50	11	61	68	90	158	40	57	97	0	0	0	316
Total	112	207	319	153	316	469	381	123	504	0	0	0	1292

Impact Analysis Report
Level Of Service

Intersection	Base LOS	Base Del/ Veh	Base V/ C	Future LOS	Future Del/ Veh	Future V/ C	Change in
#201 Lombard/Divisadero	B	13.0	0.849	B	15.0	0.893	+ 2.054 D/V
#202 Lombard/Richardson	A	3.6	0.602	A	8.2	0.757	+ 4.663 D/V
#203 Lyon/Lombard	D	31.0	0.961	F	102.0	1.376	+ 0.415 V/C
#204 Greenwich/Divisadero	B	13.4	0.549	B	13.9	0.564	+ 0.015 V/C
#205 Greenwich/Lyon	A	8.2	0.222	A	8.4	0.246	+ 0.025 V/C
#206 Francisco/Richardson	B	15.0	0.712	B	16.4	0.729	+ 1.346 D/V
#207 Richardson/Gorgas	A	7.0	0.796	A	9.2	0.847	+ 2.252 D/V
#208 Doyle/Marina/Lyon	B	17.7	0.726	C	26.3	0.833	+ 8.530 D/V
#209 Graham/Lincoln	B	13.8	0.621	C	21.6	0.792	+ 0.171 V/C
#210 Lincoln/Halleck	F	108.0	0.000	F	426.9	0.000	+318.907 D/V
#211 Lincoln/Girard	F	506.5	0.000	F	OVRFL	0.000	+628.397 D/V
#212 Presidio/Letterman/Lincoln	C	17.6	0.781	D	27.0	0.947	+ 0.166 V/C
#213 Lombard/Presidio	F	88.3	1.344	F	118.0	1.519	+ 0.175 V/C
#214 Presidio/Pacific	F	53.7	1.029	F	73.0	1.100	+ 0.071 V/C
#215 Presidio/Jackson	F	100.0	1.216	F	128.4	1.310	+ 0.094 V/C
#216 Presidio/Washington	F	81.6	1.125	F	107.2	1.203	+ 0.078 V/C
#217 Arguello/Jackson	C	17.6	0.744	C	20.5	0.800	+ 0.056 V/C
#218 Arguello/Washington St	C	22.3	0.817	D	27.4	0.875	+ 0.058 V/C
#219 Arguello/Moraga	B	14.0	0.613	C	16.0	0.676	+ 0.064 V/C
#220 Montgomery/Sheridan	A	9.2	0.394	B	10.2	0.479	+ 0.085 V/C

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #201 Lombard/Divisadero

Cycle (sec): 90 Critical Vol./Cap. (X): 0.893
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 15.0
Optimal Cycle: 90 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	27	27	27	27	27	27	54	54	54	54	54	54
Lanes:	1 0	0 1	0	1 0	0 1	0	0 1	1 1	0	0 1	1 1	0
Volume Module:												
Base Vol:	194	161	23	80	163	55	0	2176	222	0	2993	124
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	194	161	23	80	163	55	0	2176	222	0	2993	124
Added Vol:	0	0	0	0	0	0	0	208	0	0	225	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	194	161	23	80	163	55	0	2384	222	0	3218	124
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	194	161	23	80	163	55	0	2384	222	0	3218	124
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	194	161	23	80	163	55	0	2384	222	0	3218	124
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	194	161	23	80	163	55	0	2384	222	0	3218	124
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.42	0.98	0.98	0.47	0.96	0.96	0.91	0.90	0.90	0.91	0.90	0.90
Lanes:	1.00	0.87	0.13	1.00	0.75	0.25	0.00	2.74	0.26	0.00	2.89	0.11
Final Sat.:	792	1631	233	885	1367	461	0	4683	436	0	4965	191
Capacity Analysis Module:												
Vol/Sat:	0.24	0.10	0.10	0.09	0.12	0.12	0.00	0.51	0.51	0.00	0.65	0.65
Crit Moves:	****										****	
Green/Cycle:	0.30	0.30	0.30	0.30	0.30	0.30	0.00	0.70	0.70	0.00	0.70	0.70
Volume/Cap:	0.82	0.33	0.33	0.30	0.40	0.40	0.00	0.73	0.73	0.00	0.93	0.93
Uniform Del:	29.2	24.5	24.5	24.2	25.0	25.0	0.0	8.2	8.2	0.0	11.5	11.5
IncremntDel:	19.3	0.3	0.3	0.6	0.5	0.5	0.0	0.8	0.8	0.0	4.8	4.8
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00
Delay/Veh:	48.5	24.8	24.8	24.9	25.5	25.5	0.0	9.0	9.0	0.0	16.3	16.3
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	48.5	24.8	24.8	24.9	25.5	25.5	0.0	9.0	9.0	0.0	16.3	16.3
HCM2kAvg:	14	4	4	4	5	5	0	16	16	0	31	31

Level Of Service Computation Report
1994 HCM Operations Method (Future Volume Alternative)

Intersection #202 Lombard/Richardson

Cycle (sec): 90 Critical Vol./Cap. (X): 0.757
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 8.2
Optimal Cycle: 90 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Ovl			Include		
Min. Green:	25	90	0	0	57	57	0	0	25	0	0	0
Lanes:	1 0	3 0	0	0 0	2 1	0	0 0	0 0	1	0 0	0 0	0
Volume Module:												
Base Vol:	200	3119	0	0	2171	0	0	0	329	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	200	3119	0	0	2171	0	0	0	329	0	0	0
Added Vol:	141	84	0	0	57	0	0	0	150	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	341	3203	0	0	2228	0	0	0	479	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	341	3203	0	0	2228	0	0	0	479	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	341	3203	0	0	2228	0	0	0	479	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.10	1.00	1.00	1.10	1.10	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	341	3523	0	0	2451	0	0	0	479	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.77	1.00	1.00	1.00
Lanes:	1.00	3.00	0.00	0.00	3.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	1805	5700	0	0	5700	0	0	0	1463	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.19	0.62	0.00	0.00	0.43	0.00	0.00	0.00	0.33	0.00	0.00	0.00
Crit Moves:		****		****					****			
Green/Cycle:	0.30	1.00	0.00	0.00	0.70	0.00	0.00	0.00	0.30	0.00	0.00	0.00
Volume/Cap:	0.62	0.62	0.00	0.00	0.62	0.00	0.00	0.00	1.07	0.00	0.00	0.00
Uniform Del:	20.4	0.0	0.0	0.0	5.6	0.0	0.0	0.0	23.8	0.0	0.0	0.0
IncremntDel:	1.5	0.1	0.0	0.0	0.2	0.0	0.0	0.0	56.6	0.0	0.0	0.0
Delay Adj:	0.85	0.85	0.00	0.00	0.85	0.00	0.00	0.00	0.85	0.00	0.00	0.00
Delay/Veh:	18.8	0.1	0.0	0.0	5.0	0.0	0.0	0.0	76.8	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	18.8	0.1	0.0	0.0	5.0	0.0	0.0	0.0	76.8	0.0	0.0	0.0
DesignQueue:	12	0	0	0	42	0	0	0	18	0	0	0

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #203 Lyon/Lombard

Cycle (sec): 100 Critical Vol./Cap. (X): 1.376
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 102.0
Optimal Cycle: 0 Level Of Service: F

Street Name:	Lyon St.						Lombard St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	124	68	25	29	65	224	212	248	109	9	169	45
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	124	68	25	29	65	224	212	248	109	9	169	45
Added Vol:	16	0	0	0	0	0	0	150	17	0	141	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	140	68	25	29	65	224	212	398	126	9	310	45
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	140	68	25	29	65	224	212	398	126	9	310	45
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	140	68	25	29	65	224	212	398	126	9	310	45
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	140	68	25	29	65	224	212	398	126	9	310	45
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.60	0.29	0.11	0.09	0.20	0.71	0.29	0.54	0.17	0.02	0.86	0.12
Final Sat.:	260	127	47	44	99	342	154	289	92	12	419	61
Capacity Analysis Module:												
Vol/Sat:	0.54	0.54	0.54	0.65	0.65	0.65	1.38	1.38	1.38	0.74	0.74	0.74
Crit Moves:		****		****				****			****	
Delay/Veh:	18.5	18.5	18.5	21.4	21.4	21.4	200.8	201	200.8	26.2	26.2	26.2
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	18.5	18.5	18.5	21.4	21.4	21.4	200.8	201	200.8	26.2	26.2	26.2
LOS by Move:	C	C	C	C	C	C	F	F	F	D	D	D
ApproachDel:	18.5			21.4			200.8			26.2		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	18.5			21.4			200.8			26.2		
LOS by Appr:	C			C			F			D		

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #204 Greenwich/Divisadero

Cycle (sec): 100 Critical Vol./Cap. (X): 0.564
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 13.9
Optimal Cycle: 0 Level Of Service: B

Street Name:	Divisadero						Greenwich					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	11	323	11	34	296	13	26	110	9	27	140	36
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	11	323	11	34	296	13	26	110	9	27	140	36
Added Vol:	0	0	0	0	0	0	0	17	0	0	16	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	11	323	11	34	296	13	26	127	9	27	156	36
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	11	323	11	34	296	13	26	127	9	27	156	36
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	11	323	11	34	296	13	26	127	9	27	156	36
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	11	323	11	34	296	13	26	127	9	27	156	36
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.03	0.94	0.03	0.10	0.86	0.04	0.16	0.78	0.06	0.12	0.72	0.16
Final Sat.:	19	572	19	60	526	23	83	404	29	67	388	90
Capacity Analysis Module:												
Vol/Sat:	0.56	0.56	0.56	0.56	0.56	0.56	0.31	0.31	0.31	0.40	0.40	0.40
Crit Moves:		****		****					****		****	
Delay/Veh:	15.0	15.0	15.0	14.9	14.9	14.9	11.6	11.6	11.6	12.4	12.4	12.4
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	15.0	15.0	15.0	14.9	14.9	14.9	11.6	11.6	11.6	12.4	12.4	12.4
LOS by Move:	B	B	B	B	B	B	B	B	B	B	B	B
ApproachDel:	15.0			14.9			11.6			12.4		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	15.0			14.9			11.6			12.4		
LOS by Appr:	B			B			B			B		

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #205 Greenwich/Lyon

Cycle (sec): 100 Critical Vol./Cap. (X): 0.246
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 8.4
Optimal Cycle: 0 Level Of Service: A

Street Name:	Lyon						Greenwich					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	0	1 0	0 1	0	0 0	0 0	0	0 0	0 0	1!	0 0
Volume Module:												
Base Vol:	0	105	2	78	99	0	0	0	0	21	0	109
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	105	2	78	99	0	0	0	0	21	0	109
Added Vol:	0	0	0	17	0	0	0	0	0	0	0	16
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	105	2	95	99	0	0	0	0	21	0	125
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	105	2	95	99	0	0	0	0	21	0	125
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	105	2	95	99	0	0	0	0	21	0	125
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	105	2	95	99	0	0	0	0	21	0	125
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.98	0.02	0.49	0.51	0.00	0.00	0.00	0.00	0.14	0.00	0.86
Final Sat.:	0	770	15	386	402	0	0	0	0	120	0	713
Capacity Analysis Module:												
Vol/Sat:	xxxx	0.14	0.14	0.25	0.25	xxxx	xxxx	xxxx	xxxx	0.18	xxxx	0.18
Crit Moves:		****			****					****		
Delay/Veh:	0.0	8.1	8.1	8.8	8.8	0.0	0.0	0.0	0.0	7.9	0.0	7.9
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	8.1	8.1	8.8	8.8	0.0	0.0	0.0	0.0	7.9	0.0	7.9
LOS by Move:	*	A	A	A	A	*	*	*	*	A	*	A
ApproachDel:		8.1			8.8			xxxxxx			7.9	
Delay Adj:		1.00			1.00			xxxxx			1.00	
ApprAdjDel:		8.1			8.8			xxxxxx			7.9	
LOS by Appr:		A			A			*			A	

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #206 Francisco/Richardson

Cycle (sec): 90 Critical Vol./Cap. (X): 0.729
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 16.4
Optimal Cycle: 90 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	51	51	0	51	51	31	31	31	31	31	31
Lanes:	0 0	2	1 0	0 0	2	1 0	0 1	0	1 0	0 0	1!	0 0
Volume Module:												
Base Vol:	0	3117	2	0	2217	0	142	80	29	4	69	72
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	3117	2	0	2217	0	142	80	29	4	69	72
Added Vol:	0	84	0	0	57	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	3201	2	0	2274	0	142	80	29	4	69	72
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	3201	2	0	2274	0	142	80	29	4	69	72
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	3201	2	0	2274	0	142	80	29	4	69	72
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	3201	2	0	2274	0	142	80	29	4	69	72
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	0.91	0.91	1.00	0.91	0.91	0.67	0.67	0.67	0.93	0.93	0.93
Lanes:	0.00	2.99	0.01	0.00	3.00	0.00	1.00	0.73	0.27	0.03	0.47	0.50
Final Sat.:	0	5184	3	0	5187	0	1279	939	340	49	838	874
Capacity Analysis Module:												
Vol/Sat:	0.00	0.62	0.62	0.00	0.44	0.00	0.11	0.09	0.09	0.08	0.08	0.08
Crit Moves:		****		****			****					
Green/Cycle:	0.00	0.66	0.66	0.00	0.66	0.00	0.34	0.34	0.34	0.34	0.34	0.34
Volume/Cap:	0.00	0.94	0.94	0.00	0.67	0.00	0.32	0.25	0.25	0.24	0.24	0.24
Uniform Del:	0.0	14.0	14.0	0.0	9.5	0.0	21.8	21.1	21.1	21.1	21.1	21.1
IncremntDel:	0.0	6.3	6.3	0.0	0.5	0.0	0.2	0.1	0.1	0.2	0.2	0.2
Delay Adj:	0.00	1.00	1.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Delay/Veh:	0.0	20.2	20.2	0.0	10.0	0.0	22.0	21.3	21.3	21.3	21.3	21.3
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	20.2	20.2	0.0	10.0	0.0	22.0	21.3	21.3	21.3	21.3	21.3
HCM2kAvg:	0	32	32	0	14	0	4	3	3	3	3	3

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #207 Richardson/Gorgas

Cycle (sec): 90 Critical Vol./Cap. (X): 0.847
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 9.2
Optimal Cycle: 90 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Split Phase			Split Phase			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	10	10	10	12	12	12	52	52	52	52	52	52
Lanes:	1 0	1! 0	0	0 0	0 0	1	0 0	3 0	1	0 0	2 1	0
Volume Module:												
Base Vol:	106	0	147	0	0	69	0	2087	63	0	3264	34
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	106	0	147	0	0	69	0	2087	63	0	3264	34
Added Vol:	0	0	57	0	0	0	0	0	0	0	84	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	106	0	204	0	0	69	0	2087	63	0	3348	34
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	106	0	204	0	0	69	0	2087	63	0	3348	34
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	106	0	204	0	0	69	0	2087	63	0	3348	34
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	106	0	204	0	0	69	0	2087	63	0	3348	34
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.89	1.00	0.89	1.00	1.00	0.87	1.00	0.91	0.85	1.00	0.91	0.91
Lanes:	1.21	0.00	0.79	0.00	0.00	1.00	0.00	3.00	1.00	0.00	2.97	0.03
Final Sat.:	2030	0	1336	0	0	1644	0	5187	1615	0	5130	52
Capacity Analysis Module:												
Vol/Sat:	0.05	0.00	0.15	0.00	0.00	0.04	0.00	0.40	0.04	0.00	0.65	0.65
Crit Moves:			****			****					****	
Green/Cycle:	0.18	0.00	0.18	0.00	0.00	0.13	0.00	0.77	0.77	0.00	0.77	0.77
Volume/Cap:	0.29	0.00	0.85	0.00	0.00	0.31	0.00	0.52	0.05	0.00	0.85	0.85
Uniform Del:	31.9	0.0	35.7	0.0	0.0	35.3	0.0	4.0	2.5	0.0	6.8	6.8
IncremntDel:	0.2	0.0	16.6	0.0	0.0	0.8	0.0	0.1	0.0	0.0	1.8	1.8
Delay Adj:	1.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00
Delay/Veh:	32.1	0.0	52.3	0.0	0.0	36.1	0.0	4.1	2.5	0.0	8.7	8.7
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	32.1	0.0	52.3	0.0	0.0	36.1	0.0	4.1	2.5	0.0	8.7	8.7
HCM2kAvg:	2	0	10	0	0	2	0	8	0	0	23	23

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #208 Doyle/Marina/Lyon

Cycle (sec): 60 Critical Vol./Cap. (X): 0.833
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 26.3
Optimal Cycle: 90 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	24	0	24	24	0	24	0	28	0	0	28	0
Lanes:	1 0	0 0	1	1 0	0 0	1	0 0	1 1	0	0 0	1 1	0
Volume Module:												
Base Vol:	0	0	40	216	0	31	0	897	25	0	1518	491
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	40	216	0	31	0	897	25	0	1518	491
Added Vol:	0	0	0	106	0	0	0	-2	0	0	-9	115
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	40	322	0	31	0	895	25	0	1509	606
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	40	322	0	31	0	895	25	0	1509	606
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	40	322	0	31	0	895	25	0	1509	606
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	0	40	322	0	31	0	895	25	0	1509	606
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	0.85	0.77	1.00	0.85	1.00	0.95	0.95	1.00	0.91	0.91
Lanes:	1.00	0.00	1.00	1.00	0.00	1.00	0.00	1.95	0.05	0.00	1.43	0.57
Final Sat.:	1900	0	1615	1461	0	1615	0	3498	98	0	2465	990
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.02	0.22	0.00	0.02	0.00	0.26	0.26	0.00	0.61	0.61
Crit Moves:				****			****				****	
Green/Cycle:	0.00	0.00	0.40	0.40	0.00	0.40	0.00	0.60	0.60	0.00	0.60	0.60
Volume/Cap:	0.00	0.00	0.06	0.55	0.00	0.05	0.00	0.43	0.43	0.00	1.02	1.02
Uniform Del:	0.0	0.0	11.1	13.9	0.0	11.0	0.0	6.5	6.5	0.0	12.0	12.0
IncremntDel:	0.0	0.0	0.0	1.1	0.0	0.0	0.0	0.1	0.1	0.0	25.1	25.1
Delay Adj:	0.00	0.00	1.00	1.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00
Delay/Veh:	0.0	0.0	11.1	15.0	0.0	11.0	0.0	6.6	6.6	0.0	37.1	37.1
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	11.1	15.0	0.0	11.0	0.0	6.6	6.6	0.0	37.1	37.1
HCM2kAvg:	0	0	0	7	0	0	0	5	5	0	31	31

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #209 Graham/Lincoln

Cycle (sec): 100 Critical Vol./Cap. (X): 0.792
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 21.6
Optimal Cycle: 0 Level Of Service: C

Street Name:	Graham St.						Lincoln Blvd.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	0 1	0 0	0	1 0	0 1	0
Volume Module:												
Base Vol:	2	0	150	7	0	15	7	427	0	134	374	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	2	0	150	7	0	15	7	427	0	134	374	0
Added Vol:	0	0	32	-2	0	0	0	90	0	37	123	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	2	0	182	5	0	15	7	517	0	171	497	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	2	0	182	5	0	15	7	517	0	171	497	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	2	0	182	5	0	15	7	517	0	171	497	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	2	0	182	5	0	15	7	517	0	171	497	0
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.01	0.00	0.99	0.25	0.00	0.75	0.01	0.99	0.00	1.00	1.00	0.00
Final Sat.:	6	0	560	121	0	363	9	653	0	579	630	0
Capacity Analysis Module:												
Vol/Sat:	0.33	xxxx	0.33	0.04	xxxx	0.04	0.79	0.79	xxxx	0.30	0.79	xxxx
Crit Moves:	****			****			****				****	
Delay/Veh:	11.4	0.0	11.4	9.8	0.0	9.8	25.0	25.0	0.0	11.4	25.6	0.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	11.4	0.0	11.4	9.8	0.0	9.8	25.0	25.0	0.0	11.4	25.6	0.0
LOS by Move:	B	*	B	A	*	A	D	D	*	B	D	*
ApproachDel:	11.4			9.8			25.0			22.0		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	11.4			9.8			25.0			22.0		
LOS by Appr:	B			A			D			C		

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #210 Lincoln/Halleck

Average Delay (sec/veh): 86.0 Worst Case Level Of Service: F[426.9]

Street Name:	Halleck St.						Lincoln Blvd.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Channel			Include			Include		
Lanes:	0 0	0 0	0	0 0	1! 0	0	1 0	0 1	0	0 0	0 1	0
Volume Module:												
Base Vol:	0	0	0	153	0	161	138	401	3	0	382	202
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	153	0	161	138	401	3	0	382	202
Added Vol:	0	0	0	20	0	23	20	119	0	0	141	28
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	173	0	184	158	520	3	0	523	230
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	173	0	184	158	520	3	0	523	230
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	0	0	0	173	0	184	158	520	3	0	523	230
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	6.4	xxxx	6.2	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	3.5	xxxx	3.3	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	1476	xxxx	638	753	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	141	xxxx	480	866	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	121	xxxx	480	866	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	1.43	xxxx	0.38	0.18	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.7	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	10.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	B	*	*	*	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	197	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	25.3	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	427	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	F	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			426.9			xxxxxx			xxxxxx		
ApproachLOS:	*			F			*			*		

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #211 Lincoln/Girard

Average Delay (sec/veh): 290.5 Worst Case Level Of Service: F[1134.9]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Stop Sign				Stop Sign				Uncontrolled				Uncontrolled			
Rights:	Include				Include				Include				Include			
Lanes:	0	0	0	0 0	0	0	1!	0 0	1	0	1	0 0	0	0	0	1 0
Volume Module:																
Base Vol:	0	0	0	187	0	149	333	256	0	0	436	164				
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
Initial Bse:	0	0	0	187	0	149	333	256	0	0	436	164				
Added Vol:	0	0	0	0	0	139	65	64	0	0	79	0				
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0				
Initial Fut:	0	0	0	187	0	288	398	320	0	0	515	164				
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
PHF Volume:	0	0	0	187	0	288	398	320	0	0	515	164				
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0				
Final Vol.:	0	0	0	187	0	288	398	320	0	0	515	164				
Critical Gap Module:																
Critical Gp:	xxxxx	xxxx	xxxxx	6.4	xxxx	6.2	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
FollowUpTim:	xxxxx	xxxx	xxxxx	3.5	xxxx	3.3	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
Capacity Module:																
Cnflict Vol:	xxxx	xxxx	xxxxx	1713	xxxx	597	679	xxxx	xxxxx	xxxx	xxxx	xxxxx				
Potent Cap.:	xxxx	xxxx	xxxxx	101	xxxx	507	923	xxxx	xxxxx	xxxx	xxxx	xxxxx				
Move Cap.:	xxxx	xxxx	xxxxx	67	xxxx	507	923	xxxx	xxxxx	xxxx	xxxx	xxxxx				
Volume/Cap:	xxxx	xxxx	xxxx	2.81	xxxx	0.57	0.43	xxxx	xxxx	xxxx	xxxx	xxxx				
Level Of Service Module:																
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	11.8	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
LOS by Move:	*	*	*	*	*	*	B	*	*	*	*	*				
Movement:	LT - LTR - RT				LT - LTR - RT				LT - LTR - RT				LT - LTR - RT			
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	141	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx				
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	45.7	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	1135	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
Shared LOS:	*	*	*	*	F	*	*	*	*	*	*	*				
ApproachDel:	xxxxxx				1134.9		xxxxxx			xxxxxx						
ApproachLOS:	*				F		*			*						

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #212 Presidio/Letterman/Lincoln

Cycle (sec): 100 Critical Vol./Cap. (X): 0.947
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 27.0
Optimal Cycle: 0 Level Of Service: D

Street Name:	Lincoln/Presidio						Presidio/Letterman					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	0	1 0	0	1 0	1 0	0	0	1! 0	0	0	1! 0 0
Volume Module:												
Base Vol:	106	425	8	28	393	42	74	16	147	6	40	102
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	106	425	8	28	393	42	74	16	147	6	40	102
Added Vol:	28	57	13	6	55	0	0	0	10	19	0	9
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	134	482	21	34	448	42	74	16	157	25	40	111
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	134	482	21	34	448	42	74	16	157	25	40	111
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	134	482	21	34	448	42	74	16	157	25	40	111
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	134	482	21	34	448	42	74	16	157	25	40	111
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.96	0.04	0.13	1.71	0.16	0.30	0.06	0.64	0.14	0.23	0.63
Final Sat.:	489	509	22	65	862	82	150	32	317	68	108	300
Capacity Analysis Module:												
Vol/Sat:	0.27	0.95	0.95	0.53	0.52	0.51	0.49	0.49	0.49	0.37	0.37	0.37
Crit Moves:			****	****				****			****	
Delay/Veh:	12.7	51.9	51.9	17.0	16.6	16.3	15.9	15.9	15.9	13.8	13.8	13.8
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	12.7	51.9	51.9	17.0	16.6	16.3	15.9	15.9	15.9	13.8	13.8	13.8
LOS by Move:	B	F	F	C	C	C	C	C	C	B	B	B
ApproachDel:	43.6			16.6			15.9			13.8		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	43.6			16.6			15.9			13.8		
LOS by Appr:	E			C			C			B		

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #213 Lombard/Presidio

Cycle (sec): 100 Critical Vol./Cap. (X): 1.519
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 118.0
Optimal Cycle: 0 Level Of Service: F

Street Name:	Presidio Blvd.						Lombard St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0 0	1	0	1	0	0	0	0	0	0	1	0
Volume Module:												
Base Vol:	0	409	324	214	335	0	0	0	0	341	0	188
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	409	324	214	335	0	0	0	0	341	0	188
Added Vol:	0	35	31	43	41	0	0	0	0	32	0	62
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	444	355	257	376	0	0	0	0	373	0	250
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	444	355	257	376	0	0	0	0	373	0	250
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	444	355	257	376	0	0	0	0	373	0	250
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	444	355	257	376	0	0	0	0	373	0	250
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.56	0.44	1.00	1.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Final Sat.:	0	292	234	462	494	0	0	0	0	460	0	541
Capacity Analysis Module:												
Vol/Sat:	xxxx	1.52	1.52	0.56	0.76	xxxx	xxxx	xxxx	xxxx	0.81	xxxx	0.46
Crit Moves:			****		****					****		
Delay/Veh:	0.0	262	261.9	19.7	29.3	0.0	0.0	0.0	0.0	35.9	0.0	14.8
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	262	261.9	19.7	29.3	0.0	0.0	0.0	0.0	35.9	0.0	14.8
LOS by Move:	*	F	F	C	D	*	*	*	*	E	*	B
ApproachDel:	261.9				25.4		xxxxxx			27.5		
Delay Adj:	1.00				1.00		xxxxx			1.00		
ApprAdjDel:	261.9				25.4		xxxxxx			27.5		
LOS by Appr:	F				D		*			D		

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #214 Presidio/Pacific

Cycle (sec): 100 Critical Vol./Cap. (X): 1.100
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 73.0
Optimal Cycle: 0 Level Of Service: F

Street Name:	Presidio Blvd.						Pacific Ave.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1!	0	0	0	1!	0	0	0	1!	0	0
Volume Module:												
Base Vol:	9	703	19	56	606	24	3	6	5	19	33	37
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	9	703	19	56	606	24	3	6	5	19	33	37
Added Vol:	0	46	0	0	51	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	9	749	19	56	657	24	3	6	5	19	33	37
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	9	749	19	56	657	24	3	6	5	19	33	37
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	9	749	19	56	657	24	3	6	5	19	33	37
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	9	749	19	56	657	24	3	6	5	19	33	37
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.01	0.97	0.02	0.08	0.89	0.03	0.21	0.43	0.36	0.21	0.37	0.42
Final Sat.:	8	681	17	54	629	23	107	215	179	114	198	222
Capacity Analysis Module:												
Vol/Sat:	1.10	1.10	1.10	1.05	1.05	1.05	0.03	0.03	0.03	0.17	0.17	0.17
Crit Moves:	****					****	****			****		
Delay/Veh:	85.7	85.7	85.7	68.3	68.3	68.3	10.3	10.3	10.3	11.0	11.0	11.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	85.7	85.7	85.7	68.3	68.3	68.3	10.3	10.3	10.3	11.0	11.0	11.0
LOS by Move:	F	F	F	F	F	F	B	B	B	B	B	B
ApproachDel:	85.7			68.3			10.3			11.0		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	85.7			68.3			10.3			11.0		
LOS by Appr:	F			F			B			B		

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #215 Presidio/Jackson

Cycle (sec): 100 Critical Vol./Cap. (X): 1.310
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 128.4
Optimal Cycle: 0 Level Of Service: F

Street Name:	Presidio Blvd.						Jackson St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	8	575	54	54	579	28	55	101	4	71	132	47
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	8	575	54	54	579	28	55	101	4	71	132	47
Added Vol:	0	46	0	0	51	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	8	621	54	54	630	28	55	101	4	71	132	47
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	8	621	54	54	630	28	55	101	4	71	132	47
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	8	621	54	54	630	28	55	101	4	71	132	47
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	8	621	54	54	630	28	55	101	4	71	132	47
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.01	0.91	0.08	0.08	0.88	0.04	0.34	0.63	0.03	0.28	0.53	0.19
Final Sat.:	6	497	43	41	481	21	148	273	11	132	246	88
Capacity Analysis Module:												
Vol/Sat:	1.25	1.25	1.25	1.31	1.31	1.31	0.37	0.37	0.37	0.54	0.54	0.54
Crit Moves:	****				****			****			****	
Delay/Veh:	148.5	148	148.5	172.9	173	172.9	15.6	15.6	15.6	18.8	18.8	18.8
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	148.5	148	148.5	172.9	173	172.9	15.6	15.6	15.6	18.8	18.8	18.8
LOS by Move:	F	F	F	F	F	F	C	C	C	C	C	C
ApproachDel:	148.5			172.9			15.6			18.8		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	148.5			172.9			15.6			18.8		
LOS by Appr:	F			F			C			C		

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #216 Presidio/Washington

Cycle (sec): 100 Critical Vol./Cap. (X): 1.203
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 107.2
Optimal Cycle: 0 Level Of Service: F

Street Name:	Presidio Blvd.						Washington St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	20	609	35	44	566	48	68	125	13	20	62	28
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	20	609	35	44	566	48	68	125	13	20	62	28
Added Vol:	0	46	0	0	51	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	20	655	35	44	617	48	68	125	13	20	62	28
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	20	655	35	44	617	48	68	125	13	20	62	28
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	20	655	35	44	617	48	68	125	13	20	62	28
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	20	655	35	44	617	48	68	125	13	20	62	28
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.03	0.92	0.05	0.06	0.87	0.07	0.33	0.61	0.06	0.18	0.57	0.25
Final Sat.:	17	544	29	37	514	40	159	291	30	83	256	116
Capacity Analysis Module:												
Vol/Sat:	1.20	1.20	1.20	1.20	1.20	1.20	0.43	0.43	0.43	0.24	0.24	0.24
Crit Moves:	****				****			****				****
Delay/Veh:	128.3	128	128.3	127.3	127	127.3	15.8	15.8	15.8	13.0	13.0	13.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	128.3	128	128.3	127.3	127	127.3	15.8	15.8	15.8	13.0	13.0	13.0
LOS by Move:	F	F	F	F	F	F	C	C	C	B	B	B
ApproachDel:	128.3			127.3			15.8			13.0		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	128.3			127.3			15.8			13.0		
LOS by Appr:	F			F			C			B		

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #217 Arguello/Jackson

Cycle (sec): 100 Critical Vol./Cap. (X): 0.800
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 20.5
Optimal Cycle: 0 Level Of Service: C

Street Name:	Arguello Blvd.						Jackson St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	0	1 0	0 1	0	0 0	0 0	0	0 0	0 0	1!	0 0
Volume Module:												
Base Vol:	0	421	67	33	513	0	0	0	0	90	0	33
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	421	67	33	513	0	0	0	0	90	0	33
Added Vol:	0	36	0	0	35	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	457	67	33	548	0	0	0	0	90	0	33
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	457	67	33	548	0	0	0	0	90	0	33
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	457	67	33	548	0	0	0	0	90	0	33
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	457	67	33	548	0	0	0	0	90	0	33
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.87	0.13	0.06	0.94	0.00	0.00	0.00	0.00	0.73	0.00	0.27
Final Sat.:	0	633	93	41	685	0	0	0	0	392	0	144
Capacity Analysis Module:												
Vol/Sat:	xxxx	0.72	0.72	0.80	0.80	xxxx	xxxx	xxxx	xxxx	0.23	xxxx	0.23
Crit Moves:			****		****					****		
Delay/Veh:	0.0	19.0	19.0	23.9	23.9	0.0	0.0	0.0	0.0	10.8	0.0	10.8
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	19.0	19.0	23.9	23.9	0.0	0.0	0.0	0.0	10.8	0.0	10.8
LOS by Move:	*	C	C	C	C	*	*	*	*	B	*	B
ApproachDel:	19.0				23.9		xxxxxx			10.8		
Delay Adj:	1.00				1.00		xxxxx			1.00		
ApprAdjDel:	19.0				23.9		xxxxxx			10.8		
LOS by Appr:	C				C		*			B		

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #218 Arguello/Washington St

Cycle (sec): 100 Critical Vol./Cap. (X): 0.875
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 27.4
Optimal Cycle: 0 Level Of Service: D

Street Name:	Arguello Blvd.						Washington St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1!	0 0	0 0	1!	0 0	0 0	0	1 0	0 0	1!	0 0
Volume Module:												
Base Vol:	20	465	57	20	551	11	0	8	24	82	5	20
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	20	465	57	20	551	11	0	8	24	82	5	20
Added Vol:	0	36	0	0	35	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	20	501	57	20	586	11	0	8	24	82	5	20
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	20	501	57	20	586	11	0	8	24	82	5	20
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	20	501	57	20	586	11	0	8	24	82	5	20
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	20	501	57	20	586	11	0	8	24	82	5	20
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.03	0.87	0.10	0.03	0.95	0.02	0.00	0.25	0.75	0.76	0.05	0.19
Final Sat.:	24	609	69	23	670	13	0	128	385	390	24	95
Capacity Analysis Module:												
Vol/Sat:	0.82	0.82	0.82	0.87	0.87	0.87	xxxx	0.06	0.06	0.21	0.21	0.21
Crit Moves:		****			****			****		****		
Delay/Veh:	26.4	26.4	26.4	32.1	32.1	32.1	0.0	9.8	9.8	11.3	11.3	11.3
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	26.4	26.4	26.4	32.1	32.1	32.1	0.0	9.8	9.8	11.3	11.3	11.3
LOS by Move:	D	D	D	D	D	D	*	A	A	B	B	B
ApproachDel:		26.4			32.1			9.8			11.3	
Delay Adj:		1.00			1.00			1.00			1.00	
ApprAdjDel:		26.4			32.1			9.8			11.3	
LOS by Appr:		D			D			A			B	

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #219 Arguello/Moraga

Cycle (sec): 100 Critical Vol./Cap. (X): 0.676
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 16.0
Optimal Cycle: 0 Level Of Service: C

Street Name:	Arguello						Moraga					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 0	0 0	0	0 0	0 1	0	0 1	0 0	0
Volume Module:												
Base Vol:	128	0	303	0	0	0	0	48	132	317	60	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	128	0	303	0	0	0	0	48	132	317	60	0
Added Vol:	4	0	32	0	0	0	0	1	4	32	1	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	132	0	335	0	0	0	0	49	136	349	61	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	132	0	335	0	0	0	0	49	136	349	61	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	132	0	335	0	0	0	0	49	136	349	61	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	132	0	335	0	0	0	0	49	136	349	61	0
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.28	0.00	0.72	0.00	0.00	0.00	0.00	0.26	0.74	0.85	0.15	0.00
Final Sat.:	195	0	495	0	0	0	0	167	465	535	94	0
Capacity Analysis Module:												
Vol/Sat:	0.68	xxxx	0.68	xxxx	xxxx	xxxx	xxxx	0.29	0.29	0.65	0.65	xxxx
Crit Moves:			****					****		****		
Delay/Veh:	17.0	0.0	17.0	0.0	0.0	0.0	0.0	10.3	10.3	17.6	17.6	0.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	17.0	0.0	17.0	0.0	0.0	0.0	0.0	10.3	10.3	17.6	17.6	0.0
LOS by Move:	C	*	C	*	*	*	*	B	B	C	C	*
ApproachDel:	17.0			xxxxxx				10.3			17.6	
Delay Adj:	1.00			xxxxx				1.00			1.00	
ApprAdjDel:	17.0			xxxxxx				10.3			17.6	
LOS by Appr:	C			*				B			C	

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #220 Montgomery/Sheridan

Cycle (sec): 100 Critical Vol./Cap. (X): 0.479
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 10.2
Optimal Cycle: 0 Level Of Service: B

Street Name:	Montgomery St.						Sheridan Ave.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 1	0 0	0	0 0	0 1	0	0 0	1! 0	0	0 0	0 0	0
Volume Module:												
Base Vol:	29	33	0	0	48	37	193	0	148	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	29	33	0	0	48	37	193	0	148	0	0	0
Added Vol:	0	50	0	0	11	57	40	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	29	83	0	0	59	94	233	0	148	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	29	83	0	0	59	94	233	0	148	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	29	83	0	0	59	94	233	0	148	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	29	83	0	0	59	94	233	0	148	0	0	0
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.26	0.74	0.00	0.00	0.39	0.61	0.61	0.00	0.39	0.00	0.00	0.00
Final Sat.:	175	500	0	0	286	456	486	0	309	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.17	0.17	xxxx	xxxx	0.21	0.21	0.48	xxxx	0.48	xxxx	xxxx	xxxx
Crit Moves:		****			****		****					
Delay/Veh:	8.9	8.9	0.0	0.0	8.6	8.6	11.2	0.0	11.2	0.0	0.0	0.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	8.9	8.9	0.0	0.0	8.6	8.6	11.2	0.0	11.2	0.0	0.0	0.0
LOS by Move:	A	A	*	*	A	A	B	*	B	*	*	*
ApproachDel:	8.9			8.6			11.2			xxxxxx		
Delay Adj:	1.00			1.00			1.00			xxxxx		
ApprAdjDel:	8.9			8.6			11.2			xxxxxx		
LOS by Appr:	A			A			B			*		

Alternative 2 – PM Peak Hour

Scenario Report

Scenario:	PM 2030-MPU
Command:	PM MPU
Volume:	PM 2030
Geometry:	PM 2030
Impact Fee:	Default Impact Fee
Trip Generation:	PM 2030-MPU
Trip Distribution:	Main Post SEIS
Paths:	Main Post SEIS
Routes:	Default Routes
Configuration:	Default Configuration

Trip Generation Report

Forecast for PM 2030-MPU

Zone #	Subzone	Amount	Units	Rate In	Rate Out	Trips In	Trips Out	Total Trips	% Of Total
14	West Crissy	1.00	mixed use	43.00	35.00	43	35	78	6.7
	Zone 14 Subtotal					43	35	78	6.7
15	Ruger & Simo	1.00	mixed use	43.00	41.00	43	41	84	7.2
	Zone 15 Subtotal					43	41	84	7.2
32	S. Main Post	1.00	mixed use	-10.00	-9.00	-10	-9	-19	-1.6
	Zone 32 Subtotal					-10	-9	-19	-1.6
33	W. Main Post	1.00	Mixed Use	159.00	73.00	159	73	232	19.9
	Zone 33 Subtotal					159	73	232	19.9
34	E. Main Post	1.00	mixed use	83.00	28.00	83	28	111	9.5
	Zone 34 Subtotal					83	28	111	9.5
35	N. Main Post	1.00	mixed use	87.00	17.00	87	17	104	8.9
	Zone 35 Subtotal					87	17	104	8.9
36	West Letterm	1.00	mixed use	-59.00	-15.00	-59	-15	-74	-6.3
	Zone 36 Subtotal					-59	-15	-74	-6.3
753	LDA	1.00	mixed use	126.00	188.00	126	188	314	26.9
	Zone 753 Subtotal					126	188	314	26.9
767	Commissary/P	1.00	mixed use	169.00	169.00	169	169	338	28.9
	Zone 767 Subtotal					169	169	338	28.9
TOTAL						641	527	1168	100.0

Trip Distribution Report

Percent Of Trips M POST SEIS

Zone	To Gates 5	14	16	17	22	28	36
14	0.0	25.0	0.0	10.0	15.0	50.0	0.0
15	0.0	0.0	25.0	0.0	67.5	0.0	7.5
32	0.0	5.0	10.0	10.0	68.0	5.0	2.0
33	0.0	5.0	10.0	10.0	68.0	5.0	2.0
34	0.0	5.0	10.0	10.0	68.0	5.0	2.0
35	0.0	5.0	10.0	10.0	68.0	5.0	2.0
36	0.0	10.0	20.0	15.0	40.0	15.0	0.0
753	20.0	5.0	10.0	5.0	55.0	0.0	5.0
767	14.0	0.0	10.0	10.0	14.0	50.0	2.0

Volume Type	NB Link In	Out	Total	SB Link In	Out	Total	EB Link In	Out	Total	WB Link In	Out	Total	Total Volume
#201 Lombard/Divisadero													
Base	378	385	763	298	285	583	2398	3242	5640	3117	2279	5396	12382
Added	0	0	0	0	0	0	228	322	550	322	228	550	1100
Total	378	385	763	298	285	583	2626	3564	6190	3439	2507	5946	13482
#202 Lombard/Richardson													
Base	3319	2500	5819	2171	3119	5290	329	200	529	0	0	0	11638
Added	322	228	550	72	155	227	156	167	323	0	0	0	1100
Total	3641	2728	6369	2243	3274	5517	485	367	852	0	0	0	12738
#203 Lyon/Lombard													
Base	217	183	400	318	325	643	569	517	1086	223	302	525	2654
Added	19	18	37	0	0	0	174	186	360	167	156	323	720
Total	236	201	437	318	325	643	743	703	1446	390	458	848	3374
#204 Greenwich/Divisadero													
Base	345	332	677	343	385	728	145	164	309	203	155	358	2072
Added	0	0	0	0	0	0	18	19	37	19	18	37	74
Total	345	332	677	343	385	728	163	183	346	222	173	395	2146
#205 Greenwich/Lyon													
Base	107	120	227	177	214	391	0	0	0	130	80	210	828
Added	0	0	0	18	19	37	0	0	0	19	18	37	74
Total	107	120	227	195	233	428	0	0	0	149	98	247	902
#206 Francisco/Richardson													
Base	3119	2250	5369	2217	3331	5548	251	69	320	145	82	227	11464
Added	155	72	227	72	155	227	0	0	0	0	0	0	454
Total	3274	2322	5596	2289	3486	5775	251	69	320	145	82	227	11918
#207 Richardson/Gorgas													
Base	253	63	316	69	34	103	2150	3439	5589	3298	2234	5532	11540
Added	72	0	72	0	0	0	0	155	155	155	72	227	454
Total	325	63	388	69	34	103	2150	3594	5744	3453	2306	5759	11994
#208 Doyle/Marina/Lyon													
Base	40	25	65	247	491	738	922	1549	2471	2009	1153	3162	6436
Added	0	0	0	107	122	229	-2	-9	-11	113	105	218	436
Total	40	25	65	354	613	967	920	1540	2460	2122	1258	3380	6872
#209 Graham/Lincoln													
Base	152	134	286	22	7	29	434	391	825	508	584	1092	2232
Added	33	40	73	1	0	1	81	161	242	201	115	316	632
Total	185	174	359	23	7	30	515	552	1067	709	699	1408	2864
#210 Lincoln/Halleck													
Base	0	3	3	314	340	654	542	543	1085	584	554	1138	2880
Added	0	0	0	93	154	247	132	204	336	298	165	463	1046
Total	0	3	3	407	494	901	674	747	1421	882	719	1601	3926

Volume Type	NB Link In	NB Link Out	NB Link Total	SB Link In	SB Link Out	SB Link Total	EB Link In	EB Link Out	EB Link Total	WB Link In	WB Link Out	WB Link Total	Total Volume
#211 Lincoln/Girard													
Base	0	0	0	336	497	833	589	585	1174	600	443	1043	3050
Added	0	0	0	217	82	299	157	341	498	124	75	199	996
Total	0	0	0	553	579	1132	746	926	1672	724	518	1242	4046
#212 Presidio/Letterman/Lincoln													
Base	539	546	1085	463	601	1064	237	188	425	148	52	200	2774
Added	141	92	233	71	112	183	8	25	33	28	19	47	496
Total	680	638	1318	534	713	1247	245	213	458	176	71	247	3270
#213 Lombard/Presidio													
Base	733	676	1409	549	597	1146	0	0	0	529	538	1067	3622
Added	81	76	157	93	141	234	0	0	0	123	80	203	594
Total	814	752	1566	642	738	1380	0	0	0	652	618	1270	4216
#214 Presidio/Pacific													
Base	731	630	1361	686	743	1429	14	66	80	89	81	170	3040
Added	60	54	114	54	60	114	0	0	0	0	0	0	228
Total	791	684	1475	740	803	1543	14	66	80	89	81	170	3268
#215 Presidio/Jackson													
Base	637	654	1291	661	677	1338	160	168	328	250	209	459	3416
Added	60	54	114	54	60	114	0	0	0	0	0	0	228
Total	697	708	1405	715	737	1452	160	168	328	250	209	459	3644
#216 Presidio/Washington													
Base	664	599	1263	658	705	1363	206	130	336	110	204	314	3276
Added	60	54	114	54	60	114	0	0	0	0	0	0	228
Total	724	653	1377	712	765	1477	206	130	336	110	204	314	3504
#217 Arguello/Jackson													
Base	488	603	1091	546	454	1000	0	0	0	123	100	223	2314
Added	51	38	89	38	51	89	0	0	0	0	0	0	178
Total	539	641	1180	584	505	1089	0	0	0	123	100	223	2492
#218 Arguello/Washington St													
Base	542	657	1199	582	485	1067	32	36	68	107	85	192	2526
Added	51	38	89	38	51	89	0	0	0	0	0	0	178
Total	593	695	1288	620	536	1156	32	36	68	107	85	192	2704
#219 Arguello/Moraga													
Base	431	449	880	0	0	0	180	188	368	377	351	728	1976
Added	50	39	89	0	0	0	-4	-5	-9	28	40	68	148
Total	481	488	969	0	0	0	176	183	359	405	391	796	2124
#220 Montgomery/Sheridan													
Base	62	196	258	85	226	311	341	66	407	0	0	0	976
Added	43	15	58	81	81	162	38	66	104	0	0	0	324
Total	105	211	316	166	307	473	379	132	511	0	0	0	1300

Impact Analysis Report
Level Of Service

Intersection	Base LOS	Base Del/ Veh	Base V/ C	Future LOS	Future Del/ Veh	Future V/ C	Change in
#201 Lombard/Divisadero	B	13.0	0.849	B	16.5	0.911	+ 3.481 D/V
#202 Lombard/Richardson	A	3.6	0.602	B	8.7	0.760	+ 5.115 D/V
#203 Lyon/Lombard	D	31.0	0.961	F	110.3	1.417	+ 0.456 V/C
#204 Greenwich/Divisadero	B	13.4	0.549	B	14.0	0.566	+ 0.017 V/C
#205 Greenwich/Lyon	A	8.2	0.222	A	8.4	0.248	+ 0.026 V/C
#206 Francisco/Richardson	B	15.0	0.712	B	18.0	0.742	+ 2.927 D/V
#207 Richardson/Gorgas	A	7.0	0.796	B	10.1	0.870	+ 3.089 D/V
#208 Doyle/Marina/Lyon	B	17.7	0.726	C	26.9	0.835	+ 9.154 D/V
#209 Graham/Lincoln	B	13.8	0.621	C	23.9	0.850	+ 0.229 V/C
#210 Lincoln/Halleck	F	108.0	0.000	F	745.5	0.000	+637.559 D/V
#211 Lincoln/Girard	F	506.5	0.000	F	OVRFL	0.000	+957.295 D/V
#212 Presidio/Letterman/Lincoln	C	17.6	0.781	E	35.6	1.036	+ 0.255 V/C
#213 Lombard/Presidio	F	88.3	1.344	F	123.8	1.556	+ 0.212 V/C
#214 Presidio/Pacific	F	53.7	1.029	F	77.0	1.120	+ 0.090 V/C
#215 Presidio/Jackson	F	100.0	1.216	F	133.4	1.315	+ 0.099 V/C
#216 Presidio/Washington	F	81.6	1.125	F	112.1	1.227	+ 0.102 V/C
#217 Arguello/Jackson	C	17.6	0.744	C	21.3	0.808	+ 0.063 V/C
#218 Arguello/Washington St	C	22.3	0.817	D	28.9	0.883	+ 0.066 V/C
#219 Arguello/Moraga	B	14.0	0.613	C	16.2	0.691	+ 0.078 V/C
#220 Montgomery/Sheridan	A	9.2	0.394	B	10.2	0.478	+ 0.083 V/C

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #201 Lombard/Divisadero

Cycle (sec): 90 Critical Vol./Cap. (X): 0.911
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 16.5
Optimal Cycle: 90 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	27	27	27	27	27	27	54	54	54	54	54	54
Lanes:	1 0	0 1	0	1 0	0 1	0	0 1	1 1	0	0 1	1 1	0
Volume Module:												
Base Vol:	194	161	23	80	163	55	0	2176	222	0	2993	124
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	194	161	23	80	163	55	0	2176	222	0	2993	124
Added Vol:	0	0	0	0	0	0	0	228	0	0	322	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	194	161	23	80	163	55	0	2404	222	0	3315	124
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	194	161	23	80	163	55	0	2404	222	0	3315	124
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	194	161	23	80	163	55	0	2404	222	0	3315	124
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	194	161	23	80	163	55	0	2404	222	0	3315	124
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.42	0.98	0.98	0.47	0.96	0.96	0.91	0.90	0.90	0.91	0.91	0.91
Lanes:	1.00	0.87	0.13	1.00	0.75	0.25	0.00	2.75	0.25	0.00	2.89	0.11
Final Sat.:	792	1631	233	885	1367	461	0	4687	433	0	4975	186
Capacity Analysis Module:												
Vol/Sat:	0.24	0.10	0.10	0.09	0.12	0.12	0.00	0.51	0.51	0.00	0.67	0.67
Crit Moves:	****										****	
Green/Cycle:	0.30	0.30	0.30	0.30	0.30	0.30	0.00	0.70	0.70	0.00	0.70	0.70
Volume/Cap:	0.82	0.33	0.33	0.30	0.40	0.40	0.00	0.73	0.73	0.00	0.95	0.95
Uniform Del:	29.2	24.5	24.5	24.2	25.0	25.0	0.0	8.3	8.3	0.0	12.1	12.1
IncremntDel:	19.3	0.3	0.3	0.6	0.5	0.5	0.0	0.8	0.8	0.0	6.9	6.9
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00
Delay/Veh:	48.5	24.8	24.8	24.9	25.5	25.5	0.0	9.1	9.1	0.0	19.0	19.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	48.5	24.8	24.8	24.9	25.5	25.5	0.0	9.1	9.1	0.0	19.0	19.0
HCM2kAvg:	14	4	4	4	5	5	0	16	16	0	35	35

Level Of Service Computation Report
1994 HCM Operations Method (Future Volume Alternative)

Intersection #202 Lombard/Richardson

Cycle (sec): 90 Critical Vol./Cap. (X): 0.760
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 8.7
Optimal Cycle: 90 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Ovl			Include		
Min. Green:	25	90	0	0	57	57	0	0	25	0	0	0
Lanes:	1 0	3 0	0	0 0	2 1	0	0 0	0 0	1	0 0	0 0	0
Volume Module:												
Base Vol:	200	3119	0	0	2171	0	0	0	329	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	200	3119	0	0	2171	0	0	0	329	0	0	0
Added Vol:	167	155	0	0	72	0	0	0	156	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	367	3274	0	0	2243	0	0	0	485	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	367	3274	0	0	2243	0	0	0	485	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	367	3274	0	0	2243	0	0	0	485	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.10	1.00	1.00	1.10	1.10	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	367	3601	0	0	2467	0	0	0	485	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.77	1.00	1.00	1.00
Lanes:	1.00	3.00	0.00	0.00	3.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	1805	5700	0	0	5700	0	0	0	1463	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.20	0.63	0.00	0.00	0.43	0.00	0.00	0.00	0.33	0.00	0.00	0.00
Crit Moves:		****		****					****			
Green/Cycle:	0.30	1.00	0.00	0.00	0.70	0.00	0.00	0.00	0.30	0.00	0.00	0.00
Volume/Cap:	0.67	0.63	0.00	0.00	0.62	0.00	0.00	0.00	1.09	0.00	0.00	0.00
Uniform Del:	20.7	0.0	0.0	0.0	5.6	0.0	0.0	0.0	23.8	0.0	0.0	0.0
IncremntDel:	2.1	0.2	0.0	0.0	0.2	0.0	0.0	0.0	62.0	0.0	0.0	0.0
Delay Adj:	0.85	0.85	0.00	0.00	0.85	0.00	0.00	0.00	0.85	0.00	0.00	0.00
Delay/Veh:	19.8	0.2	0.0	0.0	5.0	0.0	0.0	0.0	82.2	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	19.8	0.2	0.0	0.0	5.0	0.0	0.0	0.0	82.2	0.0	0.0	0.0
DesignQueue:	13	0	0	0	42	0	0	0	18	0	0	0

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #203 Lyon/Lombard

Cycle (sec): 100 Critical Vol./Cap. (X): 1.417
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 110.3
Optimal Cycle: 0 Level Of Service: F

Street Name:	Lyon St.						Lombard St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	124	68	25	29	65	224	212	248	109	9	169	45
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	124	68	25	29	65	224	212	248	109	9	169	45
Added Vol:	19	0	0	0	0	0	0	156	18	0	167	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	143	68	25	29	65	224	212	404	127	9	336	45
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	143	68	25	29	65	224	212	404	127	9	336	45
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	143	68	25	29	65	224	212	404	127	9	336	45
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	143	68	25	29	65	224	212	404	127	9	336	45
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.60	0.29	0.11	0.09	0.20	0.71	0.29	0.54	0.17	0.02	0.86	0.12
Final Sat.:	258	123	45	43	97	336	150	285	90	11	423	57
Capacity Analysis Module:												
Vol/Sat:	0.55	0.55	0.55	0.67	0.67	0.67	1.42	1.42	1.42	0.79	0.79	0.79
Crit Moves:		****		****				****			****	
Delay/Veh:	19.3	19.3	19.3	22.2	22.2	22.2	218.5	219	218.5	30.8	30.8	30.8
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	19.3	19.3	19.3	22.2	22.2	22.2	218.5	219	218.5	30.8	30.8	30.8
LOS by Move:	C	C	C	C	C	C	F	F	F	D	D	D
ApproachDel:	19.3			22.2			218.5			30.8		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	19.3			22.2			218.5			30.8		
LOS by Appr:	C			C			F			D		

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #204 Greenwich/Divisadero

Cycle (sec): 100 Critical Vol./Cap. (X): 0.566
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 14.0
Optimal Cycle: 0 Level Of Service: B

Street Name:	Divisadero						Greenwich					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	11	323	11	34	296	13	26	110	9	27	140	36
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	11	323	11	34	296	13	26	110	9	27	140	36
Added Vol:	0	0	0	0	0	0	0	18	0	0	19	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	11	323	11	34	296	13	26	128	9	27	159	36
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	11	323	11	34	296	13	26	128	9	27	159	36
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	11	323	11	34	296	13	26	128	9	27	159	36
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	11	323	11	34	296	13	26	128	9	27	159	36
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.03	0.94	0.03	0.10	0.86	0.04	0.16	0.79	0.05	0.12	0.72	0.16
Final Sat.:	19	571	19	60	525	23	82	404	28	66	389	88
Capacity Analysis Module:												
Vol/Sat:	0.57	0.57	0.57	0.56	0.56	0.56	0.32	0.32	0.32	0.41	0.41	0.41
Crit Moves:		****			****			****			****	
Delay/Veh:	15.0	15.0	15.0	15.0	15.0	15.0	11.6	11.6	11.6	12.5	12.5	12.5
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	15.0	15.0	15.0	15.0	15.0	15.0	11.6	11.6	11.6	12.5	12.5	12.5
LOS by Move:	C	C	C	C	C	C	B	B	B	B	B	B
ApproachDel:	15.0			15.0			11.6			12.5		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	15.0			15.0			11.6			12.5		
LOS by Appr:	C			C			B			B		

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #205 Greenwich/Lyon

Cycle (sec): 100 Critical Vol./Cap. (X): 0.248
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 8.4
Optimal Cycle: 0 Level Of Service: A

Street Name:	Lyon						Greenwich					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	0	1 0	0 1	0	0 0	0 0	0	0 0	0 0	1!	0 0
Volume Module:												
Base Vol:	0	105	2	78	99	0	0	0	0	21	0	109
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	105	2	78	99	0	0	0	0	21	0	109
Added Vol:	0	0	0	18	0	0	0	0	0	0	0	19
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	105	2	96	99	0	0	0	0	21	0	128
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	105	2	96	99	0	0	0	0	21	0	128
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	105	2	96	99	0	0	0	0	21	0	128
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	105	2	96	99	0	0	0	0	21	0	128
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.98	0.02	0.49	0.51	0.00	0.00	0.00	0.00	0.14	0.00	0.86
Final Sat.:	0	769	15	387	399	0	0	0	0	117	0	714
Capacity Analysis Module:												
Vol/Sat:	xxxx	0.14	0.14	0.25	0.25	xxxx	xxxx	xxxx	xxxx	0.18	xxxx	0.18
Crit Moves:			****		****					****		
Delay/Veh:	0.0	8.1	8.1	8.9	8.9	0.0	0.0	0.0	0.0	7.9	0.0	7.9
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	8.1	8.1	8.9	8.9	0.0	0.0	0.0	0.0	7.9	0.0	7.9
LOS by Move:	*	A	A	A	A	*	*	*	*	A	*	A
ApproachDel:		8.1			8.9			xxxxxx			7.9	
Delay Adj:		1.00			1.00			xxxxx			1.00	
ApprAdjDel:		8.1			8.9			xxxxxx			7.9	
LOS by Appr:		A			A			*			A	

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #206 Francisco/Richardson

Cycle (sec): 90 Critical Vol./Cap. (X): 0.742
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 18.0
Optimal Cycle: 90 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	51	51	0	51	51	31	31	31	31	31	31
Lanes:	0 0	2	1 0	0 0	2	1 0	0 1	0	1 0	0 0	1!	0 0
Volume Module:												
Base Vol:	0	3117	2	0	2217	0	142	80	29	4	69	72
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	3117	2	0	2217	0	142	80	29	4	69	72
Added Vol:	0	155	0	0	72	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	3272	2	0	2289	0	142	80	29	4	69	72
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	3272	2	0	2289	0	142	80	29	4	69	72
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	3272	2	0	2289	0	142	80	29	4	69	72
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	3272	2	0	2289	0	142	80	29	4	69	72
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	0.91	0.91	1.00	0.91	0.91	0.67	0.67	0.67	0.93	0.93	0.93
Lanes:	0.00	2.99	0.01	0.00	3.00	0.00	1.00	0.73	0.27	0.03	0.47	0.50
Final Sat.:	0	5184	3	0	5187	0	1279	939	340	49	838	874
Capacity Analysis Module:												
Vol/Sat:	0.00	0.63	0.63	0.00	0.44	0.00	0.11	0.09	0.09	0.08	0.08	0.08
Crit Moves:		****		****			****					
Green/Cycle:	0.00	0.66	0.66	0.00	0.66	0.00	0.34	0.34	0.34	0.34	0.34	0.34
Volume/Cap:	0.00	0.96	0.96	0.00	0.67	0.00	0.32	0.25	0.25	0.24	0.24	0.24
Uniform Del:	0.0	14.5	14.5	0.0	9.6	0.0	21.8	21.1	21.1	21.1	21.1	21.1
IncremntDel:	0.0	8.5	8.5	0.0	0.5	0.0	0.2	0.1	0.1	0.2	0.2	0.2
Delay Adj:	0.00	1.00	1.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Delay/Veh:	0.0	23.0	23.0	0.0	10.1	0.0	22.0	21.3	21.3	21.3	21.3	21.3
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	23.0	23.0	0.0	10.1	0.0	22.0	21.3	21.3	21.3	21.3	21.3
HCM2kAvg:	0	35	35	0	14	0	4	3	3	3	3	3

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #207 Richardson/Gorgas

Cycle (sec): 90 Critical Vol./Cap. (X): 0.870
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 10.1
Optimal Cycle: 90 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Split Phase			Split Phase			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	10	10	10	12	12	12	52	52	52	52	52	52
Lanes:	1 0	1! 0	0	0 0	0 0	1	0 0	3 0	1	0 0	2 1	0
Volume Module:												
Base Vol:	106	0	147	0	0	69	0	2087	63	0	3264	34
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	106	0	147	0	0	69	0	2087	63	0	3264	34
Added Vol:	0	0	72	0	0	0	0	0	0	0	155	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	106	0	219	0	0	69	0	2087	63	0	3419	34
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	106	0	219	0	0	69	0	2087	63	0	3419	34
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	106	0	219	0	0	69	0	2087	63	0	3419	34
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	106	0	219	0	0	69	0	2087	63	0	3419	34
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.88	1.00	0.88	1.00	1.00	0.87	1.00	0.91	0.85	1.00	0.91	0.91
Lanes:	1.19	0.00	0.81	0.00	0.00	1.00	0.00	3.00	1.00	0.00	2.97	0.03
Final Sat.:	2008	0	1353	0	0	1644	0	5187	1615	0	5131	51
Capacity Analysis Module:												
Vol/Sat:	0.05	0.00	0.16	0.00	0.00	0.04	0.00	0.40	0.04	0.00	0.67	0.67
Crit Moves:			****			****					****	
Green/Cycle:	0.19	0.00	0.19	0.00	0.00	0.13	0.00	0.77	0.77	0.00	0.77	0.77
Volume/Cap:	0.28	0.00	0.87	0.00	0.00	0.31	0.00	0.53	0.05	0.00	0.87	0.87
Uniform Del:	31.5	0.0	35.6	0.0	0.0	35.3	0.0	4.1	2.6	0.0	7.4	7.4
IncremntDel:	0.1	0.0	19.3	0.0	0.0	0.8	0.0	0.1	0.0	0.0	2.3	2.3
Delay Adj:	1.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00
Delay/Veh:	31.6	0.0	54.8	0.0	0.0	36.1	0.0	4.3	2.6	0.0	9.7	9.7
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	31.6	0.0	54.8	0.0	0.0	36.1	0.0	4.3	2.6	0.0	9.7	9.7
HCM2kAvg:	2	0	11	0	0	2	0	8	0	0	26	26

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #208 Doyle/Marina/Lyon

Cycle (sec): 60 Critical Vol./Cap. (X): 0.835
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 26.9
Optimal Cycle: 90 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	24	0	24	24	0	24	0	28	0	0	28	0
Lanes:	1 0	0 0	1	1 0	0 0	1	0 0	1 1	0	0 0	1 1	0
Volume Module:												
Base Vol:	0	0	40	216	0	31	0	897	25	0	1518	491
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	40	216	0	31	0	897	25	0	1518	491
Added Vol:	0	0	0	107	0	0	0	-2	0	0	-9	122
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	40	323	0	31	0	895	25	0	1509	613
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	40	323	0	31	0	895	25	0	1509	613
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	40	323	0	31	0	895	25	0	1509	613
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	0	40	323	0	31	0	895	25	0	1509	613
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	0.85	0.77	1.00	0.85	1.00	0.95	0.95	1.00	0.91	0.91
Lanes:	1.00	0.00	1.00	1.00	0.00	1.00	0.00	1.95	0.05	0.00	1.42	0.58
Final Sat.:	1900	0	1615	1461	0	1615	0	3498	98	0	2457	998
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.02	0.22	0.00	0.02	0.00	0.26	0.26	0.00	0.61	0.61
Crit Moves:				****			****				****	
Green/Cycle:	0.00	0.00	0.40	0.40	0.00	0.40	0.00	0.60	0.60	0.00	0.60	0.60
Volume/Cap:	0.00	0.00	0.06	0.55	0.00	0.05	0.00	0.43	0.43	0.00	1.02	1.02
Uniform Del:	0.0	0.0	11.1	13.9	0.0	11.0	0.0	6.5	6.5	0.0	12.0	12.0
IncremntDel:	0.0	0.0	0.0	1.2	0.0	0.0	0.0	0.1	0.1	0.0	26.0	26.0
Delay Adj:	0.00	0.00	1.00	1.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00
Delay/Veh:	0.0	0.0	11.1	15.0	0.0	11.0	0.0	6.6	6.6	0.0	38.0	38.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	11.1	15.0	0.0	11.0	0.0	6.6	6.6	0.0	38.0	38.0
HCM2kAvg:	0	0	0	7	0	0	0	5	5	0	31	31

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #209 Graham/Lincoln

Cycle (sec): 100 Critical Vol./Cap. (X): 0.850
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 23.9
Optimal Cycle: 0 Level Of Service: C

Street Name:	Graham St.						Lincoln Blvd.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	0 1	0 0	0	1 0	0 1	0
Volume Module:												
Base Vol:	2	0	150	7	0	15	7	427	0	134	374	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	2	0	150	7	0	15	7	427	0	134	374	0
Added Vol:	0	0	33	1	0	0	0	81	0	40	161	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	2	0	183	8	0	15	7	508	0	174	535	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	2	0	183	8	0	15	7	508	0	174	535	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	2	0	183	8	0	15	7	508	0	174	535	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	2	0	183	8	0	15	7	508	0	174	535	0
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.01	0.00	0.99	0.35	0.00	0.65	0.01	0.99	0.00	1.00	1.00	0.00
Final Sat.:	6	0	558	167	0	312	9	645	0	579	629	0
Capacity Analysis Module:												
Vol/Sat:	0.33	xxxx	0.33	0.05	xxxx	0.05	0.79	0.79	xxxx	0.30	0.85	xxxx
Crit Moves:			****	****			****				****	
Delay/Veh:	11.6	0.0	11.6	10.0	0.0	10.0	25.0	25.0	0.0	11.5	31.6	0.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	11.6	0.0	11.6	10.0	0.0	10.0	25.0	25.0	0.0	11.5	31.6	0.0
LOS by Move:	B	*	B	B	*	B	C	C	*	B	D	*
ApproachDel:	11.6			10.0			25.0			26.7		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	11.6			10.0			25.0			26.7		
LOS by Appr:	B			B			C			D		

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #210 Lincoln/Halleck

Average Delay (sec/veh): 155.5 Worst Case Level Of Service: F[745.5]

Street Name:	Halleck St.						Lincoln Blvd.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Channel			Include			Include		
Lanes:	0 0	0 0	0	0 0	1! 0	0	1 0	0 1	0	0 0	0 1	0
Volume Module:												
Base Vol:	0	0	0	153	0	161	138	401	3	0	382	202
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	153	0	161	138	401	3	0	382	202
Added Vol:	0	0	0	63	0	30	30	102	0	0	174	124
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	216	0	191	168	503	3	0	556	326
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	216	0	191	168	503	3	0	556	326
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	0	0	0	216	0	191	168	503	3	0	556	326
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	6.4	xxxx	6.2	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	3.5	xxxx	3.3	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	1560	xxxx	719	882	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	125	xxxx	432	775	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	104	xxxx	432	775	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	2.08	xxxx	0.44	0.22	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.8	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	10.9	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	B	*	*	*	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	162	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	35.0	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	746	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	F	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			745.5			xxxxxx			xxxxxx		
ApproachLOS:	*			F			*			*		

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #211 Lincoln/Girard

Average Delay (sec/veh): 402.7 Worst Case Level Of Service: F[1463.8]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Stop Sign				Stop Sign				Uncontrolled				Uncontrolled			
Rights:	Include				Include				Include				Include			
Lanes:	0	0	0	0 0	0	0	1!	0 0	1	0	1	0 0	0	0	0	1 0
Volume Module:																
Base Vol:	0	0	0	187	0	149	333	256	0	0	436	164				
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
Initial Bse:	0	0	0	187	0	149	333	256	0	0	436	164				
Added Vol:	0	0	0	0	0	217	82	75	0	0	124	0				
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0				
Initial Fut:	0	0	0	187	0	366	415	331	0	0	560	164				
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
PHF Volume:	0	0	0	187	0	366	415	331	0	0	560	164				
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0				
Final Vol.:	0	0	0	187	0	366	415	331	0	0	560	164				
Critical Gap Module:																
Critical Gp:	xxxxx	xxxx	xxxxx	6.4	xxxx	6.2	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
FollowUpTim:	xxxxx	xxxx	xxxxx	3.5	xxxx	3.3	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
Capacity Module:																
Cnflict Vol:	xxxx	xxxx	xxxxx	1803	xxxx	642	724	xxxx	xxxxx	xxxx	xxxx	xxxxx				
Potent Cap.:	xxxx	xxxx	xxxxx	88	xxxx	478	888	xxxx	xxxxx	xxxx	xxxx	xxxxx				
Move Cap.:	xxxx	xxxx	xxxxx	56	xxxx	478	888	xxxx	xxxxx	xxxx	xxxx	xxxxx				
Volume/Cap:	xxxx	xxxx	xxxx	3.34	xxxx	0.77	0.47	xxxx	xxxx	xxxx	xxxx	xxxx				
Level Of Service Module:																
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	2.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	12.6	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
LOS by Move:	*	*	*	*	*	*	B	*	*	*	*	*				
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT				
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	135	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx				
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	56.0	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	1464	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
Shared LOS:	*	*	*	*	F	*	*	*	*	*	*	*				
ApproachDel:	xxxxxx			1463.8			xxxxxx			xxxxxx						
ApproachLOS:	*			F			*			*						

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #212 Presidio/Letterman/Lincoln

Cycle (sec): 100 Critical Vol./Cap. (X): 1.036
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 35.6
Optimal Cycle: 0 Level Of Service: E

Street Name:	Lincoln/Presidio						Presidio/Letterman					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	0	1	0	0 1	0	1	0	0	0 0	1!	0 0
Volume Module:												
Base Vol:	106	425	8	28	393	42	74	16	147	6	40	102
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	106	425	8	28	393	42	74	16	147	6	40	102
Added Vol:	25	103	13	6	65	0	0	0	8	19	0	9
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	131	528	21	34	458	42	74	16	155	25	40	111
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	131	528	21	34	458	42	74	16	155	25	40	111
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	131	528	21	34	458	42	74	16	155	25	40	111
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	131	528	21	34	458	42	74	16	155	25	40	111
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.96	0.04	0.13	1.71	0.16	0.30	0.07	0.63	0.14	0.23	0.63
Final Sat.:	488	509	20	63	865	80	151	33	315	68	108	300
Capacity Analysis Module:												
Vol/Sat:	0.27	1.04	1.04	0.54	0.53	0.52	0.49	0.49	0.49	0.37	0.37	0.37
Crit Moves:		****		****				****			****	
Delay/Veh:	12.7	74.6	74.6	17.5	17.1	16.8	16.1	16.1	16.1	14.1	14.1	14.1
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	12.7	74.6	74.6	17.5	17.1	16.8	16.1	16.1	16.1	14.1	14.1	14.1
LOS by Move:	B	F	F	C	C	C	C	C	C	B	B	B
ApproachDel:	62.7			17.1			16.1			14.1		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	62.7			17.1			16.1			14.1		
LOS by Appr:	F			C			C			B		

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #213 Lombard/Presidio

Cycle (sec): 100 Critical Vol./Cap. (X): 1.556
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 123.8
Optimal Cycle: 0 Level Of Service: F

Street Name:	Presidio Blvd.						Lombard St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	0	1 0	1 0	1 0	0	0 0	0 0	0	1 0	0 1	0
Volume Module:												
Base Vol:	0	409	324	214	335	0	0	0	0	341	0	188
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	409	324	214	335	0	0	0	0	341	0	188
Added Vol:	0	50	31	49	44	0	0	0	0	32	0	91
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	459	355	263	379	0	0	0	0	373	0	279
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	459	355	263	379	0	0	0	0	373	0	279
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	459	355	263	379	0	0	0	0	373	0	279
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	459	355	263	379	0	0	0	0	373	0	279
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.56	0.44	1.00	1.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Final Sat.:	0	295	228	460	491	0	0	0	0	459	0	540
Capacity Analysis Module:												
Vol/Sat:	xxxx	1.56	1.56	0.57	0.77	xxxx	xxxx	xxxx	xxxx	0.81	xxxx	0.52
Crit Moves:		****			****					****		
Delay/Veh:	0.0	278	278.0	20.3	30.3	0.0	0.0	0.0	0.0	36.1	0.0	16.2
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	278	278.0	20.3	30.3	0.0	0.0	0.0	0.0	36.1	0.0	16.2
LOS by Move:	*	F	F	C	D	*	*	*	*	E	*	C
ApproachDel:	278.0				26.2		xxxxxx			27.6		
Delay Adj:	1.00				1.00		xxxxx			1.00		
ApprAdjDel:	278.0				26.2		xxxxxx			27.6		
LOS by Appr:	F				D		*			D		

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #214 Presidio/Pacific

Cycle (sec): 100 Critical Vol./Cap. (X): 1.120
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 77.0
Optimal Cycle: 0 Level Of Service: F

Street Name:	Presidio Blvd.						Pacific Ave.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	9	703	19	56	606	24	3	6	5	19	33	37
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	9	703	19	56	606	24	3	6	5	19	33	37
Added Vol:	0	60	0	0	54	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	9	763	19	56	660	24	3	6	5	19	33	37
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	9	763	19	56	660	24	3	6	5	19	33	37
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	9	763	19	56	660	24	3	6	5	19	33	37
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	9	763	19	56	660	24	3	6	5	19	33	37
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.01	0.97	0.02	0.08	0.89	0.03	0.21	0.43	0.36	0.21	0.37	0.42
Final Sat.:	8	681	17	53	629	23	107	215	179	114	198	222
Capacity Analysis Module:												
Vol/Sat:	1.12	1.12	1.12	1.05	1.05	1.05	0.03	0.03	0.03	0.17	0.17	0.17
Crit Moves:		****			****		****				****	
Delay/Veh:	92.5	92.5	92.5	69.5	69.5	69.5	10.3	10.3	10.3	11.0	11.0	11.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	92.5	92.5	92.5	69.5	69.5	69.5	10.3	10.3	10.3	11.0	11.0	11.0
LOS by Move:	F	F	F	F	F	F	B	B	B	B	B	B
ApproachDel:	92.5			69.5			10.3			11.0		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	92.5			69.5			10.3			11.0		
LOS by Appr:	F			F			B			B		

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #215 Presidio/Jackson

Cycle (sec): 100 Critical Vol./Cap. (X): 1.315
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 133.4
Optimal Cycle: 0 Level Of Service: F

Street Name:	Presidio Blvd.						Jackson St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	8	575	54	54	579	28	55	101	4	71	132	47
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	8	575	54	54	579	28	55	101	4	71	132	47
Added Vol:	0	60	0	0	54	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	8	635	54	54	633	28	55	101	4	71	132	47
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	8	635	54	54	633	28	55	101	4	71	132	47
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	8	635	54	54	633	28	55	101	4	71	132	47
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	8	635	54	54	633	28	55	101	4	71	132	47
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.01	0.91	0.08	0.08	0.88	0.04	0.34	0.63	0.03	0.28	0.53	0.19
Final Sat.:	6	498	42	41	481	21	148	273	11	132	246	88
Capacity Analysis Module:												
Vol/Sat:	1.28	1.28	1.28	1.32	1.32	1.32	0.37	0.37	0.37	0.54	0.54	0.54
Crit Moves:		****			****			****			****	
Delay/Veh:	158.8	159	158.8	175.2	175	175.2	15.6	15.6	15.6	18.8	18.8	18.8
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	158.8	159	158.8	175.2	175	175.2	15.6	15.6	15.6	18.8	18.8	18.8
LOS by Move:	F	F	F	F	F	F	C	C	C	C	C	C
ApproachDel:	158.8			175.2			15.6			18.8		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	158.8			175.2			15.6			18.8		
LOS by Appr:	F			F			C			C		

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #216 Presidio/Washington

Cycle (sec): 100 Critical Vol./Cap. (X): 1.227
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 112.1
Optimal Cycle: 0 Level Of Service: F

Street Name:	Presidio Blvd.						Washington St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	20	609	35	44	566	48	68	125	13	20	62	28
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	20	609	35	44	566	48	68	125	13	20	62	28
Added Vol:	0	60	0	0	54	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	20	669	35	44	620	48	68	125	13	20	62	28
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	20	669	35	44	620	48	68	125	13	20	62	28
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	20	669	35	44	620	48	68	125	13	20	62	28
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	20	669	35	44	620	48	68	125	13	20	62	28
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.03	0.92	0.05	0.06	0.87	0.07	0.33	0.61	0.06	0.18	0.57	0.25
Final Sat.:	16	545	29	36	514	40	159	291	30	83	256	116
Capacity Analysis Module:												
Vol/Sat:	1.23	1.23	1.23	1.21	1.21	1.21	0.43	0.43	0.43	0.24	0.24	0.24
Crit Moves:		****		****				****				****
Delay/Veh:	137.6	138	137.6	129.3	129	129.3	15.8	15.8	15.8	13.0	13.0	13.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	137.6	138	137.6	129.3	129	129.3	15.8	15.8	15.8	13.0	13.0	13.0
LOS by Move:	F	F	F	F	F	F	C	C	C	B	B	B
ApproachDel:	137.6			129.3			15.8			13.0		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	137.6			129.3			15.8			13.0		
LOS by Appr:	F			F			C			B		

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #217 Arguello/Jackson

Cycle (sec): 100 Critical Vol./Cap. (X): 0.808
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 21.3
Optimal Cycle: 0 Level Of Service: C

Street Name:	Arguello Blvd.						Jackson St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	0 1	0	0 1	0 0	0	0 0	0 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	0	421	67	33	513	0	0	0	0	90	0	33
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	421	67	33	513	0	0	0	0	90	0	33
Added Vol:	0	51	0	0	38	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	472	67	33	551	0	0	0	0	90	0	33
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	472	67	33	551	0	0	0	0	90	0	33
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	472	67	33	551	0	0	0	0	90	0	33
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	472	67	33	551	0	0	0	0	90	0	33
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.88	0.12	0.06	0.94	0.00	0.00	0.00	0.00	0.73	0.00	0.27
Final Sat.:	0	635	90	41	682	0	0	0	0	391	0	143
Capacity Analysis Module:												
Vol/Sat:	xxxx	0.74	0.74	0.81	0.81	xxxx	xxxx	xxxx	xxxx	0.23	xxxx	0.23
Crit Moves:		****		****						****		
Delay/Veh:	0.0	20.2	20.2	24.6	24.6	0.0	0.0	0.0	0.0	10.9	0.0	10.9
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	20.2	20.2	24.6	24.6	0.0	0.0	0.0	0.0	10.9	0.0	10.9
LOS by Move:	*	C	C	C	C	*	*	*	*	B	*	B
ApproachDel:		20.2			24.6			xxxxxx			10.9	
Delay Adj:		1.00			1.00			xxxxx			1.00	
ApprAdjDel:		20.2			24.6			xxxxxx			10.9	
LOS by Appr:		C			C			*			B	

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #218 Arguello/Washington St

Cycle (sec): 100 Critical Vol./Cap. (X): 0.883
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 28.9
Optimal Cycle: 0 Level Of Service: D

Street Name:	Arguello Blvd.						Washington St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	0 0	0 1	0	0 0	1! 0	0
Volume Module:												
Base Vol:	20	465	57	20	551	11	0	8	24	82	5	20
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	20	465	57	20	551	11	0	8	24	82	5	20
Added Vol:	0	51	0	0	38	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	20	516	57	20	589	11	0	8	24	82	5	20
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	20	516	57	20	589	11	0	8	24	82	5	20
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	20	516	57	20	589	11	0	8	24	82	5	20
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	20	516	57	20	589	11	0	8	24	82	5	20
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.03	0.87	0.10	0.03	0.95	0.02	0.00	0.25	0.75	0.76	0.05	0.19
Final Sat.:	24	610	67	23	667	12	0	128	385	391	24	95
Capacity Analysis Module:												
Vol/Sat:	0.85	0.85	0.85	0.88	0.88	0.88	xxxx	0.06	0.06	0.21	0.21	0.21
Crit Moves:	****				****			****				****
Delay/Veh:	28.6	28.6	28.6	33.2	33.2	33.2	0.0	9.9	9.9	11.3	11.3	11.3
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	28.6	28.6	28.6	33.2	33.2	33.2	0.0	9.9	9.9	11.3	11.3	11.3
LOS by Move:	D	D	D	D	D	D	*	A	A	B	B	B
ApproachDel:		28.6			33.2			9.9			11.3	
Delay Adj:		1.00			1.00			1.00			1.00	
ApprAdjDel:		28.6			33.2			9.9			11.3	
LOS by Appr:		D			D			A			B	

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #219 Arguello/Moraga

Cycle (sec): 100 Critical Vol./Cap. (X): 0.691
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 16.2
Optimal Cycle: 0 Level Of Service: C

Street Name:	Arguello						Moraga					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 0	0 0	0	0 0	0 1	0	0 1	0 0	0
Volume Module:												
Base Vol:	128	0	303	0	0	0	0	48	132	317	60	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	128	0	303	0	0	0	0	48	132	317	60	0
Added Vol:	3	0	47	0	0	0	0	-7	3	36	-8	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	131	0	350	0	0	0	0	41	135	353	52	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	131	0	350	0	0	0	0	41	135	353	52	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	131	0	350	0	0	0	0	41	135	353	52	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	131	0	350	0	0	0	0	41	135	353	52	0
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.27	0.00	0.73	0.00	0.00	0.00	0.00	0.23	0.77	0.87	0.13	0.00
Final Sat.:	190	0	507	0	0	0	0	146	482	546	80	0
Capacity Analysis Module:												
Vol/Sat:	0.69	xxxx	0.69	xxxx	xxxx	xxxx	xxxx	0.28	0.28	0.65	0.65	xxxx
Crit Moves:	****							****		****		
Delay/Veh:	17.4	0.0	17.4	0.0	0.0	0.0	0.0	10.1	10.1	17.4	17.4	0.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	17.4	0.0	17.4	0.0	0.0	0.0	0.0	10.1	10.1	17.4	17.4	0.0
LOS by Move:	C	*	C	*	*	*	*	B	B	C	C	*
ApproachDel:	17.4			xxxxxx				10.1			17.4	
Delay Adj:	1.00			xxxxx				1.00			1.00	
ApprAdjDel:	17.4			xxxxxx				10.1			17.4	
LOS by Appr:	C			*				B			C	

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #220 Montgomery/Sheridan

Cycle (sec): 100 Critical Vol./Cap. (X): 0.478
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 10.2
Optimal Cycle: 0 Level Of Service: B

Street Name:	Montgomery St.						Sheridan Ave.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 1	0 0	0	0 0	0 1	0	0 0	1! 0	0	0 0	0 0	0
Volume Module:												
Base Vol:	29	33	0	0	48	37	193	0	148	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	29	33	0	0	48	37	193	0	148	0	0	0
Added Vol:	0	43	0	0	15	66	38	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	29	76	0	0	63	103	231	0	148	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	29	76	0	0	63	103	231	0	148	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	29	76	0	0	63	103	231	0	148	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	29	76	0	0	63	103	231	0	148	0	0	0
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.28	0.72	0.00	0.00	0.38	0.62	0.61	0.00	0.39	0.00	0.00	0.00
Final Sat.:	186	487	0	0	283	463	484	0	310	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.16	0.16	xxxx	xxxx	0.22	0.22	0.48	xxxx	0.48	xxxx	xxxx	xxxx
Crit Moves:		****			****		****					
Delay/Veh:	8.9	8.9	0.0	0.0	8.7	8.7	11.2	0.0	11.2	0.0	0.0	0.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	8.9	8.9	0.0	0.0	8.7	8.7	11.2	0.0	11.2	0.0	0.0	0.0
LOS by Move:	A	A	*	*	A	A	B	*	B	*	*	*
ApproachDel:	8.9				8.7			11.2			xxxxxx	
Delay Adj:	1.00				1.00			1.00			xxxxx	
ApprAdjDel:	8.9				8.7			11.2			xxxxxx	
LOS by Appr:	A				A			B			*	

Alternative 3 – PM Peak Hour

Scenario Report

Scenario:	PM 2030-History
Command:	PM Limited
Volume:	PM 2030 - History
Geometry:	PM 2030
Impact Fee:	Default Impact Fee
Trip Generation:	PM 2030-Limited
Trip Distribution:	Main Post SEIS
Paths:	History
Routes:	Default Routes
Configuration:	Default Configuration

Trip Generation Report

Forecast for PM 2030-Limited

Zone #	Subzone	Amount	Units	Rate In	Rate Out	Trips In	Trips Out	Total Trips	% Of Total
14	West Crissy	1.00	mixed use	43.00	35.00	43	35	78	9.6
	Zone 14 Subtotal					43	35	78	9.6
15	Ruger & Simo	1.00	mixed use	43.00	41.00	43	41	84	10.4
	Zone 15 Subtotal					43	41	84	10.4
32	S. Main Post	1.00	mixed use	1.00	1.00	1	1	2	0.2
	Zone 32 Subtotal					1	1	2	0.2
33	W. Main Post	1.00	Mixed Use	-19.00	54.00	-19	54	35	4.3
	Zone 33 Subtotal					-19	54	35	4.3
34	E. Main Post	1.00	mixed use	72.00	13.00	72	13	85	10.5
	Zone 34 Subtotal					72	13	85	10.5
35	N. Main Post	1.00	mixed use	-24.00	-29.00	-24	-29	-53	-6.6
	Zone 35 Subtotal					-24	-29	-53	-6.6
36	West Letterm	1.00	mixed use	-59.00	-15.00	-59	-15	-74	-9.1
	Zone 36 Subtotal					-59	-15	-74	-9.1
753	LDA	1.00	mixed use	126.00	188.00	126	188	314	38.8
	Zone 753 Subtotal					126	188	314	38.8
767	Commissary/P	1.00	mixed use	169.00	169.00	169	169	338	41.8
	Zone 767 Subtotal					169	169	338	41.8
TOTAL						352	457	809	100.0

Trip Distribution Report

Percent Of Trips M POST SEIS

Zone	To Gates 5	14	16	17	22	28	36
14	0.0	25.0	0.0	10.0	15.0	50.0	0.0
15	0.0	0.0	25.0	0.0	67.5	0.0	7.5
32	0.0	5.0	10.0	10.0	68.0	5.0	2.0
33	0.0	5.0	10.0	10.0	68.0	5.0	2.0
34	0.0	5.0	10.0	10.0	68.0	5.0	2.0
35	0.0	5.0	10.0	10.0	68.0	5.0	2.0
36	0.0	10.0	20.0	15.0	40.0	15.0	0.0
753	20.0	5.0	10.0	5.0	55.0	0.0	5.0
767	14.0	0.0	10.0	10.0	14.0	50.0	2.0

Volume Type	NB Link In	Out	Total	SB Link In	Out	Total	EB Link In	Out	Total	WB Link In	Out	Total	Total Volume
#201 Lombard/Divisadero													
Base	378	385	763	298	285	583	2398	3242	5640	3117	2279	5396	12382
Added	0	0	0	0	0	0	229	125	354	125	229	354	708
Total	378	385	763	298	285	583	2627	3367	5994	3242	2508	5750	13090
#202 Lombard/Richardson													
Base	3319	2500	5819	2171	3119	5290	329	200	529	0	0	0	11638
Added	125	229	354	95	16	111	134	109	243	0	0	0	708
Total	3444	2729	6173	2266	3135	5401	463	309	772	0	0	0	12346
#203 Lyon/Lombard													
Base	217	183	400	318	228	546	472	517	989	223	302	525	2460
Added	14	17	31	0	0	0	151	123	274	109	134	243	548
Total	231	200	431	318	228	546	623	640	1263	332	436	768	3008
#204 Greenwich/Divisadero													
Base	345	332	677	343	385	728	145	164	309	203	155	358	2072
Added	0	0	0	0	0	0	17	14	31	14	17	31	62
Total	345	332	677	343	385	728	162	178	340	217	172	389	2134
#205 Greenwich/Lyon													
Base	107	120	227	177	214	391	0	0	0	130	80	210	828
Added	0	0	0	17	14	31	0	0	0	14	17	31	62
Total	107	120	227	194	228	422	0	0	0	144	97	241	890
#206 Francisco/Richardson													
Base	3119	2250	5369	2217	3234	5451	154	69	223	145	82	227	11270
Added	16	95	111	95	16	111	0	0	0	0	0	0	222
Total	3135	2345	5480	2312	3250	5562	154	69	223	145	82	227	11492
#207 Richardson/Gorgas													
Base	253	63	316	69	34	103	2150	3343	5493	3202	2234	5436	11348
Added	95	0	95	0	0	0	0	16	16	16	95	111	222
Total	348	63	411	69	34	103	2150	3359	5509	3218	2329	5547	11570
#208 Doyle/Marina/Lyon													
Base	40	25	65	247	491	738	922	1549	2471	2009	1153	3162	6436
Added	0	0	0	104	108	212	-2	-9	-11	99	102	201	402
Total	40	25	65	351	599	950	920	1540	2460	2108	1255	3363	6838
#209 Graham/Lincoln													
Base	352	376	728	22	7	29	434	391	825	750	784	1534	3116
Added	26	21	47	-1	0	-1	67	23	90	44	92	136	272
Total	378	397	775	21	7	28	501	414	915	794	876	1670	3388
#210 Lincoln/Halleck													
Base	0	3	3	314	340	654	742	785	1527	826	754	1580	3764
Added	0	0	0	43	48	91	100	48	148	61	108	169	408
Total	0	3	3	357	388	745	842	833	1675	887	862	1749	4172

Volume Type	NB Link In	NB Link Out	NB Link Total	SB Link In	SB Link Out	SB Link Total	EB Link In	EB Link Out	EB Link Total	WB Link In	WB Link Out	WB Link Total	Total Volume
#211 Lincoln/Girard													
Base	0	0	0	577	653	1230	789	826	1615	556	443	999	3844
Added	0	0	0	58	43	101	101	99	200	41	58	99	400
Total	0	0	0	635	696	1331	890	925	1815	597	501	1098	4244
#212 Presidio/Letterman/Lincoln													
Base	464	449	913	443	557	1000	96	73	169	128	52	180	2262
Added	55	72	127	55	29	84	4	22	26	28	19	47	284
Total	519	521	1040	498	586	1084	100	95	195	156	71	227	2546
#213 Lombard/Presidio													
Base	733	676	1409	453	597	1050	0	0	0	529	442	971	3430
Added	52	69	121	72	54	126	0	0	0	65	66	131	378
Total	785	745	1530	525	651	1176	0	0	0	594	508	1102	3808
#214 Presidio/Pacific													
Base	731	630	1361	686	743	1429	14	66	80	89	81	170	3040
Added	31	47	78	47	31	78	0	0	0	0	0	0	156
Total	762	677	1439	733	774	1507	14	66	80	89	81	170	3196
#215 Presidio/Jackson													
Base	637	654	1291	661	677	1338	160	168	328	250	209	459	3416
Added	31	47	78	47	31	78	0	0	0	0	0	0	156
Total	668	701	1369	708	708	1416	160	168	328	250	209	459	3572
#216 Presidio/Washington													
Base	664	599	1263	658	705	1363	206	130	336	110	204	314	3276
Added	31	47	78	47	31	78	0	0	0	0	0	0	156
Total	695	646	1341	705	736	1441	206	130	336	110	204	314	3432
#217 Arguello/Jackson													
Base	488	603	1091	546	454	1000	0	0	0	123	100	223	2314
Added	22	31	53	31	22	53	0	0	0	0	0	0	106
Total	510	634	1144	577	476	1053	0	0	0	123	100	223	2420
#218 Arguello/Washington St													
Base	542	657	1199	582	485	1067	32	36	68	107	85	192	2526
Added	22	31	53	31	22	53	0	0	0	0	0	0	106
Total	564	688	1252	613	507	1120	32	36	68	107	85	192	2632
#219 Arguello/Moraga													
Base	431	449	880	377	351	728	180	188	368	0	0	0	1976
Added	21	32	53	29	18	47	5	5	10	0	0	0	110
Total	452	481	933	406	369	775	185	193	378	0	0	0	2086
#220 Montgomery/Sheridan													
Base	52	125	177	78	140	218	341	66	407	37	177	214	1016
Added	32	-2	30	32	67	99	35	34	69	0	0	0	198
Total	84	123	207	110	207	317	376	100	476	37	177	214	1214

Impact Analysis Report
Level Of Service

Intersection	Base LOS	Base Del/ Veh	Base V/ C	Future LOS	Future Del/ Veh	Future V/ C	Change in
#201 Lombard/Divisadero	B	13.0	0.849	B	14.1	0.874	+ 1.076 D/V
#202 Lombard/Richardson	A	3.6	0.602	A	7.2	0.750	+ 3.614 D/V
#203 Lyon/Lombard	C	18.6	0.791	F	55.1	1.132	+ 0.341 V/C
#204 Greenwich/Divisadero	B	13.4	0.549	B	13.9	0.564	+ 0.014 V/C
#205 Greenwich/Lyon	A	8.2	0.222	A	8.4	0.246	+ 0.024 V/C
#206 Francisco/Richardson	B	14.9	0.684	B	15.2	0.687	+ 0.300 D/V
#207 Richardson/Gorgas	A	6.9	0.778	B	10.4	0.840	+ 3.451 D/V
#208 Doyle/Marina/Lyon	B	17.7	0.726	C	25.7	0.829	+ 7.924 D/V
#209 Graham/Lincoln	C	21.0	0.740	D	28.0	0.872	+ 0.132 V/C
#210 Lincoln/Halleck	F	461.7	0.000	F	847.7	0.000	+386.020 D/V
#211 Lincoln/Girard	F	OVRFL	0.000	F	OVRFL	0.000	+788.276 D/V
#212 Presidio/Letterman/Lincoln	B	14.2	0.691	C	16.7	0.771	+ 0.080 V/C
#213 Lombard/Presidio	F	88.4	1.325	F	113.8	1.468	+ 0.143 V/C
#214 Presidio/Pacific	F	53.7	1.029	F	68.8	1.079	+ 0.049 V/C
#215 Presidio/Jackson	F	100.0	1.216	F	122.9	1.302	+ 0.086 V/C
#216 Presidio/Washington	F	81.6	1.125	F	102.0	1.194	+ 0.069 V/C
#217 Arguello/Jackson	C	17.6	0.744	C	19.8	0.792	+ 0.047 V/C
#218 Arguello/Washington St	C	22.3	0.817	D	26.0	0.866	+ 0.049 V/C
#219 Arguello/Moraga	B	13.0	0.598	B	14.0	0.635	+ 0.037 V/C
#220 Montgomery/Sheridan	A	9.3	0.403	A	10.0	0.466	+ 0.063 V/C

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #201 Lombard/Divisadero

Cycle (sec): 90 Critical Vol./Cap. (X): 0.874
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 14.1
Optimal Cycle: 90 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	27	27	27	27	27	27	54	54	54	54	54	54
Lanes:	1 0	0 1	0	1 0	0 1	0	0 1	1 1	0	0 1	1 1	0
Volume Module:												
Base Vol:	194	161	23	80	163	55	0	2176	222	0	2993	124
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	194	161	23	80	163	55	0	2176	222	0	2993	124
Added Vol:	0	0	0	0	0	0	0	229	0	0	125	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	194	161	23	80	163	55	0	2405	222	0	3118	124
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	194	161	23	80	163	55	0	2405	222	0	3118	124
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	194	161	23	80	163	55	0	2405	222	0	3118	124
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	194	161	23	80	163	55	0	2405	222	0	3118	124
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.42	0.98	0.98	0.47	0.96	0.96	0.91	0.90	0.90	0.91	0.90	0.90
Lanes:	1.00	0.87	0.13	1.00	0.75	0.25	0.00	2.75	0.25	0.00	2.89	0.11
Final Sat.:	792	1631	233	885	1367	461	0	4687	433	0	4959	197
Capacity Analysis Module:												
Vol/Sat:	0.24	0.10	0.10	0.09	0.12	0.12	0.00	0.51	0.51	0.00	0.63	0.63
Crit Moves:	****										****	
Green/Cycle:	0.30	0.30	0.30	0.30	0.30	0.30	0.00	0.70	0.70	0.00	0.70	0.70
Volume/Cap:	0.82	0.33	0.33	0.30	0.40	0.40	0.00	0.73	0.73	0.00	0.90	0.90
Uniform Del:	29.2	24.5	24.5	24.2	25.0	25.0	0.0	8.3	8.3	0.0	10.9	10.9
IncremntDel:	19.3	0.3	0.3	0.6	0.5	0.5	0.0	0.8	0.8	0.0	3.4	3.4
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00
Delay/Veh:	48.5	24.8	24.8	24.9	25.5	25.5	0.0	9.1	9.1	0.0	14.3	14.3
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	48.5	24.8	24.8	24.9	25.5	25.5	0.0	9.1	9.1	0.0	14.3	14.3
HCM2kAvg:	14	4	4	4	5	5	0	16	16	0	28	28

Level Of Service Computation Report
1994 HCM Operations Method (Future Volume Alternative)

Intersection #202 Lombard/Richardson

Cycle (sec): 90 Critical Vol./Cap. (X): 0.750
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 7.2
Optimal Cycle: 90 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Ovl			Include		
Min. Green:	25	90	0	0	57	57	0	0	25	0	0	0
Lanes:	1 0	3 0	0	0 0	2 1	0	0 0	0 0	1	0 0	0 0	0
Volume Module:												
Base Vol:	200	3119	0	0	2171	0	0	0	329	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	200	3119	0	0	2171	0	0	0	329	0	0	0
Added Vol:	109	16	0	0	95	0	0	0	134	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	309	3135	0	0	2266	0	0	0	463	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	309	3135	0	0	2266	0	0	0	463	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	309	3135	0	0	2266	0	0	0	463	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.10	1.00	1.00	1.10	1.10	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	309	3449	0	0	2493	0	0	0	463	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.77	1.00	1.00	1.00
Lanes:	1.00	3.00	0.00	0.00	3.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	1805	5700	0	0	5700	0	0	0	1463	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.17	0.61	0.00	0.00	0.44	0.00	0.00	0.00	0.32	0.00	0.00	0.00
Crit Moves:		****		****					****			
Green/Cycle:	0.30	1.00	0.00	0.00	0.70	0.00	0.00	0.00	0.30	0.00	0.00	0.00
Volume/Cap:	0.56	0.61	0.00	0.00	0.63	0.00	0.00	0.00	1.04	0.00	0.00	0.00
Uniform Del:	19.9	0.0	0.0	0.0	5.6	0.0	0.0	0.0	23.8	0.0	0.0	0.0
IncremntDel:	1.0	0.1	0.0	0.0	0.2	0.0	0.0	0.0	43.8	0.0	0.0	0.0
Delay Adj:	0.85	0.85	0.00	0.00	0.85	0.00	0.00	0.00	0.85	0.00	0.00	0.00
Delay/Veh:	17.9	0.1	0.0	0.0	5.0	0.0	0.0	0.0	64.0	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	17.9	0.1	0.0	0.0	5.0	0.0	0.0	0.0	64.0	0.0	0.0	0.0
DesignQueue:	11	0	0	0	43	0	0	0	17	0	0	0

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #203 Lyon/Lombard

Cycle (sec): 100 Critical Vol./Cap. (X): 1.132
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 55.1
Optimal Cycle: 0 Level Of Service: F

Street Name:	Lyon St.						Lombard St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	124	68	25	29	65	224	115	248	109	9	169	45
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	124	68	25	29	65	224	115	248	109	9	169	45
Added Vol:	14	0	0	0	0	0	0	134	17	0	109	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	138	68	25	29	65	224	115	382	126	9	278	45
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	138	68	25	29	65	224	115	382	126	9	278	45
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	138	68	25	29	65	224	115	382	126	9	278	45
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	138	68	25	29	65	224	115	382	126	9	278	45
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.60	0.29	0.11	0.09	0.20	0.71	0.18	0.62	0.20	0.03	0.84	0.13
Final Sat.:	265	131	48	45	102	350	102	337	111	13	414	67
Capacity Analysis Module:												
Vol/Sat:	0.52	0.52	0.52	0.64	0.64	0.64	1.13	1.13	1.13	0.67	0.67	0.67
Crit Moves:		****		****				****				****
Delay/Veh:	17.9	17.9	17.9	20.5	20.5	20.5	104.1	104	104.1	22.1	22.1	22.1
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	17.9	17.9	17.9	20.5	20.5	20.5	104.1	104	104.1	22.1	22.1	22.1
LOS by Move:	C	C	C	C	C	C	F	F	F	C	C	C
ApproachDel:	17.9			20.5			104.1			22.1		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	17.9			20.5			104.1			22.1		
LOS by Appr:	C			C			F			C		

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #204 Greenwich/Divisadero

Cycle (sec): 100 Critical Vol./Cap. (X): 0.564
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 13.9
Optimal Cycle: 0 Level Of Service: B

Street Name:	Divisadero						Greenwich					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	11	323	11	34	296	13	26	110	9	27	140	36
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	11	323	11	34	296	13	26	110	9	27	140	36
Added Vol:	0	0	0	0	0	0	0	17	0	0	14	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	11	323	11	34	296	13	26	127	9	27	154	36
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	11	323	11	34	296	13	26	127	9	27	154	36
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	11	323	11	34	296	13	26	127	9	27	154	36
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	11	323	11	34	296	13	26	127	9	27	154	36
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.03	0.94	0.03	0.10	0.86	0.04	0.16	0.78	0.06	0.12	0.71	0.17
Final Sat.:	20	573	20	61	527	23	83	405	29	68	387	90
Capacity Analysis Module:												
Vol/Sat:	0.56	0.56	0.56	0.56	0.56	0.56	0.31	0.31	0.31	0.40	0.40	0.40
Crit Moves:		****			****			****		****		
Delay/Veh:	14.9	14.9	14.9	14.9	14.9	14.9	11.6	11.6	11.6	12.4	12.4	12.4
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	14.9	14.9	14.9	14.9	14.9	14.9	11.6	11.6	11.6	12.4	12.4	12.4
LOS by Move:	B	B	B	B	B	B	B	B	B	B	B	B
ApproachDel:	14.9			14.9			11.6			12.4		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	14.9			14.9			11.6			12.4		
LOS by Appr:	B			B			B			B		

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #205 Greenwich/Lyon

Cycle (sec): 100 Critical Vol./Cap. (X): 0.246
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 8.4
Optimal Cycle: 0 Level Of Service: A

Street Name:	Lyon						Greenwich					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	0	1 0	0 1	0	0 0	0 0	0	0 0	0 0	1!	0 0
Volume Module:												
Base Vol:	0	105	2	78	99	0	0	0	0	21	0	109
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	105	2	78	99	0	0	0	0	21	0	109
Added Vol:	0	0	0	17	0	0	0	0	0	0	0	14
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	105	2	95	99	0	0	0	0	21	0	123
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	105	2	95	99	0	0	0	0	21	0	123
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	105	2	95	99	0	0	0	0	21	0	123
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	105	2	95	99	0	0	0	0	21	0	123
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.98	0.02	0.49	0.51	0.00	0.00	0.00	0.00	0.15	0.00	0.85
Final Sat.:	0	771	15	386	402	0	0	0	0	121	0	711
Capacity Analysis Module:												
Vol/Sat:	xxxx	0.14	0.14	0.25	0.25	xxxx	xxxx	xxxx	xxxx	0.17	xxxx	0.17
Crit Moves:			****	****						****		
Delay/Veh:	0.0	8.1	8.1	8.8	8.8	0.0	0.0	0.0	0.0	7.9	0.0	7.9
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	8.1	8.1	8.8	8.8	0.0	0.0	0.0	0.0	7.9	0.0	7.9
LOS by Move:	*	A	A	A	A	*	*	*	*	A	*	A
ApproachDel:	8.1			8.8			xxxxxx			7.9		
Delay Adj:	1.00			1.00			xxxxx			1.00		
ApprAdjDel:	8.1			8.8			xxxxxx			7.9		
LOS by Appr:	A			A			*			A		

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #206 Francisco/Richardson

Cycle (sec): 90 Critical Vol./Cap. (X): 0.687
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 15.2
Optimal Cycle: 90 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	51	51	0	51	51	31	31	31	31	31	31
Lanes:	0 0	2	1 0	0 0	2	1 0	0 1	0	1 0	0 0	1!	0 0
Volume Module:												
Base Vol:	0	3117	2	0	2217	0	45	80	29	4	69	72
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	3117	2	0	2217	0	45	80	29	4	69	72
Added Vol:	0	16	0	0	95	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	3133	2	0	2312	0	45	80	29	4	69	72
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	3133	2	0	2312	0	45	80	29	4	69	72
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	3133	2	0	2312	0	45	80	29	4	69	72
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	3133	2	0	2312	0	45	80	29	4	69	72
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	0.91	0.91	1.00	0.91	0.91	0.80	0.80	0.80	0.93	0.93	0.93
Lanes:	0.00	2.99	0.01	0.00	3.00	0.00	0.58	1.04	0.38	0.03	0.47	0.50
Final Sat.:	0	5184	3	0	5187	0	883	1569	569	49	839	876
Capacity Analysis Module:												
Vol/Sat:	0.00	0.60	0.60	0.00	0.45	0.00	0.05	0.05	0.05	0.08	0.08	0.08
Crit Moves:		****		****							****	
Green/Cycle:	0.00	0.66	0.66	0.00	0.66	0.00	0.34	0.34	0.34	0.34	0.34	0.34
Volume/Cap:	0.00	0.92	0.92	0.00	0.68	0.00	0.15	0.15	0.15	0.24	0.24	0.24
Uniform Del:	0.0	13.5	13.5	0.0	9.6	0.0	20.4	20.4	20.4	21.1	21.1	21.1
IncremntDel:	0.0	4.8	4.8	0.0	0.6	0.0	0.1	0.1	0.1	0.2	0.2	0.2
Delay Adj:	0.00	1.00	1.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Delay/Veh:	0.0	18.3	18.3	0.0	10.2	0.0	20.4	20.4	20.4	21.3	21.3	21.3
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	18.3	18.3	0.0	10.2	0.0	20.4	20.4	20.4	21.3	21.3	21.3
HCM2kAvg:	0	30	30	0	14	0	2	2	2	3	3	3

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #207 Richardson/Gorgas

Cycle (sec): 90 Critical Vol./Cap. (X): 0.840
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 10.4
Optimal Cycle: 90 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Split Phase			Split Phase			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	10	10	10	12	12	12	52	52	52	52	52	52
Lanes:	1 0	1! 0	0	0 0	0 0	1	0 0	3 0	1	0 0	2 1	0
Volume Module:												
Base Vol:	106	0	147	0	0	69	0	2087	63	0	3168	34
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	106	0	147	0	0	69	0	2087	63	0	3168	34
Added Vol:	0	0	95	0	0	0	0	0	0	0	16	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	106	0	242	0	0	69	0	2087	63	0	3184	34
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	106	0	242	0	0	69	0	2087	63	0	3184	34
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	106	0	242	0	0	69	0	2087	63	0	3184	34
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	106	0	242	0	0	69	0	2087	63	0	3184	34
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.88	1.00	0.88	1.00	1.00	0.87	1.00	0.91	0.85	1.00	0.91	0.91
Lanes:	1.18	0.00	0.82	0.00	0.00	1.00	0.00	3.00	1.00	0.00	2.97	0.03
Final Sat.:	1978	0	1376	0	0	1644	0	5187	1615	0	5122	55
Capacity Analysis Module:												
Vol/Sat:	0.05	0.00	0.18	0.00	0.00	0.04	0.00	0.40	0.04	0.00	0.62	0.62
Crit Moves:			****			****					****	
Green/Cycle:	0.21	0.00	0.21	0.00	0.00	0.13	0.00	0.74	0.74	0.00	0.74	0.74
Volume/Cap:	0.26	0.00	0.84	0.00	0.00	0.31	0.00	0.54	0.05	0.00	0.84	0.84
Uniform Del:	29.7	0.0	34.1	0.0	0.0	35.3	0.0	5.1	3.2	0.0	8.0	8.0
IncremntDel:	0.1	0.0	14.1	0.0	0.0	0.8	0.0	0.2	0.0	0.0	1.8	1.8
Delay Adj:	1.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00
Delay/Veh:	29.8	0.0	48.2	0.0	0.0	36.1	0.0	5.2	3.2	0.0	9.8	9.8
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	29.8	0.0	48.2	0.0	0.0	36.1	0.0	5.2	3.2	0.0	9.8	9.8
HCM2kAvg:	2	0	11	0	0	2	0	9	0	0	23	23

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #208 Doyle/Marina/Lyon

Cycle (sec): 60 Critical Vol./Cap. (X): 0.829
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 25.7
Optimal Cycle: 90 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	24	0	24	24	0	24	0	28	0	0	28	0
Lanes:	1 0	0 0	1	1 0	0 0	1	0 0	1 1	0	0 0	1 1	0
Volume Module:												
Base Vol:	0	0	40	216	0	31	0	897	25	0	1518	491
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	40	216	0	31	0	897	25	0	1518	491
Added Vol:	0	0	0	104	0	0	0	-2	0	0	-9	108
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	40	320	0	31	0	895	25	0	1509	599
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	40	320	0	31	0	895	25	0	1509	599
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	40	320	0	31	0	895	25	0	1509	599
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	0	40	320	0	31	0	895	25	0	1509	599
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	0.85	0.77	1.00	0.85	1.00	0.95	0.95	1.00	0.91	0.91
Lanes:	1.00	0.00	1.00	1.00	0.00	1.00	0.00	1.95	0.05	0.00	1.43	0.57
Final Sat.:	1900	0	1615	1461	0	1615	0	3498	98	0	2473	982
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.02	0.22	0.00	0.02	0.00	0.26	0.26	0.00	0.61	0.61
Crit Moves:				****			****				****	
Green/Cycle:	0.00	0.00	0.40	0.40	0.00	0.40	0.00	0.60	0.60	0.00	0.60	0.60
Volume/Cap:	0.00	0.00	0.06	0.55	0.00	0.05	0.00	0.43	0.43	0.00	1.02	1.02
Uniform Del:	0.0	0.0	11.1	13.8	0.0	11.0	0.0	6.5	6.5	0.0	12.0	12.0
IncremntDel:	0.0	0.0	0.0	1.1	0.0	0.0	0.0	0.1	0.1	0.0	24.1	24.1
Delay Adj:	0.00	0.00	1.00	1.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00
Delay/Veh:	0.0	0.0	11.1	14.9	0.0	11.0	0.0	6.6	6.6	0.0	36.1	36.1
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	11.1	14.9	0.0	11.0	0.0	6.6	6.6	0.0	36.1	36.1
HCM2kAvg:	0	0	0	7	0	0	0	5	5	0	30	30

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #209 Graham/Lincoln

Cycle (sec): 100 Critical Vol./Cap. (X): 0.872
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 28.0
Optimal Cycle: 0 Level Of Service: D

Street Name:	Graham St.						Lincoln Blvd.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	0 1	0 0	0	1 0	0 1	0
Volume Module:												
Base Vol:	2	0	350	7	0	15	7	427	0	376	374	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	2	0	350	7	0	15	7	427	0	376	374	0
Added Vol:	0	0	26	-1	0	0	0	67	0	21	23	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	2	0	376	6	0	15	7	494	0	397	397	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	2	0	376	6	0	15	7	494	0	397	397	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	2	0	376	6	0	15	7	494	0	397	397	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	2	0	376	6	0	15	7	494	0	397	397	0
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.01	0.00	0.99	0.29	0.00	0.71	0.01	0.99	0.00	1.00	1.00	0.00
Final Sat.:	3	0	566	121	0	302	8	566	0	509	549	0
Capacity Analysis Module:												
Vol/Sat:	0.66	xxxx	0.66	0.05	xxxx	0.05	0.87	0.87	xxxx	0.78	0.72	xxxx
Crit Moves:	****			****			****			****		
Delay/Veh:	19.5	0.0	19.5	10.9	0.0	10.9	36.6	36.6	0.0	30.0	24.3	0.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	19.5	0.0	19.5	10.9	0.0	10.9	36.6	36.6	0.0	30.0	24.3	0.0
LOS by Move:	C	*	C	B	*	B	E	E	*	D	C	*
ApproachDel:	19.5			10.9			36.6			27.1		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	19.5			10.9			36.6			27.1		
LOS by Appr:	C			B			E			D		

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #210 Lincoln/Halleck

Average Delay (sec/veh): 145.9 Worst Case Level Of Service: F[847.7]

Street Name:	Halleck St.						Lincoln Blvd.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Channel			Include			Include		
Lanes:	0 0	0 0	0	0 0	1! 0	0	1 0	0 1	0	0 0	0 1	0
Volume Module:												
Base Vol:	0	0	0	153	0	161	138	601	3	0	624	202
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	153	0	161	138	601	3	0	624	202
Added Vol:	0	0	0	26	0	17	18	82	0	0	31	30
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	179	0	178	156	683	3	0	655	232
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	179	0	178	156	683	3	0	655	232
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	0	0	0	179	0	178	156	683	3	0	655	232
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	6.4	xxxx	6.2	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	3.5	xxxx	3.3	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	1768	xxxx	771	887	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	93	xxxx	403	772	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	79	xxxx	403	772	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	2.28	xxxx	0.44	0.20	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.8	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	10.8	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	B	*	*	*	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	131	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	32.4	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	848	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	F	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			847.7			xxxxxx			xxxxxx		
ApproachLOS:	*			F			*			*		

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #211 Lincoln/Girard

Average Delay (sec/veh): 709.1 Worst Case Level Of Service: F[2357.5]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Stop Sign				Stop Sign				Uncontrolled				Uncontrolled			
Rights:	Include				Include				Include				Include			
Lanes:	0	0	0	0 0	0	0	1!	0 0	1	0	1	0 0	0	0	0	1 0
Volume Module:																
Base Vol:	0	0	0	187	0	390	533	256	0	0	436	120				
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
Initial Bse:	0	0	0	187	0	390	533	256	0	0	436	120				
Added Vol:	0	0	0	0	0	58	43	58	0	0	41	0				
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0				
Initial Fut:	0	0	0	187	0	448	576	314	0	0	477	120				
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
PHF Volume:	0	0	0	187	0	448	576	314	0	0	477	120				
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0				
Final Vol.:	0	0	0	187	0	448	576	314	0	0	477	120				
Critical Gap Module:																
Critical Gp:	xxxxx	xxxx	xxxxx	6.4	xxxx	6.2	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
FollowUpTim:	xxxxx	xxxx	xxxxx	3.5	xxxx	3.3	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
Capacity Module:																
Cnflict Vol:	xxxx	xxxx	xxxxx	2003	xxxx	537	597	xxxx	xxxxx	xxxx	xxxx	xxxxx				
Potent Cap.:	xxxx	xxxx	xxxxx	66	xxxx	548	989	xxxx	xxxxx	xxxx	xxxx	xxxxx				
Move Cap.:	xxxx	xxxx	xxxxx	36	xxxx	548	989	xxxx	xxxxx	xxxx	xxxx	xxxxx				
Volume/Cap:	xxxx	xxxx	xxxx	5.24	xxxx	0.82	0.58	xxxx	xxxx	xxxx	xxxx	xxxx				
Level Of Service Module:																
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.9	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	13.6	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
LOS by Move:	*	*	*	*	*	*	B	*	*	*	*	*				
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT				
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	105	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx				
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	69.7	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	2357	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
Shared LOS:	*	*	*	*	F	*	*	*	*	*	*	*				
ApproachDel:	xxxxxx			2357.5			xxxxxx			xxxxxx						
ApproachLOS:	*			F			*			*						

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #212 Presidio/Letterman/Lincoln

Cycle (sec): 100 Critical Vol./Cap. (X): 0.771
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 16.7
Optimal Cycle: 0 Level Of Service: C

Street Name:	Lincoln/Presidio						Presidio/Letterman					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T	- R		L - T	- R		L - T	- R		L - T	- R	
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	0	1 0	0 1	0	1 0	0 0	1!	0 0	0 0	1!	0 0
Volume Module:												
Base Vol:	31	425	8	28	393	22	30	16	50	6	20	102
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	31	425	8	28	393	22	30	16	50	6	20	102
Added Vol:	22	20	13	6	49	0	0	0	4	19	0	9
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	53	445	21	34	442	22	30	16	54	25	20	111
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	53	445	21	34	442	22	30	16	54	25	20	111
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	53	445	21	34	442	22	30	16	54	25	20	111
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	53	445	21	34	442	22	30	16	54	25	20	111
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.95	0.05	0.14	1.77	0.09	0.30	0.16	0.54	0.16	0.13	0.71
Final Sat.:	549	577	27	80	1049	53	152	81	274	86	69	384
Capacity Analysis Module:												
Vol/Sat:	0.10	0.77	0.77	0.43	0.42	0.42	0.20	0.20	0.20	0.29	0.29	0.29
Crit Moves:		****		****				****			****	
Delay/Veh:	9.8	24.8	24.8	12.9	12.7	12.5	10.7	10.7	10.7	11.2	11.2	11.2
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	9.8	24.8	24.8	12.9	12.7	12.5	10.7	10.7	10.7	11.2	11.2	11.2
LOS by Move:	A	C	C	B	B	B	B	B	B	B	B	B
ApproachDel:	23.3			12.7			10.7			11.2		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	23.3			12.7			10.7			11.2		
LOS by Appr:	C			B			B			B		

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #213 Lombard/Presidio

Cycle (sec): 100 Critical Vol./Cap. (X): 1.468
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 113.8
Optimal Cycle: 0 Level Of Service: F

Street Name:	Presidio Blvd.						Lombard St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	0	1 0	1 0	1 0	0 0	0 0	0 0	0 0	1 0	0 1	0
Volume Module:												
Base Vol:	0	409	324	118	335	0	0	0	0	341	0	188
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	409	324	118	335	0	0	0	0	341	0	188
Added Vol:	0	21	31	35	37	0	0	0	0	32	0	33
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	430	355	153	372	0	0	0	0	373	0	221
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	430	355	153	372	0	0	0	0	373	0	221
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	430	355	153	372	0	0	0	0	373	0	221
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	430	355	153	372	0	0	0	0	373	0	221
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.55	0.45	1.00	1.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Final Sat.:	0	293	242	463	496	0	0	0	0	466	0	549
Capacity Analysis Module:												
Vol/Sat:	xxxx	1.47	1.47	0.33	0.75	xxxx	xxxx	xxxx	xxxx	0.80	xxxx	0.40
Crit Moves:		****			****					****		
Delay/Veh:	0.0	240	239.8	14.1	28.1	0.0	0.0	0.0	0.0	34.4	0.0	13.5
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	240	239.8	14.1	28.1	0.0	0.0	0.0	0.0	34.4	0.0	13.5
LOS by Move:	*	F	F	B	D	*	*	*	*	D	*	B
ApproachDel:	239.8				24.0		xxxxxx			26.7		
Delay Adj:	1.00				1.00		xxxxx			1.00		
ApprAdjDel:	239.8				24.0		xxxxxx			26.7		
LOS by Appr:	F				C		*			D		

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #214 Presidio/Pacific

Cycle (sec): 100 Critical Vol./Cap. (X): 1.079
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 68.8
Optimal Cycle: 0 Level Of Service: F

Street Name:	Presidio Blvd.						Pacific Ave.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	9	703	19	56	606	24	3	6	5	19	33	37
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	9	703	19	56	606	24	3	6	5	19	33	37
Added Vol:	0	31	0	0	47	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	9	734	19	56	653	24	3	6	5	19	33	37
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	9	734	19	56	653	24	3	6	5	19	33	37
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	9	734	19	56	653	24	3	6	5	19	33	37
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	9	734	19	56	653	24	3	6	5	19	33	37
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.01	0.97	0.02	0.08	0.89	0.03	0.21	0.43	0.36	0.21	0.37	0.42
Final Sat.:	8	680	18	54	628	23	107	215	179	114	198	222
Capacity Analysis Module:												
Vol/Sat:	1.08	1.08	1.08	1.04	1.04	1.04	0.03	0.03	0.03	0.17	0.17	0.17
Crit Moves:			****		****		****				****	
Delay/Veh:	78.6	78.6	78.6	66.6	66.6	66.6	10.3	10.3	10.3	11.0	11.0	11.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	78.6	78.6	78.6	66.6	66.6	66.6	10.3	10.3	10.3	11.0	11.0	11.0
LOS by Move:	F	F	F	F	F	F	B	B	B	B	B	B
ApproachDel:	78.6				66.6			10.3			11.0	
Delay Adj:	1.00				1.00			1.00			1.00	
ApprAdjDel:	78.6				66.6			10.3			11.0	
LOS by Appr:	F				F			B			B	

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #215 Presidio/Jackson

Cycle (sec): 100 Critical Vol./Cap. (X): 1.302
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 122.9
Optimal Cycle: 0 Level Of Service: F

Street Name:	Presidio Blvd.						Jackson St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	8	575	54	54	579	28	55	101	4	71	132	47
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	8	575	54	54	579	28	55	101	4	71	132	47
Added Vol:	0	31	0	0	47	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	8	606	54	54	626	28	55	101	4	71	132	47
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	8	606	54	54	626	28	55	101	4	71	132	47
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	8	606	54	54	626	28	55	101	4	71	132	47
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	8	606	54	54	626	28	55	101	4	71	132	47
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.01	0.91	0.08	0.08	0.88	0.04	0.34	0.63	0.03	0.28	0.53	0.19
Final Sat.:	7	496	44	41	481	22	149	273	11	132	246	88
Capacity Analysis Module:												
Vol/Sat:	1.22	1.22	1.22	1.30	1.30	1.30	0.37	0.37	0.37	0.54	0.54	0.54
Crit Moves:		****			****			****			****	
Delay/Veh:	137.6	138	137.6	169.9	170	169.9	15.6	15.6	15.6	18.8	18.8	18.8
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	137.6	138	137.6	169.9	170	169.9	15.6	15.6	15.6	18.8	18.8	18.8
LOS by Move:	F	F	F	F	F	F	C	C	C	C	C	C
ApproachDel:	137.6			169.9			15.6			18.8		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	137.6			169.9			15.6			18.8		
LOS by Appr:	F			F			C			C		

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #216 Presidio/Washington

Cycle (sec): 100 Critical Vol./Cap. (X): 1.194
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 102.0
Optimal Cycle: 0 Level Of Service: F

Street Name:	Presidio Blvd.						Washington St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	20	609	35	44	566	48	68	125	13	20	62	28
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	20	609	35	44	566	48	68	125	13	20	62	28
Added Vol:	0	31	0	0	47	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	20	640	35	44	613	48	68	125	13	20	62	28
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	20	640	35	44	613	48	68	125	13	20	62	28
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	20	640	35	44	613	48	68	125	13	20	62	28
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	20	640	35	44	613	48	68	125	13	20	62	28
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.03	0.92	0.05	0.06	0.87	0.07	0.33	0.61	0.06	0.18	0.57	0.25
Final Sat.:	17	543	30	37	513	40	159	291	30	83	256	116
Capacity Analysis Module:												
Vol/Sat:	1.18	1.18	1.18	1.19	1.19	1.19	0.43	0.43	0.43	0.24	0.24	0.24
Crit Moves:			****	****				****				****
Delay/Veh:	118.6	119	118.6	124.7	125	124.7	15.8	15.8	15.8	13.0	13.0	13.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	118.6	119	118.6	124.7	125	124.7	15.8	15.8	15.8	13.0	13.0	13.0
LOS by Move:	F	F	F	F	F	F	C	C	C	B	B	B
ApproachDel:	118.6			124.7			15.8			13.0		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	118.6			124.7			15.8			13.0		
LOS by Appr:	F			F			C			B		

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #217 Arguello/Jackson

Cycle (sec): 100 Critical Vol./Cap. (X): 0.792
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 19.8
Optimal Cycle: 0 Level Of Service: C

Street Name:	Arguello Blvd.						Jackson St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T	- R		L - T	- R		L - T	- R		L - T	- R	
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	0 1	0	0 1	0 0	0	0 0	0 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	0	421	67	33	513	0	0	0	0	90	0	33
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	421	67	33	513	0	0	0	0	90	0	33
Added Vol:	0	22	0	0	31	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	443	67	33	544	0	0	0	0	90	0	33
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	443	67	33	544	0	0	0	0	90	0	33
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	443	67	33	544	0	0	0	0	90	0	33
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	443	67	33	544	0	0	0	0	90	0	33
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.87	0.13	0.06	0.94	0.00	0.00	0.00	0.00	0.73	0.00	0.27
Final Sat.:	0	632	96	42	687	0	0	0	0	393	0	144
Capacity Analysis Module:												
Vol/Sat:	xxxx	0.70	0.70	0.79	0.79	xxxx	xxxx	xxxx	xxxx	0.23	xxxx	0.23
Crit Moves:		****			****					****		
Delay/Veh:	0.0	18.1	18.1	23.2	23.2	0.0	0.0	0.0	0.0	10.8	0.0	10.8
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	18.1	18.1	23.2	23.2	0.0	0.0	0.0	0.0	10.8	0.0	10.8
LOS by Move:	*	C	C	C	C	*	*	*	*	B	*	B
ApproachDel:		18.1			23.2			xxxxxx			10.8	
Delay Adj:		1.00			1.00			xxxxx			1.00	
ApprAdjDel:		18.1			23.2			xxxxxx			10.8	
LOS by Appr:		C			C			*			B	

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #218 Arguello/Washington St

Cycle (sec): 100 Critical Vol./Cap. (X): 0.866
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 26.0
Optimal Cycle: 0 Level Of Service: D

Street Name:	Arguello Blvd.						Washington St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T	- R		L - T	- R		L - T	- R		L - T	- R	
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	0 0	0 1	0	0 0	1! 0	0
Volume Module:												
Base Vol:	20	465	57	20	551	11	0	8	24	82	5	20
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	20	465	57	20	551	11	0	8	24	82	5	20
Added Vol:	0	22	0	0	31	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	20	487	57	20	582	11	0	8	24	82	5	20
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	20	487	57	20	582	11	0	8	24	82	5	20
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	20	487	57	20	582	11	0	8	24	82	5	20
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	20	487	57	20	582	11	0	8	24	82	5	20
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.04	0.86	0.10	0.03	0.95	0.02	0.00	0.25	0.75	0.76	0.05	0.19
Final Sat.:	25	607	71	23	672	13	0	128	385	391	24	95
Capacity Analysis Module:												
Vol/Sat:	0.80	0.80	0.80	0.87	0.87	0.87	xxxx	0.06	0.06	0.21	0.21	0.21
Crit Moves:		****		****				****		****		
Delay/Veh:	24.5	24.5	24.5	30.8	30.8	30.8	0.0	9.7	9.7	11.2	11.2	11.2
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	24.5	24.5	24.5	30.8	30.8	30.8	0.0	9.7	9.7	11.2	11.2	11.2
LOS by Move:	C	C	C	D	D	D	*	A	A	B	B	B
ApproachDel:		24.5			30.8			9.7			11.2	
Delay Adj:		1.00			1.00			1.00			1.00	
ApprAdjDel:		24.5			30.8			9.7			11.2	
LOS by Appr:		C			D			A			B	

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #219 Arguello/Moraga

Cycle (sec): 100 Critical Vol./Cap. (X): 0.635
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 14.0
Optimal Cycle: 0 Level Of Service: B

Street Name:	Arguello						Moraga					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 1	0 0	0	0 0	0 1	0	0 0	1! 0	0	0 1	0 0	0
Volume Module:												
Base Vol:	128	303	0	0	317	60	48	0	132	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	128	303	0	0	317	60	48	0	132	0	0	0
Added Vol:	4	17	0	0	28	1	1	0	4	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	132	320	0	0	345	61	49	0	136	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	132	320	0	0	345	61	49	0	136	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	132	320	0	0	345	61	49	0	136	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	132	320	0	0	345	61	49	0	136	0	0	0
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.29	0.71	0.00	0.00	0.85	0.15	0.26	0.00	0.74	0.00	1.00	0.00
Final Sat.:	208	504	0	0	613	108	160	0	444	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.64	0.64	xxxx	xxxx	0.56	0.56	0.31	xxxx	0.31	xxxx	xxxx	xxxx
Crit Moves:		****			****		****					
Delay/Veh:	15.8	15.8	0.0	0.0	13.6	13.6	10.5	0.0	10.5	0.0	0.0	0.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	15.8	15.8	0.0	0.0	13.6	13.6	10.5	0.0	10.5	0.0	0.0	0.0
LOS by Move:	C	C	*	*	B	B	B	*	B	*	*	*
ApproachDel:	15.8				13.6		10.5			xxxxxx		
Delay Adj:	1.00				1.00		1.00			xxxxx		
ApprAdjDel:	15.8				13.6		10.5			xxxxxx		
LOS by Appr:	C				B		B			*		

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #220 Montgomery/Sheridan

Cycle (sec): 100 Critical Vol./Cap. (X): 0.466
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 10.0
Optimal Cycle: 0 Level Of Service: A

Street Name:	Montgomery St.						Sheridan Ave.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	17	33	2	5	48	25	97	170	74	3	24	10
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	17	33	2	5	48	25	97	170	74	3	24	10
Added Vol:	0	32	0	0	-2	34	35	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	17	65	2	5	46	59	132	170	74	3	24	10
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	17	65	2	5	46	59	132	170	74	3	24	10
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	17	65	2	5	46	59	132	170	74	3	24	10
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	17	65	2	5	46	59	132	170	74	3	24	10
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.20	0.78	0.02	0.04	0.42	0.54	0.35	0.45	0.20	0.08	0.65	0.27
Final Sat.:	136	519	16	33	302	388	283	365	159	60	476	198
Capacity Analysis Module:												
Vol/Sat:	0.13	0.13	0.13	0.15	0.15	0.15	0.47	0.47	0.47	0.05	0.05	0.05
Crit Moves:		****			****				****		****	
Delay/Veh:	8.6	8.6	8.6	8.4	8.4	8.4	10.9	10.9	10.9	7.8	7.8	7.8
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	8.6	8.6	8.6	8.4	8.4	8.4	10.9	10.9	10.9	7.8	7.8	7.8
LOS by Move:	A	A	A	A	A	A	B	B	B	A	A	A
ApproachDel:	8.6				8.4			10.9			7.8	
Delay Adj:	1.00				1.00			1.00			1.00	
ApprAdjDel:	8.6				8.4			10.9			7.8	
LOS by Appr:	A				A			B			A	

Alternative 4 – PM Peak Hour

Scenario Report

Scenario:	PM 2030-Status Quo
Command:	PM Status Quo
Volume:	PM 2030
Geometry:	PM 2030
Impact Fee:	Default Impact Fee
Trip Generation:	PM 2030-Status Quo
Trip Distribution:	Main Post SEIS
Paths:	Main Post SEIS
Routes:	Default Routes
Configuration:	Default Configuration

Trip Generation Report

Forecast for PM 2030-Status Quo

Zone #	Subzone	Amount	Units	Rate In	Rate Out	Trips In	Trips Out	Total Trips	% Of Total
14	West Crissy	1.00	mixed use	43.00	35.00	43	35	78	10.8
	Zone 14 Subtotal					43	35	78	10.8
15	Ruger & Simo	1.00	mixed use	43.00	41.00	43	41	84	11.7
	Zone 15 Subtotal					43	41	84	11.7
32	S. Main Post	1.00	mixed use	5.00	1.00	5	1	6	0.8
	Zone 32 Subtotal					5	1	6	0.8
33	W. Main Post	1.00	Mixed Use	-47.00	-37.00	-47	-37	-84	-11.7
	Zone 33 Subtotal					-47	-37	-84	-11.7
34	E. Main Post	1.00	mixed use	80.00	31.00	80	31	111	15.4
	Zone 34 Subtotal					80	31	111	15.4
35	N. Main Post	1.00	mixed use	-24.00	-29.00	-24	-29	-53	-7.4
	Zone 35 Subtotal					-24	-29	-53	-7.4
36	West Letterm	1.00	mixed use	-59.00	-15.00	-59	-15	-74	-10.3
	Zone 36 Subtotal					-59	-15	-74	-10.3
753	LDA	1.00	mixed use	126.00	188.00	126	188	314	43.6
	Zone 753 Subtotal					126	188	314	43.6
767	Commissary/P	1.00	mixed use	169.00	169.00	169	169	338	46.9
	Zone 767 Subtotal					169	169	338	46.9
TOTAL						336	384	720	100.0

Trip Distribution Report

Percent Of Trips M POST SEIS

Zone	To Gates 5	14	16	17	22	28	36
14	0.0	25.0	0.0	10.0	15.0	50.0	0.0
15	0.0	0.0	25.0	0.0	67.5	0.0	7.5
32	0.0	5.0	10.0	10.0	68.0	5.0	2.0
33	0.0	5.0	10.0	10.0	68.0	5.0	2.0
34	0.0	5.0	10.0	10.0	68.0	5.0	2.0
35	0.0	5.0	10.0	10.0	68.0	5.0	2.0
36	0.0	10.0	20.0	15.0	40.0	15.0	0.0
753	20.0	5.0	10.0	5.0	55.0	0.0	5.0
767	14.0	0.0	10.0	10.0	14.0	50.0	2.0

Volume Type	NB Link In	Out	Total	SB Link In	Out	Total	EB Link In	Out	Total	WB Link In	Out	Total	Total Volume
#201 Lombard/Divisadero													
Base	378	385	763	298	285	583	2398	3242	5640	3117	2279	5396	12382
Added	0	0	0	0	0	0	131	114	245	114	131	245	490
Total	378	385	763	298	285	583	2529	3356	5885	3231	2410	5641	12872
#202 Lombard/Richardson													
Base	3319	2500	5819	2171	3119	5290	329	200	529	0	0	0	11638
Added	114	131	245	1	2	3	130	112	242	0	0	0	490
Total	3433	2631	6064	2172	3121	5293	459	312	771	0	0	0	12128
#203 Lyon/Lombard													
Base	217	183	400	318	325	643	569	517	1086	223	302	525	2654
Added	13	15	28	0	0	0	145	125	270	112	130	242	540
Total	230	198	428	318	325	643	714	642	1356	335	432	767	3194
#204 Greenwich/Divisadero													
Base	345	332	677	343	385	728	145	164	309	203	155	358	2072
Added	0	0	0	0	0	0	15	13	28	13	15	28	56
Total	345	332	677	343	385	728	160	177	337	216	170	386	2128
#205 Greenwich/Lyon													
Base	107	120	227	177	214	391	0	0	0	130	80	210	828
Added	0	0	0	15	13	28	0	0	0	13	15	28	56
Total	107	120	227	192	227	419	0	0	0	143	95	238	884
#206 Francisco/Richardson													
Base	3119	2250	5369	2217	3331	5548	251	69	320	145	82	227	11464
Added	2	1	3	1	2	3	0	0	0	0	0	0	6
Total	3121	2251	5372	2218	3333	5551	251	69	320	145	82	227	11470
#207 Richardson/Gorgas													
Base	253	63	316	69	34	103	2150	3439	5589	3298	2234	5532	11540
Added	1	0	1	0	0	0	0	2	2	2	1	3	6
Total	254	63	317	69	34	103	2150	3441	5591	3300	2235	5535	11546
#208 Doyle/Marina/Lyon													
Base	40	25	65	247	491	738	922	1549	2471	2009	1153	3162	6436
Added	0	0	0	100	107	207	-2	-9	-11	98	98	196	392
Total	40	25	65	347	598	945	920	1540	2460	2107	1251	3358	6828
209 Graham/Lincoln													
Base	152	134	286	22	7	29	434	391	825	508	584	1092	2232
Added	16	23	39	-1	0	-1	-4	1	-3	24	11	35	70
Total	168	157	325	21	7	28	430	392	822	532	595	1127	2302
#210 Lincoln/Halleck													
Base	0	3	3	314	340	654	542	543	1085	584	554	1138	2880
Added	0	0	0	42	44	86	30	28	58	42	42	84	228
Total	0	3	3	356	384	740	572	571	1143	626	596	1222	3108

Volume Type	NB Link In	NB Link Out	NB Link Total	SB Link In	SB Link Out	SB Link Total	EB Link In	EB Link Out	EB Link Total	WB Link In	WB Link Out	WB Link Total	Total Volume
##211 Lincoln/Girard													
Base	0	0	0	336	497	833	589	585	1174	600	443	1043	3050
Added	0	0	0	49	3	52	34	83	117	34	31	65	234
Total	0	0	0	385	500	885	623	668	1291	634	474	1108	3284
#212 Presidio/Letterman/Lincoln													
Base	539	546	1085	463	601	1064	237	188	425	148	52	200	2774
Added	49	49	98	27	21	48	9	24	33	28	19	47	226
Total	588	595	1183	490	622	1112	246	212	458	176	71	247	3000
#213 Lombard/Presidio													
Base	733	676	1409	549	597	1146	0	0	0	529	538	1067	3622
Added	50	61	111	49	49	98	0	0	0	62	51	113	322
Total	783	737	1520	598	646	1244	0	0	0	591	589	1180	3944
#214 Presidio/Pacific													
Base	731	630	1361	686	743	1429	14	66	80	89	81	170	3040
Added	30	40	70	40	30	70	0	0	0	0	0	0	140
Total	761	670	1431	726	773	1499	14	66	80	89	81	170	3180
#215 Presidio/Jackson													
Base	637	654	1291	661	677	1338	160	168	328	250	209	459	3416
Added	30	40	70	40	30	70	0	0	0	0	0	0	140
Total	667	694	1361	701	707	1408	160	168	328	250	209	459	3556
#216 Presidio/Washington													
Base	664	599	1263	658	705	1363	206	130	336	110	204	314	3276
Added	30	40	70	40	30	70	0	0	0	0	0	0	140
Total	694	639	1333	698	735	1433	206	130	336	110	204	314	3416
#217 Arguello/Jackson													
Base	488	603	1091	546	454	1000	0	0	0	123	100	223	2314
Added	20	24	44	24	20	44	0	0	0	0	0	0	88
Total	508	627	1135	570	474	1044	0	0	0	123	100	223	2402
#218 Arguello/Washington St													
Base	542	657	1199	582	485	1067	32	36	68	107	85	192	2526
Added	20	24	44	24	20	44	0	0	0	0	0	0	88
Total	562	681	1243	606	505	1111	32	36	68	107	85	192	2614
#219 Arguello/Moraga													
Base	431	449	880	0	0	0	180	188	368	377	351	728	1976
Added	20	25	45	0	0	0	5	9	14	25	16	41	100
Total	451	474	925	0	0	0	185	197	382	402	367	769	2076
#220 Montgomery/Sheridan													
Base	62	196	258	85	226	311	341	66	407	0	0	0	976
Added	-22	-4	-26	25	-3	22	19	29	48	0	0	0	44
Total	40	192	232	110	223	333	360	95	455	0	0	0	1020

Impact Analysis Report
Level Of Service

Intersection	Base LOS	Base Del/ Veh	Base V/ C	Future LOS	Future Del/ Veh	Future V/ C	Change in
#201 Lombard/Divisadero	B	13.0	0.849	B	13.9	0.872	+ 0.880 D/V
#202 Lombard/Richardson	A	3.6	0.602	A	6.9	0.743	+ 3.371 D/V
#203 Lyon/Lombard	D	31.0	0.961	F	88.0	1.307	+ 0.345 V/C
#204 Greenwich/Divisadero	B	13.4	0.549	B	13.8	0.562	+ 0.013 V/C
#205 Greenwich/Lyon	A	8.2	0.222	A	8.3	0.243	+ 0.022 V/C
#206 Francisco/Richardson	B	15.0	0.712	B	15.1	0.713	+ 0.027 D/V
#207 Richardson/Gorgas	A	7.0	0.796	A	7.0	0.797	+ 0.030 D/V
#208 Doyle/Marina/Lyon	B	17.7	0.726	C	25.6	0.826	+ 7.841 D/V
#209 Graham/Lincoln	B	13.8	0.621	B	14.0	0.624	+ 0.004 V/C
#210 Lincoln/Halleck	F	108.0	0.000	F	215.1	0.000	+107.169 D/V
#211 Lincoln/Girard	F	506.5	0.000	F	642.6	0.000	+136.140 D/V
#212 Presidio/Letterman/Lincoln	C	17.6	0.781	C	20.9	0.853	+ 0.072 V/C
#213 Lombard/Presidio	F	88.3	1.344	F	111.7	1.475	+ 0.131 V/C
#214 Presidio/Pacific	F	53.7	1.029	F	67.3	1.077	+ 0.048 V/C
#215 Presidio/Jackson	F	100.0	1.216	F	120.3	1.289	+ 0.073 V/C
#216 Presidio/Washington	F	81.6	1.125	F	99.8	1.182	+ 0.057 V/C
#217 Arguello/Jackson	C	17.6	0.744	C	19.3	0.782	+ 0.038 V/C
#218 Arguello/Washington St	C	22.3	0.817	D	25.3	0.855	+ 0.039 V/C
#219 Arguello/Moraga	B	14.0	0.613	C	15.3	0.652	+ 0.039 V/C
#220 Montgomery/Sheridan	A	9.2	0.394	A	9.4	0.419	+ 0.024 V/C

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #201 Lombard/Divisadero

Cycle (sec): 90 Critical Vol./Cap. (X): 0.872
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 13.9
Optimal Cycle: 90 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	27	27	27	27	27	27	54	54	54	54	54	54
Lanes:	1 0	0 1	0	1 0	0 1	0	0 1	1 1	0	0 1	1 1	0
Volume Module:												
Base Vol:	194	161	23	80	163	55	0	2176	222	0	2993	124
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	194	161	23	80	163	55	0	2176	222	0	2993	124
Added Vol:	0	0	0	0	0	0	0	131	0	0	114	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	194	161	23	80	163	55	0	2307	222	0	3107	124
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	194	161	23	80	163	55	0	2307	222	0	3107	124
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	194	161	23	80	163	55	0	2307	222	0	3107	124
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	194	161	23	80	163	55	0	2307	222	0	3107	124
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.42	0.98	0.98	0.47	0.96	0.96	0.91	0.90	0.90	0.91	0.90	0.90
Lanes:	1.00	0.87	0.13	1.00	0.75	0.25	0.00	2.74	0.26	0.00	2.88	0.12
Final Sat.:	792	1631	233	885	1367	461	0	4670	449	0	4958	198
Capacity Analysis Module:												
Vol/Sat:	0.24	0.10	0.10	0.09	0.12	0.12	0.00	0.49	0.49	0.00	0.63	0.63
Crit Moves:	****										****	
Green/Cycle:	0.30	0.30	0.30	0.30	0.30	0.30	0.00	0.70	0.70	0.00	0.70	0.70
Volume/Cap:	0.82	0.33	0.33	0.30	0.40	0.40	0.00	0.71	0.71	0.00	0.90	0.90
Uniform Del:	29.2	24.5	24.5	24.2	25.0	25.0	0.0	8.0	8.0	0.0	10.8	10.8
IncremntDel:	19.3	0.3	0.3	0.6	0.5	0.5	0.0	0.7	0.7	0.0	3.3	3.3
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00
Delay/Veh:	48.5	24.8	24.8	24.9	25.5	25.5	0.0	8.7	8.7	0.0	14.2	14.2
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	48.5	24.8	24.8	24.9	25.5	25.5	0.0	8.7	8.7	0.0	14.2	14.2
HCM2kAvg:	14	4	4	4	5	5	0	15	15	0	28	28

Level Of Service Computation Report
1994 HCM Operations Method (Future Volume Alternative)

Intersection #202 Lombard/Richardson

Cycle (sec): 90 Critical Vol./Cap. (X): 0.743
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 6.9
Optimal Cycle: 90 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Ovl			Include		
Min. Green:	25	90	0	0	57	57	0	0	25	0	0	0
Lanes:	1 0	3 0	0	0 0	2 1	0	0 0	0 0	1	0 0	0 0	0
Volume Module:												
Base Vol:	200	3119	0	0	2171	0	0	0	329	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	200	3119	0	0	2171	0	0	0	329	0	0	0
Added Vol:	112	2	0	0	1	0	0	0	130	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	312	3121	0	0	2172	0	0	0	459	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	312	3121	0	0	2172	0	0	0	459	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	312	3121	0	0	2172	0	0	0	459	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.10	1.00	1.00	1.10	1.10	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	312	3433	0	0	2389	0	0	0	459	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.77	1.00	1.00	1.00
Lanes:	1.00	3.00	0.00	0.00	3.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	1805	5700	0	0	5700	0	0	0	1463	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.17	0.60	0.00	0.00	0.42	0.00	0.00	0.00	0.31	0.00	0.00	0.00
Crit Moves:		****		****					****			
Green/Cycle:	0.30	1.00	0.00	0.00	0.70	0.00	0.00	0.00	0.30	0.00	0.00	0.00
Volume/Cap:	0.57	0.60	0.00	0.00	0.60	0.00	0.00	0.00	1.03	0.00	0.00	0.00
Uniform Del:	20.0	0.0	0.0	0.0	5.5	0.0	0.0	0.0	23.8	0.0	0.0	0.0
IncremntDel:	1.0	0.1	0.0	0.0	0.2	0.0	0.0	0.0	40.9	0.0	0.0	0.0
Delay Adj:	0.85	0.85	0.00	0.00	0.85	0.00	0.00	0.00	0.85	0.00	0.00	0.00
Delay/Veh:	18.0	0.1	0.0	0.0	4.8	0.0	0.0	0.0	61.1	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	18.0	0.1	0.0	0.0	4.8	0.0	0.0	0.0	61.1	0.0	0.0	0.0
DesignQueue:	11	0	0	0	41	0	0	0	17	0	0	0

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #203 Lyon/Lombard

Cycle (sec): 100 Critical Vol./Cap. (X): 1.307
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 88.0
Optimal Cycle: 0 Level Of Service: F

Street Name:	Lyon St.						Lombard St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	124	68	25	29	65	224	212	248	109	9	169	45
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	124	68	25	29	65	224	212	248	109	9	169	45
Added Vol:	13	0	0	0	0	0	0	130	15	0	112	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	137	68	25	29	65	224	212	378	124	9	281	45
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	137	68	25	29	65	224	212	378	124	9	281	45
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	137	68	25	29	65	224	212	378	124	9	281	45
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	137	68	25	29	65	224	212	378	124	9	281	45
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.59	0.30	0.11	0.09	0.20	0.71	0.30	0.53	0.17	0.03	0.84	0.13
Final Sat.:	264	131	48	45	101	350	162	289	95	13	415	66
Capacity Analysis Module:												
Vol/Sat:	0.52	0.52	0.52	0.64	0.64	0.64	1.31	1.31	1.31	0.68	0.68	0.68
Crit Moves:		****		****				****			****	
Delay/Veh:	17.8	17.8	17.8	20.6	20.6	20.6	171.5	171	171.5	22.4	22.4	22.4
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	17.8	17.8	17.8	20.6	20.6	20.6	171.5	171	171.5	22.4	22.4	22.4
LOS by Move:	C	C	C	C	C	C	F	F	F	C	C	C
ApproachDel:	17.8			20.6			171.5			22.4		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	17.8			20.6			171.5			22.4		
LOS by Appr:	C			C			F			C		

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #204 Greenwich/Divisadero

Cycle (sec): 100 Critical Vol./Cap. (X): 0.562
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 13.8
Optimal Cycle: 0 Level Of Service: B

Street Name:	Divisadero						Greenwich					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	11	323	11	34	296	13	26	110	9	27	140	36
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	11	323	11	34	296	13	26	110	9	27	140	36
Added Vol:	0	0	0	0	0	0	0	15	0	0	13	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	11	323	11	34	296	13	26	125	9	27	153	36
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	11	323	11	34	296	13	26	125	9	27	153	36
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	11	323	11	34	296	13	26	125	9	27	153	36
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	11	323	11	34	296	13	26	125	9	27	153	36
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.03	0.94	0.03	0.10	0.86	0.04	0.16	0.78	0.06	0.12	0.71	0.17
Final Sat.:	20	574	20	61	528	23	84	404	29	68	386	91
Capacity Analysis Module:												
Vol/Sat:	0.56	0.56	0.56	0.56	0.56	0.56	0.31	0.31	0.31	0.40	0.40	0.40
Crit Moves:		****		****			****					****
Delay/Veh:	14.9	14.9	14.9	14.8	14.8	14.8	11.5	11.5	11.5	12.3	12.3	12.3
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	14.9	14.9	14.9	14.8	14.8	14.8	11.5	11.5	11.5	12.3	12.3	12.3
LOS by Move:	B	B	B	B	B	B	B	B	B	B	B	B
ApproachDel:	14.9			14.8			11.5			12.3		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	14.9			14.8			11.5			12.3		
LOS by Appr:	B			B			B			B		

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #205 Greenwich/Lyon

Cycle (sec): 100 Critical Vol./Cap. (X): 0.243
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 8.3
Optimal Cycle: 0 Level Of Service: A

Street Name:	Lyon						Greenwich					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	0	1 0	0 1	0	0 0	0 0	0	0 0	0 0	1!	0 0
Volume Module:												
Base Vol:	0	105	2	78	99	0	0	0	0	21	0	109
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	105	2	78	99	0	0	0	0	21	0	109
Added Vol:	0	0	0	15	0	0	0	0	0	0	0	13
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	105	2	93	99	0	0	0	0	21	0	122
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	105	2	93	99	0	0	0	0	21	0	122
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	105	2	93	99	0	0	0	0	21	0	122
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	105	2	93	99	0	0	0	0	21	0	122
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.98	0.02	0.48	0.52	0.00	0.00	0.00	0.00	0.15	0.00	0.85
Final Sat.:	0	773	15	382	407	0	0	0	0	122	0	711
Capacity Analysis Module:												
Vol/Sat:	xxxx	0.14	0.14	0.24	0.24	xxxx	xxxx	xxxx	xxxx	0.17	xxxx	0.17
Crit Moves:			****		****					****		
Delay/Veh:	0.0	8.1	8.1	8.8	8.8	0.0	0.0	0.0	0.0	7.9	0.0	7.9
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	8.1	8.1	8.8	8.8	0.0	0.0	0.0	0.0	7.9	0.0	7.9
LOS by Move:	*	A	A	A	A	*	*	*	*	A	*	A
ApproachDel:		8.1			8.8			xxxxxx			7.9	
Delay Adj:		1.00			1.00			xxxxx			1.00	
ApprAdjDel:		8.1			8.8			xxxxxx			7.9	
LOS by Appr:		A			A			*			A	

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #206 Francisco/Richardson

Cycle (sec): 90 Critical Vol./Cap. (X): 0.713
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 15.1
Optimal Cycle: 90 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	51	51	0	51	51	31	31	31	31	31	31
Lanes:	0 0	2	1 0	0 0	2	1 0	0 1	0	1 0	0 0	1!	0 0
Volume Module:												
Base Vol:	0	3117	2	0	2217	0	142	80	29	4	69	72
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	3117	2	0	2217	0	142	80	29	4	69	72
Added Vol:	0	2	0	0	1	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	3119	2	0	2218	0	142	80	29	4	69	72
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	3119	2	0	2218	0	142	80	29	4	69	72
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	3119	2	0	2218	0	142	80	29	4	69	72
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	3119	2	0	2218	0	142	80	29	4	69	72
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	0.91	0.91	1.00	0.91	0.91	0.67	0.67	0.67	0.93	0.93	0.93
Lanes:	0.00	2.99	0.01	0.00	3.00	0.00	1.00	0.73	0.27	0.03	0.47	0.50
Final Sat.:	0	5184	3	0	5187	0	1279	939	340	49	838	874
Capacity Analysis Module:												
Vol/Sat:	0.00	0.60	0.60	0.00	0.43	0.00	0.11	0.09	0.09	0.08	0.08	0.08
Crit Moves:		****		****			****					
Green/Cycle:	0.00	0.66	0.66	0.00	0.66	0.00	0.34	0.34	0.34	0.34	0.34	0.34
Volume/Cap:	0.00	0.92	0.92	0.00	0.65	0.00	0.32	0.25	0.25	0.24	0.24	0.24
Uniform Del:	0.0	13.4	13.4	0.0	9.3	0.0	21.8	21.1	21.1	21.1	21.1	21.1
IncrmntDel:	0.0	4.6	4.6	0.0	0.5	0.0	0.2	0.1	0.1	0.2	0.2	0.2
Delay Adj:	0.00	1.00	1.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Delay/Veh:	0.0	18.0	18.0	0.0	9.8	0.0	22.0	21.3	21.3	21.3	21.3	21.3
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	18.0	18.0	0.0	9.8	0.0	22.0	21.3	21.3	21.3	21.3	21.3
HCM2kAvg:	0	29	29	0	13	0	4	3	3	3	3	3

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #207 Richardson/Gorgas

Cycle (sec): 90 Critical Vol./Cap. (X): 0.797
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 7.0
Optimal Cycle: 90 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Split Phase			Split Phase			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	10	10	10	12	12	12	52	52	52	52	52	52
Lanes:	1 0	1! 0	0	0 0	0 0	1	0 0	3 0	1	0 0	2 1	0
Volume Module:												
Base Vol:	106	0	147	0	0	69	0	2087	63	0	3264	34
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	106	0	147	0	0	69	0	2087	63	0	3264	34
Added Vol:	0	0	1	0	0	0	0	0	0	0	2	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	106	0	148	0	0	69	0	2087	63	0	3266	34
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	106	0	148	0	0	69	0	2087	63	0	3266	34
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	106	0	148	0	0	69	0	2087	63	0	3266	34
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	106	0	148	0	0	69	0	2087	63	0	3266	34
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.89	1.00	0.89	1.00	1.00	0.87	1.00	0.91	0.85	1.00	0.91	0.91
Lanes:	1.26	0.00	0.74	0.00	0.00	1.00	0.00	3.00	1.00	0.00	2.97	0.03
Final Sat.:	2148	0	1252	0	0	1644	0	5187	1615	0	5128	53
Capacity Analysis Module:												
Vol/Sat:	0.05	0.00	0.12	0.00	0.00	0.04	0.00	0.40	0.04	0.00	0.64	0.64
Crit Moves:			****			****					****	
Green/Cycle:	0.15	0.00	0.15	0.00	0.00	0.13	0.00	0.80	0.80	0.00	0.80	0.80
Volume/Cap:	0.33	0.00	0.80	0.00	0.00	0.31	0.00	0.50	0.05	0.00	0.80	0.80
Uniform Del:	34.3	0.0	37.0	0.0	0.0	35.3	0.0	3.0	1.9	0.0	5.0	5.0
IncremntDel:	0.3	0.0	13.1	0.0	0.0	0.8	0.0	0.1	0.0	0.0	1.1	1.1
Delay Adj:	1.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00
Delay/Veh:	34.6	0.0	50.1	0.0	0.0	36.1	0.0	3.1	1.9	0.0	6.1	6.1
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	34.6	0.0	50.1	0.0	0.0	36.1	0.0	3.1	1.9	0.0	6.1	6.1
HCM2kAvg:	2	0	8	0	0	2	0	7	0	0	19	19

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #208 Doyle/Marina/Lyon

Cycle (sec): 60 Critical Vol./Cap. (X): 0.826
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 25.6
Optimal Cycle: 90 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	24	0	24	24	0	24	0	28	0	0	28	0
Lanes:	1 0	0 0	1	1 0	0 0	1	0 0	1 1	0	0 0	1 1	0
Volume Module:												
Base Vol:	0	0	40	216	0	31	0	897	25	0	1518	491
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	40	216	0	31	0	897	25	0	1518	491
Added Vol:	0	0	0	100	0	0	0	-2	0	0	-9	107
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	40	316	0	31	0	895	25	0	1509	598
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	40	316	0	31	0	895	25	0	1509	598
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	40	316	0	31	0	895	25	0	1509	598
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	0	40	316	0	31	0	895	25	0	1509	598
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	0.85	0.77	1.00	0.85	1.00	0.95	0.95	1.00	0.91	0.91
Lanes:	1.00	0.00	1.00	1.00	0.00	1.00	0.00	1.95	0.05	0.00	1.43	0.57
Final Sat.:	1900	0	1615	1461	0	1615	0	3498	98	0	2474	981
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.02	0.22	0.00	0.02	0.00	0.26	0.26	0.00	0.61	0.61
Crit Moves:				****			****				****	
Green/Cycle:	0.00	0.00	0.40	0.40	0.00	0.40	0.00	0.60	0.60	0.00	0.60	0.60
Volume/Cap:	0.00	0.00	0.06	0.54	0.00	0.05	0.00	0.43	0.43	0.00	1.02	1.02
Uniform Del:	0.0	0.0	11.1	13.8	0.0	11.0	0.0	6.5	6.5	0.0	12.0	12.0
IncremntDel:	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.1	0.1	0.0	24.0	24.0
Delay Adj:	0.00	0.00	1.00	1.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00
Delay/Veh:	0.0	0.0	11.1	14.8	0.0	11.0	0.0	6.6	6.6	0.0	36.0	36.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	11.1	14.8	0.0	11.0	0.0	6.6	6.6	0.0	36.0	36.0
HCM2kAvg:	0	0	0	6	0	0	0	5	5	0	30	30

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #209 Graham/Lincoln

Cycle (sec): 100 Critical Vol./Cap. (X): 0.624
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 14.0
Optimal Cycle: 0 Level Of Service: B

Street Name:	Graham St.						Lincoln Blvd.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	0 1	0 0	0	1 0	0 1	0
Volume Module:												
Base Vol:	2	0	150	7	0	15	7	427	0	134	374	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	2	0	150	7	0	15	7	427	0	134	374	0
Added Vol:	0	0	16	-1	0	0	0	-4	0	23	1	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	2	0	166	6	0	15	7	423	0	157	375	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	2	0	166	6	0	15	7	423	0	157	375	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	2	0	166	6	0	15	7	423	0	157	375	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	2	0	166	6	0	15	7	423	0	157	375	0
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.01	0.00	0.99	0.29	0.00	0.71	0.02	0.98	0.00	1.00	1.00	0.00
Final Sat.:	7	0	597	146	0	365	11	677	0	598	651	0
Capacity Analysis Module:												
Vol/Sat:	0.28	xxxx	0.28	0.04	xxxx	0.04	0.62	0.62	xxxx	0.26	0.58	xxxx
Crit Moves:	****			****			****				****	
Delay/Veh:	10.3	0.0	10.3	9.2	0.0	9.2	15.9	15.9	0.0	10.7	15.0	0.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	10.3	0.0	10.3	9.2	0.0	9.2	15.9	15.9	0.0	10.7	15.0	0.0
LOS by Move:	B	*	B	A	*	A	C	C	*	B	B	*
ApproachDel:	10.3			9.2			15.9			13.7		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	10.3			9.2			15.9			13.7		
LOS by Appr:	B			A			C			B		

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #210 Lincoln/Halleck

Average Delay (sec/veh): 50.2 Worst Case Level Of Service: F[215.1]

Street Name:	Halleck St.						Lincoln Blvd.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Channel			Include			Include		
Lanes:	0 0	0 0	0	0 0	1! 0	0	1 0	0 1	0	0 0	0 1	0
Volume Module:												
Base Vol:	0	0	0	153	0	161	138	401	3	0	382	202
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	153	0	161	138	401	3	0	382	202
Added Vol:	0	0	0	26	0	16	14	16	0	0	12	30
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	179	0	177	152	417	3	0	394	232
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	179	0	177	152	417	3	0	394	232
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	0	0	0	179	0	177	152	417	3	0	394	232
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	6.4	xxxx	6.2	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	3.5	xxxx	3.3	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	1233	xxxx	510	626	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	197	xxxx	567	965	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	173	xxxx	567	965	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	1.03	xxxx	0.31	0.16	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.6	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	9.4	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	A	*	*	*	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	265	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	18.6	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	215	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	F	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			215.1			xxxxxx			xxxxxx		
ApproachLOS:	*			F			*			*		

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #211 Lincoln/Girard

Average Delay (sec/veh): 152.9 Worst Case Level Of Service: F[642.6]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Stop Sign				Stop Sign				Uncontrolled				Uncontrolled			
Rights:	Include				Include				Include				Include			
Lanes:	0	0	0	0 0	0	0	1!	0 0	1	0	1	0 0	0	0	0	1 0
Volume Module:																
Base Vol:	0	0	0	187	0	149	333	256	0	0	436	164				
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
Initial Bse:	0	0	0	187	0	149	333	256	0	0	436	164				
Added Vol:	0	0	0	0	0	49	3	31	0	0	34	0				
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0				
Initial Fut:	0	0	0	187	0	198	336	287	0	0	470	164				
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
PHF Volume:	0	0	0	187	0	198	336	287	0	0	470	164				
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0				
Final Vol.:	0	0	0	187	0	198	336	287	0	0	470	164				
Critical Gap Module:																
Critical Gp:	xxxxx	xxxx	xxxxx	6.4	xxxx	6.2	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
FollowUpTim:	xxxxx	xxxx	xxxxx	3.5	xxxx	3.3	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
Capacity Module:																
Cnflict Vol:	xxxx	xxxx	xxxxx	1511	xxxx	552	634	xxxx	xxxxx	xxxx	xxxx	xxxxx				
Potent Cap.:	xxxx	xxxx	xxxxx	134	xxxx	537	959	xxxx	xxxxx	xxxx	xxxx	xxxxx				
Move Cap.:	xxxx	xxxx	xxxxx	97	xxxx	537	959	xxxx	xxxxx	xxxx	xxxx	xxxxx				
Volume/Cap:	xxxx	xxxx	xxxx	1.92	xxxx	0.37	0.35	xxxx	xxxx	xxxx	xxxx	xxxx				
Level Of Service Module:																
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	1.6	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	10.8	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
LOS by Move:	*	*	*	*	*	*	B	*	*	*	*	*				
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT				
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	168	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx				
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	31.7	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	643	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
Shared LOS:	*	*	*	*	F	*	*	*	*	*	*	*				
ApproachDel:	xxxxxx				642.6		xxxxxx			xxxxxx						
ApproachLOS:	*				F		*			*						

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #212 Presidio/Letterman/Lincoln

Cycle (sec): 100 Critical Vol./Cap. (X): 0.853
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 20.9
Optimal Cycle: 0 Level Of Service: C

Street Name:	Lincoln/Presidio						Presidio/Letterman					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	0	1 0	0	1 0	1 0	0	0	1! 0	0	0	1! 0 0
Volume Module:												
Base Vol:	106	425	8	28	393	42	74	16	147	6	40	102
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	106	425	8	28	393	42	74	16	147	6	40	102
Added Vol:	24	12	13	6	21	0	0	0	9	19	0	9
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	130	437	21	34	414	42	74	16	156	25	40	111
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	130	437	21	34	414	42	74	16	156	25	40	111
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	130	437	21	34	414	42	74	16	156	25	40	111
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	130	437	21	34	414	42	74	16	156	25	40	111
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.95	0.05	0.14	1.69	0.17	0.30	0.07	0.63	0.14	0.23	0.63
Final Sat.:	494	512	25	70	865	89	152	33	320	68	109	303
Capacity Analysis Module:												
Vol/Sat:	0.26	0.85	0.85	0.49	0.48	0.47	0.49	0.49	0.49	0.37	0.37	0.37
Crit Moves:		****		****				****			****	
Delay/Veh:	12.4	35.5	35.5	15.6	15.3	15.0	15.1	15.1	15.1	13.3	13.3	13.3
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	12.4	35.5	35.5	15.6	15.3	15.0	15.1	15.1	15.1	13.3	13.3	13.3
LOS by Move:	B	E	E	C	C	B	C	C	C	B	B	B
ApproachDel:	30.4			15.3			15.1			13.3		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	30.4			15.3			15.1			13.3		
LOS by Appr:	D			C			C			B		

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #213 Lombard/Presidio

Cycle (sec): 100 Critical Vol./Cap. (X): 1.475
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 111.7
Optimal Cycle: 0 Level Of Service: F

Street Name:	Presidio Blvd.						Lombard St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	0	1 0	1 0	1 0	0	0 0	0	0 0	1 0	0 1	0
Volume Module:												
Base Vol:	0	409	324	214	335	0	0	0	0	341	0	188
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	409	324	214	335	0	0	0	0	341	0	188
Added Vol:	0	19	31	20	29	0	0	0	0	32	0	30
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	428	355	234	364	0	0	0	0	373	0	218
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	428	355	234	364	0	0	0	0	373	0	218
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	428	355	234	364	0	0	0	0	373	0	218
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	428	355	234	364	0	0	0	0	373	0	218
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.55	0.45	1.00	1.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Final Sat.:	0	290	241	464	497	0	0	0	0	462	0	544
Capacity Analysis Module:												
Vol/Sat:	xxxx	1.47	1.47	0.50	0.73	xxxx	xxxx	xxxx	xxxx	0.81	xxxx	0.40
Crit Moves:			****		****					****		
Delay/Veh:	0.0	243	242.7	17.9	27.0	0.0	0.0	0.0	0.0	35.3	0.0	13.6
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	243	242.7	17.9	27.0	0.0	0.0	0.0	0.0	35.3	0.0	13.6
LOS by Move:	*	F	F	C	D	*	*	*	*	E	*	B
ApproachDel:	242.7				23.5		xxxxxx			27.3		
Delay Adj:	1.00				1.00		xxxxx			1.00		
ApprAdjDel:	242.7				23.5		xxxxxx			27.3		
LOS by Appr:	F				C		*			D		

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #214 Presidio/Pacific

Cycle (sec): 100 Critical Vol./Cap. (X): 1.077
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 67.3
Optimal Cycle: 0 Level Of Service: F

Street Name:	Presidio Blvd.						Pacific Ave.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	9	703	19	56	606	24	3	6	5	19	33	37
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	9	703	19	56	606	24	3	6	5	19	33	37
Added Vol:	0	30	0	0	40	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	9	733	19	56	646	24	3	6	5	19	33	37
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	9	733	19	56	646	24	3	6	5	19	33	37
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	9	733	19	56	646	24	3	6	5	19	33	37
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	9	733	19	56	646	24	3	6	5	19	33	37
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.01	0.97	0.02	0.08	0.89	0.03	0.21	0.43	0.36	0.21	0.37	0.42
Final Sat.:	8	680	18	54	628	23	107	215	179	114	198	222
Capacity Analysis Module:												
Vol/Sat:	1.08	1.08	1.08	1.03	1.03	1.03	0.03	0.03	0.03	0.17	0.17	0.17
Crit Moves:		****			****		****			****		
Delay/Veh:	78.2	78.2	78.2	63.8	63.8	63.8	10.3	10.3	10.3	11.0	11.0	11.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	78.2	78.2	78.2	63.8	63.8	63.8	10.3	10.3	10.3	11.0	11.0	11.0
LOS by Move:	F	F	F	F	F	F	B	B	B	B	B	B
ApproachDel:	78.2			63.8			10.3			11.0		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	78.2			63.8			10.3			11.0		
LOS by Appr:	F			F			B			B		

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #215 Presidio/Jackson

Cycle (sec): 100 Critical Vol./Cap. (X): 1.289
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 120.3
Optimal Cycle: 0 Level Of Service: F

Street Name:	Presidio Blvd.						Jackson St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	8	575	54	54	579	28	55	101	4	71	132	47
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	8	575	54	54	579	28	55	101	4	71	132	47
Added Vol:	0	30	0	0	40	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	8	605	54	54	619	28	55	101	4	71	132	47
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	8	605	54	54	619	28	55	101	4	71	132	47
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	8	605	54	54	619	28	55	101	4	71	132	47
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	8	605	54	54	619	28	55	101	4	71	132	47
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.01	0.91	0.08	0.08	0.88	0.04	0.34	0.63	0.03	0.28	0.53	0.19
Final Sat.:	7	496	44	42	480	22	149	273	11	132	246	88
Capacity Analysis Module:												
Vol/Sat:	1.22	1.22	1.22	1.29	1.29	1.29	0.37	0.37	0.37	0.54	0.54	0.54
Crit Moves:	****				****			****			****	
Delay/Veh:	136.9	137	136.9	164.6	165	164.6	15.6	15.6	15.6	18.8	18.8	18.8
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	136.9	137	136.9	164.6	165	164.6	15.6	15.6	15.6	18.8	18.8	18.8
LOS by Move:	F	F	F	F	F	F	C	C	C	C	C	C
ApproachDel:	136.9			164.6			15.6			18.8		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	136.9			164.6			15.6			18.8		
LOS by Appr:	F			F			C			C		

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #216 Presidio/Washington

Cycle (sec): 100 Critical Vol./Cap. (X): 1.182
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 99.8
Optimal Cycle: 0 Level Of Service: F

Street Name:	Presidio Blvd.						Washington St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	20	609	35	44	566	48	68	125	13	20	62	28
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	20	609	35	44	566	48	68	125	13	20	62	28
Added Vol:	0	30	0	0	40	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	20	639	35	44	606	48	68	125	13	20	62	28
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	20	639	35	44	606	48	68	125	13	20	62	28
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	20	639	35	44	606	48	68	125	13	20	62	28
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	20	639	35	44	606	48	68	125	13	20	62	28
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.03	0.92	0.05	0.06	0.87	0.07	0.33	0.61	0.06	0.18	0.57	0.25
Final Sat.:	17	543	30	37	513	41	159	291	30	83	256	116
Capacity Analysis Module:												
Vol/Sat:	1.18	1.18	1.18	1.18	1.18	1.18	0.43	0.43	0.43	0.24	0.24	0.24
Crit Moves:	****			****			****			****		
Delay/Veh:	118.0	118	118.0	120.2	120	120.2	15.8	15.8	15.8	13.0	13.0	13.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	118.0	118	118.0	120.2	120	120.2	15.8	15.8	15.8	13.0	13.0	13.0
LOS by Move:	F	F	F	F	F	F	C	C	C	B	B	B
ApproachDel:	118.0			120.2			15.8			13.0		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	118.0			120.2			15.8			13.0		
LOS by Appr:	F			F			C			B		

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #217 Arguello/Jackson

Cycle (sec): 100 Critical Vol./Cap. (X): 0.782
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 19.3
Optimal Cycle: 0 Level Of Service: C

Street Name:	Arguello Blvd.						Jackson St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	0	1 0	0 1	0	0 0	0 0	0	0 0	0 0	1!	0 0
Volume Module:												
Base Vol:	0	421	67	33	513	0	0	0	0	90	0	33
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	421	67	33	513	0	0	0	0	90	0	33
Added Vol:	0	20	0	0	24	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	441	67	33	537	0	0	0	0	90	0	33
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	441	67	33	537	0	0	0	0	90	0	33
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	441	67	33	537	0	0	0	0	90	0	33
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	441	67	33	537	0	0	0	0	90	0	33
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.87	0.13	0.06	0.94	0.00	0.00	0.00	0.00	0.73	0.00	0.27
Final Sat.:	0	632	96	42	687	0	0	0	0	393	0	144
Capacity Analysis Module:												
Vol/Sat:	xxxx	0.70	0.70	0.78	0.78	xxxx	xxxx	xxxx	xxxx	0.23	xxxx	0.23
Crit Moves:		****			****					****		
Delay/Veh:	0.0	17.9	17.9	22.5	22.5	0.0	0.0	0.0	0.0	10.7	0.0	10.7
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	17.9	17.9	22.5	22.5	0.0	0.0	0.0	0.0	10.7	0.0	10.7
LOS by Move:	*	C	C	C	C	*	*	*	*	B	*	B
ApproachDel:		17.9			22.5			xxxxxx			10.7	
Delay Adj:		1.00			1.00			xxxxx			1.00	
ApprAdjDel:		17.9			22.5			xxxxxx			10.7	
LOS by Appr:		C			C			*			B	

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #218 Arguello/Washington St

Cycle (sec): 100 Critical Vol./Cap. (X): 0.855
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 25.3
Optimal Cycle: 0 Level Of Service: D

Street Name:	Arguello Blvd.						Washington St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1!	0 0	0 0	1!	0 0	0 0	0	1 0	0 0	1!	0 0
Volume Module:												
Base Vol:	20	465	57	20	551	11	0	8	24	82	5	20
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	20	465	57	20	551	11	0	8	24	82	5	20
Added Vol:	0	20	0	0	24	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	20	485	57	20	575	11	0	8	24	82	5	20
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	20	485	57	20	575	11	0	8	24	82	5	20
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	20	485	57	20	575	11	0	8	24	82	5	20
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	20	485	57	20	575	11	0	8	24	82	5	20
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.04	0.86	0.10	0.03	0.95	0.02	0.00	0.25	0.75	0.76	0.05	0.19
Final Sat.:	25	608	71	23	672	13	0	128	385	391	24	95
Capacity Analysis Module:												
Vol/Sat:	0.80	0.80	0.80	0.86	0.86	0.86	xxxx	0.06	0.06	0.21	0.21	0.21
Crit Moves:		****		****				****		****		
Delay/Veh:	24.1	24.1	24.1	29.6	29.6	29.6	0.0	9.7	9.7	11.2	11.2	11.2
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	24.1	24.1	24.1	29.6	29.6	29.6	0.0	9.7	9.7	11.2	11.2	11.2
LOS by Move:	C	C	C	D	D	D	*	A	A	B	B	B
ApproachDel:		24.1			29.6			9.7			11.2	
Delay Adj:		1.00			1.00			1.00			1.00	
ApprAdjDel:		24.1			29.6			9.7			11.2	
LOS by Appr:		C			D			A			B	

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #219 Arguello/Moraga

Cycle (sec): 100 Critical Vol./Cap. (X): 0.652
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 15.3
Optimal Cycle: 0 Level Of Service: C

Street Name:	Arguello						Moraga					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 0	0 0	0	0 0	0 1	0	0 1	0 0	0
Volume Module:												
Base Vol:	128	0	303	0	0	0	0	48	132	317	60	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	128	0	303	0	0	0	0	48	132	317	60	0
Added Vol:	5	0	15	0	0	0	0	1	4	21	4	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	133	0	318	0	0	0	0	49	136	338	64	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	133	0	318	0	0	0	0	49	136	338	64	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	133	0	318	0	0	0	0	49	136	338	64	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	133	0	318	0	0	0	0	49	136	338	64	0
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.29	0.00	0.71	0.00	0.00	0.00	0.00	0.26	0.74	0.84	0.16	0.00
Final Sat.:	204	0	488	0	0	0	0	170	471	533	101	0
Capacity Analysis Module:												
Vol/Sat:	0.65	xxxx	0.65	xxxx	xxxx	xxxx	xxxx	0.29	0.29	0.63	0.63	xxxx
Crit Moves:	****							****		****		
Delay/Veh:	16.0	0.0	16.0	0.0	0.0	0.0	0.0	10.1	10.1	16.8	16.8	0.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	16.0	0.0	16.0	0.0	0.0	0.0	0.0	10.1	10.1	16.8	16.8	0.0
LOS by Move:	C	*	C	*	*	*	*	B	B	C	C	*
ApproachDel:	16.0			xxxxxx				10.1			16.8	
Delay Adj:	1.00			xxxxx				1.00			1.00	
ApprAdjDel:	16.0			xxxxxx				10.1			16.8	
LOS by Appr:	C			*				B			C	

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #220 Montgomery/Sheridan

Cycle (sec): 100 Critical Vol./Cap. (X): 0.419
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 9.4
Optimal Cycle: 0 Level Of Service: A

Street Name:	Montgomery St.						Sheridan Ave.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 1	0 0	0	0 0	0 1	0	0 0	1! 0	0	0 0	0 0	0
Volume Module:												
Base Vol:	29	33	0	0	48	37	193	0	148	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	29	33	0	0	48	37	193	0	148	0	0	0
Added Vol:	0	-22	0	0	-4	29	19	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	29	11	0	0	44	66	212	0	148	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	29	11	0	0	44	66	212	0	148	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	29	11	0	0	44	66	212	0	148	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	29	11	0	0	44	66	212	0	148	0	0	0
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.72	0.28	0.00	0.00	0.40	0.60	0.59	0.00	0.41	0.00	0.00	0.00
Final Sat.:	495	188	0	0	310	465	506	0	354	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.06	0.06	xxxx	xxxx	0.14	0.14	0.42	xxxx	0.42	xxxx	xxxx	xxxx
Crit Moves:	****				****		****					
Delay/Veh:	8.2	8.2	0.0	0.0	8.0	8.0	9.9	0.0	9.9	0.0	0.0	0.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	8.2	8.2	0.0	0.0	8.0	8.0	9.9	0.0	9.9	0.0	0.0	0.0
LOS by Move:	A	A	*	*	A	A	A	*	A	*	*	*
ApproachDel:	8.2				8.0			9.9			xxxxxx	
Delay Adj:	1.00				1.00			1.00			xxxxx	
ApprAdjDel:	8.2				8.0			9.9			xxxxxx	
LOS by Appr:	A				A			A			*	

Alternative 1, Mitigated – AM Peak Hour

Scenario Report

Scenario:	AM PTMP Mitigated
Command:	AM PTMP MIT
Volume:	AM 2030
Geometry:	AM 2030 Mitigated
Impact Fee:	Default Impact Fee
Trip Generation:	AM 2030-PTMP
Trip Distribution:	Main Post SEIS
Paths:	Main Post SEIS
Routes:	Default Routes
Configuration:	Default Configuration

Trip Generation Report

Forecast for AM 2030-PTMP

Zone #	Subzone	Amount	Units	Rate In	Rate Out	Trips In	Trips Out	Total Trips	% Of Total
14	West Crissy	1.00	mixed use	14.00	36.00	14	36	50	10.4
	Zone 14 Subtotal					14	36	50	10.4
15	Ruger & Simo	1.00	mixed use	16.00	21.00	16	21	37	7.7
	Zone 15 Subtotal					16	21	37	7.7
32	S. Main Post	1.00	mixed use	1.00	0.00	1	0	1	0.2
	Zone 32 Subtotal					1	0	1	0.2
33	W. Main Post	1.00	Mixed Use	11.00	52.00	11	52	63	13.1
	Zone 33 Subtotal					11	52	63	13.1
34	E. Main Post	1.00	mixed use	-27.00	9.00	-27	9	-18	-3.8
	Zone 34 Subtotal					-27	9	-18	-3.8
35	N. Main Post	1.00	mixed use	-20.00	-19.00	-20	-19	-39	-8.1
	Zone 35 Subtotal					-20	-19	-39	-8.1
36	West Letterm	1.00	mixed use	12.00	-35.00	12	-35	-23	-4.8
	Zone 36 Subtotal					12	-35	-23	-4.8
753	LDA	1.00	mixed use	106.00	53.00	106	53	159	33.1
	Zone 753 Subtotal					106	53	159	33.1
767	Commissary/P	1.00	mixed use	90.00	160.00	90	160	250	52.1
	Zone 767 Subtotal					90	160	250	52.1
TOTAL						203	277	480	100.0

Trip Distribution Report

Percent Of Trips M POST SEIS

Zone	To Gates 5	14	16	17	22	28	36
14	0.0	25.0	0.0	10.0	15.0	50.0	0.0
15	0.0	0.0	25.0	0.0	67.5	0.0	7.5
32	0.0	5.0	10.0	10.0	68.0	5.0	2.0
33	0.0	5.0	10.0	10.0	68.0	5.0	2.0
34	0.0	5.0	10.0	10.0	68.0	5.0	2.0
35	0.0	5.0	10.0	10.0	68.0	5.0	2.0
36	0.0	10.0	20.0	15.0	40.0	15.0	0.0
753	20.0	5.0	10.0	5.0	55.0	0.0	5.0
767	14.0	0.0	10.0	10.0	14.0	50.0	2.0

Volume Type	NB Link In	Out	Total	SB Link In	Out	Total	EB Link In	Out	Total	WB Link In	Out	Total	Total Volume
#201 Lombard/Divisadero													
Base	353	390	743	266	195	461	3488	2383	5871	2225	3364	5589	12664
Added	0	0	0	0	0	0	86	65	151	65	86	151	302
Total	353	390	743	266	195	461	3574	2448	6022	2290	3450	5740	12966
#202 Lombard/Richardson													
Base	2387	3417	5804	3196	2233	5429	226	159	385	0	0	0	11618
Added	65	86	151	18	0	18	68	65	133	0	0	0	302
Total	2452	3503	5955	3214	2233	5447	294	224	518	0	0	0	11920
#203 Lyon/Lombard													
Base	159	253	412	366	254	620	539	378	917	95	274	369	2318
Added	8	8	16	0	0	0	76	73	149	65	68	133	298
Total	167	261	428	366	254	620	615	451	1066	160	342	502	2616
#204 Greenwich/Divisadero													
Base	335	361	696	396	358	754	186	125	311	142	215	357	2118
Added	0	0	0	0	0	0	8	8	16	8	8	16	32
Total	335	361	696	396	358	754	194	133	327	150	223	373	2150
#205 Greenwich/Lyon													
Base	107	164	271	248	173	421	0	0	0	88	106	194	886
Added	0	0	0	8	8	16	0	0	0	8	8	16	32
Total	107	164	271	256	181	437	0	0	0	96	114	210	918
#206 Francisco/Richardson													
Base	2222	3170	5392	3113	2529	5642	287	57	344	198	64	262	11640
Added	0	18	18	18	0	18	0	0	0	0	0	0	36
Total	2222	3188	5410	3131	2529	5660	287	57	344	198	64	262	11676
#207 Richardson/Gorgas													
Base	17	37	54	160	16	176	3137	2682	5819	2526	3105	5631	11680
Added	18	0	18	0	0	0	0	0	0	0	18	18	36
Total	35	37	72	160	16	176	3137	2682	5819	2526	3123	5649	11716
#208 Doyle/Marina/Lyon													
Base	12	41	53	128	321	449	1349	291	1640	606	1442	2048	4190
Added	0	0	0	100	50	150	-5	2	-3	52	95	147	294
Total	12	41	53	228	371	599	1344	293	1637	658	1537	2195	4484
#209 Graham/Lincoln													
Base	277	180	457	44	92	136	465	421	886	571	664	1235	2714
Added	18	15	33	-1	0	-1	62	19	81	34	79	113	226
Total	295	195	490	43	92	135	527	440	967	605	743	1348	2940
#210 Lincoln/Halleck													
Base	0	0	0	300	379	679	620	652	1272	688	577	1265	3216
Added	0	0	0	45	19	64	84	32	116	28	106	134	314
Total	0	0	0	345	398	743	704	684	1388	716	683	1399	3530

Volume Type	NB Link In	NB Link Out	NB Link Total	SB Link In	SB Link Out	SB Link Total	EB Link In	EB Link Out	EB Link Total	WB Link In	WB Link Out	WB Link Total	Total Volume
#211 Lincoln/Girard													
Base	0	0	0	548	393	941	605	681	1286	575	654	1229	3456
Added	0	0	0	-12	51	39	108	12	120	24	57	81	240
Total	0	0	0	536	444	980	713	693	1406	599	711	1310	3696
#212 Presidio/Letterman/Lincoln													
Base	528	557	1085	644	632	1276	289	198	487	66	140	206	3054
Added	26	53	79	50	26	76	3	-8	-5	8	16	24	174
Total	554	610	1164	694	658	1352	292	190	482	74	156	230	3228
#213 Lombard/Presidio													
Base	746	660	1406	560	512	1072	0	0	0	412	546	958	3436
Added	35	31	66	53	26	79	0	0	0	19	50	69	214
Total	781	691	1472	613	538	1151	0	0	0	431	596	1027	3650
#214 Presidio/Pacific													
Base	698	649	1347	671	716	1387	83	70	153	93	110	203	3090
Added	23	24	47	24	23	47	0	0	0	0	0	0	94
Total	721	673	1394	695	739	1434	83	70	153	93	110	203	3184
#215 Presidio/Jackson													
Base	683	632	1315	654	701	1355	171	171	342	263	267	530	3542
Added	23	24	47	24	23	47	0	0	0	0	0	0	94
Total	706	656	1362	678	724	1402	171	171	342	263	267	530	3636
#216 Presidio/Washington													
Base	654	489	1143	524	694	1218	239	144	383	135	225	360	3104
Added	23	24	47	24	23	47	0	0	0	0	0	0	94
Total	677	513	1190	548	717	1265	239	144	383	135	225	360	3198
#217 Arguello/Jackson													
Base	625	512	1137	464	553	1017	0	0	0	163	187	350	2504
Added	14	21	35	21	14	35	0	0	0	0	0	0	70
Total	639	533	1172	485	567	1052	0	0	0	163	187	350	2574
#218 Arguello/Washington St													
Base	751	561	1312	502	624	1126	37	51	88	102	156	258	2784
Added	14	21	35	21	14	35	0	0	0	0	0	0	70
Total	765	582	1347	523	638	1161	37	51	88	102	156	258	2854
#219 Arguello/Moraga													
Base	485	354	839	0	0	0	119	186	305	374	438	812	1956
Added	15	22	37	0	0	0	4	3	7	19	13	32	76
Total	500	376	876	0	0	0	123	189	312	393	451	844	2032
#220 Montgomery/Sheridan													
Base	34	176	210	90	540	630	661	69	730	0	0	0	1570
Added	31	1	32	14	62	76	31	13	44	0	0	0	152
Total	65	177	242	104	602	706	692	82	774	0	0	0	1722

Impact Analysis Report
Level Of Service

Intersection	Base LOS	Base Del/ Veh	Base V/ C	Future LOS	Future Del/ Veh	Future V/ C	Change in
#201 Lombard/Divisadero	B	13.9	0.914	B	15.1	0.930	+ 1.212 D/V
#202 Lombard/Richardson	A	6.0	0.431	A	6.5	0.431	+ 0.468 D/V
#203 Lyon/Lombard	B	13.3	0.617	B	14.1	0.673	+ 0.731 D/V
#204 Greenwich/Divisadero	B	13.9	0.614	B	14.1	0.623	+ 0.008 V/C
#205 Greenwich/Lyon	A	8.5	0.300	A	8.6	0.311	+ 0.012 V/C
#206 Francisco/Richardson	B	15.1	0.753	B	15.4	0.756	+ 0.233 D/V
#207 Richardson/Gorgas	A	8.1	0.699	A	8.1	0.701	+ 0.088 D/V
#208 Doyle/Marina/Lyon	C	34.6	0.450	C	34.0	0.505	-0.570 D/V
#209 Graham/Lincoln	B	10.3	0.448	B	10.3	0.496	+ 0.058 D/V
#210 Lincoln/Halleck	B	10.4	0.639	B	11.9	0.692	+ 1.436 D/V
#211 Lincoln/Girard	B	17.1	0.677	B	18.2	0.714	+ 1.042 D/V
#212 Presidio/Letterman/Lincoln	C	20.0	0.788	C	24.0	0.866	+ 0.078 V/C
#213 Lombard/Presidio	B	17.8	0.763	C	20.4	0.813	+ 2.528 D/V
#214 Presidio/Pacific	A	5.3	0.487	A	5.3	0.503	-0.040 D/V
#215 Presidio/Jackson	B	10.4	0.597	B	10.4	0.613	+ 0.042 D/V
#216 Presidio/Washington	A	9.5	0.546	A	9.4	0.560	-0.033 D/V
#217 Arguello/Jackson	B	14.1	0.670	B	14.8	0.702	+ 0.032 V/C
#218 Arguello/Washington St	D	28.6	0.934	D	31.8	0.959	+ 0.025 V/C
#219 Arguello/Moraga	B	14.9	0.667	C	16.0	0.696	+ 0.029 V/C
#220 Montgomery/Sheridan	C	18.7	0.786	C	22.8	0.848	+ 0.062 V/C

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #203 Lyon/Lombard

Cycle (sec): 60 Critical Vol./Cap. (X): 0.673
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 14.1
Optimal Cycle: 36 Level Of Service: B

Street Name:	Lyon St.						Lombard St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	114	37	8	21	151	194	197	245	97	5	70	20
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	114	37	8	21	151	194	197	245	97	5	70	20
Added Vol:	8	0	0	0	0	0	0	68	8	0	65	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	122	37	8	21	151	194	197	313	105	5	135	20
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	122	37	8	21	151	194	197	313	105	5	135	20
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	122	37	8	21	151	194	197	313	105	5	135	20
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	122	37	8	21	151	194	197	313	105	5	135	20
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.50	0.50	0.50	0.91	0.91	0.91	0.82	0.82	0.82	0.97	0.97	0.97
Lanes:	0.73	0.22	0.05	0.06	0.41	0.53	0.32	0.51	0.17	0.03	0.84	0.13
Final Sat.:	687	208	45	99	713	916	501	795	267	58	1555	230
Capacity Analysis Module:												
Vol/Sat:	0.18	0.18	0.18	0.21	0.21	0.21	0.39	0.39	0.39	0.09	0.09	0.09
Crit Moves:					****			****				
Green/Cycle:	0.31	0.31	0.31	0.31	0.31	0.31	0.59	0.59	0.59	0.59	0.59	0.59
Volume/Cap:	0.56	0.56	0.56	0.67	0.67	0.67	0.67	0.67	0.67	0.15	0.15	0.15
Uniform Del:	17.1	17.1	17.1	17.9	17.9	17.9	8.5	8.5	8.5	5.7	5.7	5.7
IncremntDel:	2.5	2.5	2.5	3.3	3.3	3.3	2.0	2.0	2.0	0.1	0.1	0.1
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Delay/Veh:	19.6	19.6	19.6	21.2	21.2	21.2	10.5	10.5	10.5	5.7	5.7	5.7
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	19.6	19.6	19.6	21.2	21.2	21.2	10.5	10.5	10.5	5.7	5.7	5.7
HCM2kAvg:	6	6	6	7	7	7	10	10	10	1	1	1

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #209 Graham/Lincoln

Cycle (sec): 60 Critical Vol./Cap. (X): 0.496
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 10.3
Optimal Cycle: 26 Level Of Service: B

Street Name:	Graham St.						Lincoln Blvd.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	1 0	0 1	0	1 0	0 1	0
Volume Module:												
Base Vol:	27	30	220	18	10	16	20	426	19	151	378	42
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	27	30	220	18	10	16	20	426	19	151	378	42
Added Vol:	0	0	18	-1	0	0	0	62	0	15	19	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	27	30	238	17	10	16	20	488	19	166	397	42
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	27	30	238	17	10	16	20	488	19	166	397	42
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	27	30	238	17	10	16	20	488	19	166	397	42
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	27	30	238	17	10	16	20	488	19	166	397	42
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.87	0.87	0.87	0.83	0.83	0.83	0.41	0.99	0.99	0.36	0.99	0.99
Lanes:	0.09	0.10	0.81	0.40	0.23	0.37	1.00	0.96	0.04	1.00	0.90	0.10
Final Sat.:	151	168	1334	622	366	586	787	1818	71	682	1694	179
Capacity Analysis Module:												
Vol/Sat:	0.18	0.18	0.18	0.03	0.03	0.03	0.03	0.27	0.27	0.24	0.23	0.23
Crit Moves:		****						****				
Green/Cycle:	0.36	0.36	0.36	0.36	0.36	0.36	0.54	0.54	0.54	0.54	0.54	0.54
Volume/Cap:	0.50	0.50	0.50	0.08	0.08	0.08	0.05	0.50	0.50	0.45	0.43	0.43
Uniform Del:	15.0	15.0	15.0	12.7	12.7	12.7	6.5	8.6	8.6	8.4	8.3	8.3
IncremntDel:	0.7	0.7	0.7	0.1	0.1	0.1	0.0	0.4	0.4	0.9	0.3	0.3
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Delay/Veh:	15.6	15.6	15.6	12.7	12.7	12.7	6.5	9.0	9.0	9.2	8.6	8.6
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	15.6	15.6	15.6	12.7	12.7	12.7	6.5	9.0	9.0	9.2	8.6	8.6
HCM2kAvg:	5	5	5	1	1	1	0	6	6	5	5	5

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #210 Lincoln/Halleck

Cycle (sec): 60 Critical Vol./Cap. (X): 0.692
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 11.9
Optimal Cycle: 38 Level Of Service: B

Street Name:	Halleck St.						Lincoln Blvd.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	0 0	0	0 0	1! 0	0	1 0	1 0	0	0 0	0 1	0
Volume Module:												
Base Vol:	0	0	0	123	0	177	166	454	0	0	475	213
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	123	0	177	166	454	0	0	475	213
Added Vol:	0	0	0	32	0	13	10	74	0	0	19	9
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	155	0	190	176	528	0	0	494	222
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	155	0	190	176	528	0	0	494	222
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	155	0	190	176	528	0	0	494	222
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	0	0	155	0	190	176	528	0	0	494	222
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	0.79	1.00	0.79	0.57	1.00	1.00	1.00	0.96	0.96
Lanes:	0.00	0.00	0.00	0.45	0.00	0.55	1.00	1.00	0.00	0.00	0.69	0.31
Final Sat.:	0	0	0	676	0	828	1089	1900	0	0	1256	564
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.23	0.00	0.23	0.16	0.28	0.00	0.00	0.39	0.39
Crit Moves:				****							****	
Green/Cycle:	0.00	0.00	0.00	0.33	0.00	0.33	0.57	0.57	0.00	0.00	0.57	0.57
Volume/Cap:	0.00	0.00	0.00	0.69	0.00	0.69	0.28	0.49	0.00	0.00	0.69	0.69
Uniform Del:	0.0	0.0	0.0	17.4	0.0	17.4	6.7	7.7	0.0	0.0	9.2	9.2
IncremntDel:	0.0	0.0	0.0	4.1	0.0	4.1	0.3	0.3	0.0	0.0	2.0	2.0
Delay Adj:	0.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00
Delay/Veh:	0.0	0.0	0.0	21.5	0.0	21.5	6.9	8.1	0.0	0.0	11.2	11.2
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	21.5	0.0	21.5	6.9	8.1	0.0	0.0	11.2	11.2
HCM2kAvg:	0	0	0	8	0	8	3	6	0	0	11	11

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #211 Lincoln/Girard

Cycle (sec): 60 Critical Vol./Cap. (X): 0.714
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 18.2
Optimal Cycle: 40 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	0 0	0	1 0	0 0	1	1 0	1 0	0	0 0	0 1	0
Volume Module:												
Base Vol:	0	0	0	276	0	272	227	378	0	0	409	166
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	276	0	272	227	378	0	0	409	166
Added Vol:	0	0	0	0	0	-12	51	57	0	0	24	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	276	0	260	278	435	0	0	433	166
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	276	0	260	278	435	0	0	433	166
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	276	0	260	278	435	0	0	433	166
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	0	0	276	0	260	278	435	0	0	433	166
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	0.95	1.00	0.85	0.95	1.00	1.00	1.00	0.96	0.96
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	0.00	0.00	0.72	0.28
Final Sat.:	0	0	0	1805	0	1615	1805	1900	0	0	1323	507
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.15	0.00	0.16	0.15	0.23	0.00	0.00	0.33	0.33
Crit Moves:						****	****				****	
Green/Cycle:	0.00	0.00	0.00	0.23	0.00	0.23	0.22	0.67	0.00	0.00	0.46	0.46
Volume/Cap:	0.00	0.00	0.00	0.68	0.00	0.71	0.71	0.34	0.00	0.00	0.71	0.71
Uniform Del:	0.0	0.0	0.0	21.2	0.0	21.4	21.8	4.1	0.0	0.0	13.1	13.1
IncremntDel:	0.0	0.0	0.0	4.6	0.0	6.6	6.2	0.2	0.0	0.0	2.9	2.9
Delay Adj:	0.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00
Delay/Veh:	0.0	0.0	0.0	25.8	0.0	28.0	28.0	4.3	0.0	0.0	16.0	16.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	25.8	0.0	28.0	28.0	4.3	0.0	0.0	16.0	16.0
HCM2kAvg:	0	0	0	6	0	6	7	4	0	0	10	10

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #212 Presidio/Letterman/Lincoln

Cycle (sec): 100 Critical Vol./Cap. (X): 0.866
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 24.0
Optimal Cycle: 0 Level Of Service: C

Street Name:	Lincoln/Presidio						Presidio/Letterman					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0 0	1 0		0 1 0	1 0		0 0	1! 0 0		0 0	1! 0 0	
Volume Module:												
Base Vol:	104	415	9	101	464	79	174	30	85	8	15	43
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	104	415	9	101	464	79	174	30	85	8	15	43
Added Vol:	-8	23	11	5	45	0	0	0	3	5	0	3
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	96	438	20	106	509	79	174	30	88	13	15	46
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	96	438	20	106	509	79	174	30	88	13	15	46
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	96	438	20	106	509	79	174	30	88	13	15	46
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	96	438	20	106	509	79	174	30	88	13	15	46
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.96	0.04	0.30	1.47	0.23	0.60	0.10	0.30	0.18	0.20	0.62
Final Sat.:	487	506	23	159	784	124	302	52	153	78	90	275
Capacity Analysis Module:												
Vol/Sat:	0.20	0.87	0.87	0.66	0.65	0.64	0.58	0.58	0.58	0.17	0.17	0.17
Crit Moves:		****		****				****				****
Delay/Veh:	11.7	37.8	37.8	21.5	20.4	19.4	17.9	17.9	17.9	11.6	11.6	11.6
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	11.7	37.8	37.8	21.5	20.4	19.4	17.9	17.9	17.9	11.6	11.6	11.6
LOS by Move:	B	E	E	C	C	C	C	C	C	B	B	B
ApproachDel:		33.2			20.5			17.9			11.6	
Delay Adj:		1.00			1.00			1.00			1.00	
ApprAdjDel:		33.2			20.5			17.9			11.6	
LOS by Appr:		D			C			C			B	

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #213 Lombard/Presidio

Cycle (sec): 60 Critical Vol./Cap. (X): 0.813
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 20.4
Optimal Cycle: 54 Level Of Service: C

Street Name:	Presidio Blvd.						Lombard St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0 0	1 0		1 0 1	0 0		0 0 0	0 0		1 0 0	0 1	
Volume Module:												
Base Vol:	0	391	355	191	369	0	0	0	0	291	0	121
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	391	355	191	369	0	0	0	0	291	0	121
Added Vol:	0	19	16	34	19	0	0	0	0	12	0	7
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	410	371	225	388	0	0	0	0	303	0	128
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	410	371	225	388	0	0	0	0	303	0	128
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	410	371	225	388	0	0	0	0	303	0	128
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	410	371	225	388	0	0	0	0	303	0	128
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	0.94	0.94	0.95	1.00	1.00	1.00	1.00	1.00	0.95	1.00	0.85
Lanes:	0.00	0.52	0.48	1.00	1.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Final Sat.:	0	934	845	1805	1900	0	0	0	0	1805	0	1615
Capacity Analysis Module:												
Vol/Sat:	0.00	0.44	0.44	0.12	0.20	0.00	0.00	0.00	0.00	0.17	0.00	0.08
Crit Moves:		****		****						****		
Green/Cycle:	0.00	0.54	0.54	0.15	0.69	0.00	0.00	0.00	0.00	0.21	0.00	0.21
Volume/Cap:	0.00	0.81	0.81	0.81	0.29	0.00	0.00	0.00	0.00	0.81	0.00	0.38
Uniform Del:	0.0	11.3	11.3	24.6	3.5	0.0	0.0	0.0	0.0	22.7	0.0	20.5
IncremntDel:	0.0	5.4	5.4	16.6	0.1	0.0	0.0	0.0	0.0	12.8	0.0	0.7
Delay Adj:	0.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Delay/Veh:	0.0	16.7	16.7	41.1	3.7	0.0	0.0	0.0	0.0	35.5	0.0	21.3
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	16.7	16.7	41.1	3.7	0.0	0.0	0.0	0.0	35.5	0.0	21.3
HCM2kAvg:	0	14	14	7	3	0	0	0	0	8	0	2

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #214 Presidio/Pacific

Cycle (sec): 60 Critical Vol./Cap. (X): 0.503
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 5.3
Optimal Cycle: 26 Level Of Service: A

Street Name:	Presidio Blvd.						Pacific Ave.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	12	655	31	46	593	32	32	33	18	38	26	29
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	12	655	31	46	593	32	32	33	18	38	26	29
Added Vol:	0	23	0	0	24	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	12	678	31	46	617	32	32	33	18	38	26	29
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	12	678	31	46	617	32	32	33	18	38	26	29
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	12	678	31	46	617	32	32	33	18	38	26	29
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	12	678	31	46	617	32	32	33	18	38	26	29
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.98	0.98	0.98	0.93	0.93	0.93	0.85	0.85	0.85	0.83	0.83	0.83
Lanes:	0.02	0.94	0.04	0.07	0.89	0.04	0.38	0.40	0.22	0.41	0.28	0.31
Final Sat.:	31	1758	80	117	1568	81	620	639	348	646	442	493
Capacity Analysis Module:												
Vol/Sat:	0.39	0.39	0.39	0.39	0.39	0.39	0.05	0.05	0.05	0.06	0.06	0.06
Crit Moves:					****						****	
Green/Cycle:	0.78	0.78	0.78	0.78	0.78	0.78	0.12	0.12	0.12	0.12	0.12	0.12
Volume/Cap:	0.49	0.49	0.49	0.50	0.50	0.50	0.44	0.44	0.44	0.50	0.50	0.50
Uniform Del:	2.3	2.3	2.3	2.3	2.3	2.3	24.7	24.7	24.7	24.9	24.9	24.9
IncremntDel:	0.3	0.3	0.3	0.3	0.3	0.3	1.7	1.7	1.7	2.2	2.2	2.2
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Delay/Veh:	2.6	2.6	2.6	2.6	2.6	2.6	26.3	26.3	26.3	27.0	27.0	27.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	2.6	2.6	2.6	2.6	2.6	2.6	26.3	26.3	26.3	27.0	27.0	27.0
HCM2kAvg:	5	5	5	5	5	5	2	2	2	3	3	3

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #215 Presidio/Jackson

Cycle (sec): 60 Critical Vol./Cap. (X): 0.613
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 10.4
Optimal Cycle: 32 Level Of Service: B

Street Name:	Presidio Blvd.						Jackson St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	9	615	59	59	565	30	11	149	11	56	132	75
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	9	615	59	59	565	30	11	149	11	56	132	75
Added Vol:	0	23	0	0	24	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	9	638	59	59	589	30	11	149	11	56	132	75
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	9	638	59	59	589	30	11	149	11	56	132	75
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	9	638	59	59	589	30	11	149	11	56	132	75
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	9	638	59	59	589	30	11	149	11	56	132	75
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.98	0.98	0.98	0.90	0.90	0.90	0.97	0.97	0.97	0.88	0.88	0.88
Lanes:	0.01	0.91	0.08	0.09	0.87	0.04	0.06	0.88	0.06	0.21	0.50	0.29
Final Sat.:	24	1686	156	150	1493	76	118	1601	118	357	841	478
Capacity Analysis Module:												
Vol/Sat:	0.38	0.38	0.38	0.39	0.39	0.39	0.09	0.09	0.09	0.16	0.16	0.16
Crit Moves:					****						****	
Green/Cycle:	0.64	0.64	0.64	0.64	0.64	0.64	0.26	0.26	0.26	0.26	0.26	0.26
Volume/Cap:	0.59	0.59	0.59	0.61	0.61	0.61	0.36	0.36	0.36	0.61	0.61	0.61
Uniform Del:	6.1	6.1	6.1	6.3	6.3	6.3	18.3	18.3	18.3	19.7	19.7	19.7
IncremntDel:	0.8	0.8	0.8	1.0	1.0	1.0	0.5	0.5	0.5	2.6	2.6	2.6
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Delay/Veh:	6.9	6.9	6.9	7.3	7.3	7.3	18.8	18.8	18.8	22.3	22.3	22.3
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	6.9	6.9	6.9	7.3	7.3	7.3	18.8	18.8	18.8	22.3	22.3	22.3
HCM2kAvg:	8	8	8	9	9	9	3	3	3	6	6	6

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #216 Presidio/Washington

Cycle (sec): 60 Critical Vol./Cap. (X): 0.560
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 9.4
Optimal Cycle: 29 Level Of Service: A

Street Name:	Presidio Blvd.						Washington St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	15	610	29	38	440	46	59	158	22	27	83	25
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	15	610	29	38	440	46	59	158	22	27	83	25
Added Vol:	0	23	0	0	24	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	15	633	29	38	464	46	59	158	22	27	83	25
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	15	633	29	38	464	46	59	158	22	27	83	25
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	15	633	29	38	464	46	59	158	22	27	83	25
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	15	633	29	38	464	46	59	158	22	27	83	25
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.98	0.98	0.98	0.93	0.93	0.93	0.89	0.89	0.89	0.91	0.91	0.91
Lanes:	0.02	0.94	0.04	0.07	0.85	0.08	0.25	0.66	0.09	0.20	0.61	0.19
Final Sat.:	41	1745	80	122	1496	148	418	1121	156	345	1060	319
Capacity Analysis Module:												
Vol/Sat:	0.36	0.36	0.36	0.31	0.31	0.31	0.14	0.14	0.14	0.08	0.08	0.08
Crit Moves:		****						****				
Green/Cycle:	0.65	0.65	0.65	0.65	0.65	0.65	0.25	0.25	0.25	0.25	0.25	0.25
Volume/Cap:	0.56	0.56	0.56	0.48	0.48	0.48	0.56	0.56	0.56	0.31	0.31	0.31
Uniform Del:	5.8	5.8	5.8	5.4	5.4	5.4	19.5	19.5	19.5	18.2	18.2	18.2
IncremntDel:	0.6	0.6	0.6	0.3	0.3	0.3	1.7	1.7	1.7	0.4	0.4	0.4
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Delay/Veh:	6.4	6.4	6.4	5.7	5.7	5.7	21.2	21.2	21.2	18.6	18.6	18.6
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	6.4	6.4	6.4	5.7	5.7	5.7	21.2	21.2	21.2	18.6	18.6	18.6
HCM2kAvg:	8	8	8	6	6	6	5	5	5	2	2	2

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #218 Arguello/Washington St

Cycle (sec): 100 Critical Vol./Cap. (X): 0.959
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 31.8
Optimal Cycle: 0 Level Of Service: D

Street Name:	Arguello Blvd.						Washington St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 1	0 0	1	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	23	592	136	9	471	22	4	11	22	68	6	28
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	23	592	136	9	471	22	4	11	22	68	6	28
Added Vol:	0	14	0	0	21	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	23	606	136	9	492	22	4	11	22	68	6	28
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	23	606	136	9	492	22	4	11	22	68	6	28
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	23	606	136	9	492	22	4	11	22	68	6	28
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	23	606	136	9	492	22	4	11	22	68	6	28
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.04	0.96	1.00	0.02	0.94	0.04	0.11	0.30	0.59	0.67	0.06	0.27
Final Sat.:	24	632	755	12	634	28	55	151	301	342	30	141
Capacity Analysis Module:												
Vol/Sat:	0.96	0.96	0.18	0.78	0.78	0.78	0.07	0.07	0.07	0.20	0.20	0.20
Crit Moves:		****			****			****		****		
Delay/Veh:	48.2	48.2	8.5	23.6	23.6	23.6	10.1	10.1	10.1	11.2	11.2	11.2
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	48.2	48.2	8.5	23.6	23.6	23.6	10.1	10.1	10.1	11.2	11.2	11.2
LOS by Move:	E	E	A	C	C	C	B	B	B	B	B	B
ApproachDel:		41.2			23.6			10.1			11.2	
Delay Adj:		1.00			1.00			1.00			1.00	
ApprAdjDel:		41.2			23.6			10.1			11.2	
LOS by Appr:		E			C			B			B	

Alternative 1, Mitigated – PM Peak Hour

Scenario Report

Scenario:	PM PTMP Mitigated
Command:	PM PTMP MIT
Volume:	PM 2030
Geometry:	PM 2030 Mitigated
Impact Fee:	Default Impact Fee
Trip Generation:	PM 2030-PTMP
Trip Distribution:	Main Post SEIS
Paths:	Main Post SEIS
Routes:	Default Routes
Configuration:	Default Configuration

Trip Generation Report

Forecast for PM 2030-PTMP

Zone #	Subzone	Amount	Units	Rate In	Rate Out	Trips In	Trips Out	Total Trips	% Of Total
14	West Crissy	1.00	mixed use	43.00	35.00	43	35	78	7.8
	Zone 14 Subtotal					43	35	78	7.8
15	Ruger & Simo	1.00	mixed use	43.00	41.00	43	41	84	8.4
	Zone 15 Subtotal					43	41	84	8.4
32	S. Main Post	1.00	mixed use	1.00	1.00	1	1	2	0.2
	Zone 32 Subtotal					1	1	2	0.2
33	W. Main Post	1.00	Mixed Use	109.00	83.00	109	83	192	19.3
	Zone 33 Subtotal					109	83	192	19.3
34	E. Main Post	1.00	mixed use	93.00	32.00	93	32	125	12.6
	Zone 34 Subtotal					93	32	125	12.6
35	N. Main Post	1.00	mixed use	-26.00	-37.00	-26	-37	-63	-6.3
	Zone 35 Subtotal					-26	-37	-63	-6.3
36	West Letterm	1.00	mixed use	-59.00	-15.00	-59	-15	-74	-7.4
	Zone 36 Subtotal					-59	-15	-74	-7.4
753	LDA	1.00	mixed use	126.00	188.00	126	188	314	31.5
	Zone 753 Subtotal					126	188	314	31.5
767	Commissary/P	1.00	mixed use	169.00	169.00	169	169	338	33.9
	Zone 767 Subtotal					169	169	338	33.9
TOTAL						499	497	996	100.0

Trip Distribution Report

Percent Of Trips M POST SEIS

Zone	To Gates 5	14	16	17	22	28	36
14	0.0	25.0	0.0	10.0	15.0	50.0	0.0
15	0.0	0.0	25.0	0.0	67.5	0.0	7.5
32	0.0	5.0	10.0	10.0	68.0	5.0	2.0
33	0.0	5.0	10.0	10.0	68.0	5.0	2.0
34	0.0	5.0	10.0	10.0	68.0	5.0	2.0
35	0.0	5.0	10.0	10.0	68.0	5.0	2.0
36	0.0	10.0	20.0	15.0	40.0	15.0	0.0
753	20.0	5.0	10.0	5.0	55.0	0.0	5.0
767	14.0	0.0	10.0	10.0	14.0	50.0	2.0

Volume Type	NB Link In	Out	Total	SB Link In	Out	Total	EB Link In	Out	Total	WB Link In	Out	Total	Total Volume
#201 Lombard/Divisadero													
Base	378	385	763	298	285	583	2398	3242	5640	3117	2279	5396	12382
Added	0	0	0	0	0	0	208	225	433	225	208	433	866
Total	378	385	763	298	285	583	2606	3467	6073	3342	2487	5829	13248
#202 Lombard/Richardson													
Base	3319	2500	5819	2171	3119	5290	329	200	529	0	0	0	11638
Added	225	207	432	57	84	141	150	141	291	0	0	0	864
Total	3544	2707	6251	2228	3203	5431	479	341	820	0	0	0	12502
#203 Lyon/Lombard													
Base	217	183	400	318	325	643	569	517	1086	223	302	525	2654
Added	16	17	33	0	0	0	167	157	324	141	150	291	648
Total	233	200	433	318	325	643	736	674	1410	364	452	816	3302
#204 Greenwich/Divisadero													
Base	345	332	677	343	385	728	145	164	309	203	155	358	2072
Added	0	0	0	0	0	0	17	16	33	16	17	33	66
Total	345	332	677	343	385	728	162	180	342	219	172	391	2138
#205 Greenwich/Lyon													
Base	107	120	227	177	214	391	0	0	0	130	80	210	828
Added	0	0	0	17	16	33	0	0	0	16	17	33	66
Total	107	120	227	194	230	424	0	0	0	146	97	243	894
#206 Francisco/Richardson													
Base	3119	2250	5369	2217	3331	5548	251	69	320	145	82	227	11464
Added	84	57	141	57	84	141	0	0	0	0	0	0	282
Total	3203	2307	5510	2274	3415	5689	251	69	320	145	82	227	11746
#207 Richardson/Gorgas													
Base	253	63	316	69	34	103	2150	3439	5589	3298	2234	5532	11540
Added	57	0	57	0	0	0	0	84	84	84	57	141	282
Total	310	63	373	69	34	103	2150	3523	5673	3382	2291	5673	11822
#208 Doyle/Marina/Lyon													
Base	40	25	65	247	491	738	922	1549	2471	2009	1153	3162	6436
Added	0	0	0	106	115	221	-2	-9	-11	106	104	210	420
Total	40	25	65	353	606	959	920	1540	2460	2115	1257	3372	6856
#209 Graham/Lincoln													
Base	152	134	286	22	7	29	434	391	825	508	584	1092	2232
Added	32	37	69	-2	0	-2	90	123	213	160	120	280	560
Total	184	171	355	20	7	27	524	514	1038	668	704	1372	2792
#210 Lincoln/Halleck													
Base	0	3	3	314	340	654	542	543	1085	584	554	1138	2880
Added	0	0	0	43	48	91	139	164	303	169	139	308	702
Total	0	3	3	357	388	745	681	707	1388	753	693	1446	3582

Volume Type	NB Link In	NB Link Out	NB Link Total	SB Link In	SB Link Out	SB Link Total	EB Link In	EB Link Out	EB Link Total	WB Link In	WB Link Out	WB Link Total	Total Volume
#211 Lincoln/Girard													
Base	0	0	0	336	497	833	589	585	1174	600	443	1043	3050
Added	0	0	0	139	65	204	129	218	347	79	64	143	694
Total	0	0	0	475	562	1037	718	803	1521	679	507	1186	3744
#212 Presidio/Letterman/Lincoln													
Base	539	546	1085	463	601	1064	237	188	425	148	52	200	2774
Added	98	84	182	61	66	127	10	28	38	28	19	47	394
Total	637	630	1267	524	667	1191	247	216	463	176	71	247	3168
#213 Lombard/Presidio													
Base	733	676	1409	549	597	1146	0	0	0	529	538	1067	3622
Added	66	73	139	84	97	181	0	0	0	94	74	168	488
Total	799	749	1548	633	694	1327	0	0	0	623	612	1235	4110
#214 Presidio/Pacific													
Base	731	630	1361	686	743	1429	14	66	80	89	81	170	3040
Added	46	51	97	51	46	97	0	0	0	0	0	0	194
Total	777	681	1458	737	789	1526	14	66	80	89	81	170	3234
#215 Presidio/Jackson													
Base	637	654	1291	661	677	1338	160	168	328	250	209	459	3416
Added	46	51	97	51	46	97	0	0	0	0	0	0	194
Total	683	705	1388	712	723	1435	160	168	328	250	209	459	3610
#216 Presidio/Washington													
Base	664	599	1263	658	705	1363	206	130	336	110	204	314	3276
Added	46	51	97	51	46	97	0	0	0	0	0	0	194
Total	710	650	1360	709	751	1460	206	130	336	110	204	314	3470
#217 Arguello/Jackson													
Base	488	603	1091	546	454	1000	0	0	0	123	100	223	2314
Added	36	35	71	35	36	71	0	0	0	0	0	0	142
Total	524	638	1162	581	490	1071	0	0	0	123	100	223	2456
#218 Arguello/Washington St													
Base	542	657	1199	582	485	1067	32	36	68	107	85	192	2526
Added	36	35	71	35	36	71	0	0	0	0	0	0	142
Total	578	692	1270	617	521	1138	32	36	68	107	85	192	2668
#219 Arguello/Moraga													
Base	431	449	880	0	0	0	180	188	368	377	351	728	1976
Added	36	36	72	0	0	0	5	5	10	33	33	66	148
Total	467	485	952	0	0	0	185	193	378	410	384	794	2124
#220 Montgomery/Sheridan													
Base	62	196	258	85	226	311	341	66	407	0	0	0	976
Added	50	11	61	68	90	158	40	57	97	0	0	0	316
Total	112	207	319	153	316	469	381	123	504	0	0	0	1292

Impact Analysis Report
Level Of Service

Intersection	Base LOS	Base Del/ Veh	Base V/ C	Future LOS	Future Del/ Veh	Future V/ C	Change in
#201 Lombard/Divisadero	B	13.0	0.849	B	15.0	0.893	+ 2.054 D/V
#202 Lombard/Richardson	A	3.6	0.602	A	8.2	0.757	+ 4.663 D/V
#203 Lyon/Lombard	B	13.7	0.649	B	17.2	0.813	+ 3.503 D/V
#204 Greenwich/Divisadero	B	13.4	0.549	B	13.9	0.564	+ 0.015 V/C
#205 Greenwich/Lyon	A	8.2	0.222	A	8.4	0.246	+ 0.025 V/C
#206 Francisco/Richardson	B	15.0	0.712	B	16.4	0.729	+ 1.346 D/V
#207 Richardson/Gorgas	A	7.0	0.796	A	9.2	0.847	+ 2.252 D/V
#208 Doyle/Marina/Lyon	B	17.7	0.726	C	26.3	0.833	+ 8.530 D/V
#209 Graham/Lincoln	A	7.1	0.358	A	7.4	0.432	+ 0.328 D/V
#210 Lincoln/Halleck	B	10.9	0.591	B	12.6	0.726	+ 1.697 D/V
#211 Lincoln/Girard	B	15.3	0.684	B	17.3	0.771	+ 2.014 D/V
#212 Presidio/Letterman/Lincoln	C	17.6	0.781	D	27.0	0.947	+ 0.166 V/C
#213 Lombard/Presidio	C	20.5	0.798	C	26.9	0.885	+ 6.461 D/V
#214 Presidio/Pacific	A	4.1	0.500	A	4.1	0.533	+ 0.033 D/V
#215 Presidio/Jackson	B	10.0	0.589	B	10.1	0.621	+ 0.108 D/V
#216 Presidio/Washington	A	8.6	0.552	A	8.6	0.583	-0.002 D/V
#217 Arguello/Jackson	C	17.6	0.744	C	20.5	0.800	+ 0.056 V/C
#218 Arguello/Washington St	C	22.9	0.833	D	28.2	0.893	+ 0.060 V/C
#219 Arguello/Moraga	B	14.0	0.613	C	16.0	0.676	+ 0.064 V/C
#220 Montgomery/Sheridan	A	9.2	0.394	B	10.2	0.479	+ 0.085 V/C

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #203 Lyon/Lombard

Cycle (sec): 60 Critical Vol./Cap. (X): 0.813
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 17.2
Optimal Cycle: 54 Level Of Service: B

Street Name:	Lyon St.						Lombard St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	124	68	25	29	65	224	212	248	109	9	169	45
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	124	68	25	29	65	224	212	248	109	9	169	45
Added Vol:	16	0	0	0	0	0	0	150	17	0	141	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	140	68	25	29	65	224	212	398	126	9	310	45
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	140	68	25	29	65	224	212	398	126	9	310	45
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	140	68	25	29	65	224	212	398	126	9	310	45
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	140	68	25	29	65	224	212	398	126	9	310	45
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.52	0.52	0.52	0.87	0.87	0.87	0.78	0.78	0.78	0.97	0.97	0.97
Lanes:	0.60	0.29	0.11	0.09	0.20	0.71	0.29	0.54	0.17	0.02	0.86	0.12
Final Sat.:	597	290	107	151	337	1163	426	800	253	45	1567	227
Capacity Analysis Module:												
Vol/Sat:	0.23	0.23	0.23	0.19	0.19	0.19	0.50	0.50	0.50	0.20	0.20	0.20
Crit Moves:		****						****				
Green/Cycle:	0.29	0.29	0.29	0.29	0.29	0.29	0.61	0.61	0.61	0.61	0.61	0.61
Volume/Cap:	0.81	0.81	0.81	0.67	0.67	0.67	0.81	0.81	0.81	0.32	0.32	0.32
Uniform Del:	19.8	19.8	19.8	18.8	18.8	18.8	9.0	9.0	9.0	5.6	5.6	5.6
IncremntDel:	16.1	16.1	16.1	3.6	3.6	3.6	5.7	5.7	5.7	0.2	0.2	0.2
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Delay/Veh:	36.0	36.0	36.0	22.4	22.4	22.4	14.7	14.7	14.7	5.8	5.8	5.8
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	36.0	36.0	36.0	22.4	22.4	22.4	14.7	14.7	14.7	5.8	5.8	5.8
HCM2kAvg:	10	10	10	7	7	7	16	16	16	3	3	3

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #209 Graham/Lincoln

Cycle (sec): 60 Critical Vol./Cap. (X): 0.432
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 7.4
Optimal Cycle: 24 Level Of Service: A

Street Name:	Graham St.						Lincoln Blvd.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	0 1	0 0	0	1 0	0 1	0
Volume Module:												
Base Vol:	2	0	150	7	0	15	7	427	0	134	374	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	2	0	150	7	0	15	7	427	0	134	374	0
Added Vol:	0	0	32	-2	0	0	0	90	0	37	123	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	2	0	182	5	0	15	7	517	0	171	497	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	2	0	182	5	0	15	7	517	0	171	497	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	2	0	182	5	0	15	7	517	0	171	497	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	2	0	182	5	0	15	7	517	0	171	497	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.86	1.00	0.86	0.85	1.00	0.85	1.00	1.00	1.00	0.55	1.00	1.00
Lanes:	0.01	0.00	0.99	0.25	0.00	0.75	0.01	0.99	0.00	1.00	1.00	0.00
Final Sat.:	18	0	1624	402	0	1205	25	1867	0	1036	1900	0
Capacity Analysis Module:												
Vol/Sat:	0.11	0.00	0.11	0.01	0.00	0.01	0.28	0.28	0.00	0.17	0.26	0.00
Crit Moves:	****							****				
Green/Cycle:	0.26	0.00	0.26	0.26	0.00	0.26	0.64	0.64	0.00	0.64	0.64	0.00
Volume/Cap:	0.43	0.00	0.43	0.05	0.00	0.05	0.43	0.43	0.00	0.26	0.41	0.00
Uniform Del:	18.5	0.0	18.5	16.7	0.0	16.7	5.4	5.4	0.0	4.6	5.2	0.0
IncremntDel:	0.7	0.0	0.7	0.0	0.0	0.0	0.2	0.2	0.0	0.2	0.2	0.0
Delay Adj:	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
Delay/Veh:	19.2	0.0	19.2	16.7	0.0	16.7	5.6	5.6	0.0	4.8	5.5	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	19.2	0.0	19.2	16.7	0.0	16.7	5.6	5.6	0.0	4.8	5.5	0.0
HCM2kAvg:	3	0	3	0	0	0	5	5	0	3	5	0

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #210 Lincoln/Halleck

Cycle (sec): 60 Critical Vol./Cap. (X): 0.726
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 12.6
Optimal Cycle: 42 Level Of Service: B

Street Name:	Halleck St.						Lincoln Blvd.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Ovl			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	0 0	0	0 0	1! 0	0	1 0	0 1	0	0 0	0 1	0
Volume Module:												
Base Vol:	0	0	0	153	0	161	138	401	3	0	382	202
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	153	0	161	138	401	3	0	382	202
Added Vol:	0	0	0	20	0	23	20	119	0	0	141	28
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	173	0	184	158	520	3	0	523	230
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	173	0	184	158	520	3	0	523	230
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	173	0	184	158	520	3	0	523	230
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	0	0	173	0	184	158	520	3	0	523	230
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	0.78	1.00	0.78	0.57	1.00	1.00	1.00	0.96	0.96
Lanes:	0.00	0.00	0.00	0.48	0.00	0.52	1.00	0.99	0.01	0.00	0.69	0.31
Final Sat.:	0	0	0	721	0	767	1089	1887	11	0	1266	557
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.24	0.00	0.24	0.15	0.28	0.28	0.00	0.41	0.41
Crit Moves:				****							****	
Green/Cycle:	0.00	0.00	0.00	0.33	0.00	0.33	0.57	0.57	0.57	0.00	0.57	0.57
Volume/Cap:	0.00	0.00	0.00	0.73	0.00	0.73	0.25	0.48	0.48	0.00	0.73	0.73
Uniform Del:	0.0	0.0	0.0	17.7	0.0	17.7	6.5	7.7	7.7	0.0	9.5	9.5
IncremntDel:	0.0	0.0	0.0	5.3	0.0	5.3	0.2	0.3	0.3	0.0	2.6	2.6
Delay Adj:	0.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00
Delay/Veh:	0.0	0.0	0.0	23.0	0.0	23.0	6.7	8.0	8.0	0.0	12.1	12.1
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	23.0	0.0	23.0	6.7	8.0	8.0	0.0	12.1	12.1
HCM2kAvg:	0	0	0	9	0	9	3	6	6	0	12	12

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #211 Lincoln/Girard

Cycle (sec): 60 Critical Vol./Cap. (X): 0.771
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 17.3
Optimal Cycle: 47 Level Of Service: B

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L - T - R				L - T - R				L - T - R				L - T - R			
Control:	Protected				Protected				Protected				Protected			
Rights:	Include				Ovl				Include				Ovl			
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	0 0	0		1 0	0 0	1		1 0	1 0	0		0 0	0 1	0	
Volume Module:																
Base Vol:	0	0	0	187	0	149	333	256	0	0	436	164				
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
Initial Bse:	0	0	0	187	0	149	333	256	0	0	436	164				
Added Vol:	0	0	0	0	0	139	65	64	0	0	79	0				
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0				
Initial Fut:	0	0	0	187	0	288	398	320	0	0	515	164				
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
PHF Volume:	0	0	0	187	0	288	398	320	0	0	515	164				
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0				
Reduced Vol:	0	0	0	187	0	288	398	320	0	0	515	164				
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
Final Vol.:	0	0	0	187	0	288	398	320	0	0	515	164				
Saturation Flow Module:																
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900				
Adjustment:	1.00	1.00	1.00	0.95	1.00	0.85	0.95	1.00	1.00	1.00	0.97	0.97				
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	0.00	0.00	0.76	0.24				
Final Sat.:	0	0	0	1805	0	1615	1805	1900	0	0	1394	444				
Capacity Analysis Module:																
Vol/Sat:	0.00	0.00	0.00	0.10	0.00	0.18	0.22	0.17	0.00	0.00	0.37	0.37				
Crit Moves:				****			****				****					
Green/Cycle:	0.00	0.00	0.00	0.13	0.00	0.42	0.29	0.77	0.00	0.00	0.48	0.61				
Volume/Cap:	0.00	0.00	0.00	0.77	0.00	0.42	0.77	0.22	0.00	0.00	0.77	0.60				
Uniform Del:	0.0	0.0	0.0	25.1	0.0	12.3	19.6	2.0	0.0	0.0	12.9	7.1				
IncremntDel:	0.0	0.0	0.0	14.0	0.0	0.4	7.0	0.1	0.0	0.0	4.2	0.9				
Delay Adj:	0.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00				
Delay/Veh:	0.0	0.0	0.0	39.1	0.0	12.7	26.6	2.1	0.0	0.0	17.1	8.0				
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
AdjDel/Veh:	0.0	0.0	0.0	39.1	0.0	12.7	26.6	2.1	0.0	0.0	17.1	8.0				
HCM2kAvg:	0	0	0	6	0	4	9	2	0	0	12	8				

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #212 Presidio/Letterman/Lincoln

Cycle (sec): 100 Critical Vol./Cap. (X): 0.947
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 27.0
Optimal Cycle: 0 Level Of Service: D

Street Name:	Lincoln/Presidio						Presidio/Letterman					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0 0 1 0			0 1 0 1 0			0 0 1! 0 0			0 0 1! 0 0		
Volume Module:												
Base Vol:	106	425	8	28	393	42	74	16	147	6	40	102
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	106	425	8	28	393	42	74	16	147	6	40	102
Added Vol:	28	57	13	6	55	0	0	0	10	19	0	9
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	134	482	21	34	448	42	74	16	157	25	40	111
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	134	482	21	34	448	42	74	16	157	25	40	111
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	134	482	21	34	448	42	74	16	157	25	40	111
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	134	482	21	34	448	42	74	16	157	25	40	111
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.96	0.04	0.13	1.71	0.16	0.30	0.06	0.64	0.14	0.23	0.63
Final Sat.:	489	509	22	65	862	82	150	32	317	68	108	300
Capacity Analysis Module:												
Vol/Sat:	0.27	0.95	0.95	0.53	0.52	0.51	0.49	0.49	0.49	0.37	0.37	0.37
Crit Moves:			****	****				****			****	
Delay/Veh:	12.7	51.9	51.9	17.0	16.6	16.3	15.9	15.9	15.9	13.8	13.8	13.8
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	12.7	51.9	51.9	17.0	16.6	16.3	15.9	15.9	15.9	13.8	13.8	13.8
LOS by Move:	B	F	F	C	C	C	C	C	C	B	B	B
ApproachDel:	43.6			16.6			15.9			13.8		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	43.6			16.6			15.9			13.8		
LOS by Appr:	E			C			C			B		

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #213 Lombard/Presidio

Cycle (sec): 60 Critical Vol./Cap. (X): 0.885
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 26.9
Optimal Cycle: 71 Level Of Service: C

Street Name:	Presidio Blvd.						Lombard St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0 0 1 0			1 0 1 0 0			0 0 0 0 0			1 0 0 1 0		
Volume Module:												
Base Vol:	0	409	324	214	335	0	0	0	0	341	0	188
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	409	324	214	335	0	0	0	0	341	0	188
Added Vol:	0	35	31	43	41	0	0	0	0	32	0	62
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	444	355	257	376	0	0	0	0	373	0	250
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	444	355	257	376	0	0	0	0	373	0	250
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	444	355	257	376	0	0	0	0	373	0	250
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	444	355	257	376	0	0	0	0	373	0	250
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	0.94	0.94	0.95	1.00	1.00	1.00	1.00	1.00	0.95	1.00	0.85
Lanes:	0.00	0.56	0.44	1.00	1.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Final Sat.:	0	992	794	1805	1900	0	0	0	0	1805	0	1615
Capacity Analysis Module:												
Vol/Sat:	0.00	0.45	0.45	0.14	0.20	0.00	0.00	0.00	0.00	0.21	0.00	0.15
Crit Moves:		****		****						****		
Green/Cycle:	0.00	0.51	0.51	0.16	0.67	0.00	0.00	0.00	0.00	0.23	0.00	0.23
Volume/Cap:	0.00	0.88	0.88	0.88	0.30	0.00	0.00	0.00	0.00	0.88	0.00	0.66
Uniform Del:	0.0	13.3	13.3	24.6	4.2	0.0	0.0	0.0	0.0	22.2	0.0	20.9
IncremntDel:	0.0	10.4	10.4	25.9	0.1	0.0	0.0	0.0	0.0	19.5	0.0	4.4
Delay Adj:	0.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Delay/Veh:	0.0	23.7	23.7	50.5	4.3	0.0	0.0	0.0	0.0	41.7	0.0	25.2
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	23.7	23.7	50.5	4.3	0.0	0.0	0.0	0.0	41.7	0.0	25.2
HCM2kAvg:	0	17	17	8	3	0	0	0	0	11	0	6

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #214 Presidio/Pacific

Cycle (sec): 60 Critical Vol./Cap. (X): 0.533
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 4.1
Optimal Cycle: 28 Level Of Service: A

Street Name:	Presidio Blvd.						Pacific Ave.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	9	703	19	56	606	24	3	6	5	19	33	37
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	9	703	19	56	606	24	3	6	5	19	33	37
Added Vol:	0	46	0	0	51	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	9	749	19	56	657	24	3	6	5	19	33	37
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	9	749	19	56	657	24	3	6	5	19	33	37
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	9	749	19	56	657	24	3	6	5	19	33	37
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	9	749	19	56	657	24	3	6	5	19	33	37
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.99	0.99	0.99	0.91	0.91	0.91	0.90	0.90	0.90	0.87	0.87	0.87
Lanes:	0.01	0.97	0.02	0.08	0.89	0.03	0.21	0.43	0.36	0.21	0.37	0.42
Final Sat.:	22	1813	46	132	1544	56	367	735	612	353	613	687
Capacity Analysis Module:												
Vol/Sat:	0.41	0.41	0.41	0.43	0.43	0.43	0.01	0.01	0.01	0.05	0.05	0.05
Crit Moves:					****						****	
Green/Cycle:	0.80	0.80	0.80	0.80	0.80	0.80	0.10	0.10	0.10	0.10	0.10	0.10
Volume/Cap:	0.52	0.52	0.52	0.53	0.53	0.53	0.08	0.08	0.08	0.53	0.53	0.53
Uniform Del:	2.1	2.1	2.1	2.1	2.1	2.1	24.4	24.4	24.4	25.6	25.6	25.6
IncremntDel:	0.3	0.3	0.3	0.4	0.4	0.4	0.2	0.2	0.2	3.3	3.3	3.3
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Delay/Veh:	2.4	2.4	2.4	2.5	2.5	2.5	24.6	24.6	24.6	28.9	28.9	28.9
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	2.4	2.4	2.4	2.5	2.5	2.5	24.6	24.6	24.6	28.9	28.9	28.9
HCM2kAvg:	6	6	6	6	6	6	0	0	0	3	3	3

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #215 Presidio/Jackson

Cycle (sec): 60 Critical Vol./Cap. (X): 0.621
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 10.1
Optimal Cycle: 33 Level Of Service: B

Street Name:	Presidio Blvd.						Jackson St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	8	575	54	54	579	28	55	101	4	71	132	47
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	8	575	54	54	579	28	55	101	4	71	132	47
Added Vol:	0	46	0	0	51	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	8	621	54	54	630	28	55	101	4	71	132	47
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	8	621	54	54	630	28	55	101	4	71	132	47
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	8	621	54	54	630	28	55	101	4	71	132	47
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	8	621	54	54	630	28	55	101	4	71	132	47
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.98	0.98	0.98	0.92	0.92	0.92	0.82	0.82	0.82	0.86	0.86	0.86
Lanes:	0.01	0.91	0.08	0.08	0.88	0.04	0.34	0.63	0.03	0.28	0.53	0.19
Final Sat.:	22	1697	148	133	1547	69	533	979	39	467	868	309
Capacity Analysis Module:												
Vol/Sat:	0.37	0.37	0.37	0.41	0.41	0.41	0.10	0.10	0.10	0.15	0.15	0.15
Crit Moves:					****						****	
Green/Cycle:	0.66	0.66	0.66	0.66	0.66	0.66	0.24	0.24	0.24	0.24	0.24	0.24
Volume/Cap:	0.56	0.56	0.56	0.62	0.62	0.62	0.42	0.42	0.42	0.62	0.62	0.62
Uniform Del:	5.6	5.6	5.6	6.0	6.0	6.0	19.1	19.1	19.1	20.2	20.2	20.2
IncremntDel:	0.6	0.6	0.6	1.1	1.1	1.1	0.8	0.8	0.8	3.0	3.0	3.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Delay/Veh:	6.2	6.2	6.2	7.1	7.1	7.1	19.8	19.8	19.8	23.2	23.2	23.2
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	6.2	6.2	6.2	7.1	7.1	7.1	19.8	19.8	19.8	23.2	23.2	23.2
HCM2kAvg:	7	7	7	9	9	9	3	3	3	6	6	6

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #216 Presidio/Washington

Cycle (sec): 60 Critical Vol./Cap. (X): 0.583
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 8.6
Optimal Cycle: 30 Level Of Service: A

Street Name:	Presidio Blvd.						Washington St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	20	609	35	44	566	48	68	125	13	20	62	28
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	20	609	35	44	566	48	68	125	13	20	62	28
Added Vol:	0	46	0	0	51	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	20	655	35	44	617	48	68	125	13	20	62	28
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	20	655	35	44	617	48	68	125	13	20	62	28
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	20	655	35	44	617	48	68	125	13	20	62	28
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	20	655	35	44	617	48	68	125	13	20	62	28
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.97	0.97	0.97	0.93	0.93	0.93	0.87	0.87	0.87	0.91	0.91	0.91
Lanes:	0.03	0.92	0.05	0.06	0.87	0.07	0.33	0.61	0.06	0.18	0.57	0.25
Final Sat.:	52	1704	91	110	1540	120	548	1007	105	315	978	441
Capacity Analysis Module:												
Vol/Sat:	0.38	0.38	0.38	0.40	0.40	0.40	0.12	0.12	0.12	0.06	0.06	0.06
Crit Moves:					****			****				
Green/Cycle:	0.69	0.69	0.69	0.69	0.69	0.69	0.21	0.21	0.21	0.21	0.21	0.21
Volume/Cap:	0.56	0.56	0.56	0.58	0.58	0.58	0.58	0.58	0.58	0.30	0.30	0.30
Uniform Del:	4.8	4.8	4.8	4.9	4.9	4.9	21.2	21.2	21.2	19.8	19.8	19.8
IncremntDel:	0.6	0.6	0.6	0.7	0.7	0.7	2.5	2.5	2.5	0.5	0.5	0.5
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Delay/Veh:	5.3	5.3	5.3	5.6	5.6	5.6	23.7	23.7	23.7	20.3	20.3	20.3
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	5.3	5.3	5.3	5.6	5.6	5.6	23.7	23.7	23.7	20.3	20.3	20.3
HCM2kAvg:	7	7	7	8	8	8	5	5	5	2	2	2

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #218 Arguello/Washington St

Cycle (sec): 100 Critical Vol./Cap. (X): 0.893
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 28.2
Optimal Cycle: 0 Level Of Service: D

Street Name:	Arguello Blvd.						Washington St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 1	0 0	1	0 0	1! 0	0	0 0	0 1	0	0 0	1! 0	0
Volume Module:												
Base Vol:	20	465	57	20	551	11	0	8	24	82	5	20
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	20	465	57	20	551	11	0	8	24	82	5	20
Added Vol:	0	36	0	0	35	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	20	501	57	20	586	11	0	8	24	82	5	20
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	20	501	57	20	586	11	0	8	24	82	5	20
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	20	501	57	20	586	11	0	8	24	82	5	20
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	20	501	57	20	586	11	0	8	24	82	5	20
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.04	0.96	1.00	0.03	0.95	0.02	0.00	0.25	0.75	0.76	0.05	0.19
Final Sat.:	25	618	737	22	657	12	0	128	385	391	24	95
Capacity Analysis Module:												
Vol/Sat:	0.81	0.81	0.08	0.89	0.89	0.89	xxxx	0.06	0.06	0.21	0.21	0.21
Crit Moves:	****			****				****		****		
Delay/Veh:	27.1	27.1	7.9	35.0	35.0	35.0	0.0	9.8	9.8	11.3	11.3	11.3
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	27.1	27.1	7.9	35.0	35.0	35.0	0.0	9.8	9.8	11.3	11.3	11.3
LOS by Move:	D	D	A	D	D	D	*	A	A	B	B	B
ApproachDel:	25.2			35.0			9.8			11.3		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	25.2			35.0			9.8			11.3		
LOS by Appr:	D			D			A			B		

Alternative 2, Mitigated – AM Peak Hour

Scenario Report

Scenario:	AM MPU Mitigated
Command:	AM Preferred MIT
Volume:	AM 2030
Geometry:	AM 2030 Mitigated
Impact Fee:	Default Impact Fee
Trip Generation:	AM 2030 MPU
Trip Distribution:	Main Post SEIS
Paths:	Main Post SEIS
Routes:	Default Routes
Configuration:	Default Configuration

Trip Generation Report

Forecast for AM 2030 MPU

Zone #	Subzone	Amount	Units	Rate In	Rate Out	Trips In	Trips Out	Total Trips	% Of Total
14	West Crissy	1.00	mixed use	14.00	36.00	14	36	50	8.7
	Zone 14 Subtotal					14	36	50	8.7
15	Ruger & Simo	1.00	mixed use	16.00	21.00	16	21	37	6.4
	Zone 15 Subtotal					16	21	37	6.4
32	S. Main Post	1.00	mixed use	-6.00	-2.00	-6	-2	-8	-1.4
	Zone 32 Subtotal					-6	-2	-8	-1.4
33	W. Main Post	1.00	Mixed Use	8.00	55.00	8	55	63	11.0
	Zone 33 Subtotal					8	55	63	11.0
34	E. Main Post	1.00	mixed use	-26.00	3.00	-26	3	-23	-4.0
	Zone 34 Subtotal					-26	3	-23	-4.0
35	N. Main Post	1.00	mixed use	26.00	21.00	26	21	47	8.2
	Zone 35 Subtotal					26	21	47	8.2
753	LDA	1.00	mixed use	106.00	53.00	106	53	159	27.7
	Zone 753 Subtotal					106	53	159	27.7
767	Commissary/P	1.00	mixed use	90.00	160.00	90	160	250	43.5
	Zone 767 Subtotal					90	160	250	43.5
TOTAL						228	347	575	100.0

Trip Distribution Report

Percent Of Trips M POST SEIS

Zone	To Gates 5	14	16	17	22	28	36
14	0.0	25.0	0.0	10.0	15.0	50.0	0.0
15	0.0	0.0	25.0	0.0	67.5	0.0	7.5
32	0.0	5.0	10.0	10.0	68.0	5.0	2.0
33	0.0	5.0	10.0	10.0	68.0	5.0	2.0
34	0.0	5.0	10.0	10.0	68.0	5.0	2.0
35	0.0	5.0	10.0	10.0	68.0	5.0	2.0
36	0.0	10.0	20.0	15.0	40.0	15.0	0.0
753	20.0	5.0	10.0	5.0	55.0	0.0	5.0
767	14.0	0.0	10.0	10.0	14.0	50.0	2.0

Volume Type	NB Link In	Out	Total	SB Link In	Out	Total	EB Link In	Out	Total	WB Link In	Out	Total	Total Volume
#201 Lombard/Divisadero													
Base	353	390	743	266	195	461	3488	2383	5871	2225	3364	5589	12664
Added	0	0	0	0	0	0	123	85	208	85	123	208	416
Total	353	390	743	266	195	461	3611	2468	6079	2310	3487	5797	13080
#202 Lombard/Richardson													
Base	2387	3417	5804	3196	2233	5429	226	159	385	0	0	0	11618
Added	86	123	209	49	14	63	74	72	146	0	0	0	418
Total	2473	3540	6013	3245	2247	5492	300	231	531	0	0	0	12036
#203 Lyon/Lombard													
Base	159	253	412	366	254	620	539	378	917	95	274	369	2318
Added	8	9	17	0	0	0	83	80	163	72	74	146	326
Total	167	262	429	366	254	620	622	458	1080	167	348	515	2644
#204 Greenwich/Divisadero													
Base	335	361	696	396	358	754	186	125	311	142	215	357	2118
Added	0	0	0	0	0	0	9	8	17	8	9	17	34
Total	335	361	696	396	358	754	195	133	328	150	224	374	2152
#205 Greenwich/Lyon													
Base	107	164	271	248	173	421	0	0	0	88	106	194	886
Added	0	0	0	9	8	17	0	0	0	8	9	17	34
Total	107	164	271	257	181	438	0	0	0	96	115	211	920
#206 Francisco/Richardson													
Base	2222	3170	5392	3113	2529	5642	287	57	344	198	64	262	11640
Added	14	49	63	49	14	63	0	0	0	0	0	0	126
Total	2236	3219	5455	3162	2543	5705	287	57	344	198	64	262	11766
#207 Richardson/Gorgas													
Base	17	37	54	160	16	176	3137	2682	5819	2526	3105	5631	11680
Added	49	0	49	0	0	0	0	14	14	14	49	63	126
Total	66	37	103	160	16	176	3137	2696	5833	2540	3154	5694	11806
#208 Doyle/Marina/Lyon													
Base	12	41	53	128	321	449	1349	291	1640	606	1442	2048	4190
Added	0	0	0	102	52	154	0	0	0	52	102	154	308
Total	12	41	53	230	373	603	1349	291	1640	658	1544	2202	4498
#209 Graham/Lincoln													
Base	277	180	457	44	92	136	465	421	886	571	664	1235	2714
Added	19	17	36	1	0	1	64	16	80	33	84	117	234
Total	296	197	493	45	92	137	529	437	966	604	748	1352	2948
#210 Lincoln/Halleck													
Base	0	0	0	300	379	679	620	652	1272	688	577	1265	3216
Added	0	0	0	81	62	143	86	32	118	63	136	199	460
Total	0	0	0	381	441	822	706	684	1390	751	713	1464	3676

Volume Type	NB Link In	NB Link Out	NB Link Total	SB Link In	SB Link Out	SB Link Total	EB Link In	EB Link Out	EB Link Total	WB Link In	WB Link Out	WB Link Total	Total Volume
#211 Lincoln/Girard													
Base	0	0	0	548	393	941	605	681	1286	575	654	1229	3456
Added	0	0	0	14	69	83	138	48	186	34	69	103	372
Total	0	0	0	562	462	1024	743	729	1472	609	723	1332	3828
#212 Presidio/Letterman/Lincoln													
Base	528	557	1085	644	632	1276	289	198	487	66	140	206	3054
Added	35	70	105	69	35	104	1	-8	-7	8	16	24	226
Total	563	627	1190	713	667	1380	290	190	480	74	156	230	3280
#213 Lombard/Presidio													
Base	746	660	1406	560	512	1072	0	0	0	412	546	958	3436
Added	36	41	77	70	35	105	0	0	0	27	57	84	266
Total	782	701	1483	630	547	1177	0	0	0	439	603	1042	3702
#214 Presidio/Pacific													
Base	698	649	1347	671	716	1387	83	70	153	93	110	203	3090
Added	24	34	58	34	24	58	0	0	0	0	0	0	116
Total	722	683	1405	705	740	1445	83	70	153	93	110	203	3206
#215 Presidio/Jackson													
Base	683	632	1315	654	701	1355	171	171	342	263	267	530	3542
Added	24	34	58	34	24	58	0	0	0	0	0	0	116
Total	707	666	1373	688	725	1413	171	171	342	263	267	530	3658
#216 Presidio/Washington													
Base	654	489	1143	524	694	1218	239	144	383	135	225	360	3104
Added	24	34	58	34	24	58	0	0	0	0	0	0	116
Total	678	523	1201	558	718	1276	239	144	383	135	225	360	3220
#217 Arguello/Jackson													
Base	625	512	1137	464	553	1017	0	0	0	163	187	350	2504
Added	16	30	46	30	16	46	0	0	0	0	0	0	92
Total	641	542	1183	494	569	1063	0	0	0	163	187	350	2596
#218 Arguello/Washington St													
Base	751	561	1312	502	624	1126	37	51	88	102	156	258	2784
Added	16	30	46	30	16	46	0	0	0	0	0	0	92
Total	767	591	1358	532	640	1172	37	51	88	102	156	258	2876
#219 Arguello/Moraga													
Base	485	354	839	0	0	0	119	186	305	374	438	812	1956
Added	16	30	46	0	0	0	1	-4	-3	22	13	35	78
Total	501	384	885	0	0	0	120	182	302	396	451	847	2034
#220 Montgomery/Sheridan													
Base	34	176	210	90	540	630	661	69	730	0	0	0	1570
Added	33	0	33	12	64	76	31	12	43	0	0	0	152
Total	67	176	243	102	604	706	692	81	773	0	0	0	1722

Impact Analysis Report
Level Of Service

Intersection	Base LOS	Base Del/ Veh	Base V/ C	Future LOS	Future Del/ Veh	Future V/ C	Change in
#201 Lombard/Divisadero	B	13.9	0.914	B	15.8	0.937	+ 1.926 D/V
#202 Lombard/Richardson	B	6.0	0.431	B	6.7	0.434	+ 0.695 D/V
#203 Lyon/Lombard	B	13.3	0.617	B	14.1	0.678	+ 0.805 D/V
#204 Greenwich/Divisadero	B	13.9	0.614	B	14.1	0.623	+ 0.009 V/C
#205 Greenwich/Lyon	A	8.5	0.300	A	8.6	0.313	+ 0.013 V/C
#206 Francisco/Richardson	B	15.1	0.753	B	15.8	0.762	+ 0.685 D/V
#207 Richardson/Gorgas	A	8.1	0.699	A	8.3	0.702	+ 0.260 D/V
#208 Doyle/Marina/Lyon	C	34.6	0.450	C	34.3	0.507	-0.305 D/V
#209 Graham/Lincoln	B	10.3	0.448	B	10.3	0.498	+ 0.074 D/V
#210 Lincoln/Halleck	B	10.4	0.639	B	13.4	0.746	+ 2.950 D/V
#211 Lincoln/Girard	B	17.1	0.677	B	19.1	0.749	+ 1.999 D/V
#212 Presidio/Letterman/Lincoln	B	13.4	0.434	B	13.0	0.464	-0.449 D/V
#213 Lombard/Presidio	B	17.8	0.763	C	20.6	0.818	+ 2.810 D/V
#214 Presidio/Pacific	A	5.3	0.487	A	5.3	0.509	-0.041 D/V
#215 Presidio/Jackson	B	10.4	0.597	B	10.4	0.619	+ 0.043 D/V
#216 Presidio/Washington	A	9.5	0.546	A	9.4	0.560	-0.038 D/V
#217 Arguello/Jackson	B	14.1	0.670	C	15.1	0.715	+ 0.045 V/C
#218 Arguello/Washington St	D	28.6	0.934	D	32.6	0.964	+ 0.030 V/C
#219 Arguello/Moraga	B	14.9	0.667	C	16.1	0.697	+ 0.030 V/C
#220 Montgomery/Sheridan	C	18.7	0.786	C	22.8	0.848	+ 0.062 V/C

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #203 Lyon/Lombard

Cycle (sec): 60 Critical Vol./Cap. (X): 0.678
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 14.1
Optimal Cycle: 37 Level Of Service: B

Street Name:	Lyon St.						Lombard St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	114	37	8	21	151	194	197	245	97	5	70	20
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	114	37	8	21	151	194	197	245	97	5	70	20
Added Vol:	8	0	0	0	0	0	0	74	9	0	72	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	122	37	8	21	151	194	197	319	106	5	142	20
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	122	37	8	21	151	194	197	319	106	5	142	20
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	122	37	8	21	151	194	197	319	106	5	142	20
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	122	37	8	21	151	194	197	319	106	5	142	20
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.49	0.49	0.49	0.91	0.91	0.91	0.82	0.82	0.82	0.97	0.97	0.97
Lanes:	0.73	0.22	0.05	0.06	0.41	0.53	0.32	0.51	0.17	0.03	0.85	0.12
Final Sat.:	682	207	45	99	713	916	495	802	266	55	1571	221
Capacity Analysis Module:												
Vol/Sat:	0.18	0.18	0.18	0.21	0.21	0.21	0.40	0.40	0.40	0.09	0.09	0.09
Crit Moves:					****			****				
Green/Cycle:	0.31	0.31	0.31	0.31	0.31	0.31	0.59	0.59	0.59	0.59	0.59	0.59
Volume/Cap:	0.57	0.57	0.57	0.68	0.68	0.68	0.68	0.68	0.68	0.15	0.15	0.15
Uniform Del:	17.3	17.3	17.3	18.0	18.0	18.0	8.5	8.5	8.5	5.6	5.6	5.6
IncremntDel:	2.7	2.7	2.7	3.4	3.4	3.4	2.0	2.0	2.0	0.1	0.1	0.1
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Delay/Veh:	20.0	20.0	20.0	21.4	21.4	21.4	10.5	10.5	10.5	5.7	5.7	5.7
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	20.0	20.0	20.0	21.4	21.4	21.4	10.5	10.5	10.5	5.7	5.7	5.7
HCM2kAvg:	6	6	6	7	7	7	10	10	10	1	1	1

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #209 Graham/Lincoln

Cycle (sec): 60 Critical Vol./Cap. (X): 0.498
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 10.3
Optimal Cycle: 26 Level Of Service: B

Street Name:	Graham St.						Lincoln Blvd.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	1 0	0 1	0	1 0	0 1	0
Volume Module:												
Base Vol:	27	30	220	18	10	16	20	426	19	151	378	42
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	27	30	220	18	10	16	20	426	19	151	378	42
Added Vol:	0	0	19	1	0	0	0	64	0	17	16	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	27	30	239	19	10	16	20	490	19	168	394	42
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	27	30	239	19	10	16	20	490	19	168	394	42
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	27	30	239	19	10	16	20	490	19	168	394	42
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	27	30	239	19	10	16	20	490	19	168	394	42
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.87	0.87	0.87	0.82	0.82	0.82	0.42	0.99	0.99	0.36	0.99	0.99
Lanes:	0.09	0.10	0.81	0.42	0.22	0.36	1.00	0.96	0.04	1.00	0.90	0.10
Final Sat.:	151	168	1335	657	346	553	790	1818	70	680	1693	180
Capacity Analysis Module:												
Vol/Sat:	0.18	0.18	0.18	0.03	0.03	0.03	0.03	0.27	0.27	0.25	0.23	0.23
Crit Moves:		****						****				
Green/Cycle:	0.36	0.36	0.36	0.36	0.36	0.36	0.54	0.54	0.54	0.54	0.54	0.54
Volume/Cap:	0.50	0.50	0.50	0.08	0.08	0.08	0.05	0.50	0.50	0.46	0.43	0.43
Uniform Del:	15.0	15.0	15.0	12.7	12.7	12.7	6.5	8.7	8.7	8.4	8.2	8.2
IncremntDel:	0.7	0.7	0.7	0.1	0.1	0.1	0.0	0.4	0.4	0.9	0.3	0.3
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Delay/Veh:	15.7	15.7	15.7	12.7	12.7	12.7	6.5	9.0	9.0	9.3	8.5	8.5
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	15.7	15.7	15.7	12.7	12.7	12.7	6.5	9.0	9.0	9.3	8.5	8.5
HCM2kAvg:	5	5	5	1	1	1	0	6	6	6	5	5

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #210 Lincoln/Halleck

Cycle (sec): 60 Critical Vol./Cap. (X): 0.746
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 13.4
Optimal Cycle: 44 Level Of Service: B

Street Name:	Halleck St.						Lincoln Blvd.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0 0 0 0			0 0 1! 0 0			1 0 1 0 0			0 0 0 1 0		
Volume Module:												
Base Vol:	0	0	0	123	0	177	166	454	0	0	475	213
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	123	0	177	166	454	0	0	475	213
Added Vol:	0	0	0	64	0	17	14	72	0	0	15	48
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	187	0	194	180	526	0	0	490	261
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	187	0	194	180	526	0	0	490	261
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	187	0	194	180	526	0	0	490	261
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	0	0	187	0	194	180	526	0	0	490	261
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	0.78	1.00	0.78	0.59	1.00	1.00	1.00	0.95	0.95
Lanes:	0.00	0.00	0.00	0.49	0.00	0.51	1.00	1.00	0.00	0.00	0.65	0.35
Final Sat.:	0	0	0	728	0	756	1113	1900	0	0	1181	629
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.26	0.00	0.26	0.16	0.28	0.00	0.00	0.41	0.41
Crit Moves:				****							****	
Green/Cycle:	0.00	0.00	0.00	0.34	0.00	0.34	0.56	0.56	0.00	0.00	0.56	0.56
Volume/Cap:	0.00	0.00	0.00	0.75	0.00	0.75	0.29	0.50	0.00	0.00	0.75	0.75
Uniform Del:	0.0	0.0	0.0	17.4	0.0	17.4	7.1	8.2	0.0	0.0	10.1	10.1
IncremntDel:	0.0	0.0	0.0	6.0	0.0	6.0	0.3	0.4	0.0	0.0	3.1	3.1
Delay Adj:	0.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00
Delay/Veh:	0.0	0.0	0.0	23.3	0.0	23.3	7.3	8.6	0.0	0.0	13.2	13.2
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	23.3	0.0	23.3	7.3	8.6	0.0	0.0	13.2	13.2
HCM2kAvg:	0	0	0	9	0	9	3	6	0	0	12	12

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #211 Lincoln/Girard

Cycle (sec): 60 Critical Vol./Cap. (X): 0.749
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 19.1
Optimal Cycle: 44 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0 0 0 0			1 0 0 0 1			1 0 1 0 0			0 0 0 1 0		
Volume Module:												
Base Vol:	0	0	0	276	0	272	227	378	0	0	409	166
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	276	0	272	227	378	0	0	409	166
Added Vol:	0	0	0	0	0	14	69	69	0	0	34	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	276	0	286	296	447	0	0	443	166
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	276	0	286	296	447	0	0	443	166
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	276	0	286	296	447	0	0	443	166
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	0	0	276	0	286	296	447	0	0	443	166
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	0.95	1.00	0.85	0.95	1.00	1.00	1.00	0.96	0.96
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	0.00	0.00	0.73	0.27
Final Sat.:	0	0	0	1805	0	1615	1805	1900	0	0	1331	499
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.15	0.00	0.18	0.16	0.24	0.00	0.00	0.33	0.33
Crit Moves:						****	****				****	
Green/Cycle:	0.00	0.00	0.00	0.24	0.00	0.24	0.22	0.66	0.00	0.00	0.44	0.44
Volume/Cap:	0.00	0.00	0.00	0.65	0.00	0.75	0.75	0.35	0.00	0.00	0.75	0.75
Uniform Del:	0.0	0.0	0.0	20.6	0.0	21.3	21.9	4.4	0.0	0.0	13.9	13.9
IncremntDel:	0.0	0.0	0.0	3.4	0.0	8.0	7.7	0.2	0.0	0.0	3.9	3.9
Delay Adj:	0.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00
Delay/Veh:	0.0	0.0	0.0	24.1	0.0	29.2	29.6	4.6	0.0	0.0	17.8	17.8
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	24.1	0.0	29.2	29.6	4.6	0.0	0.0	17.8	17.8
HCM2kAvg:	0	0	0	6	0	7	7	4	0	0	11	11

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #212 Presidio/Letterman/Lincoln

Cycle (sec): 100 Critical Vol./Cap. (X): 0.464
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 13.0
Optimal Cycle: 27 Level Of Service: B

Street Name:	Lincoln/Presidio						Presidio/Letterman					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0 0	1 0		0 1 0	1 0		0 0	1! 0 0		0 0	1! 0 0	
Volume Module:												
Base Vol:	104	415	9	101	464	79	174	30	85	8	15	43
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	104	415	9	101	464	79	174	30	85	8	15	43
Added Vol:	-8	32	11	5	64	0	0	0	1	5	0	3
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	96	447	20	106	528	79	174	30	86	13	15	46
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	96	447	20	106	528	79	174	30	86	13	15	46
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	96	447	20	106	528	79	174	30	86	13	15	46
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	96	447	20	106	528	79	174	30	86	13	15	46
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.31	0.99	0.99	0.71	0.71	0.71	0.76	0.76	0.76	0.87	0.87	0.87
Lanes:	1.00	0.96	0.04	0.30	1.48	0.22	0.60	0.10	0.30	0.18	0.20	0.62
Final Sat.:	597	1808	81	404	2010	301	866	149	428	289	333	1022
Capacity Analysis Module:												
Vol/Sat:	0.16	0.25	0.25	0.26	0.26	0.26	0.20	0.20	0.20	0.04	0.04	0.04
Crit Moves:					****			****				
Green/Cycle:	0.57	0.57	0.57	0.57	0.57	0.57	0.43	0.43	0.43	0.43	0.43	0.43
Volume/Cap:	0.28	0.44	0.44	0.46	0.46	0.46	0.46	0.46	0.46	0.10	0.10	0.10
Uniform Del:	10.1	11.2	11.2	11.5	11.5	11.5	18.1	18.1	18.1	15.1	15.1	15.1
IncremntDel:	0.5	0.3	0.3	0.2	0.2	0.2	0.5	0.5	0.5	0.1	0.1	0.1
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Delay/Veh:	10.5	11.5	11.5	11.7	11.7	11.7	18.6	18.6	18.6	15.2	15.2	15.2
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	10.5	11.5	11.5	11.7	11.7	11.7	18.6	18.6	18.6	15.2	15.2	15.2
HCM2kAvg:	4	7	7	8	8	8	7	7	7	1	1	1

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #213 Lombard/Presidio

Cycle (sec): 60 Critical Vol./Cap. (X): 0.818
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 20.6
Optimal Cycle: 55 Level Of Service: C

Street Name:	Presidio Blvd.						Lombard St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0 0	1 0		1 0 1	0 0		0 0 0	0 0		1 0 0	0 1	
Volume Module:												
Base Vol:	0	391	355	191	369	0	0	0	0	291	0	121
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	391	355	191	369	0	0	0	0	291	0	121
Added Vol:	0	20	16	41	29	0	0	0	0	12	0	15
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	411	371	232	398	0	0	0	0	303	0	136
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	411	371	232	398	0	0	0	0	303	0	136
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	411	371	232	398	0	0	0	0	303	0	136
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	411	371	232	398	0	0	0	0	303	0	136
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	0.94	0.94	0.95	1.00	1.00	1.00	1.00	1.00	0.95	1.00	0.85
Lanes:	0.00	0.53	0.47	1.00	1.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Final Sat.:	0	935	844	1805	1900	0	0	0	0	1805	0	1615
Capacity Analysis Module:												
Vol/Sat:	0.00	0.44	0.44	0.13	0.21	0.00	0.00	0.00	0.00	0.17	0.00	0.08
Crit Moves:		****		****						****		
Green/Cycle:	0.00	0.54	0.54	0.16	0.69	0.00	0.00	0.00	0.00	0.21	0.00	0.21
Volume/Cap:	0.00	0.82	0.82	0.82	0.30	0.00	0.00	0.00	0.00	0.82	0.00	0.41
Uniform Del:	0.0	11.4	11.4	24.5	3.5	0.0	0.0	0.0	0.0	22.8	0.0	20.7
IncremntDel:	0.0	5.6	5.6	16.8	0.1	0.0	0.0	0.0	0.0	13.3	0.0	0.8
Delay Adj:	0.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Delay/Veh:	0.0	17.1	17.1	41.2	3.7	0.0	0.0	0.0	0.0	36.1	0.0	21.5
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	17.1	17.1	41.2	3.7	0.0	0.0	0.0	0.0	36.1	0.0	21.5
HCM2kAvg:	0	15	15	7	3	0	0	0	0	8	0	3

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #214 Presidio/Pacific

Cycle (sec): 60 Critical Vol./Cap. (X): 0.509
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 5.3
Optimal Cycle: 27 Level Of Service: A

Street Name:	Presidio Blvd.						Pacific Ave.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	12	655	31	46	593	32	32	33	18	38	26	29
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	12	655	31	46	593	32	32	33	18	38	26	29
Added Vol:	0	24	0	0	34	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	12	679	31	46	627	32	32	33	18	38	26	29
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	12	679	31	46	627	32	32	33	18	38	26	29
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	12	679	31	46	627	32	32	33	18	38	26	29
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	12	679	31	46	627	32	32	33	18	38	26	29
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.98	0.98	0.98	0.93	0.93	0.93	0.84	0.84	0.84	0.83	0.83	0.83
Lanes:	0.02	0.94	0.04	0.06	0.89	0.05	0.38	0.40	0.22	0.41	0.28	0.31
Final Sat.:	31	1758	80	115	1572	80	618	637	348	645	441	492
Capacity Analysis Module:												
Vol/Sat:	0.39	0.39	0.39	0.40	0.40	0.40	0.05	0.05	0.05	0.06	0.06	0.06
Crit Moves:					****						****	
Green/Cycle:	0.78	0.78	0.78	0.78	0.78	0.78	0.12	0.12	0.12	0.12	0.12	0.12
Volume/Cap:	0.49	0.49	0.49	0.51	0.51	0.51	0.45	0.45	0.45	0.51	0.51	0.51
Uniform Del:	2.3	2.3	2.3	2.3	2.3	2.3	24.7	24.7	24.7	24.9	24.9	24.9
IncremntDel:	0.3	0.3	0.3	0.3	0.3	0.3	1.7	1.7	1.7	2.4	2.4	2.4
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Delay/Veh:	2.5	2.5	2.5	2.6	2.6	2.6	26.4	26.4	26.4	27.3	27.3	27.3
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	2.5	2.5	2.5	2.6	2.6	2.6	26.4	26.4	26.4	27.3	27.3	27.3
HCM2kAvg:	5	5	5	6	6	6	2	2	2	3	3	3

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #215 Presidio/Jackson

Cycle (sec): 60 Critical Vol./Cap. (X): 0.619
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 10.4
Optimal Cycle: 33 Level Of Service: B

Street Name:	Presidio Blvd.						Jackson St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	9	615	59	59	565	30	11	149	11	56	132	75
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	9	615	59	59	565	30	11	149	11	56	132	75
Added Vol:	0	24	0	0	34	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	9	639	59	59	599	30	11	149	11	56	132	75
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	9	639	59	59	599	30	11	149	11	56	132	75
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	9	639	59	59	599	30	11	149	11	56	132	75
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	9	639	59	59	599	30	11	149	11	56	132	75
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.98	0.98	0.98	0.90	0.90	0.90	0.97	0.97	0.97	0.88	0.88	0.88
Lanes:	0.01	0.91	0.08	0.09	0.87	0.04	0.06	0.88	0.06	0.21	0.50	0.29
Final Sat.:	24	1686	156	147	1496	75	118	1603	118	357	842	478
Capacity Analysis Module:												
Vol/Sat:	0.38	0.38	0.38	0.40	0.40	0.40	0.09	0.09	0.09	0.16	0.16	0.16
Crit Moves:					****						****	
Green/Cycle:	0.65	0.65	0.65	0.65	0.65	0.65	0.25	0.25	0.25	0.25	0.25	0.25
Volume/Cap:	0.59	0.59	0.59	0.62	0.62	0.62	0.37	0.37	0.37	0.62	0.62	0.62
Uniform Del:	6.0	6.0	6.0	6.2	6.2	6.2	18.4	18.4	18.4	19.8	19.8	19.8
IncremntDel:	0.8	0.8	0.8	1.1	1.1	1.1	0.5	0.5	0.5	2.8	2.8	2.8
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Delay/Veh:	6.8	6.8	6.8	7.3	7.3	7.3	18.9	18.9	18.9	22.6	22.6	22.6
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	6.8	6.8	6.8	7.3	7.3	7.3	18.9	18.9	18.9	22.6	22.6	22.6
HCM2kAvg:	8	8	8	9	9	9	3	3	3	6	6	6

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #216 Presidio/Washington

Cycle (sec): 60 Critical Vol./Cap. (X): 0.560
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 9.4
Optimal Cycle: 29 Level Of Service: A

Street Name:	Presidio Blvd.						Washington St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	15	610	29	38	440	46	59	158	22	27	83	25
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	15	610	29	38	440	46	59	158	22	27	83	25
Added Vol:	0	24	0	0	34	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	15	634	29	38	474	46	59	158	22	27	83	25
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	15	634	29	38	474	46	59	158	22	27	83	25
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	15	634	29	38	474	46	59	158	22	27	83	25
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	15	634	29	38	474	46	59	158	22	27	83	25
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.98	0.98	0.98	0.93	0.93	0.93	0.89	0.89	0.89	0.91	0.91	0.91
Lanes:	0.02	0.94	0.04	0.07	0.85	0.08	0.25	0.66	0.09	0.20	0.61	0.19
Final Sat.:	41	1745	80	120	1500	146	418	1121	156	345	1060	319
Capacity Analysis Module:												
Vol/Sat:	0.36	0.36	0.36	0.32	0.32	0.32	0.14	0.14	0.14	0.08	0.08	0.08
Crit Moves:		****						****				
Green/Cycle:	0.65	0.65	0.65	0.65	0.65	0.65	0.25	0.25	0.25	0.25	0.25	0.25
Volume/Cap:	0.56	0.56	0.56	0.49	0.49	0.49	0.56	0.56	0.56	0.31	0.31	0.31
Uniform Del:	5.8	5.8	5.8	5.4	5.4	5.4	19.6	19.6	19.6	18.2	18.2	18.2
IncremntDel:	0.6	0.6	0.6	0.3	0.3	0.3	1.7	1.7	1.7	0.4	0.4	0.4
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Delay/Veh:	6.4	6.4	6.4	5.7	5.7	5.7	21.3	21.3	21.3	18.6	18.6	18.6
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	6.4	6.4	6.4	5.7	5.7	5.7	21.3	21.3	21.3	18.6	18.6	18.6
HCM2kAvg:	8	8	8	6	6	6	5	5	5	2	2	2

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #218 Arguello/Washington St

Cycle (sec): 100 Critical Vol./Cap. (X): 0.964
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 32.6
Optimal Cycle: 0 Level Of Service: D

Street Name:	Arguello Blvd.						Washington St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 1	0 0	1	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	23	592	136	9	471	22	4	11	22	68	6	28
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	23	592	136	9	471	22	4	11	22	68	6	28
Added Vol:	0	16	0	0	30	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	23	608	136	9	501	22	4	11	22	68	6	28
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	23	608	136	9	501	22	4	11	22	68	6	28
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	23	608	136	9	501	22	4	11	22	68	6	28
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	23	608	136	9	501	22	4	11	22	68	6	28
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.04	0.96	1.00	0.02	0.94	0.04	0.11	0.30	0.59	0.67	0.06	0.27
Final Sat.:	24	631	753	11	634	28	55	151	301	342	30	141
Capacity Analysis Module:												
Vol/Sat:	0.96	0.96	0.18	0.79	0.79	0.79	0.07	0.07	0.07	0.20	0.20	0.20
Crit Moves:	****			****				****		****		
Delay/Veh:	49.3	49.3	8.5	24.7	24.7	24.7	10.1	10.1	10.1	11.2	11.2	11.2
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	49.3	49.3	8.5	24.7	24.7	24.7	10.1	10.1	10.1	11.2	11.2	11.2
LOS by Move:	E	E	A	C	C	C	B	B	B	B	B	B
ApproachDel:	42.1			24.7			10.1			11.2		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	42.1			24.7			10.1			11.2		
LOS by Appr:	E			C			B			B		

Alternative 2, Mitigated – PM Peak Hour

Scenario Report

Scenario:	PM MPU Mitigated
Command:	PM Preferred MIT
Volume:	PM 2030
Geometry:	PM 2030 Mitigated
Impact Fee:	Default Impact Fee
Trip Generation:	PM 2030 MPU
Trip Distribution:	Main Post SEIS
Paths:	Main Post SEIS
Routes:	Default Routes
Configuration:	Default Configuration

Trip Generation Report

Forecast for PM 2030 MPU

Zone #	Subzone	Amount	Units	Rate In	Rate Out	Trips In	Trips Out	Total Trips	% Of Total
14	West Crissy	1.00	mixed use	43.00	35.00	43	35	78	6.3
	Zone 14 Subtotal					43	35	78	6.3
15	Ruger & Simo	1.00	mixed use	43.00	41.00	43	41	84	6.8
	Zone 15 Subtotal					43	41	84	6.8
32	S. Main Post	1.00	mixed use	-10.00	-9.00	-10	-9	-19	-1.5
	Zone 32 Subtotal					-10	-9	-19	-1.5
33	W. Main Post	1.00	Mixed Use	159.00	73.00	159	73	232	18.7
	Zone 33 Subtotal					159	73	232	18.7
34	E. Main Post	1.00	mixed use	83.00	28.00	83	28	111	8.9
	Zone 34 Subtotal					83	28	111	8.9
35	N. Main Post	1.00	mixed use	87.00	17.00	87	17	104	8.4
	Zone 35 Subtotal					87	17	104	8.4
753	LDA	1.00	mixed use	126.00	188.00	126	188	314	25.3
	Zone 753 Subtotal					126	188	314	25.3
767	Commissary/P	1.00	mixed use	169.00	169.00	169	169	338	27.2
	Zone 767 Subtotal					169	169	338	27.2
TOTAL						700	542	1242	100.0

Trip Distribution Report

Percent Of Trips M POST SEIS

Zone	To Gates 5	14	16	17	22	28	36
14	0.0	25.0	0.0	10.0	15.0	50.0	0.0
15	0.0	0.0	25.0	0.0	67.5	0.0	7.5
32	0.0	5.0	10.0	10.0	68.0	5.0	2.0
33	0.0	5.0	10.0	10.0	68.0	5.0	2.0
34	0.0	5.0	10.0	10.0	68.0	5.0	2.0
35	0.0	5.0	10.0	10.0	68.0	5.0	2.0
36	0.0	10.0	20.0	15.0	40.0	15.0	0.0
753	20.0	5.0	10.0	5.0	55.0	0.0	5.0
767	14.0	0.0	10.0	10.0	14.0	50.0	2.0

Volume Type	NB Link In	Out	Total	SB Link In	Out	Total	EB Link In	Out	Total	WB Link In	Out	Total	Total Volume
#201 Lombard/Divisadero													
Base	378	385	763	298	285	583	2398	3242	5640	3117	2279	5396	12382
Added	0	0	0	0	0	0	234	345	579	345	234	579	1158
Total	378	385	763	298	285	583	2632	3587	6219	3462	2513	5975	13540
#202 Lombard/Richardson													
Base	3319	2500	5819	2171	3119	5290	329	200	529	0	0	0	11638
Added	345	234	579	78	178	256	156	167	323	0	0	0	1158
Total	3664	2734	6398	2249	3297	5546	485	367	852	0	0	0	12796
#203 Lyon/Lombard													
Base	217	183	400	318	325	643	569	517	1086	223	302	525	2654
Added	19	18	37	0	0	0	174	186	360	167	156	323	720
Total	236	201	437	318	325	643	743	703	1446	390	458	848	3374
#204 Greenwich/Divisadero													
Base	345	332	677	343	385	728	145	164	309	203	155	358	2072
Added	0	0	0	0	0	0	18	19	37	19	18	37	74
Total	345	332	677	343	385	728	163	183	346	222	173	395	2146
#205 Greenwich/Lyon													
Base	107	120	227	177	214	391	0	0	0	130	80	210	828
Added	0	0	0	18	19	37	0	0	0	19	18	37	74
Total	107	120	227	195	233	428	0	0	0	149	98	247	902
#206 Francisco/Richardson													
Base	3119	2250	5369	2217	3331	5548	251	69	320	145	82	227	11464
Added	178	78	256	78	178	256	0	0	0	0	0	0	512
Total	3297	2328	5625	2295	3509	5804	251	69	320	145	82	227	11976
#207 Richardson/Gorgas													
Base	253	63	316	69	34	103	2150	3439	5589	3298	2234	5532	11540
Added	78	0	78	0	0	0	0	178	178	178	78	256	512
Total	331	63	394	69	34	103	2150	3617	5767	3476	2312	5788	12052
#208 Doyle/Marina/Lyon													
Base	40	25	65	247	491	738	922	1549	2471	2009	1153	3162	6436
Added	0	0	0	107	122	229	0	0	0	122	107	229	458
Total	40	25	65	354	613	967	922	1549	2471	2131	1260	3391	6894
209 Graham/Lincoln													
Base	152	134	286	22	7	29	434	391	825	508	584	1092	2232
Added	42	42	84	1	0	1	81	161	242	203	124	327	654
Total	194	176	370	23	7	30	515	552	1067	711	708	1419	2886
#210 Lincoln/Halleck													
Base	0	3	3	314	340	654	542	543	1085	584	554	1138	2880
Added	0	0	0	93	154	247	140	206	346	300	173	473	1066
Total	0	3	3	407	494	901	682	749	1431	884	727	1611	3946

Volume Type	NB Link In	NB Link Out	NB Link Total	SB Link In	SB Link Out	SB Link Total	EB Link In	EB Link Out	EB Link Total	WB Link In	WB Link Out	WB Link Total	Total Volume
#211 Lincoln/Girard													
Base	0	0	0	336	497	833	589	585	1174	600	443	1043	3050
Added	0	0	0	219	90	309	165	343	508	124	75	199	1016
Total	0	0	0	555	587	1142	754	928	1682	724	518	1242	4066
#212 Presidio/Letterman/Lincoln													
Base	539	546	1085	463	601	1064	237	188	425	148	52	200	2774
Added	153	95	248	74	124	198	8	25	33	28	19	47	526
Total	692	641	1333	537	725	1262	245	213	458	176	71	247	3300
#213 Lombard/Presidio													
Base	733	676	1409	549	597	1146	0	0	0	529	538	1067	3622
Added	92	79	171	96	152	248	0	0	0	123	80	203	622
Total	825	755	1580	645	749	1394	0	0	0	652	618	1270	4244
#214 Presidio/Pacific													
Base	731	630	1361	686	743	1429	14	66	80	89	81	170	3040
Added	72	57	129	57	72	129	0	0	0	0	0	0	258
Total	803	687	1490	743	815	1558	14	66	80	89	81	170	3298
#215 Presidio/Jackson													
Base	637	654	1291	661	677	1338	160	168	328	250	209	459	3416
Added	72	57	129	57	72	129	0	0	0	0	0	0	258
Total	709	711	1420	718	749	1467	160	168	328	250	209	459	3674
#216 Presidio/Washington													
Base	664	599	1263	658	705	1363	206	130	336	110	204	314	3276
Added	72	57	129	57	72	129	0	0	0	0	0	0	258
Total	736	656	1392	715	777	1492	206	130	336	110	204	314	3534
#217 Arguello/Jackson													
Base	488	603	1091	546	454	1000	0	0	0	123	100	223	2314
Added	59	41	100	41	59	100	0	0	0	0	0	0	200
Total	547	644	1191	587	513	1100	0	0	0	123	100	223	2514
#218 Arguello/Washington St													
Base	542	657	1199	582	485	1067	32	36	68	107	85	192	2526
Added	59	41	100	41	59	100	0	0	0	0	0	0	200
Total	601	698	1299	623	544	1167	32	36	68	107	85	192	2726
#219 Arguello/Moraga													
Base	431	449	880	0	0	0	180	188	368	377	351	728	1976
Added	59	41	100	0	0	0	-4	-5	-9	30	49	79	170
Total	490	490	980	0	0	0	176	183	359	407	400	807	2146
#220 Montgomery/Sheridan													
Base	62	196	258	85	226	311	341	66	407	0	0	0	976
Added	43	15	58	81	81	162	38	66	104	0	0	0	324
Total	105	211	316	166	307	473	379	132	511	0	0	0	1300

Impact Analysis Report
Level Of Service

Intersection	Base LOS	Base Del/ Veh	Base V/ C	Future LOS	Future Del/ Veh	Future V/ C	Change in
#201 Lombard/Divisadero	B	13.0	0.849	B	16.9	0.916	+ 3.936 D/V
#202 Lombard/Richardson	A	3.6	0.602	B	8.6	0.764	+ 5.088 D/V
#203 Lyon/Lombard	B	13.7	0.649	B	17.8	0.828	+ 4.018 D/V
#204 Greenwich/Divisadero	B	13.4	0.549	B	14.0	0.566	+ 0.017 V/C
#205 Greenwich/Lyon	A	8.2	0.222	A	8.4	0.248	+ 0.026 V/C
#206 Francisco/Richardson	B	15.0	0.712	B	18.6	0.747	+ 3.567 D/V
#207 Richardson/Gorgas	A	7.0	0.796	B	10.4	0.878	+ 3.449 D/V
#208 Doyle/Marina/Lyon	B	17.7	0.726	C	27.7	0.838	+ 9.970 D/V
#209 Graham/Lincoln	A	7.1	0.358	A	7.7	0.444	+ 0.574 D/V
#210 Lincoln/Halleck	B	10.9	0.591	B	17.2	0.852	+ 6.273 D/V
#211 Lincoln/Girard	B	15.3	0.684	B	19.0	0.812	+ 3.743 D/V
#212 Presidio/Letterman/Lincoln	A	9.8	0.427	A	9.6	0.510	-0.254 D/V
#213 Lombard/Presidio	C	20.5	0.798	C	29.3	0.904	+ 8.815 D/V
#214 Presidio/Pacific	A	4.1	0.500	A	4.1	0.537	+ 0.061 D/V
#215 Presidio/Jackson	B	10.0	0.589	B	10.2	0.626	+ 0.154 D/V
#216 Presidio/Washington	A	8.6	0.552	A	8.6	0.588	+ 0.041 D/V
#217 Arguello/Jackson	C	17.6	0.744	C	21.9	0.813	+ 0.069 V/C
#218 Arguello/Washington St	C	22.9	0.833	D	30.8	0.907	+ 0.074 V/C
#219 Arguello/Moraga	B	14.0	0.613	C	16.6	0.704	+ 0.091 V/C
#220 Montgomery/Sheridan	A	9.2	0.394	B	10.2	0.478	+ 0.083 V/C

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #203 Lyon/Lombard

Cycle (sec): 60 Critical Vol./Cap. (X): 0.828
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 17.8
Optimal Cycle: 56 Level Of Service: B

Street Name:	Lyon St.									Lombard St.		
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	124	68	25	29	65	224	212	248	109	9	169	45
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	124	68	25	29	65	224	212	248	109	9	169	45
Added Vol:	19	0	0	0	0	0	0	156	18	0	167	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	143	68	25	29	65	224	212	404	127	9	336	45
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	143	68	25	29	65	224	212	404	127	9	336	45
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	143	68	25	29	65	224	212	404	127	9	336	45
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	143	68	25	29	65	224	212	404	127	9	336	45
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.52	0.52	0.52	0.87	0.87	0.87	0.77	0.77	0.77	0.97	0.97	0.97
Lanes:	0.61	0.29	0.10	0.09	0.20	0.71	0.29	0.54	0.17	0.02	0.86	0.12
Final Sat.:	597	284	104	151	337	1163	419	799	251	43	1588	213
Capacity Analysis Module:												
Vol/Sat:	0.24	0.24	0.24	0.19	0.19	0.19	0.51	0.51	0.51	0.21	0.21	0.21
Crit Moves:		****						****				
Green/Cycle:	0.29	0.29	0.29	0.29	0.29	0.29	0.61	0.61	0.61	0.61	0.61	0.61
Volume/Cap:	0.83	0.83	0.83	0.67	0.67	0.67	0.83	0.83	0.83	0.35	0.35	0.35
Uniform Del:	19.9	19.9	19.9	18.8	18.8	18.8	9.2	9.2	9.2	5.8	5.8	5.8
IncremntDel:	17.8	17.8	17.8	3.6	3.6	3.6	6.4	6.4	6.4	0.2	0.2	0.2
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Delay/Veh:	37.8	37.8	37.8	22.3	22.3	22.3	15.6	15.6	15.6	6.0	6.0	6.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	37.8	37.8	37.8	22.3	22.3	22.3	15.6	15.6	15.6	6.0	6.0	6.0
HCM2kAvg:	11	11	11	7	7	7	16	16	16	4	4	4

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #209 Graham/Lincoln

Cycle (sec): 60 Critical Vol./Cap. (X): 0.444
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 7.7
Optimal Cycle: 24 Level Of Service: A

Street Name:	Graham St.									Lincoln Blvd.		
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	0 1	0 0	0	1 0	0 1	0
Volume Module:												
Base Vol:	2	0	150	7	0	15	7	427	0	134	374	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	2	0	150	7	0	15	7	427	0	134	374	0
Added Vol:	0	0	42	1	0	0	0	81	0	42	161	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	2	0	192	8	0	15	7	508	0	176	535	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	2	0	192	8	0	15	7	508	0	176	535	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	2	0	192	8	0	15	7	508	0	176	535	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	2	0	192	8	0	15	7	508	0	176	535	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.87	1.00	0.87	0.83	1.00	0.83	1.00	1.00	1.00	0.55	1.00	1.00
Lanes:	0.01	0.00	0.99	0.35	0.00	0.65	0.01	0.99	0.00	1.00	1.00	0.00
Final Sat.:	17	0	1627	550	0	1031	26	1867	0	1045	1900	0
Capacity Analysis Module:												
Vol/Sat:	0.12	0.00	0.12	0.01	0.00	0.01	0.27	0.27	0.00	0.17	0.28	0.00
Crit Moves:	****										****	
Green/Cycle:	0.27	0.00	0.27	0.27	0.00	0.27	0.63	0.63	0.00	0.63	0.63	0.00
Volume/Cap:	0.44	0.00	0.44	0.05	0.00	0.05	0.43	0.43	0.00	0.27	0.44	0.00
Uniform Del:	18.3	0.0	18.3	16.4	0.0	16.4	5.5	5.5	0.0	4.8	5.6	0.0
IncremntDel:	0.7	0.0	0.7	0.1	0.0	0.1	0.2	0.2	0.0	0.2	0.3	0.0
Delay Adj:	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
Delay/Veh:	19.1	0.0	19.1	16.5	0.0	16.5	5.8	5.8	0.0	5.0	5.9	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	19.1	0.0	19.1	16.5	0.0	16.5	5.8	5.8	0.0	5.0	5.9	0.0
HCM2kAvg:	3	0	3	0	0	0	5	5	0	3	5	0

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #210 Lincoln/Halleck

Cycle (sec): 60 Critical Vol./Cap. (X): 0.852
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 17.2
Optimal Cycle: 62 Level Of Service: B

Street Name:	Halleck St.						Lincoln Blvd.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Ovl			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0 0 0 0			0 0 1! 0 0			1 0 0 1 0			0 0 0 1 0		
Volume Module:												
Base Vol:	0	0	0	153	0	161	138	401	3	0	382	202
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	153	0	161	138	401	3	0	382	202
Added Vol:	0	0	0	63	0	30	30	110	0	0	176	124
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	216	0	191	168	511	3	0	558	326
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	216	0	191	168	511	3	0	558	326
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	216	0	191	168	511	3	0	558	326
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	0	0	216	0	191	168	511	3	0	558	326
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	0.77	1.00	0.77	0.57	1.00	1.00	1.00	0.95	0.95
Lanes:	0.00	0.00	0.00	0.53	0.00	0.47	1.00	0.99	0.01	0.00	0.63	0.37
Final Sat.:	0	0	0	779	0	689	1091	1887	11	0	1139	666
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.28	0.00	0.28	0.15	0.27	0.27	0.00	0.49	0.49
Crit Moves:				****							****	
Green/Cycle:	0.00	0.00	0.00	0.33	0.00	0.33	0.57	0.57	0.57	0.00	0.57	0.57
Volume/Cap:	0.00	0.00	0.00	0.85	0.00	0.85	0.27	0.47	0.47	0.00	0.85	0.85
Uniform Del:	0.0	0.0	0.0	18.9	0.0	18.9	6.4	7.4	7.4	0.0	10.6	10.6
IncremntDel:	0.0	0.0	0.0	13.7	0.0	13.7	0.2	0.3	0.3	0.0	6.9	6.9
Delay Adj:	0.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00
Delay/Veh:	0.0	0.0	0.0	32.6	0.0	32.6	6.6	7.8	7.8	0.0	17.5	17.5
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	32.6	0.0	32.6	6.6	7.8	7.8	0.0	17.5	17.5
HCM2kAvg:	0	0	0	12	0	12	3	6	6	0	17	17

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #211 Lincoln/Girard

Cycle (sec): 60 Critical Vol./Cap. (X): 0.812
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 19.0
Optimal Cycle: 54 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Ovl			Include			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0 0 0 0			1 0 0 0 1			1 0 1 0 0			0 0 0 1 0		
Volume Module:												
Base Vol:	0	0	0	187	0	149	333	256	0	0	436	164
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	187	0	149	333	256	0	0	436	164
Added Vol:	0	0	0	0	0	219	90	75	0	0	124	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	187	0	368	423	331	0	0	560	164
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	187	0	368	423	331	0	0	560	164
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	187	0	368	423	331	0	0	560	164
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	0	0	187	0	368	423	331	0	0	560	164
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	0.95	1.00	0.85	0.95	1.00	1.00	1.00	0.97	0.97
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	0.00	0.00	0.77	0.23
Final Sat.:	0	0	0	1805	0	1615	1805	1900	0	0	1424	417
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.10	0.00	0.23	0.23	0.17	0.00	0.00	0.39	0.39
Crit Moves:				****			****				****	
Green/Cycle:	0.00	0.00	0.00	0.13	0.00	0.42	0.29	0.77	0.00	0.00	0.48	0.61
Volume/Cap:	0.00	0.00	0.00	0.81	0.00	0.55	0.81	0.23	0.00	0.00	0.81	0.64
Uniform Del:	0.0	0.0	0.0	25.5	0.0	13.3	19.8	1.9	0.0	0.0	13.2	7.5
IncremntDel:	0.0	0.0	0.0	19.3	0.0	1.0	9.4	0.1	0.0	0.0	5.7	1.3
Delay Adj:	0.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00
Delay/Veh:	0.0	0.0	0.0	44.8	0.0	14.2	29.3	2.0	0.0	0.0	18.9	8.7
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	44.8	0.0	14.2	29.3	2.0	0.0	0.0	18.9	8.7
HCM2kAvg:	0	0	0	6	0	6	10	2	0	0	14	9

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #212 Presidio/Letterman/Lincoln

Cycle (sec): 60 Critical Vol./Cap. (X): 0.510
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 9.6
Optimal Cycle: 27 Level Of Service: A

Street Name:	Lincoln/Presidio						Presidio/Letterman					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0 0	1 0		0 1 0	1 0		0 0	1! 0 0		0 0	1! 0 0	
Volume Module:												
Base Vol:	106	425	8	28	393	42	74	16	147	6	40	102
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	106	425	8	28	393	42	74	16	147	6	40	102
Added Vol:	25	115	13	6	68	0	0	0	8	19	0	9
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	131	540	21	34	461	42	74	16	155	25	40	111
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	131	540	21	34	461	42	74	16	155	25	40	111
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	131	540	21	34	461	42	74	16	155	25	40	111
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	131	540	21	34	461	42	74	16	155	25	40	111
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.44	0.99	0.99	0.85	0.85	0.85	0.80	0.80	0.80	0.86	0.86	0.86
Lanes:	1.00	0.96	0.04	0.13	1.72	0.15	0.30	0.07	0.63	0.14	0.23	0.63
Final Sat.:	840	1818	71	205	2780	253	458	99	959	232	372	1032
Capacity Analysis Module:												
Vol/Sat:	0.16	0.30	0.30	0.17	0.17	0.17	0.16	0.16	0.16	0.11	0.11	0.11
Crit Moves:		****						****				
Green/Cycle:	0.58	0.58	0.58	0.58	0.58	0.58	0.32	0.32	0.32	0.32	0.32	0.32
Volume/Cap:	0.27	0.51	0.51	0.28	0.28	0.28	0.51	0.51	0.51	0.34	0.34	0.34
Uniform Del:	6.2	7.4	7.4	6.3	6.3	6.3	16.7	16.7	16.7	15.7	15.7	15.7
IncremntDel:	0.3	0.4	0.4	0.1	0.1	0.1	0.9	0.9	0.9	0.4	0.4	0.4
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Delay/Veh:	6.5	7.8	7.8	6.3	6.3	6.3	17.6	17.6	17.6	16.1	16.1	16.1
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	6.5	7.8	7.8	6.3	6.3	6.3	17.6	17.6	17.6	16.1	16.1	16.1
HCM2kAvg:	3	7	7	3	3	3	5	5	5	3	3	3

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Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #213 Lombard/Presidio

Cycle (sec): 60 Critical Vol./Cap. (X): 0.904
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 29.3
Optimal Cycle: 77 Level Of Service: C

Street Name:	Presidio Blvd.						Lombard St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0 0	1 0		1 0 1	0 0		0 0 0	0 0		1 0 0	1 0	
Volume Module:												
Base Vol:	0	409	324	214	335	0	0	0	0	341	0	188
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	409	324	214	335	0	0	0	0	341	0	188
Added Vol:	0	61	31	49	47	0	0	0	0	32	0	91
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	470	355	263	382	0	0	0	0	373	0	279
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	470	355	263	382	0	0	0	0	373	0	279
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	470	355	263	382	0	0	0	0	373	0	279
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	470	355	263	382	0	0	0	0	373	0	279
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	0.94	0.94	0.95	1.00	1.00	1.00	1.00	1.00	0.95	1.00	0.85
Lanes:	0.00	0.57	0.43	1.00	1.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Final Sat.:	0	1020	770	1805	1900	0	0	0	0	1805	0	1615
Capacity Analysis Module:												
Vol/Sat:	0.00	0.46	0.46	0.15	0.20	0.00	0.00	0.00	0.00	0.21	0.00	0.17
Crit Moves:		****		****						****		
Green/Cycle:	0.00	0.51	0.51	0.16	0.67	0.00	0.00	0.00	0.00	0.23	0.00	0.23
Volume/Cap:	0.00	0.90	0.90	0.90	0.30	0.00	0.00	0.00	0.00	0.90	0.00	0.76
Uniform Del:	0.0	13.4	13.4	24.7	4.1	0.0	0.0	0.0	0.0	22.5	0.0	21.6
IncremntDel:	0.0	12.2	12.2	29.3	0.1	0.0	0.0	0.0	0.0	22.7	0.0	8.6
Delay Adj:	0.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Delay/Veh:	0.0	25.6	25.6	54.0	4.2	0.0	0.0	0.0	0.0	45.2	0.0	30.2
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	25.6	25.6	54.0	4.2	0.0	0.0	0.0	0.0	45.2	0.0	30.2
HCM2kAvg:	0	19	19	9	3	0	0	0	0	11	0	7

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Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #214 Presidio/Pacific

Cycle (sec): 60 Critical Vol./Cap. (X): 0.537
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 4.1
Optimal Cycle: 28 Level Of Service: A

Street Name:	Presidio Blvd.						Pacific Ave.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	9	703	19	56	606	24	3	6	5	19	33	37
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	9	703	19	56	606	24	3	6	5	19	33	37
Added Vol:	0	72	0	0	57	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	9	775	19	56	663	24	3	6	5	19	33	37
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	9	775	19	56	663	24	3	6	5	19	33	37
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	9	775	19	56	663	24	3	6	5	19	33	37
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	9	775	19	56	663	24	3	6	5	19	33	37
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.99	0.99	0.99	0.91	0.91	0.91	0.90	0.90	0.90	0.87	0.87	0.87
Lanes:	0.01	0.97	0.02	0.08	0.89	0.03	0.21	0.43	0.36	0.21	0.37	0.42
Final Sat.:	21	1817	45	130	1543	56	367	735	612	353	613	687
Capacity Analysis Module:												
Vol/Sat:	0.43	0.43	0.43	0.43	0.43	0.43	0.01	0.01	0.01	0.05	0.05	0.05
Crit Moves:					****						****	
Green/Cycle:	0.80	0.80	0.80	0.80	0.80	0.80	0.10	0.10	0.10	0.10	0.10	0.10
Volume/Cap:	0.53	0.53	0.53	0.54	0.54	0.54	0.08	0.08	0.08	0.54	0.54	0.54
Uniform Del:	2.1	2.1	2.1	2.1	2.1	2.1	24.5	24.5	24.5	25.7	25.7	25.7
IncremntDel:	0.4	0.4	0.4	0.4	0.4	0.4	0.2	0.2	0.2	3.5	3.5	3.5
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Delay/Veh:	2.5	2.5	2.5	2.5	2.5	2.5	24.7	24.7	24.7	29.1	29.1	29.1
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	2.5	2.5	2.5	2.5	2.5	2.5	24.7	24.7	24.7	29.1	29.1	29.1
HCM2kAvg:	6	6	6	6	6	6	0	0	0	3	3	3

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #215 Presidio/Jackson

Cycle (sec): 60 Critical Vol./Cap. (X): 0.626
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 10.2
Optimal Cycle: 33 Level Of Service: B

Street Name:	Presidio Blvd.						Jackson St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	8	575	54	54	579	28	55	101	4	71	132	47
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	8	575	54	54	579	28	55	101	4	71	132	47
Added Vol:	0	72	0	0	57	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	8	647	54	54	636	28	55	101	4	71	132	47
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	8	647	54	54	636	28	55	101	4	71	132	47
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	8	647	54	54	636	28	55	101	4	71	132	47
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	8	647	54	54	636	28	55	101	4	71	132	47
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.98	0.98	0.98	0.92	0.92	0.92	0.82	0.82	0.82	0.86	0.86	0.86
Lanes:	0.01	0.91	0.08	0.07	0.89	0.04	0.34	0.63	0.03	0.28	0.53	0.19
Final Sat.:	21	1706	142	131	1546	68	533	978	39	467	868	309
Capacity Analysis Module:												
Vol/Sat:	0.38	0.38	0.38	0.41	0.41	0.41	0.10	0.10	0.10	0.15	0.15	0.15
Crit Moves:					****						****	
Green/Cycle:	0.66	0.66	0.66	0.66	0.66	0.66	0.24	0.24	0.24	0.24	0.24	0.24
Volume/Cap:	0.58	0.58	0.58	0.63	0.63	0.63	0.43	0.43	0.43	0.63	0.63	0.63
Uniform Del:	5.7	5.7	5.7	6.0	6.0	6.0	19.2	19.2	19.2	20.3	20.3	20.3
IncremntDel:	0.7	0.7	0.7	1.1	1.1	1.1	0.8	0.8	0.8	3.1	3.1	3.1
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Delay/Veh:	6.4	6.4	6.4	7.1	7.1	7.1	19.9	19.9	19.9	23.4	23.4	23.4
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	6.4	6.4	6.4	7.1	7.1	7.1	19.9	19.9	19.9	23.4	23.4	23.4
HCM2kAvg:	8	8	8	9	9	9	3	3	3	6	6	6

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #216 Presidio/Washington

Cycle (sec): 60 Critical Vol./Cap. (X): 0.588
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 8.6
Optimal Cycle: 31 Level Of Service: A

Street Name:	Presidio Blvd.						Washington St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	20	609	35	44	566	48	68	125	13	20	62	28
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	20	609	35	44	566	48	68	125	13	20	62	28
Added Vol:	0	72	0	0	57	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	20	681	35	44	623	48	68	125	13	20	62	28
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	20	681	35	44	623	48	68	125	13	20	62	28
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	20	681	35	44	623	48	68	125	13	20	62	28
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	20	681	35	44	623	48	68	125	13	20	62	28
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.97	0.97	0.97	0.93	0.93	0.93	0.87	0.87	0.87	0.91	0.91	0.91
Lanes:	0.03	0.92	0.05	0.06	0.87	0.07	0.33	0.61	0.06	0.18	0.57	0.25
Final Sat.:	50	1711	88	109	1537	118	548	1007	105	315	977	441
Capacity Analysis Module:												
Vol/Sat:	0.40	0.40	0.40	0.41	0.41	0.41	0.12	0.12	0.12	0.06	0.06	0.06
Crit Moves:					****			****				
Green/Cycle:	0.69	0.69	0.69	0.69	0.69	0.69	0.21	0.21	0.21	0.21	0.21	0.21
Volume/Cap:	0.58	0.58	0.58	0.59	0.59	0.59	0.59	0.59	0.59	0.30	0.30	0.30
Uniform Del:	4.8	4.8	4.8	4.9	4.9	4.9	21.3	21.3	21.3	19.9	19.9	19.9
IncremntDel:	0.7	0.7	0.7	0.8	0.8	0.8	2.6	2.6	2.6	0.5	0.5	0.5
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Delay/Veh:	5.5	5.5	5.5	5.6	5.6	5.6	23.9	23.9	23.9	20.4	20.4	20.4
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	5.5	5.5	5.5	5.6	5.6	5.6	23.9	23.9	23.9	20.4	20.4	20.4
HCM2kAvg:	8	8	8	8	8	8	5	5	5	2	2	2

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #218 Arguello/Washington St

Cycle (sec): 100 Critical Vol./Cap. (X): 0.907
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 30.8
Optimal Cycle: 0 Level Of Service: D

Street Name:	Arguello Blvd.						Washington St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 1	0 0	1	0 0	1! 0	0	0 0	0 1	0	0 0	1! 0	0
Volume Module:												
Base Vol:	20	465	57	20	551	11	0	8	24	82	5	20
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	20	465	57	20	551	11	0	8	24	82	5	20
Added Vol:	0	59	0	0	41	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	20	524	57	20	592	11	0	8	24	82	5	20
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	20	524	57	20	592	11	0	8	24	82	5	20
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	20	524	57	20	592	11	0	8	24	82	5	20
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	20	524	57	20	592	11	0	8	24	82	5	20
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.04	0.96	1.00	0.03	0.95	0.02	0.00	0.25	0.75	0.76	0.05	0.19
Final Sat.:	24	618	736	22	653	12	0	128	384	391	24	95
Capacity Analysis Module:												
Vol/Sat:	0.85	0.85	0.08	0.91	0.91	0.91	xxxx	0.06	0.06	0.21	0.21	0.21
Crit Moves:		****		****				****		****		
Delay/Veh:	30.9	30.9	8.0	37.3	37.3	37.3	0.0	9.9	9.9	11.4	11.4	11.4
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	30.9	30.9	8.0	37.3	37.3	37.3	0.0	9.9	9.9	11.4	11.4	11.4
LOS by Move:	D	D	A	E	E	E	*	A	A	B	B	B
ApproachDel:	28.7			37.3			9.9			11.4		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	28.7			37.3			9.9			11.4		
LOS by Appr:	D			E			A			B		

Alternative 3, Migitated – AM Peak Hour

Scenario Report

Scenario:	AM History Mitigated
Command:	AM History MIT
Volume:	AM 2030 - History
Geometry:	AM 2030 Mitigated
Impact Fee:	Default Impact Fee
Trip Generation:	AM 2030-Limited
Trip Distribution:	Main Post SEIS
Paths:	History
Routes:	Default Routes
Configuration:	Default Configuration

Trip Generation Report

Forecast for AM 2030-Limited

Zone #	Subzone	Amount	Units	Rate In	Rate Out	Trips In	Trips Out	Total Trips	% Of Total
14	West Crissy	1.00	mixed use	14.00	36.00	14	36	50	13.3
	Zone 14 Subtotal					14	36	50	13.3
15	Ruger & Simo	1.00	mixed use	16.00	21.00	16	21	37	9.8
	Zone 15 Subtotal					16	21	37	9.8
32	S. Main Post	1.00	mixed use	1.00	0.00	1	0	1	0.3
	Zone 32 Subtotal					1	0	1	0.3
33	W. Main Post	1.00	Mixed Use	-25.00	-9.00	-25	-9	-34	-9.0
	Zone 33 Subtotal					-25	-9	-34	-9.0
34	E. Main Post	1.00	mixed use	-37.00	2.00	-37	2	-35	-9.3
	Zone 34 Subtotal					-37	2	-35	-9.3
35	N. Main Post	1.00	mixed use	-10.00	-18.00	-10	-18	-28	-7.4
	Zone 35 Subtotal					-10	-18	-28	-7.4
36	West Letterm	1.00	mixed use	12.00	-35.00	12	-35	-23	-6.1
	Zone 36 Subtotal					12	-35	-23	-6.1
753	LDA	1.00	mixed use	106.00	53.00	106	53	159	42.2
	Zone 753 Subtotal					106	53	159	42.2
767	Commissary/P	1.00	mixed use	90.00	160.00	90	160	250	66.3
	Zone 767 Subtotal					90	160	250	66.3
TOTAL						167	210	377	100.0

Trip Distribution Report

Percent Of Trips M POST SEIS

Zone	To Gates 5	14	16	17	22	28	36
14	0.0	25.0	0.0	10.0	15.0	50.0	0.0
15	0.0	0.0	25.0	0.0	67.5	0.0	7.5
32	0.0	5.0	10.0	10.0	68.0	5.0	2.0
33	0.0	5.0	10.0	10.0	68.0	5.0	2.0
34	0.0	5.0	10.0	10.0	68.0	5.0	2.0
35	0.0	5.0	10.0	10.0	68.0	5.0	2.0
36	0.0	10.0	20.0	15.0	40.0	15.0	0.0
753	20.0	5.0	10.0	5.0	55.0	0.0	5.0
767	14.0	0.0	10.0	10.0	14.0	50.0	2.0

Volume Type	NB Link In	Out	Total	SB Link In	Out	Total	EB Link In	Out	Total	WB Link In	Out	Total	Total Volume
#201 Lombard/Divisadero													
Base	353	390	743	266	195	461	3488	2383	5871	2225	3364	5589	12664
Added	0	0	0	0	0	0	54	40	94	40	54	94	188
Total	353	390	743	266	195	461	3542	2423	5965	2265	3418	5683	12852
#202 Lombard/Richardson													
Base	2387	3417	5804	3196	2233	5429	226	159	385	0	0	0	11618
Added	40	53	93	0	-13	-13	53	53	106	0	0	0	186
Total	2427	3470	5897	3196	2220	5416	279	212	491	0	0	0	11804
#203 Lyon/Lombard													
Base	159	253	412	291	195	486	480	303	783	95	274	369	2050
Added	7	7	14	0	0	0	60	60	120	53	53	106	240
Total	166	260	426	291	195	486	540	363	903	148	327	475	2290
#204 Greenwich/Divisadero													
Base	335	361	696	396	358	754	186	125	311	142	215	357	2118
Added	0	0	0	0	0	0	7	7	14	7	7	14	28
Total	335	361	696	396	358	754	193	132	325	149	222	371	2146
#205 Greenwich/Lyon													
Base	107	164	271	248	173	421	0	0	0	88	106	194	886
Added	0	0	0	7	7	14	0	0	0	7	7	14	28
Total	107	164	271	255	180	435	0	0	0	95	113	208	914
#206 Francisco/Richardson													
Base	2222	3170	5392	3113	2469	5582	227	57	284	198	64	262	11520
Added	-13	0	-13	0	-13	-13	0	0	0	0	0	0	-26
Total	2209	3170	5379	3113	2456	5569	227	57	284	198	64	262	11494
#207 Richardson/Gorgas													
Base	17	37	54	160	16	176	3137	2622	5759	2466	3105	5571	11560
Added	0	0	0	0	0	0	0	-13	-13	-13	0	-13	-26
Total	17	37	54	160	16	176	3137	2609	5746	2453	3105	5558	11534
#208 Doyle/Marina/Lyon													
Base	12	41	53	128	321	449	1349	291	1640	606	1442	2048	4190
Added	0	0	0	97	48	145	-5	2	-3	50	92	142	284
Total	12	41	53	225	369	594	1344	293	1637	656	1534	2190	4474
#209 Graham/Lincoln													
Base	437	374	811	44	92	136	465	421	886	765	824	1589	3422
Added	10	10	20	-1	0	-1	14	-9	5	1	23	24	48
Total	447	384	831	43	92	135	479	412	891	766	847	1613	3470
#210 Lincoln/Halleck													
Base	0	0	0	300	379	679	780	846	1626	882	737	1619	3924
Added	0	0	0	44	25	69	25	-1	24	5	50	55	148
Total	0	0	0	344	404	748	805	845	1650	887	787	1674	4072

Volume Type	NB Link In	NB Link Out	NB Link Total	SB Link In	SB Link Out	SB Link Total	EB Link In	EB Link Out	EB Link Total	WB Link In	WB Link Out	WB Link Total	Total Volume
#211 Lincoln/Girard													
Base	0	0	0	692	453	1145	765	875	1640	475	604	1079	3864
Added	0	0	0	-32	15	-17	54	-16	38	16	39	55	76
Total	0	0	0	660	468	1128	819	859	1678	491	643	1134	3940
#212 Presidio/Letterman/Lincoln													
Base	453	513	966	594	532	1126	130	73	203	66	125	191	2486
Added	16	32	48	31	19	50	1	-11	-10	8	16	24	112
Total	469	545	1014	625	551	1176	131	62	193	74	141	215	2598
#213 Lombard/Presidio													
Base	746	660	1406	560	437	997	0	0	0	337	546	883	3286
Added	31	24	55	33	15	48	0	0	0	12	37	49	152
Total	777	684	1461	593	452	1045	0	0	0	349	583	932	3438
#214 Presidio/Pacific													
Base	698	649	1347	671	716	1387	83	70	153	93	110	203	3090
Added	19	17	36	17	19	36	0	0	0	0	0	0	72
Total	717	666	1383	688	735	1423	83	70	153	93	110	203	3162
#215 Presidio/Jackson													
Base	683	632	1315	654	701	1355	171	171	342	263	267	530	3542
Added	19	17	36	17	19	36	0	0	0	0	0	0	72
Total	702	649	1351	671	720	1391	171	171	342	263	267	530	3614
#216 Presidio/Washington													
Base	654	489	1143	524	694	1218	239	144	383	135	225	360	3104
Added	19	17	36	17	19	36	0	0	0	0	0	0	72
Total	673	506	1179	541	713	1254	239	144	383	135	225	360	3176
#217 Arguello/Jackson													
Base	625	512	1137	464	553	1017	0	0	0	163	187	350	2504
Added	10	15	25	15	10	25	0	0	0	0	0	0	50
Total	635	527	1162	479	563	1042	0	0	0	163	187	350	2554
#218 Arguello/Washington St													
Base	751	561	1312	502	624	1126	37	51	88	102	156	258	2784
Added	10	15	25	15	10	25	0	0	0	0	0	0	50
Total	761	576	1337	517	634	1151	37	51	88	102	156	258	2834
#219 Arguello/Moraga													
Base	485	354	839	374	438	812	119	186	305	0	0	0	1956
Added	11	15	26	12	9	21	4	3	7	0	0	0	54
Total	496	369	865	386	447	833	123	189	312	0	0	0	2010
#220 Montgomery/Sheridan													
Base	44	178	222	67	280	347	661	69	730	32	277	309	1608
Added	-5	-2	-7	4	15	19	20	6	26	0	0	0	38
Total	39	176	215	71	295	366	681	75	756	32	277	309	1646

Impact Analysis Report
Level Of Service

Intersection	Base LOS	Base Del/ Veh	Base V/ C	Future LOS	Future Del/ Veh	Future V/ C	Change in
#201 Lombard/Divisadero	B	13.9	0.914	B	14.6	0.924	+ 0.746 D/V
#202 Lombard/Richardson	A	6.0	0.431	A	6.3	0.428	+ 0.287 D/V
#203 Lyon/Lombard	B	11.8	0.511	B	11.9	0.552	+ 0.139 D/V
#204 Greenwich/Divisadero	B	13.9	0.614	B	14.1	0.622	+ 0.007 V/C
#205 Greenwich/Lyon	A	8.5	0.300	A	8.6	0.310	+ 0.010 V/C
#206 Francisco/Richardson	B	15.0	0.717	B	15.0	0.717	-0.009 D/V
#207 Richardson/Gorgas	A	8.0	0.699	A	8.0	0.699	-0.008 D/V
#208 Doyle/Marina/Lyon	C	34.6	0.450	C	34.0	0.503	-0.568 D/V
#209 Graham/Lincoln	B	14.4	0.778	B	15.5	0.809	+ 1.063 D/V
#210 Lincoln/Halleck	B	11.4	0.753	B	13.3	0.793	+ 1.949 D/V
#211 Lincoln/Girard	C	24.7	0.842	C	24.2	0.838	-0.555 D/V
#212 Presidio/Letterman/Lincoln	C	15.1	0.692	C	16.6	0.745	+ 0.053 V/C
#213 Lombard/Presidio	B	17.7	0.763	B	19.6	0.802	+ 1.962 D/V
#214 Presidio/Pacific	A	5.3	0.487	A	5.3	0.498	-0.033 D/V
#215 Presidio/Jackson	B	10.4	0.597	B	10.4	0.609	+ 0.033 D/V
#216 Presidio/Washington	A	9.5	0.546	A	9.4	0.558	-0.024 D/V
#217 Arguello/Jackson	B	14.1	0.670	B	14.6	0.693	+ 0.023 V/C
#218 Arguello/Washington St	D	28.6	0.934	D	30.8	0.952	+ 0.018 V/C
#219 Arguello/Moraga	B	13.4	0.642	B	13.9	0.661	+ 0.018 V/C
#220 Montgomery/Sheridan	C	17.6	0.773	C	18.9	0.797	+ 0.024 V/C

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #203 Lyon/Lombard

Cycle (sec): 60 Critical Vol./Cap. (X): 0.552
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 11.9
Optimal Cycle: 29 Level Of Service: B

Street Name:	Lyon St.						Lombard St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	114	37	8	21	151	119	138	245	97	5	70	20
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	114	37	8	21	151	119	138	245	97	5	70	20
Added Vol:	7	0	0	0	0	0	0	53	7	0	53	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	121	37	8	21	151	119	138	298	104	5	123	20
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	121	37	8	21	151	119	138	298	104	5	123	20
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	121	37	8	21	151	119	138	298	104	5	123	20
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	121	37	8	21	151	119	138	298	104	5	123	20
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.56	0.56	0.56	0.92	0.92	0.92	0.86	0.86	0.86	0.97	0.97	0.97
Lanes:	0.73	0.22	0.05	0.07	0.52	0.41	0.26	0.55	0.19	0.03	0.83	0.14
Final Sat.:	771	236	51	126	908	716	417	901	314	62	1532	249
Capacity Analysis Module:												
Vol/Sat:	0.16	0.16	0.16	0.17	0.17	0.17	0.33	0.33	0.33	0.08	0.08	0.08
Crit Moves:					****			****				
Green/Cycle:	0.30	0.30	0.30	0.30	0.30	0.30	0.60	0.60	0.60	0.60	0.60	0.60
Volume/Cap:	0.52	0.52	0.52	0.55	0.55	0.55	0.55	0.55	0.55	0.13	0.13	0.13
Uniform Del:	17.4	17.4	17.4	17.6	17.6	17.6	7.2	7.2	7.2	5.2	5.2	5.2
IncremntDel:	1.6	1.6	1.6	1.3	1.3	1.3	0.7	0.7	0.7	0.1	0.1	0.1
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Delay/Veh:	18.9	18.9	18.9	18.9	18.9	18.9	7.9	7.9	7.9	5.3	5.3	5.3
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	18.9	18.9	18.9	18.9	18.9	18.9	7.9	7.9	7.9	5.3	5.3	5.3
HCM2kAvg:	5	5	5	5	5	5	7	7	7	1	1	1

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #209 Graham/Lincoln

Cycle (sec): 60 Critical Vol./Cap. (X): 0.809
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 15.5
Optimal Cycle: 53 Level Of Service: B

Street Name:	Graham St.						Lincoln Blvd.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	1 0	0 1	0	1 0	0 1	0
Volume Module:												
Base Vol:	27	30	380	18	10	16	20	426	19	345	378	42
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	27	30	380	18	10	16	20	426	19	345	378	42
Added Vol:	0	0	10	-1	0	0	0	14	0	10	-9	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	27	30	390	17	10	16	20	440	19	355	369	42
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	27	30	390	17	10	16	20	440	19	355	369	42
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	27	30	390	17	10	16	20	440	19	355	369	42
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	27	30	390	17	10	16	20	440	19	355	369	42
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.87	0.87	0.87	0.82	0.82	0.82	0.45	0.99	0.99	0.41	0.99	0.99
Lanes:	0.06	0.07	0.87	0.40	0.23	0.37	1.00	0.96	0.04	1.00	0.90	0.10
Final Sat.:	100	111	1439	619	364	583	851	1810	78	777	1680	191
Capacity Analysis Module:												
Vol/Sat:	0.27	0.27	0.27	0.03	0.03	0.03	0.02	0.24	0.24	0.46	0.22	0.22
Crit Moves:		****								****		
Green/Cycle:	0.34	0.34	0.34	0.34	0.34	0.34	0.56	0.56	0.56	0.56	0.56	0.56
Volume/Cap:	0.81	0.81	0.81	0.08	0.08	0.08	0.04	0.43	0.43	0.81	0.39	0.39
Uniform Del:	18.2	18.2	18.2	13.6	13.6	13.6	5.8	7.5	7.5	10.5	7.3	7.3
IncremntDel:	8.7	8.7	8.7	0.1	0.1	0.1	0.0	0.3	0.3	10.7	0.2	0.2
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Delay/Veh:	26.9	26.9	26.9	13.7	13.7	13.7	5.9	7.8	7.8	21.2	7.5	7.5
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	26.9	26.9	26.9	13.7	13.7	13.7	5.9	7.8	7.8	21.2	7.5	7.5
HCM2kAvg:	10	10	10	1	1	1	0	5	5	15	4	4

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #210 Lincoln/Halleck

Cycle (sec): 60 Critical Vol./Cap. (X): 0.793
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 13.3
Optimal Cycle: 50 Level Of Service: B

Street Name:	Halleck St.						Lincoln Blvd.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0 0 0 0			0 0 1! 0 0			1 0 1 0 0			0 0 0 1 0		
Volume Module:												
Base Vol:	0	0	0	123	0	177	166	614	0	0	669	213
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	123	0	177	166	614	0	0	669	213
Added Vol:	0	0	0	33	0	11	8	17	0	0	-12	17
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	156	0	188	174	631	0	0	657	230
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	156	0	188	174	631	0	0	657	230
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	156	0	188	174	631	0	0	657	230
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	0	0	156	0	188	174	631	0	0	657	230
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	0.79	1.00	0.79	0.54	1.00	1.00	1.00	0.97	0.97
Lanes:	0.00	0.00	0.00	0.45	0.00	0.55	1.00	1.00	0.00	0.00	0.74	0.26
Final Sat.:	0	0	0	678	0	817	1016	1900	0	0	1358	475
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.23	0.00	0.23	0.17	0.33	0.00	0.00	0.48	0.48
Crit Moves:				****							****	
Green/Cycle:	0.00	0.00	0.00	0.29	0.00	0.29	0.61	0.61	0.00	0.00	0.61	0.61
Volume/Cap:	0.00	0.00	0.00	0.79	0.00	0.79	0.28	0.54	0.00	0.00	0.79	0.79
Uniform Del:	0.0	0.0	0.0	19.6	0.0	19.6	5.5	6.8	0.0	0.0	8.8	8.8
IncremntDel:	0.0	0.0	0.0	9.7	0.0	9.7	0.2	0.5	0.0	0.0	4.0	4.0
Delay Adj:	0.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00
Delay/Veh:	0.0	0.0	0.0	29.3	0.0	29.3	5.8	7.4	0.0	0.0	12.8	12.8
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	29.3	0.0	29.3	5.8	7.4	0.0	0.0	12.8	12.8
HCM2kAvg:	0	0	0	9	0	9	3	7	0	0	15	15

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #211 Lincoln/Girard

Cycle (sec): 60 Critical Vol./Cap. (X): 0.838
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 24.2
Optimal Cycle: 59 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0 0 0 0			1 0 0 0 1			1 0 1 0 0			0 0 0 1 0		
Volume Module:												
Base Vol:	0	0	0	226	0	466	387	378	0	0	409	66
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	226	0	466	387	378	0	0	409	66
Added Vol:	0	0	0	0	0	-32	15	39	0	0	16	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	226	0	434	402	417	0	0	425	66
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	226	0	434	402	417	0	0	425	66
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	226	0	434	402	417	0	0	425	66
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	0	0	226	0	434	402	417	0	0	425	66
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	0.95	1.00	0.85	0.95	1.00	1.00	1.00	0.98	0.98
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	0.00	0.00	0.87	0.13
Final Sat.:	0	0	0	1805	0	1615	1805	1900	0	0	1615	251
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.13	0.00	0.27	0.22	0.22	0.00	0.00	0.26	0.26
Crit Moves:						****	****				****	
Green/Cycle:	0.00	0.00	0.00	0.32	0.00	0.32	0.27	0.58	0.00	0.00	0.31	0.31
Volume/Cap:	0.00	0.00	0.00	0.39	0.00	0.84	0.84	0.38	0.00	0.00	0.84	0.84
Uniform Del:	0.0	0.0	0.0	15.8	0.0	18.9	20.8	6.8	0.0	0.0	19.2	19.2
IncremntDel:	0.0	0.0	0.0	0.4	0.0	11.5	12.3	0.2	0.0	0.0	10.4	10.4
Delay Adj:	0.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00
Delay/Veh:	0.0	0.0	0.0	16.3	0.0	30.5	33.2	7.0	0.0	0.0	29.5	29.5
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	16.3	0.0	30.5	33.2	7.0	0.0	0.0	29.5	29.5
HCM2kAvg:	0	0	0	4	0	11	10	4	0	0	12	12

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #212 Presidio/Letterman/Lincoln

Cycle (sec): 100 Critical Vol./Cap. (X): 0.745
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 16.6
Optimal Cycle: 0 Level Of Service: C

Street Name:	Lincoln/Presidio						Presidio/Letterman					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0 0	1 0		0 1 0	1 0		0 0	1! 0 0		0 0	1! 0 0	
Volume Module:												
Base Vol:	29	415	9	101	464	29	74	15	41	8	15	43
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	29	415	9	101	464	29	74	15	41	8	15	43
Added Vol:	-11	16	11	5	26	0	0	0	1	5	0	3
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	18	431	20	106	490	29	74	15	42	13	15	46
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	18	431	20	106	490	29	74	15	42	13	15	46
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	18	431	20	106	490	29	74	15	42	13	15	46
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	18	431	20	106	490	29	74	15	42	13	15	46
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.96	0.04	0.34	1.57	0.09	0.57	0.11	0.32	0.18	0.20	0.62
Final Sat.:	548	579	27	205	968	58	292	59	166	89	103	315
Capacity Analysis Module:												
Vol/Sat:	0.03	0.74	0.74	0.52	0.51	0.50	0.25	0.25	0.25	0.15	0.15	0.15
Crit Moves:		****		****				****		****		
Delay/Veh:	9.3	23.1	23.1	14.5	14.0	13.6	11.3	11.3	11.3	10.2	10.2	10.2
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	9.3	23.1	23.1	14.5	14.0	13.6	11.3	11.3	11.3	10.2	10.2	10.2
LOS by Move:	A	C	C	B	B	B	B	B	B	B	B	B
ApproachDel:		22.5			14.1			11.3			10.2	
Delay Adj:		1.00			1.00			1.00			1.00	
ApprAdjDel:		22.5			14.1			11.3			10.2	
LOS by Appr:		C			B			B			B	

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #213 Lombard/Presidio

Cycle (sec): 60 Critical Vol./Cap. (X): 0.802
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 19.6
Optimal Cycle: 52 Level Of Service: B

Street Name:	Presidio Blvd.						Lombard St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0 0	1 0		1 0 1	0 0		0 0 0	0 0		1 0 0	0 1	
Volume Module:												
Base Vol:	0	391	355	191	369	0	0	0	0	291	0	46
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	391	355	191	369	0	0	0	0	291	0	46
Added Vol:	0	15	16	21	12	0	0	0	0	12	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	406	371	212	381	0	0	0	0	303	0	46
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	406	371	212	381	0	0	0	0	303	0	46
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	406	371	212	381	0	0	0	0	303	0	46
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	406	371	212	381	0	0	0	0	303	0	46
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	0.94	0.94	0.95	1.00	1.00	1.00	1.00	1.00	0.95	1.00	0.85
Lanes:	0.00	0.52	0.48	1.00	1.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Final Sat.:	0	929	849	1805	1900	0	0	0	0	1805	0	1615
Capacity Analysis Module:												
Vol/Sat:	0.00	0.44	0.44	0.12	0.20	0.00	0.00	0.00	0.00	0.17	0.00	0.03
Crit Moves:		****		****						****		
Green/Cycle:	0.00	0.54	0.54	0.15	0.69	0.00	0.00	0.00	0.00	0.21	0.00	0.21
Volume/Cap:	0.00	0.80	0.80	0.80	0.29	0.00	0.00	0.00	0.00	0.80	0.00	0.14
Uniform Del:	0.0	11.1	11.1	24.8	3.6	0.0	0.0	0.0	0.0	22.5	0.0	19.3
IncremntDel:	0.0	4.9	4.9	16.0	0.1	0.0	0.0	0.0	0.0	11.7	0.0	0.2
Delay Adj:	0.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Delay/Veh:	0.0	16.0	16.0	40.8	3.7	0.0	0.0	0.0	0.0	34.3	0.0	19.5
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	16.0	16.0	40.8	3.7	0.0	0.0	0.0	0.0	34.3	0.0	19.5
HCM2kAvg:	0	14	14	6	3	0	0	0	0	8	0	1

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #214 Presidio/Pacific

Cycle (sec): 60 Critical Vol./Cap. (X): 0.498
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 5.3
Optimal Cycle: 26 Level Of Service: A

Street Name:	Presidio Blvd.						Pacific Ave.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	12	655	31	46	593	32	32	33	18	38	26	29
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	12	655	31	46	593	32	32	33	18	38	26	29
Added Vol:	0	19	0	0	17	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	12	674	31	46	610	32	32	33	18	38	26	29
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	12	674	31	46	610	32	32	33	18	38	26	29
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	12	674	31	46	610	32	32	33	18	38	26	29
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	12	674	31	46	610	32	32	33	18	38	26	29
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.98	0.98	0.98	0.93	0.93	0.93	0.85	0.85	0.85	0.83	0.83	0.83
Lanes:	0.02	0.94	0.04	0.07	0.89	0.04	0.38	0.40	0.22	0.41	0.28	0.31
Final Sat.:	31	1757	81	118	1565	82	620	640	349	647	443	494
Capacity Analysis Module:												
Vol/Sat:	0.38	0.38	0.38	0.39	0.39	0.39	0.05	0.05	0.05	0.06	0.06	0.06
Crit Moves:					****						****	
Green/Cycle:	0.78	0.78	0.78	0.78	0.78	0.78	0.12	0.12	0.12	0.12	0.12	0.12
Volume/Cap:	0.49	0.49	0.49	0.50	0.50	0.50	0.44	0.44	0.44	0.50	0.50	0.50
Uniform Del:	2.3	2.3	2.3	2.3	2.3	2.3	24.6	24.6	24.6	24.8	24.8	24.8
IncremntDel:	0.3	0.3	0.3	0.3	0.3	0.3	1.6	1.6	1.6	2.1	2.1	2.1
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Delay/Veh:	2.6	2.6	2.6	2.6	2.6	2.6	26.2	26.2	26.2	26.9	26.9	26.9
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	2.6	2.6	2.6	2.6	2.6	2.6	26.2	26.2	26.2	26.9	26.9	26.9
HCM2kAvg:	5	5	5	5	5	5	2	2	2	3	3	3

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #215 Presidio/Jackson

Cycle (sec): 60 Critical Vol./Cap. (X): 0.609
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 10.4
Optimal Cycle: 32 Level Of Service: B

Street Name:	Presidio Blvd.						Jackson St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	9	615	59	59	565	30	11	149	11	56	132	75
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	9	615	59	59	565	30	11	149	11	56	132	75
Added Vol:	0	19	0	0	17	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	9	634	59	59	582	30	11	149	11	56	132	75
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	9	634	59	59	582	30	11	149	11	56	132	75
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	9	634	59	59	582	30	11	149	11	56	132	75
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	9	634	59	59	582	30	11	149	11	56	132	75
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.98	0.98	0.98	0.90	0.90	0.90	0.97	0.97	0.97	0.88	0.88	0.88
Lanes:	0.01	0.91	0.08	0.09	0.87	0.04	0.06	0.88	0.06	0.21	0.50	0.29
Final Sat.:	24	1685	157	151	1489	77	118	1601	118	357	841	478
Capacity Analysis Module:												
Vol/Sat:	0.38	0.38	0.38	0.39	0.39	0.39	0.09	0.09	0.09	0.16	0.16	0.16
Crit Moves:					****						****	
Green/Cycle:	0.64	0.64	0.64	0.64	0.64	0.64	0.26	0.26	0.26	0.26	0.26	0.26
Volume/Cap:	0.59	0.59	0.59	0.61	0.61	0.61	0.36	0.36	0.36	0.61	0.61	0.61
Uniform Del:	6.2	6.2	6.2	6.3	6.3	6.3	18.2	18.2	18.2	19.6	19.6	19.6
IncremntDel:	0.8	0.8	0.8	1.0	1.0	1.0	0.5	0.5	0.5	2.5	2.5	2.5
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Delay/Veh:	6.9	6.9	6.9	7.3	7.3	7.3	18.7	18.7	18.7	22.1	22.1	22.1
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	6.9	6.9	6.9	7.3	7.3	7.3	18.7	18.7	18.7	22.1	22.1	22.1
HCM2kAvg:	8	8	8	9	9	9	3	3	3	6	6	6

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #216 Presidio/Washington

Cycle (sec): 60 Critical Vol./Cap. (X): 0.558
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 9.4
Optimal Cycle: 29 Level Of Service: A

Street Name:	Presidio Blvd.						Washington St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	15	610	29	38	440	46	59	158	22	27	83	25
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	15	610	29	38	440	46	59	158	22	27	83	25
Added Vol:	0	19	0	0	17	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	15	629	29	38	457	46	59	158	22	27	83	25
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	15	629	29	38	457	46	59	158	22	27	83	25
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	15	629	29	38	457	46	59	158	22	27	83	25
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	15	629	29	38	457	46	59	158	22	27	83	25
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.98	0.98	0.98	0.93	0.93	0.93	0.89	0.89	0.89	0.91	0.91	0.91
Lanes:	0.02	0.94	0.04	0.07	0.84	0.09	0.25	0.66	0.09	0.20	0.61	0.19
Final Sat.:	42	1744	80	124	1491	150	418	1119	156	345	1060	319
Capacity Analysis Module:												
Vol/Sat:	0.36	0.36	0.36	0.31	0.31	0.31	0.14	0.14	0.14	0.08	0.08	0.08
Crit Moves:		****						****				
Green/Cycle:	0.65	0.65	0.65	0.65	0.65	0.65	0.25	0.25	0.25	0.25	0.25	0.25
Volume/Cap:	0.56	0.56	0.56	0.47	0.47	0.47	0.56	0.56	0.56	0.31	0.31	0.31
Uniform Del:	5.9	5.9	5.9	5.4	5.4	5.4	19.5	19.5	19.5	18.2	18.2	18.2
IncremntDel:	0.6	0.6	0.6	0.3	0.3	0.3	1.6	1.6	1.6	0.4	0.4	0.4
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Delay/Veh:	6.4	6.4	6.4	5.7	5.7	5.7	21.1	21.1	21.1	18.6	18.6	18.6
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	6.4	6.4	6.4	5.7	5.7	5.7	21.1	21.1	21.1	18.6	18.6	18.6
HCM2kAvg:	8	8	8	6	6	6	5	5	5	2	2	2

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #218 Arguello/Washington St

Cycle (sec): 100 Critical Vol./Cap. (X): 0.952
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 30.8
Optimal Cycle: 0 Level Of Service: D

Street Name:	Arguello Blvd.						Washington St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 1	0 0	1	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	23	592	136	9	471	22	4	11	22	68	6	28
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	23	592	136	9	471	22	4	11	22	68	6	28
Added Vol:	0	10	0	0	15	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	23	602	136	9	486	22	4	11	22	68	6	28
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	23	602	136	9	486	22	4	11	22	68	6	28
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	23	602	136	9	486	22	4	11	22	68	6	28
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	23	602	136	9	486	22	4	11	22	68	6	28
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.04	0.96	1.00	0.02	0.94	0.04	0.11	0.30	0.59	0.67	0.06	0.27
Final Sat.:	24	633	756	12	634	29	55	151	302	342	30	141
Capacity Analysis Module:												
Vol/Sat:	0.95	0.95	0.18	0.77	0.77	0.77	0.07	0.07	0.07	0.20	0.20	0.20
Crit Moves:	****			****				****		****		
Delay/Veh:	46.6	46.6	8.5	23.0	23.0	23.0	10.0	10.0	10.0	11.2	11.2	11.2
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	46.6	46.6	8.5	23.0	23.0	23.0	10.0	10.0	10.0	11.2	11.2	11.2
LOS by Move:	E	E	A	C	C	C	B	B	B	B	B	B
ApproachDel:	39.8			23.0			10.0			11.2		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	39.8			23.0			10.0			11.2		
LOS by Appr:	E			C			B			B		

Alternative 3, Mitigated – PM Peak Hour

Scenario Report

Scenario:	PM History Mitigated
Command:	PM History MIT
Volume:	PM 2030 - History
Geometry:	PM 2030 Mitigated
Impact Fee:	Default Impact Fee
Trip Generation:	PM 2030-Limited
Trip Distribution:	Main Post SEIS
Paths:	History
Routes:	Default Routes
Configuration:	Default Configuration

Trip Generation Report

Forecast for PM 2030-Limited

Zone #	Subzone	Amount	Units	Rate In	Rate Out	Trips In	Trips Out	Total Trips	% Of Total
14	West Crissy	1.00	mixed use	43.00	35.00	43	35	78	9.6
	Zone 14 Subtotal					43	35	78	9.6
15	Ruger & Simo	1.00	mixed use	43.00	41.00	43	41	84	10.4
	Zone 15 Subtotal					43	41	84	10.4
32	S. Main Post	1.00	mixed use	1.00	1.00	1	1	2	0.2
	Zone 32 Subtotal					1	1	2	0.2
33	W. Main Post	1.00	Mixed Use	-19.00	54.00	-19	54	35	4.3
	Zone 33 Subtotal					-19	54	35	4.3
34	E. Main Post	1.00	mixed use	72.00	13.00	72	13	85	10.5
	Zone 34 Subtotal					72	13	85	10.5
35	N. Main Post	1.00	mixed use	-24.00	-29.00	-24	-29	-53	-6.6
	Zone 35 Subtotal					-24	-29	-53	-6.6
36	West Letterm	1.00	mixed use	-59.00	-15.00	-59	-15	-74	-9.1
	Zone 36 Subtotal					-59	-15	-74	-9.1
753	LDA	1.00	mixed use	126.00	188.00	126	188	314	38.8
	Zone 753 Subtotal					126	188	314	38.8
767	Commissary/P	1.00	mixed use	169.00	169.00	169	169	338	41.8
	Zone 767 Subtotal					169	169	338	41.8
TOTAL						352	457	809	100.0

Trip Distribution Report

Percent Of Trips M POST SEIS

Zone	To Gates 5	14	16	17	22	28	36
14	0.0	25.0	0.0	10.0	15.0	50.0	0.0
15	0.0	0.0	25.0	0.0	67.5	0.0	7.5
32	0.0	5.0	10.0	10.0	68.0	5.0	2.0
33	0.0	5.0	10.0	10.0	68.0	5.0	2.0
34	0.0	5.0	10.0	10.0	68.0	5.0	2.0
35	0.0	5.0	10.0	10.0	68.0	5.0	2.0
36	0.0	10.0	20.0	15.0	40.0	15.0	0.0
753	20.0	5.0	10.0	5.0	55.0	0.0	5.0
767	14.0	0.0	10.0	10.0	14.0	50.0	2.0

Volume Type	NB Link In	Out	Total	SB Link In	Out	Total	EB Link In	Out	Total	WB Link In	Out	Total	Total Volume
#201 Lombard/Divisadero													
Base	378	385	763	298	285	583	2398	3242	5640	3117	2279	5396	12382
Added	0	0	0	0	0	0	229	125	354	125	229	354	708
Total	378	385	763	298	285	583	2627	3367	5994	3242	2508	5750	13090
#202 Lombard/Richardson													
Base	3319	2500	5819	2171	3119	5290	329	200	529	0	0	0	11638
Added	125	229	354	95	16	111	134	109	243	0	0	0	708
Total	3444	2729	6173	2266	3135	5401	463	309	772	0	0	0	12346
#203 Lyon/Lombard													
Base	217	183	400	318	228	546	472	517	989	223	302	525	2460
Added	14	17	31	0	0	0	151	123	274	109	134	243	548
Total	231	200	431	318	228	546	623	640	1263	332	436	768	3008
#204 Greenwich/Divisadero													
Base	345	332	677	343	385	728	145	164	309	203	155	358	2072
Added	0	0	0	0	0	0	17	14	31	14	17	31	62
Total	345	332	677	343	385	728	162	178	340	217	172	389	2134
#205 Greenwich/Lyon													
Base	107	120	227	177	214	391	0	0	0	130	80	210	828
Added	0	0	0	17	14	31	0	0	0	14	17	31	62
Total	107	120	227	194	228	422	0	0	0	144	97	241	890
#206 Francisco/Richardson													
Base	3119	2250	5369	2217	3234	5451	154	69	223	145	82	227	11270
Added	16	95	111	95	16	111	0	0	0	0	0	0	222
Total	3135	2345	5480	2312	3250	5562	154	69	223	145	82	227	11492
#207 Richardson/Gorgas													
Base	253	63	316	69	34	103	2150	3343	5493	3202	2234	5436	11348
Added	95	0	95	0	0	0	0	16	16	16	95	111	222
Total	348	63	411	69	34	103	2150	3359	5509	3218	2329	5547	11570
#208 Doyle/Marina/Lyon													
Base	40	25	65	247	491	738	922	1549	2471	2009	1153	3162	6436
Added	0	0	0	104	108	212	-2	-9	-11	99	102	201	402
Total	40	25	65	351	599	950	920	1540	2460	2108	1255	3363	6838
#209 Graham/Lincoln													
Base	352	376	728	22	7	29	434	391	825	750	784	1534	3116
Added	26	21	47	-1	0	-1	67	23	90	44	92	136	272
Total	378	397	775	21	7	28	501	414	915	794	876	1670	3388
#210 Lincoln/Halleck													
Base	0	3	3	314	340	654	742	785	1527	826	754	1580	3764
Added	0	0	0	43	48	91	100	48	148	61	108	169	408
Total	0	3	3	357	388	745	842	833	1675	887	862	1749	4172

Volume Type	NB Link In	NB Link Out	NB Link Total	SB Link In	SB Link Out	SB Link Total	EB Link In	EB Link Out	EB Link Total	WB Link In	WB Link Out	WB Link Total	Total Volume
#211 Lincoln/Girard													
Base	0	0	0	577	653	1230	789	826	1615	556	443	999	3844
Added	0	0	0	58	43	101	101	99	200	41	58	99	400
Total	0	0	0	635	696	1331	890	925	1815	597	501	1098	4244
#212 Presidio/Letterman/Lincoln													
Base	464	449	913	443	557	1000	96	73	169	128	52	180	2262
Added	55	72	127	55	29	84	4	22	26	28	19	47	284
Total	519	521	1040	498	586	1084	100	95	195	156	71	227	2546
#213 Lombard/Presidio													
Base	733	676	1409	453	597	1050	0	0	0	529	442	971	3430
Added	52	69	121	72	54	126	0	0	0	65	66	131	378
Total	785	745	1530	525	651	1176	0	0	0	594	508	1102	3808
#214 Presidio/Pacific													
Base	731	630	1361	686	743	1429	14	66	80	89	81	170	3040
Added	31	47	78	47	31	78	0	0	0	0	0	0	156
Total	762	677	1439	733	774	1507	14	66	80	89	81	170	3196
#215 Presidio/Jackson													
Base	637	654	1291	661	677	1338	160	168	328	250	209	459	3416
Added	31	47	78	47	31	78	0	0	0	0	0	0	156
Total	668	701	1369	708	708	1416	160	168	328	250	209	459	3572
#216 Presidio/Washington													
Base	664	599	1263	658	705	1363	206	130	336	110	204	314	3276
Added	31	47	78	47	31	78	0	0	0	0	0	0	156
Total	695	646	1341	705	736	1441	206	130	336	110	204	314	3432
#217 Arguello/Jackson													
Base	488	603	1091	546	454	1000	0	0	0	123	100	223	2314
Added	22	31	53	31	22	53	0	0	0	0	0	0	106
Total	510	634	1144	577	476	1053	0	0	0	123	100	223	2420
#218 Arguello/Washington St													
Base	542	657	1199	582	485	1067	32	36	68	107	85	192	2526
Added	22	31	53	31	22	53	0	0	0	0	0	0	106
Total	564	688	1252	613	507	1120	32	36	68	107	85	192	2632
#219 Arguello/Moraga													
Base	431	449	880	377	351	728	180	188	368	0	0	0	1976
Added	21	32	53	29	18	47	5	5	10	0	0	0	110
Total	452	481	933	406	369	775	185	193	378	0	0	0	2086
#220 Montgomery/Sheridan													
Base	52	125	177	78	140	218	341	66	407	37	177	214	1016
Added	32	-2	30	32	67	99	35	34	69	0	0	0	198
Total	84	123	207	110	207	317	376	100	476	37	177	214	1214

Impact Analysis Report
Level Of Service

Intersection	Base LOS	Base Del/ Veh	Base V/ C	Future LOS	Future Del/ Veh	Future V/ C	Change in
#201 Lombard/Divisadero	B	13.0	0.849	B	14.1	0.874	+ 1.076 D/V
#202 Lombard/Richardson	A	3.6	0.602	A	7.2	0.750	+ 3.614 D/V
#203 Lyon/Lombard	B	12.0	0.540	B	13.2	0.663	+ 1.209 D/V
#204 Greenwich/Divisadero	B	13.4	0.549	B	13.9	0.564	+ 0.014 V/C
#205 Greenwich/Lyon	A	8.2	0.222	A	8.4	0.246	+ 0.024 V/C
#206 Francisco/Richardson	B	14.9	0.684	B	15.2	0.687	+ 0.300 D/V
#207 Richardson/Gorgas	A	6.9	0.778	B	10.4	0.840	+ 3.451 D/V
#208 Doyle/Marina/Lyon	B	17.7	0.726	C	25.7	0.829	+ 7.924 D/V
#209 Graham/Lincoln	B	11.0	0.598	B	11.6	0.640	+ 0.599 D/V
#210 Lincoln/Halleck	B	11.7	0.734	B	14.1	0.806	+ 2.482 D/V
#211 Lincoln/Girard	B	17.8	0.778	B	19.6	0.828	+ 1.808 D/V
#212 Presidio/Letterman/Lincoln	B	14.2	0.691	C	16.7	0.771	+ 0.080 V/C
#213 Lombard/Presidio	B	16.9	0.739	C	20.3	0.813	+ 3.415 D/V
#214 Presidio/Pacific	A	4.1	0.500	A	4.1	0.529	+ 0.014 D/V
#215 Presidio/Jackson	B	10.0	0.589	B	10.1	0.618	+ 0.075 D/V
#216 Presidio/Washington	A	8.6	0.552	A	8.6	0.580	-0.016 D/V
#217 Arguello/Jackson	C	17.6	0.744	C	19.8	0.792	+ 0.047 V/C
#218 Arguello/Washington St	C	22.9	0.833	D	26.8	0.883	+ 0.051 V/C
#219 Arguello/Moraga	B	13.0	0.598	B	14.0	0.635	+ 0.037 V/C
#220 Montgomery/Sheridan	A	9.3	0.403	A	10.0	0.466	+ 0.063 V/C

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #203 Lyon/Lombard

Cycle (sec): 60 Critical Vol./Cap. (X): 0.663
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 13.2
Optimal Cycle: 36 Level Of Service: B

Street Name:	Lyon St.						Lombard St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	124	68	25	29	65	224	115	248	109	9	169	45
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	124	68	25	29	65	224	115	248	109	9	169	45
Added Vol:	14	0	0	0	0	0	0	134	17	0	109	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	138	68	25	29	65	224	115	382	126	9	278	45
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	138	68	25	29	65	224	115	382	126	9	278	45
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	138	68	25	29	65	224	115	382	126	9	278	45
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	138	68	25	29	65	224	115	382	126	9	278	45
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.57	0.57	0.57	0.87	0.87	0.87	0.85	0.85	0.85	0.97	0.97	0.97
Lanes:	0.60	0.29	0.11	0.09	0.20	0.71	0.18	0.62	0.20	0.03	0.84	0.13
Final Sat.:	650	320	118	151	338	1164	299	993	328	50	1540	249
Capacity Analysis Module:												
Vol/Sat:	0.21	0.21	0.21	0.19	0.19	0.19	0.38	0.38	0.38	0.18	0.18	0.18
Crit Moves:		****						****				
Green/Cycle:	0.32	0.32	0.32	0.32	0.32	0.32	0.58	0.58	0.58	0.58	0.58	0.58
Volume/Cap:	0.66	0.66	0.66	0.60	0.60	0.60	0.66	0.66	0.66	0.31	0.31	0.31
Uniform Del:	17.6	17.6	17.6	17.2	17.2	17.2	8.6	8.6	8.6	6.5	6.5	6.5
IncremntDel:	4.8	4.8	4.8	1.9	1.9	1.9	1.8	1.8	1.8	0.2	0.2	0.2
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Delay/Veh:	22.4	22.4	22.4	19.1	19.1	19.1	10.4	10.4	10.4	6.6	6.6	6.6
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	22.4	22.4	22.4	19.1	19.1	19.1	10.4	10.4	10.4	6.6	6.6	6.6
HCM2kAvg:	8	8	8	6	6	6	10	10	10	3	3	3

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #209 Graham/Lincoln

Cycle (sec): 60 Critical Vol./Cap. (X): 0.640
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 11.6
Optimal Cycle: 34 Level Of Service: B

Street Name:	Graham St.						Lincoln Blvd.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	0 1	0 0	0	1 0	0 1	0
Volume Module:												
Base Vol:	2	0	350	7	0	15	7	427	0	376	374	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	2	0	350	7	0	15	7	427	0	376	374	0
Added Vol:	0	0	26	-1	0	0	0	67	0	21	23	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	2	0	376	6	0	15	7	494	0	397	397	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	2	0	376	6	0	15	7	494	0	397	397	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	2	0	376	6	0	15	7	494	0	397	397	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	2	0	376	6	0	15	7	494	0	397	397	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.87	1.00	0.87	0.83	1.00	0.83	1.00	1.00	1.00	0.60	1.00	1.00
Lanes:	0.01	0.00	0.99	0.29	0.00	0.71	0.01	0.99	0.00	1.00	1.00	0.00
Final Sat.:	9	0	1635	450	0	1124	26	1868	0	1148	1900	0
Capacity Analysis Module:												
Vol/Sat:	0.23	0.00	0.23	0.01	0.00	0.01	0.26	0.26	0.00	0.35	0.21	0.00
Crit Moves:	****									****		
Green/Cycle:	0.36	0.00	0.36	0.36	0.00	0.36	0.54	0.54	0.00	0.54	0.54	0.00
Volume/Cap:	0.64	0.00	0.64	0.04	0.00	0.04	0.49	0.49	0.00	0.64	0.39	0.00
Uniform Del:	16.0	0.0	16.0	12.5	0.0	12.5	8.6	8.6	0.0	9.7	8.0	0.0
IncremntDel:	2.4	0.0	2.4	0.0	0.0	0.0	0.4	0.4	0.0	2.3	0.2	0.0
Delay Adj:	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
Delay/Veh:	18.4	0.0	18.4	12.5	0.0	12.5	9.0	9.0	0.0	11.9	8.2	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	18.4	0.0	18.4	12.5	0.0	12.5	9.0	9.0	0.0	11.9	8.2	0.0
HCM2kAvg:	7	0	7	0	0	0	6	6	0	9	4	0

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #210 Lincoln/Halleck

Cycle (sec): 60 Critical Vol./Cap. (X): 0.806
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 14.1
Optimal Cycle: 52 Level Of Service: B

Street Name:	Halleck St.						Lincoln Blvd.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Ovl			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	0 0	0	0 0	1! 0	0	1 0	0 1	0	0 0	0 1	0
Volume Module:												
Base Vol:	0	0	0	153	0	161	138	601	3	0	624	202
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	153	0	161	138	601	3	0	624	202
Added Vol:	0	0	0	26	0	17	18	82	0	0	31	30
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	179	0	178	156	683	3	0	655	232
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	179	0	178	156	683	3	0	655	232
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	179	0	178	156	683	3	0	655	232
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	0	0	179	0	178	156	683	3	0	655	232
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	0.78	1.00	0.78	0.55	1.00	1.00	1.00	0.97	0.97
Lanes:	0.00	0.00	0.00	0.50	0.00	0.50	1.00	0.99	0.01	0.00	0.74	0.26
Final Sat.:	0	0	0	741	0	737	1037	1890	8	0	1354	480
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.24	0.00	0.24	0.15	0.36	0.36	0.00	0.48	0.48
Crit Moves:				****							****	
Green/Cycle:	0.00	0.00	0.00	0.30	0.00	0.30	0.60	0.60	0.60	0.00	0.60	0.60
Volume/Cap:	0.00	0.00	0.00	0.81	0.00	0.81	0.25	0.60	0.60	0.00	0.81	0.81
Uniform Del:	0.0	0.0	0.0	19.4	0.0	19.4	5.6	7.5	7.5	0.0	9.3	9.3
IncremntDel:	0.0	0.0	0.0	10.4	0.0	10.4	0.2	0.9	0.9	0.0	4.5	4.5
Delay Adj:	0.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00
Delay/Veh:	0.0	0.0	0.0	29.8	0.0	29.8	5.9	8.4	8.4	0.0	13.7	13.7
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	29.8	0.0	29.8	5.9	8.4	8.4	0.0	13.7	13.7
HCM2kAvg:	0	0	0	10	0	10	3	9	9	0	15	15

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #211 Lincoln/Girard

Cycle (sec): 60 Critical Vol./Cap. (X): 0.828
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 19.6
Optimal Cycle: 57 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Ovl			Include			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	0 0	0	1 0	0 0	1	1 0	1 0	0	0 0	0 1	0
Volume Module:												
Base Vol:	0	0	0	187	0	390	533	256	0	0	436	120
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	187	0	390	533	256	0	0	436	120
Added Vol:	0	0	0	0	0	58	43	58	0	0	41	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	187	0	448	576	314	0	0	477	120
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	187	0	448	576	314	0	0	477	120
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	187	0	448	576	314	0	0	477	120
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	0	0	187	0	448	576	314	0	0	477	120
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	0.95	1.00	0.85	0.95	1.00	1.00	1.00	0.97	0.97
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	0.00	0.00	0.80	0.20
Final Sat.:	0	0	0	1805	0	1615	1805	1900	0	0	1477	372
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.10	0.00	0.28	0.32	0.17	0.00	0.00	0.32	0.32
Crit Moves:				****			****				****	
Green/Cycle:	0.00	0.00	0.00	0.13	0.00	0.51	0.39	0.77	0.00	0.00	0.39	0.51
Volume/Cap:	0.00	0.00	0.00	0.83	0.00	0.54	0.83	0.21	0.00	0.00	0.83	0.63
Uniform Del:	0.0	0.0	0.0	25.6	0.0	10.0	16.7	1.8	0.0	0.0	16.5	10.4
IncremntDel:	0.0	0.0	0.0	21.8	0.0	0.8	8.2	0.1	0.0	0.0	7.9	1.3
Delay Adj:	0.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00
Delay/Veh:	0.0	0.0	0.0	47.4	0.0	10.7	24.9	1.9	0.0	0.0	24.4	11.8
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	47.4	0.0	10.7	24.9	1.9	0.0	0.0	24.4	11.8
HCM2kAvg:	0	0	0	6	0	6	13	2	0	0	13	9

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #212 Presidio/Letterman/Lincoln

Cycle (sec): 100 Critical Vol./Cap. (X): 0.771
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 16.7
Optimal Cycle: 0 Level Of Service: C

Street Name:	Lincoln/Presidio						Presidio/Letterman					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0 0	1 0		0 1 0	1 0		0 0	1! 0 0		0 0	1! 0 0	
Volume Module:												
Base Vol:	31	425	8	28	393	22	30	16	50	6	20	102
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	31	425	8	28	393	22	30	16	50	6	20	102
Added Vol:	22	20	13	6	49	0	0	0	4	19	0	9
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	53	445	21	34	442	22	30	16	54	25	20	111
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	53	445	21	34	442	22	30	16	54	25	20	111
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	53	445	21	34	442	22	30	16	54	25	20	111
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	53	445	21	34	442	22	30	16	54	25	20	111
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.95	0.05	0.14	1.77	0.09	0.30	0.16	0.54	0.16	0.13	0.71
Final Sat.:	549	577	27	80	1049	53	152	81	274	86	69	384
Capacity Analysis Module:												
Vol/Sat:	0.10	0.77	0.77	0.43	0.42	0.42	0.20	0.20	0.20	0.29	0.29	0.29
Crit Moves:		****		****				****			****	
Delay/Veh:	9.8	24.8	24.8	12.9	12.7	12.5	10.7	10.7	10.7	11.2	11.2	11.2
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	9.8	24.8	24.8	12.9	12.7	12.5	10.7	10.7	10.7	11.2	11.2	11.2
LOS by Move:	A	C	C	B	B	B	B	B	B	B	B	B
ApproachDel:	23.3			12.7			10.7			11.2		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	23.3			12.7			10.7			11.2		
LOS by Appr:	C			B			B			B		

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #213 Lombard/Presidio

Cycle (sec): 60 Critical Vol./Cap. (X): 0.813
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 20.3
Optimal Cycle: 54 Level Of Service: C

Street Name:	Presidio Blvd.						Lombard St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0 0	1 0		1 0 1	0 0		0 0 0	0 0		1 0 0	1 0	
Volume Module:												
Base Vol:	0	409	324	118	335	0	0	0	0	341	0	188
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	409	324	118	335	0	0	0	0	341	0	188
Added Vol:	0	21	31	35	37	0	0	0	0	32	0	33
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	430	355	153	372	0	0	0	0	373	0	221
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	430	355	153	372	0	0	0	0	373	0	221
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	430	355	153	372	0	0	0	0	373	0	221
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	430	355	153	372	0	0	0	0	373	0	221
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	0.94	0.94	0.95	1.00	1.00	1.00	1.00	1.00	0.95	1.00	0.85
Lanes:	0.00	0.55	0.45	1.00	1.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Final Sat.:	0	977	807	1805	1900	0	0	0	0	1805	0	1615
Capacity Analysis Module:												
Vol/Sat:	0.00	0.44	0.44	0.08	0.20	0.00	0.00	0.00	0.00	0.21	0.00	0.14
Crit Moves:		****		****						****		
Green/Cycle:	0.00	0.54	0.54	0.10	0.65	0.00	0.00	0.00	0.00	0.25	0.00	0.25
Volume/Cap:	0.00	0.81	0.81	0.81	0.30	0.00	0.00	0.00	0.00	0.81	0.00	0.54
Uniform Del:	0.0	11.3	11.3	26.3	4.7	0.0	0.0	0.0	0.0	21.0	0.0	19.3
IncremntDel:	0.0	5.3	5.3	22.9	0.1	0.0	0.0	0.0	0.0	10.6	0.0	1.4
Delay Adj:	0.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Delay/Veh:	0.0	16.6	16.6	49.1	4.8	0.0	0.0	0.0	0.0	31.6	0.0	20.8
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	16.6	16.6	49.1	4.8	0.0	0.0	0.0	0.0	31.6	0.0	20.8
HCM2kAvg:	0	14	14	5	3	0	0	0	0	9	0	4

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #214 Presidio/Pacific

Cycle (sec): 60 Critical Vol./Cap. (X): 0.529
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 4.1
Optimal Cycle: 27 Level Of Service: A

Street Name:	Presidio Blvd.						Pacific Ave.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	9	703	19	56	606	24	3	6	5	19	33	37
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	9	703	19	56	606	24	3	6	5	19	33	37
Added Vol:	0	31	0	0	47	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	9	734	19	56	653	24	3	6	5	19	33	37
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	9	734	19	56	653	24	3	6	5	19	33	37
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	9	734	19	56	653	24	3	6	5	19	33	37
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	9	734	19	56	653	24	3	6	5	19	33	37
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.99	0.99	0.99	0.91	0.91	0.91	0.90	0.90	0.90	0.87	0.87	0.87
Lanes:	0.01	0.97	0.02	0.08	0.89	0.03	0.21	0.43	0.36	0.21	0.37	0.42
Final Sat.:	22	1812	47	133	1546	57	367	734	612	353	614	688
Capacity Analysis Module:												
Vol/Sat:	0.41	0.41	0.41	0.42	0.42	0.42	0.01	0.01	0.01	0.05	0.05	0.05
Crit Moves:					****						****	
Green/Cycle:	0.80	0.80	0.80	0.80	0.80	0.80	0.10	0.10	0.10	0.10	0.10	0.10
Volume/Cap:	0.51	0.51	0.51	0.53	0.53	0.53	0.08	0.08	0.08	0.53	0.53	0.53
Uniform Del:	2.0	2.0	2.0	2.1	2.1	2.1	24.4	24.4	24.4	25.6	25.6	25.6
IncremntDel:	0.3	0.3	0.3	0.4	0.4	0.4	0.2	0.2	0.2	3.2	3.2	3.2
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Delay/Veh:	2.3	2.3	2.3	2.5	2.5	2.5	24.6	24.6	24.6	28.7	28.7	28.7
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	2.3	2.3	2.3	2.5	2.5	2.5	24.6	24.6	24.6	28.7	28.7	28.7
HCM2kAvg:	5	5	5	6	6	6	0	0	0	3	3	3

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #215 Presidio/Jackson

Cycle (sec): 60 Critical Vol./Cap. (X): 0.618
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 10.1
Optimal Cycle: 32 Level Of Service: B

Street Name:	Presidio Blvd.						Jackson St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	8	575	54	54	579	28	55	101	4	71	132	47
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	8	575	54	54	579	28	55	101	4	71	132	47
Added Vol:	0	31	0	0	47	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	8	606	54	54	626	28	55	101	4	71	132	47
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	8	606	54	54	626	28	55	101	4	71	132	47
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	8	606	54	54	626	28	55	101	4	71	132	47
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	8	606	54	54	626	28	55	101	4	71	132	47
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.98	0.98	0.98	0.92	0.92	0.92	0.82	0.82	0.82	0.87	0.87	0.87
Lanes:	0.01	0.91	0.08	0.08	0.88	0.04	0.34	0.63	0.03	0.28	0.53	0.19
Final Sat.:	22	1693	151	134	1550	69	534	981	39	467	869	309
Capacity Analysis Module:												
Vol/Sat:	0.36	0.36	0.36	0.40	0.40	0.40	0.10	0.10	0.10	0.15	0.15	0.15
Crit Moves:					****						****	
Green/Cycle:	0.65	0.65	0.65	0.65	0.65	0.65	0.25	0.25	0.25	0.25	0.25	0.25
Volume/Cap:	0.55	0.55	0.55	0.62	0.62	0.62	0.42	0.42	0.42	0.62	0.62	0.62
Uniform Del:	5.6	5.6	5.6	6.0	6.0	6.0	19.0	19.0	19.0	20.1	20.1	20.1
IncremntDel:	0.5	0.5	0.5	1.0	1.0	1.0	0.7	0.7	0.7	2.9	2.9	2.9
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Delay/Veh:	6.1	6.1	6.1	7.1	7.1	7.1	19.8	19.8	19.8	23.0	23.0	23.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	6.1	6.1	6.1	7.1	7.1	7.1	19.8	19.8	19.8	23.0	23.0	23.0
HCM2kAvg:	7	7	7	9	9	9	3	3	3	6	6	6

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #216 Presidio/Washington

Cycle (sec): 60 Critical Vol./Cap. (X): 0.580
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 8.6
Optimal Cycle: 30 Level Of Service: A

Street Name:	Presidio Blvd.						Washington St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	20	609	35	44	566	48	68	125	13	20	62	28
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	20	609	35	44	566	48	68	125	13	20	62	28
Added Vol:	0	31	0	0	47	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	20	640	35	44	613	48	68	125	13	20	62	28
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	20	640	35	44	613	48	68	125	13	20	62	28
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	20	640	35	44	613	48	68	125	13	20	62	28
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	20	640	35	44	613	48	68	125	13	20	62	28
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.97	0.97	0.97	0.93	0.93	0.93	0.87	0.87	0.87	0.91	0.91	0.91
Lanes:	0.03	0.92	0.05	0.06	0.87	0.07	0.33	0.61	0.06	0.18	0.57	0.25
Final Sat.:	53	1699	93	111	1541	121	547	1005	105	315	978	441
Capacity Analysis Module:												
Vol/Sat:	0.38	0.38	0.38	0.40	0.40	0.40	0.12	0.12	0.12	0.06	0.06	0.06
Crit Moves:					****			****				
Green/Cycle:	0.69	0.69	0.69	0.69	0.69	0.69	0.21	0.21	0.21	0.21	0.21	0.21
Volume/Cap:	0.55	0.55	0.55	0.58	0.58	0.58	0.58	0.58	0.58	0.30	0.30	0.30
Uniform Del:	4.8	4.8	4.8	4.9	4.9	4.9	21.2	21.2	21.2	19.8	19.8	19.8
IncremntDel:	0.5	0.5	0.5	0.7	0.7	0.7	2.4	2.4	2.4	0.4	0.4	0.4
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Delay/Veh:	5.3	5.3	5.3	5.6	5.6	5.6	23.6	23.6	23.6	20.2	20.2	20.2
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	5.3	5.3	5.3	5.6	5.6	5.6	23.6	23.6	23.6	20.2	20.2	20.2
HCM2kAvg:	7	7	7	8	8	8	5	5	5	2	2	2

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #218 Arguello/Washington St

Cycle (sec): 100 Critical Vol./Cap. (X): 0.883
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 26.8
Optimal Cycle: 0 Level Of Service: D

Street Name:	Arguello Blvd.						Washington St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 1	0 0	1	0 0	1! 0	0	0 0	0 1	0	0 0	1! 0	0
Volume Module:												
Base Vol:	20	465	57	20	551	11	0	8	24	82	5	20
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	20	465	57	20	551	11	0	8	24	82	5	20
Added Vol:	0	22	0	0	31	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	20	487	57	20	582	11	0	8	24	82	5	20
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	20	487	57	20	582	11	0	8	24	82	5	20
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	20	487	57	20	582	11	0	8	24	82	5	20
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	20	487	57	20	582	11	0	8	24	82	5	20
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.04	0.96	1.00	0.03	0.95	0.02	0.00	0.25	0.75	0.76	0.05	0.19
Final Sat.:	25	618	737	23	659	12	0	128	384	390	24	95
Capacity Analysis Module:												
Vol/Sat:	0.79	0.79	0.08	0.88	0.88	0.88	xxxx	0.06	0.06	0.21	0.21	0.21
Crit Moves:	****					****		****		****		
Delay/Veh:	25.2	25.2	7.9	33.6	33.6	33.6	0.0	9.8	9.8	11.2	11.2	11.2
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	25.2	25.2	7.9	33.6	33.6	33.6	0.0	9.8	9.8	11.2	11.2	11.2
LOS by Move:	D	D	A	D	D	D	*	A	A	B	B	B
ApproachDel:	23.4			33.6			9.8			11.2		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	23.4			33.6			9.8			11.2		
LOS by Appr:	C			D			A			B		

Alternative 4, Mitigated – AM Peak Hour

Scenario Report

Scenario:	AM Status Quo Mitigated
Command:	AM Status Quo MIT
Volume:	AM 2030
Geometry:	AM 2030 Mitigated
Impact Fee:	Default Impact Fee
Trip Generation:	AM 2030-Status Quo
Trip Distribution:	Main Post SEIS
Paths:	Main Post SEIS
Routes:	Default Routes
Configuration:	Default Configuration

Trip Generation Report

Forecast for AM 2030-Status Quo

Zone #	Subzone	Amount	Units	Rate In	Rate Out	Trips In	Trips Out	Total Trips	% Of Total
14	West Crissy	1.00	mixed use	14.00	36.00	14	36	50	12.4
	Zone 14 Subtotal					14	36	50	12.4
15	Ruger & Simo	1.00	mixed use	16.00	21.00	16	21	37	9.2
	Zone 15 Subtotal					16	21	37	9.2
32	S. Main Post	1.00	mixed use	-1.00	4.00	-1	4	3	0.7
	Zone 32 Subtotal					-1	4	3	0.7
33	W. Main Post	1.00	Mixed Use	-23.00	-15.00	-23	-15	-38	-9.5
	Zone 33 Subtotal					-23	-15	-38	-9.5
34	E. Main Post	1.00	mixed use	-17.00	9.00	-17	9	-8	-2.0
	Zone 34 Subtotal					-17	9	-8	-2.0
35	N. Main Post	1.00	mixed use	-10.00	-18.00	-10	-18	-28	-7.0
	Zone 35 Subtotal					-10	-18	-28	-7.0
36	West Letterm	1.00	mixed use	12.00	-35.00	12	-35	-23	-5.7
	Zone 36 Subtotal					12	-35	-23	-5.7
753	LDA	1.00	mixed use	106.00	53.00	106	53	159	39.6
	Zone 753 Subtotal					106	53	159	39.6
767	Commissary/P	1.00	mixed use	90.00	160.00	90	160	250	62.2
	Zone 767 Subtotal					90	160	250	62.2
TOTAL						187	215	402	100.0

Trip Distribution Report

Percent Of Trips M POST SEIS

Zone	To Gates 5	14	16	17	22	28	36
14	0.0	25.0	0.0	10.0	15.0	50.0	0.0
15	0.0	0.0	25.0	0.0	67.5	0.0	7.5
32	0.0	5.0	10.0	10.0	68.0	5.0	2.0
33	0.0	5.0	10.0	10.0	68.0	5.0	2.0
34	0.0	5.0	10.0	10.0	68.0	5.0	2.0
35	0.0	5.0	10.0	10.0	68.0	5.0	2.0
36	0.0	10.0	20.0	15.0	40.0	15.0	0.0
753	20.0	5.0	10.0	5.0	55.0	0.0	5.0
767	14.0	0.0	10.0	10.0	14.0	50.0	2.0

Volume Type	NB Link In	Out	Total	SB Link In	Out	Total	EB Link In	Out	Total	WB Link In	Out	Total	Total Volume
#201 Lombard/Divisadero													
Base	353	390	743	266	195	461	3488	2383	5871	2225	3364	5589	12664
Added	0	0	0	0	0	0	44	54	98	54	44	98	196
Total	353	390	743	266	195	461	3532	2437	5969	2279	3408	5687	12860
#202 Lombard/Richardson													
Base	2387	3417	5804	3196	2233	5429	226	159	385	0	0	0	11618
Added	54	44	98	-13	-8	-21	57	62	119	0	0	0	196
Total	2441	3461	5902	3183	2225	5408	283	221	504	0	0	0	11814
#203 Lyon/Lombard													
Base	159	253	412	366	254	620	539	378	917	95	274	369	2318
Added	7	7	14	0	0	0	64	69	133	62	57	119	266
Total	166	260	426	366	254	620	603	447	1050	157	331	488	2584
#204 Greenwich/Divisadero													
Base	335	361	696	396	358	754	186	125	311	142	215	357	2118
Added	0	0	0	0	0	0	7	7	14	7	7	14	28
Total	335	361	696	396	358	754	193	132	325	149	222	371	2146
#205 Greenwich/Lyon													
Base	107	164	271	248	173	421	0	0	0	88	106	194	886
Added	0	0	0	7	7	14	0	0	0	7	7	14	28
Total	107	164	271	255	180	435	0	0	0	95	113	208	914
#206 Francisco/Richardson													
Base	2222	3170	5392	3113	2529	5642	287	57	344	198	64	262	11640
Added	-8	-13	-21	-13	-8	-21	0	0	0	0	0	0	-42
Total	2214	3157	5371	3100	2521	5621	287	57	344	198	64	262	11598
#207 Richardson/Gorgas													
Base	17	37	54	160	16	176	3137	2682	5819	2526	3105	5631	11680
Added	-13	0	-13	0	0	0	0	-8	-8	-8	-13	-21	-42
Total	4	37	41	160	16	176	3137	2674	5811	2518	3092	5610	11638
#208 Doyle/Marina/Lyon													
Base	12	41	53	128	321	449	1349	291	1640	606	1442	2048	4190
Added	0	0	0	97	49	146	-5	2	-3	51	92	143	286
Total	12	41	53	225	370	595	1344	293	1637	657	1534	2191	4476
#209 Graham/Lincoln													
Base	277	180	457	44	92	136	465	421	886	571	664	1235	2714
Added	15	9	24	-1	0	-1	10	-7	3	2	24	26	52
Total	292	189	481	43	92	135	475	414	889	573	688	1261	2766
#210 Lincoln/Halleck													
Base	0	0	0	300	379	679	620	652	1272	688	577	1265	3216
Added	0	0	0	45	25	70	29	0	29	5	54	59	158
Total	0	0	0	345	404	749	649	652	1301	693	631	1324	3374

Volume Type	NB Link In	NB Link Out	NB Link Total	SB Link In	SB Link Out	SB Link Total	EB Link In	EB Link Out	EB Link Total	WB Link In	WB Link Out	WB Link Total	Total Volume
#211 Lincoln/Girard													
Base	0	0	0	548	393	941	605	681	1286	575	654	1229	3456
Added	0	0	0	-21	17	-4	55	-5	50	16	38	54	100
Total	0	0	0	527	410	937	660	676	1336	591	692	1283	3556
#212 Presidio/Letterman/Lincoln													
Base	528	557	1085	644	632	1276	289	198	487	66	140	206	3054
Added	22	34	56	31	19	50	3	-5	-2	8	16	24	128
Total	550	591	1141	675	651	1326	292	193	485	74	156	230	3182
#213 Lombard/Presidio													
Base	746	660	1406	560	512	1072	0	0	0	412	546	958	3436
Added	33	24	57	34	21	55	0	0	0	16	38	54	166
Total	779	684	1463	594	533	1127	0	0	0	428	584	1012	3602
#214 Presidio/Pacific													
Base	698	649	1347	671	716	1387	83	70	153	93	110	203	3090
Added	21	18	39	18	21	39	0	0	0	0	0	0	78
Total	719	667	1386	689	737	1426	83	70	153	93	110	203	3168
#215 Presidio/Jackson													
Base	683	632	1315	654	701	1355	171	171	342	263	267	530	3542
Added	21	18	39	18	21	39	0	0	0	0	0	0	78
Total	704	650	1354	672	722	1394	171	171	342	263	267	530	3620
#216 Presidio/Washington													
Base	654	489	1143	524	694	1218	239	144	383	135	225	360	3104
Added	21	18	39	18	21	39	0	0	0	0	0	0	78
Total	675	507	1182	542	715	1257	239	144	383	135	225	360	3182
#217 Arguello/Jackson													
Base	625	512	1137	464	553	1017	0	0	0	163	187	350	2504
Added	12	15	27	15	12	27	0	0	0	0	0	0	54
Total	637	527	1164	479	565	1044	0	0	0	163	187	350	2558
#218 Arguello/Washington St													
Base	751	561	1312	502	624	1126	37	51	88	102	156	258	2784
Added	12	15	27	15	12	27	0	0	0	0	0	0	54
Total	763	576	1339	517	636	1153	37	51	88	102	156	258	2838
#219 Arguello/Moraga													
Base	485	354	839	0	0	0	119	186	305	374	438	812	1956
Added	12	15	27	0	0	0	7	0	7	10	14	24	58
Total	497	369	866	0	0	0	126	186	312	384	452	836	2014
#220 Montgomery/Sheridan													
Base	34	176	210	90	540	630	661	69	730	0	0	0	1570
Added	-9	-2	-11	4	9	13	18	6	24	0	0	0	26
Total	25	174	199	94	549	643	679	75	754	0	0	0	1596

Impact Analysis Report
Level Of Service

Intersection	Base LOS	Base Del/ Veh	Base V/ C	Future LOS	Future Del/ Veh	Future V/ C	Change in
#201 Lombard/Divisadero	B	13.9	0.914	B	14.5	0.922	+ 0.586 D/V
#202 Lombard/Richardson	A	6.0	0.431	A	6.3	0.429	+ 0.241 D/V
#203 Lyon/Lombard	B	13.3	0.617	B	13.9	0.665	+ 0.566 D/V
#204 Greenwich/Divisadero	B	13.9	0.614	B	14.1	0.622	+ 0.007 V/C
#205 Greenwich/Lyon	A	8.5	0.300	A	8.6	0.310	+ 0.010 V/C
#206 Francisco/Richardson	B	15.1	0.753	B	15.0	0.750	-0.164 D/V
#207 Richardson/Gorgas	A	8.1	0.699	A	8.0	0.698	-0.030 D/V
#208 Doyle/Marina/Lyon	C	34.6	0.450	C	34.0	0.503	-0.569 D/V
#209 Graham/Lincoln	B	10.3	0.448	B	10.5	0.464	+ 0.250 D/V
#210 Lincoln/Halleck	B	10.4	0.639	B	11.8	0.679	+ 1.366 D/V
#211 Lincoln/Girard	B	17.1	0.677	B	17.3	0.682	+ 0.132 D/V
#212 Presidio/Letterman/Lincoln	C	20.0	0.788	C	22.9	0.849	+ 0.061 V/C
#213 Lombard/Presidio	B	17.8	0.763	B	19.8	0.804	+ 1.988 D/V
#214 Presidio/Pacific	A	5.3	0.487	A	5.3	0.499	-0.036 D/V
#215 Presidio/Jackson	B	10.4	0.597	B	10.4	0.609	+ 0.038 D/V
#216 Presidio/Washington	A	9.5	0.546	A	9.4	0.559	-0.025 D/V
#217 Arguello/Jackson	B	14.1	0.670	B	14.6	0.693	+ 0.023 V/C
#218 Arguello/Washington St	D	28.6	0.934	D	31.1	0.955	+ 0.021 V/C
#219 Arguello/Moraga	B	14.9	0.667	C	15.7	0.689	+ 0.022 V/C
#220 Montgomery/Sheridan	C	18.7	0.786	C	19.9	0.805	+ 0.019 V/C

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #203 Lyon/Lombard

Cycle (sec): 60 Critical Vol./Cap. (X): 0.665
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 13.9
Optimal Cycle: 36 Level Of Service: B

Street Name:	Lyon St.						Lombard St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	114	37	8	21	151	194	197	245	97	5	70	20
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	114	37	8	21	151	194	197	245	97	5	70	20
Added Vol:	7	0	0	0	0	0	0	57	7	0	62	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	121	37	8	21	151	194	197	302	104	5	132	20
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	121	37	8	21	151	194	197	302	104	5	132	20
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	121	37	8	21	151	194	197	302	104	5	132	20
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	121	37	8	21	151	194	197	302	104	5	132	20
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.50	0.50	0.50	0.91	0.91	0.91	0.82	0.82	0.82	0.97	0.97	0.97
Lanes:	0.73	0.22	0.05	0.06	0.41	0.53	0.33	0.50	0.17	0.03	0.84	0.13
Final Sat.:	697	213	46	99	713	916	509	781	269	59	1550	235
Capacity Analysis Module:												
Vol/Sat:	0.17	0.17	0.17	0.21	0.21	0.21	0.39	0.39	0.39	0.09	0.09	0.09
Crit Moves:					****			****				
Green/Cycle:	0.32	0.32	0.32	0.32	0.32	0.32	0.58	0.58	0.58	0.58	0.58	0.58
Volume/Cap:	0.55	0.55	0.55	0.67	0.67	0.67	0.67	0.67	0.67	0.15	0.15	0.15
Uniform Del:	16.9	16.9	16.9	17.7	17.7	17.7	8.6	8.6	8.6	5.7	5.7	5.7
IncremntDel:	2.1	2.1	2.1	3.1	3.1	3.1	1.9	1.9	1.9	0.1	0.1	0.1
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Delay/Veh:	18.9	18.9	18.9	20.8	20.8	20.8	10.5	10.5	10.5	5.8	5.8	5.8
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	18.9	18.9	18.9	20.8	20.8	20.8	10.5	10.5	10.5	5.8	5.8	5.8
HCM2kAvg:	6	6	6	7	7	7	10	10	10	1	1	1

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #209 Graham/Lincoln

Cycle (sec): 60 Critical Vol./Cap. (X): 0.464
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 10.5
Optimal Cycle: 25 Level Of Service: B

Street Name:	Graham St.						Lincoln Blvd.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	1 0	0 1	0	1 0	0 1	0
Volume Module:												
Base Vol:	27	30	220	18	10	16	20	426	19	151	378	42
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	27	30	220	18	10	16	20	426	19	151	378	42
Added Vol:	0	0	15	-1	0	0	0	10	0	9	-7	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	27	30	235	17	10	16	20	436	19	160	371	42
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	27	30	235	17	10	16	20	436	19	160	371	42
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	27	30	235	17	10	16	20	436	19	160	371	42
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	27	30	235	17	10	16	20	436	19	160	371	42
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.87	0.87	0.87	0.83	0.83	0.83	0.43	0.99	0.99	0.39	0.99	0.99
Lanes:	0.09	0.10	0.81	0.40	0.23	0.37	1.00	0.96	0.04	1.00	0.90	0.10
Final Sat.:	153	170	1331	624	367	588	809	1810	79	741	1681	190
Capacity Analysis Module:												
Vol/Sat:	0.18	0.18	0.18	0.03	0.03	0.03	0.02	0.24	0.24	0.22	0.22	0.22
Crit Moves:		****						****				
Green/Cycle:	0.38	0.38	0.38	0.38	0.38	0.38	0.52	0.52	0.52	0.52	0.52	0.52
Volume/Cap:	0.46	0.46	0.46	0.07	0.07	0.07	0.05	0.46	0.46	0.42	0.42	0.42
Uniform Del:	14.0	14.0	14.0	11.8	11.8	11.8	7.1	9.1	9.1	8.8	8.9	8.9
IncremntDel:	0.5	0.5	0.5	0.1	0.1	0.1	0.0	0.3	0.3	0.7	0.3	0.3
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Delay/Veh:	14.5	14.5	14.5	11.9	11.9	11.9	7.2	9.5	9.5	9.6	9.2	9.2
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	14.5	14.5	14.5	11.9	11.9	11.9	7.2	9.5	9.5	9.6	9.2	9.2
HCM2kAvg:	5	5	5	1	1	1	0	6	6	5	5	5

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #210 Lincoln/Halleck

Cycle (sec): 60 Critical Vol./Cap. (X): 0.679
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 11.8
Optimal Cycle: 37 Level Of Service: B

Street Name:	Halleck St.						Lincoln Blvd.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	0 0	0	0 0	1! 0	0	1 0	1 0	0	0 0	0 1	0
Volume Module:												
Base Vol:	0	0	0	123	0	177	166	454	0	0	475	213
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	123	0	177	166	454	0	0	475	213
Added Vol:	0	0	0	33	0	12	8	21	0	0	-12	17
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	156	0	189	174	475	0	0	463	230
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	156	0	189	174	475	0	0	463	230
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	156	0	189	174	475	0	0	463	230
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	0	0	156	0	189	174	475	0	0	463	230
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	0.79	1.00	0.79	0.58	1.00	1.00	1.00	0.96	0.96
Lanes:	0.00	0.00	0.00	0.45	0.00	0.55	1.00	1.00	0.00	0.00	0.67	0.33
Final Sat.:	0	0	0	680	0	824	1100	1900	0	0	1212	602
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.23	0.00	0.23	0.16	0.25	0.00	0.00	0.38	0.38
Crit Moves:				****							****	
Green/Cycle:	0.00	0.00	0.00	0.34	0.00	0.34	0.56	0.56	0.00	0.00	0.56	0.56
Volume/Cap:	0.00	0.00	0.00	0.68	0.00	0.68	0.28	0.44	0.00	0.00	0.68	0.68
Uniform Del:	0.0	0.0	0.0	17.1	0.0	17.1	6.8	7.7	0.0	0.0	9.3	9.3
IncremntDel:	0.0	0.0	0.0	3.7	0.0	3.7	0.3	0.3	0.0	0.0	1.9	1.9
Delay Adj:	0.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00
Delay/Veh:	0.0	0.0	0.0	20.8	0.0	20.8	7.1	8.0	0.0	0.0	11.2	11.2
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	20.8	0.0	20.8	7.1	8.0	0.0	0.0	11.2	11.2
HCM2kAvg:	0	0	0	8	0	8	3	5	0	0	10	10

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #211 Lincoln/Girard

Cycle (sec): 60 Critical Vol./Cap. (X): 0.682
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 17.3
Optimal Cycle: 37 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	0 0	0	1 0	0 0	1	1 0	1 0	0	0 0	0 1	0
Volume Module:												
Base Vol:	0	0	0	276	0	272	227	378	0	0	409	166
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	276	0	272	227	378	0	0	409	166
Added Vol:	0	0	0	0	0	-21	17	38	0	0	16	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	276	0	251	244	416	0	0	425	166
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	276	0	251	244	416	0	0	425	166
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	276	0	251	244	416	0	0	425	166
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	0	0	276	0	251	244	416	0	0	425	166
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	0.95	1.00	0.85	0.95	1.00	1.00	1.00	0.96	0.96
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	0.00	0.00	0.72	0.28
Final Sat.:	0	0	0	1805	0	1615	1805	1900	0	0	1314	513
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.15	0.00	0.16	0.14	0.22	0.00	0.00	0.32	0.32
Crit Moves:						****	****				****	
Green/Cycle:	0.00	0.00	0.00	0.23	0.00	0.23	0.20	0.67	0.00	0.00	0.47	0.47
Volume/Cap:	0.00	0.00	0.00	0.67	0.00	0.68	0.68	0.33	0.00	0.00	0.68	0.68
Uniform Del:	0.0	0.0	0.0	21.1	0.0	21.2	22.3	4.1	0.0	0.0	12.3	12.3
IncremntDel:	0.0	0.0	0.0	4.3	0.0	5.2	5.3	0.1	0.0	0.0	2.2	2.2
Delay Adj:	0.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00
Delay/Veh:	0.0	0.0	0.0	25.4	0.0	26.4	27.6	4.3	0.0	0.0	14.5	14.5
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	25.4	0.0	26.4	27.6	4.3	0.0	0.0	14.5	14.5
HCM2kAvg:	0	0	0	6	0	6	6	3	0	0	10	10

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #212 Presidio/Letterman/Lincoln

Cycle (sec): 100 | Critical Vol./Cap. (X): 0.849
Loss Time (sec): 0 (Y+R = 4 sec) | Average Delay (sec/veh): 22.9
Optimal Cycle: 0 | Level Of Service: C

Street Name:	Lincoln/Presidio						Presidio/Letterman					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	0 1	0	0 1	0 1	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	104	415	9	101	464	79	174	30	85	8	15	43
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	104	415	9	101	464	79	174	30	85	8	15	43
Added Vol:	-5	16	11	5	26	0	0	0	3	5	0	3
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	99	431	20	106	490	79	174	30	88	13	15	46
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	99	431	20	106	490	79	174	30	88	13	15	46
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	99	431	20	106	490	79	174	30	88	13	15	46
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	99	431	20	106	490	79	174	30	88	13	15	46
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.96	0.04	0.31	1.46	0.23	0.60	0.10	0.30	0.18	0.20	0.62
Final Sat.:	489	508	24	164	778	128	304	52	154	78	90	276
Capacity Analysis Module:												
Vol/Sat:	0.20	0.85	0.85	0.65	0.63	0.62	0.57	0.57	0.57	0.17	0.17	0.17
Crit Moves:		****		****				****				****
Delay/Veh:	11.7	35.4	35.4	20.6	19.6	18.6	17.7	17.7	17.7	11.6	11.6	11.6
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	11.7	35.4	35.4	20.6	19.6	18.6	17.7	17.7	17.7	11.6	11.6	11.6
LOS by Move:	B	E	E	C	C	C	C	C	C	B	B	B
ApproachDel:	31.1			19.6			17.7			11.6		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	31.1			19.6			17.7			11.6		
LOS by Appr:	D			C			C			B		

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #213 Lombard/Presidio

Cycle (sec): 60 | Critical Vol./Cap. (X): 0.804
Loss Time (sec): 6 (Y+R = 4 sec) | Average Delay (sec/veh): 19.8
Optimal Cycle: 52 | Level Of Service: B

Street Name:	Presidio Blvd.						Lombard St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	0 1	0	1 0	1 0	0	0 0	0 0	0	1 0	0 0	1
Volume Module:												
Base Vol:	0	391	355	191	369	0	0	0	0	291	0	121
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	391	355	191	369	0	0	0	0	291	0	121
Added Vol:	0	17	16	22	12	0	0	0	0	12	0	4
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	408	371	213	381	0	0	0	0	303	0	125
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	408	371	213	381	0	0	0	0	303	0	125
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	408	371	213	381	0	0	0	0	303	0	125
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	408	371	213	381	0	0	0	0	303	0	125
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	0.94	0.94	0.95	1.00	1.00	1.00	1.00	1.00	0.95	1.00	0.85
Lanes:	0.00	0.52	0.48	1.00	1.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Final Sat.:	0	931	847	1805	1900	0	0	0	0	1805	0	1615
Capacity Analysis Module:												
Vol/Sat:	0.00	0.44	0.44	0.12	0.20	0.00	0.00	0.00	0.00	0.17	0.00	0.08
Crit Moves:		****		****						****		
Green/Cycle:	0.00	0.54	0.54	0.15	0.69	0.00	0.00	0.00	0.00	0.21	0.00	0.21
Volume/Cap:	0.00	0.80	0.80	0.80	0.29	0.00	0.00	0.00	0.00	0.80	0.00	0.37
Uniform Del:	0.0	11.1	11.1	24.8	3.6	0.0	0.0	0.0	0.0	22.6	0.0	20.4
IncremntDel:	0.0	5.0	5.0	16.2	0.1	0.0	0.0	0.0	0.0	11.9	0.0	0.7
Delay Adj:	0.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Delay/Veh:	0.0	16.0	16.0	41.0	3.7	0.0	0.0	0.0	0.0	34.5	0.0	21.1
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	16.0	16.0	41.0	3.7	0.0	0.0	0.0	0.0	34.5	0.0	21.1
HCM2kAvg:	0	14	14	7	3	0	0	0	0	8	0	2

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #214 Presidio/Pacific

Cycle (sec): 60 Critical Vol./Cap. (X): 0.499
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 5.3
Optimal Cycle: 26 Level Of Service: A

Street Name:	Presidio Blvd.						Pacific Ave.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	12	655	31	46	593	32	32	33	18	38	26	29
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	12	655	31	46	593	32	32	33	18	38	26	29
Added Vol:	0	21	0	0	18	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	12	676	31	46	611	32	32	33	18	38	26	29
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	12	676	31	46	611	32	32	33	18	38	26	29
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	12	676	31	46	611	32	32	33	18	38	26	29
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	12	676	31	46	611	32	32	33	18	38	26	29
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.98	0.98	0.98	0.93	0.93	0.93	0.85	0.85	0.85	0.83	0.83	0.83
Lanes:	0.02	0.94	0.04	0.07	0.89	0.04	0.38	0.40	0.22	0.41	0.28	0.31
Final Sat.:	31	1758	81	118	1566	82	620	640	349	647	443	494
Capacity Analysis Module:												
Vol/Sat:	0.38	0.38	0.38	0.39	0.39	0.39	0.05	0.05	0.05	0.06	0.06	0.06
Crit Moves:					****						****	
Green/Cycle:	0.78	0.78	0.78	0.78	0.78	0.78	0.12	0.12	0.12	0.12	0.12	0.12
Volume/Cap:	0.49	0.49	0.49	0.50	0.50	0.50	0.44	0.44	0.44	0.50	0.50	0.50
Uniform Del:	2.3	2.3	2.3	2.3	2.3	2.3	24.6	24.6	24.6	24.8	24.8	24.8
IncremntDel:	0.3	0.3	0.3	0.3	0.3	0.3	1.6	1.6	1.6	2.1	2.1	2.1
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Delay/Veh:	2.6	2.6	2.6	2.6	2.6	2.6	26.2	26.2	26.2	26.9	26.9	26.9
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	2.6	2.6	2.6	2.6	2.6	2.6	26.2	26.2	26.2	26.9	26.9	26.9
HCM2kAvg:	5	5	5	5	5	5	2	2	2	3	3	3

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #215 Presidio/Jackson

Cycle (sec): 60 Critical Vol./Cap. (X): 0.609
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 10.4
Optimal Cycle: 32 Level Of Service: B

Street Name:	Presidio Blvd.						Jackson St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	9	615	59	59	565	30	11	149	11	56	132	75
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	9	615	59	59	565	30	11	149	11	56	132	75
Added Vol:	0	21	0	0	18	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	9	636	59	59	583	30	11	149	11	56	132	75
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	9	636	59	59	583	30	11	149	11	56	132	75
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	9	636	59	59	583	30	11	149	11	56	132	75
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	9	636	59	59	583	30	11	149	11	56	132	75
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.98	0.98	0.98	0.90	0.90	0.90	0.97	0.97	0.97	0.88	0.88	0.88
Lanes:	0.01	0.91	0.08	0.09	0.87	0.04	0.06	0.88	0.06	0.21	0.50	0.29
Final Sat.:	24	1686	156	151	1489	77	118	1601	118	357	841	478
Capacity Analysis Module:												
Vol/Sat:	0.38	0.38	0.38	0.39	0.39	0.39	0.09	0.09	0.09	0.16	0.16	0.16
Crit Moves:					****						****	
Green/Cycle:	0.64	0.64	0.64	0.64	0.64	0.64	0.26	0.26	0.26	0.26	0.26	0.26
Volume/Cap:	0.59	0.59	0.59	0.61	0.61	0.61	0.36	0.36	0.36	0.61	0.61	0.61
Uniform Del:	6.2	6.2	6.2	6.3	6.3	6.3	18.2	18.2	18.2	19.6	19.6	19.6
IncremntDel:	0.8	0.8	0.8	1.0	1.0	1.0	0.5	0.5	0.5	2.5	2.5	2.5
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Delay/Veh:	6.9	6.9	6.9	7.3	7.3	7.3	18.7	18.7	18.7	22.1	22.1	22.1
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	6.9	6.9	6.9	7.3	7.3	7.3	18.7	18.7	18.7	22.1	22.1	22.1
HCM2kAvg:	8	8	8	9	9	9	3	3	3	6	6	6

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #216 Presidio/Washington

Cycle (sec): 60 Critical Vol./Cap. (X): 0.559
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 9.4
Optimal Cycle: 29 Level Of Service: A

Street Name:	Presidio Blvd.						Washington St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	15	610	29	38	440	46	59	158	22	27	83	25
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	15	610	29	38	440	46	59	158	22	27	83	25
Added Vol:	0	21	0	0	18	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	15	631	29	38	458	46	59	158	22	27	83	25
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	15	631	29	38	458	46	59	158	22	27	83	25
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	15	631	29	38	458	46	59	158	22	27	83	25
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	15	631	29	38	458	46	59	158	22	27	83	25
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.98	0.98	0.98	0.93	0.93	0.93	0.89	0.89	0.89	0.91	0.91	0.91
Lanes:	0.02	0.94	0.04	0.07	0.85	0.08	0.25	0.66	0.09	0.20	0.61	0.19
Final Sat.:	41	1744	80	124	1491	150	418	1119	156	345	1060	319
Capacity Analysis Module:												
Vol/Sat:	0.36	0.36	0.36	0.31	0.31	0.31	0.14	0.14	0.14	0.08	0.08	0.08
Crit Moves:		****						****				
Green/Cycle:	0.65	0.65	0.65	0.65	0.65	0.65	0.25	0.25	0.25	0.25	0.25	0.25
Volume/Cap:	0.56	0.56	0.56	0.47	0.47	0.47	0.56	0.56	0.56	0.31	0.31	0.31
Uniform Del:	5.8	5.8	5.8	5.4	5.4	5.4	19.5	19.5	19.5	18.2	18.2	18.2
IncremntDel:	0.6	0.6	0.6	0.3	0.3	0.3	1.7	1.7	1.7	0.4	0.4	0.4
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Delay/Veh:	6.4	6.4	6.4	5.7	5.7	5.7	21.2	21.2	21.2	18.6	18.6	18.6
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	6.4	6.4	6.4	5.7	5.7	5.7	21.2	21.2	21.2	18.6	18.6	18.6
HCM2kAvg:	8	8	8	6	6	6	5	5	5	2	2	2

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #218 Arguello/Washington St

Cycle (sec): 100 Critical Vol./Cap. (X): 0.955
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 31.1
Optimal Cycle: 0 Level Of Service: D

Street Name:	Arguello Blvd.						Washington St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 1	0 0	1	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	23	592	136	9	471	22	4	11	22	68	6	28
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	23	592	136	9	471	22	4	11	22	68	6	28
Added Vol:	0	12	0	0	15	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	23	604	136	9	486	22	4	11	22	68	6	28
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	23	604	136	9	486	22	4	11	22	68	6	28
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	23	604	136	9	486	22	4	11	22	68	6	28
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	23	604	136	9	486	22	4	11	22	68	6	28
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.04	0.96	1.00	0.02	0.94	0.04	0.11	0.30	0.59	0.67	0.06	0.27
Final Sat.:	24	633	756	12	634	29	55	151	302	342	30	141
Capacity Analysis Module:												
Vol/Sat:	0.95	0.95	0.18	0.77	0.77	0.77	0.07	0.07	0.07	0.20	0.20	0.20
Crit Moves:		****			****			****			****	
Delay/Veh:	47.3	47.3	8.5	23.0	23.0	23.0	10.0	10.0	10.0	11.2	11.2	11.2
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	47.3	47.3	8.5	23.0	23.0	23.0	10.0	10.0	10.0	11.2	11.2	11.2
LOS by Move:	E	E	A	C	C	C	B	B	B	B	B	B
ApproachDel:		40.4			23.0			10.0			11.2	
Delay Adj:		1.00			1.00			1.00			1.00	
ApprAdjDel:		40.4			23.0			10.0			11.2	
LOS by Appr:		E			C			B			B	

Alternative 4, Mitigated – PM Peak Hour

Scenario Report

Scenario:	PM Status Quo Mitigated
Command:	PM Status Quo MIT
Volume:	PM 2030
Geometry:	PM 2030 Mitigated
Impact Fee:	Default Impact Fee
Trip Generation:	PM 2030-Status Quo
Trip Distribution:	Main Post SEIS
Paths:	Main Post SEIS
Routes:	Default Routes
Configuration:	Default Configuration

Trip Generation Report

Forecast for PM 2030-Status Quo

Zone #	Subzone	Amount	Units	Rate In	Rate Out	Trips In	Trips Out	Total Trips	% Of Total
14	West Crissy	1.00	mixed use	43.00	35.00	43	35	78	10.8
	Zone 14 Subtotal					43	35	78	10.8
15	Ruger & Simo	1.00	mixed use	43.00	41.00	43	41	84	11.7
	Zone 15 Subtotal					43	41	84	11.7
32	S. Main Post	1.00	mixed use	5.00	1.00	5	1	6	0.8
	Zone 32 Subtotal					5	1	6	0.8
33	W. Main Post	1.00	Mixed Use	-47.00	-37.00	-47	-37	-84	-11.7
	Zone 33 Subtotal					-47	-37	-84	-11.7
34	E. Main Post	1.00	mixed use	80.00	31.00	80	31	111	15.4
	Zone 34 Subtotal					80	31	111	15.4
35	N. Main Post	1.00	mixed use	-24.00	-29.00	-24	-29	-53	-7.4
	Zone 35 Subtotal					-24	-29	-53	-7.4
36	West Letterm	1.00	mixed use	-59.00	-15.00	-59	-15	-74	-10.3
	Zone 36 Subtotal					-59	-15	-74	-10.3
753	LDA	1.00	mixed use	126.00	188.00	126	188	314	43.6
	Zone 753 Subtotal					126	188	314	43.6
767	Commissary/P	1.00	mixed use	169.00	169.00	169	169	338	46.9
	Zone 767 Subtotal					169	169	338	46.9
TOTAL						336	384	720	100.0

Trip Distribution Report

Percent Of Trips M POST SEIS

Zone	To Gates 5	14	16	17	22	28	36
14	0.0	25.0	0.0	10.0	15.0	50.0	0.0
15	0.0	0.0	25.0	0.0	67.5	0.0	7.5
32	0.0	5.0	10.0	10.0	68.0	5.0	2.0
33	0.0	5.0	10.0	10.0	68.0	5.0	2.0
34	0.0	5.0	10.0	10.0	68.0	5.0	2.0
35	0.0	5.0	10.0	10.0	68.0	5.0	2.0
36	0.0	10.0	20.0	15.0	40.0	15.0	0.0
753	20.0	5.0	10.0	5.0	55.0	0.0	5.0
767	14.0	0.0	10.0	10.0	14.0	50.0	2.0

Volume Type	NB Link In	Out	Total	SB Link In	Out	Total	EB Link In	Out	Total	WB Link In	Out	Total	Total Volume
#201 Lombard/Divisadero													
Base	378	385	763	298	285	583	2398	3242	5640	3117	2279	5396	12382
Added	0	0	0	0	0	0	131	114	245	114	131	245	490
Total	378	385	763	298	285	583	2529	3356	5885	3231	2410	5641	12872
#202 Lombard/Richardson													
Base	3319	2500	5819	2171	3119	5290	329	200	529	0	0	0	11638
Added	114	131	245	1	2	3	130	112	242	0	0	0	490
Total	3433	2631	6064	2172	3121	5293	459	312	771	0	0	0	12128
#203 Lyon/Lombard													
Base	217	183	400	318	325	643	569	517	1086	223	302	525	2654
Added	13	15	28	0	0	0	145	125	270	112	130	242	540
Total	230	198	428	318	325	643	714	642	1356	335	432	767	3194
#204 Greenwich/Divisadero													
Base	345	332	677	343	385	728	145	164	309	203	155	358	2072
Added	0	0	0	0	0	0	15	13	28	13	15	28	56
Total	345	332	677	343	385	728	160	177	337	216	170	386	2128
#205 Greenwich/Lyon													
Base	107	120	227	177	214	391	0	0	0	130	80	210	828
Added	0	0	0	15	13	28	0	0	0	13	15	28	56
Total	107	120	227	192	227	419	0	0	0	143	95	238	884
#206 Francisco/Richardson													
Base	3119	2250	5369	2217	3331	5548	251	69	320	145	82	227	11464
Added	2	1	3	1	2	3	0	0	0	0	0	0	6
Total	3121	2251	5372	2218	3333	5551	251	69	320	145	82	227	11470
#207 Richardson/Gorgas													
Base	253	63	316	69	34	103	2150	3439	5589	3298	2234	5532	11540
Added	1	0	1	0	0	0	0	2	2	2	1	3	6
Total	254	63	317	69	34	103	2150	3441	5591	3300	2235	5535	11546
#208 Doyle/Marina/Lyon													
Base	40	25	65	247	491	738	922	1549	2471	2009	1153	3162	6436
Added	0	0	0	100	107	207	-2	-9	-11	98	98	196	392
Total	40	25	65	347	598	945	920	1540	2460	2107	1251	3358	6828
#209 Graham/Lincoln													
Base	152	134	286	22	7	29	434	391	825	508	584	1092	2232
Added	16	23	39	-1	0	-1	-4	1	-3	24	11	35	70
Total	168	157	325	21	7	28	430	392	822	532	595	1127	2302
#210 Lincoln/Halleck													
Base	0	3	3	314	340	654	542	543	1085	584	554	1138	2880
Added	0	0	0	42	44	86	30	28	58	42	42	84	228
Total	0	3	3	356	384	740	572	571	1143	626	596	1222	3108

Volume Type	NB Link In	NB Link Out	NB Link Total	SB Link In	SB Link Out	SB Link Total	EB Link In	EB Link Out	EB Link Total	WB Link In	WB Link Out	WB Link Total	Total Volume
#211 Lincoln/Girard													
Base	0	0	0	336	497	833	589	585	1174	600	443	1043	3050
Added	0	0	0	49	3	52	34	83	117	34	31	65	234
Total	0	0	0	385	500	885	623	668	1291	634	474	1108	3284
#212 Presidio/Letterman/Lincoln													
Base	539	546	1085	463	601	1064	237	188	425	148	52	200	2774
Added	49	49	98	27	21	48	9	24	33	28	19	47	226
Total	588	595	1183	490	622	1112	246	212	458	176	71	247	3000
#213 Lombard/Presidio													
Base	733	676	1409	549	597	1146	0	0	0	529	538	1067	3622
Added	50	61	111	49	49	98	0	0	0	62	51	113	322
Total	783	737	1520	598	646	1244	0	0	0	591	589	1180	3944
#214 Presidio/Pacific													
Base	731	630	1361	686	743	1429	14	66	80	89	81	170	3040
Added	30	40	70	40	30	70	0	0	0	0	0	0	140
Total	761	670	1431	726	773	1499	14	66	80	89	81	170	3180
#215 Presidio/Jackson													
Base	637	654	1291	661	677	1338	160	168	328	250	209	459	3416
Added	30	40	70	40	30	70	0	0	0	0	0	0	140
Total	667	694	1361	701	707	1408	160	168	328	250	209	459	3556
#216 Presidio/Washington													
Base	664	599	1263	658	705	1363	206	130	336	110	204	314	3276
Added	30	40	70	40	30	70	0	0	0	0	0	0	140
Total	694	639	1333	698	735	1433	206	130	336	110	204	314	3416
#217 Arguello/Jackson													
Base	488	603	1091	546	454	1000	0	0	0	123	100	223	2314
Added	20	24	44	24	20	44	0	0	0	0	0	0	88
Total	508	627	1135	570	474	1044	0	0	0	123	100	223	2402
#218 Arguello/Washington St													
Base	542	657	1199	582	485	1067	32	36	68	107	85	192	2526
Added	20	24	44	24	20	44	0	0	0	0	0	0	88
Total	562	681	1243	606	505	1111	32	36	68	107	85	192	2614
#219 Arguello/Moraga													
Base	431	449	880	0	0	0	180	188	368	377	351	728	1976
Added	20	25	45	0	0	0	5	9	14	25	16	41	100
Total	451	474	925	0	0	0	185	197	382	402	367	769	2076
#220 Montgomery/Sheridan													
Base	62	196	258	85	226	311	341	66	407	0	0	0	976
Added	-22	-4	-26	25	-3	22	19	29	48	0	0	0	44
Total	40	192	232	110	223	333	360	95	455	0	0	0	1020

Impact Analysis Report
Level Of Service

Intersection	Base LOS	Base Del/ Veh	Base V/ C	Future LOS	Future Del/ Veh	Future V/ C	Change in
#201 Lombard/Divisadero	B	13.0	0.849	B	13.9	0.872	+ 0.880 D/V
#202 Lombard/Richardson	A	3.6	0.602	A	6.9	0.743	+ 3.371 D/V
#203 Lyon/Lombard	B	13.7	0.649	B	16.4	0.789	+ 2.687 D/V
#204 Greenwich/Divisadero	B	13.4	0.549	B	13.8	0.562	+ 0.013 V/C
#205 Greenwich/Lyon	A	8.2	0.222	A	8.3	0.243	+ 0.022 V/C
#206 Francisco/Richardson	B	15.0	0.712	B	15.1	0.713	+ 0.027 D/V
#207 Richardson/Gorgas	A	7.0	0.796	A	7.0	0.797	+ 0.030 D/V
#208 Doyle/Marina/Lyon	B	17.7	0.726	C	25.6	0.826	+ 7.841 D/V
#209 Graham/Lincoln	A	7.1	0.358	A	7.6	0.367	+ 0.470 D/V
#210 Lincoln/Halleck	B	10.9	0.591	B	12.1	0.651	+ 1.148 D/V
#211 Lincoln/Girard	B	15.3	0.684	B	15.5	0.706	+ 0.214 D/V
#212 Presidio/Letterman/Lincoln	C	17.6	0.781	C	20.9	0.853	+ 0.072 V/C
#213 Lombard/Presidio	C	20.5	0.798	C	24.6	0.861	+ 4.079 D/V
#214 Presidio/Pacific	A	4.1	0.500	A	4.1	0.525	+ 0.012 D/V
#215 Presidio/Jackson	B	10.0	0.589	B	10.1	0.614	+ 0.068 D/V
#216 Presidio/Washington	A	8.6	0.552	A	8.6	0.576	-0.013 D/V
#217 Arguello/Jackson	C	17.6	0.744	C	19.3	0.782	+ 0.038 V/C
#218 Arguello/Washington St	C	22.9	0.833	D	26.0	0.873	+ 0.040 V/C
#219 Arguello/Moraga	B	14.0	0.613	C	15.3	0.652	+ 0.039 V/C
#220 Montgomery/Sheridan	A	9.2	0.394	A	9.4	0.419	+ 0.024 V/C

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #203 Lyon/Lombard

Cycle (sec): 60 | Critical Vol./Cap. (X): 0.789
Loss Time (sec): 6 (Y+R = 4 sec) | Average Delay (sec/veh): 16.4
Optimal Cycle: 50 | Level Of Service: B

Street Name:	Lyon St.						Lombard St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	124	68	25	29	65	224	212	248	109	9	169	45
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	124	68	25	29	65	224	212	248	109	9	169	45
Added Vol:	13	0	0	0	0	0	0	130	15	0	112	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	137	68	25	29	65	224	212	378	124	9	281	45
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	137	68	25	29	65	224	212	378	124	9	281	45
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	137	68	25	29	65	224	212	378	124	9	281	45
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	137	68	25	29	65	224	212	378	124	9	281	45
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.53	0.53	0.53	0.87	0.87	0.87	0.78	0.78	0.78	0.97	0.97	0.97
Lanes:	0.60	0.29	0.11	0.09	0.20	0.71	0.30	0.53	0.17	0.03	0.84	0.13
Final Sat.:	600	298	109	151	337	1163	440	785	258	49	1540	247
Capacity Analysis Module:												
Vol/Sat:	0.23	0.23	0.23	0.19	0.19	0.19	0.48	0.48	0.48	0.18	0.18	0.18
Crit Moves:		****						****				
Green/Cycle:	0.29	0.29	0.29	0.29	0.29	0.29	0.61	0.61	0.61	0.61	0.61	0.61
Volume/Cap:	0.79	0.79	0.79	0.67	0.67	0.67	0.79	0.79	0.79	0.30	0.30	0.30
Uniform Del:	19.6	19.6	19.6	18.8	18.8	18.8	8.8	8.8	8.8	5.6	5.6	5.6
IncremntDel:	13.4	13.4	13.4	3.5	3.5	3.5	4.7	4.7	4.7	0.2	0.2	0.2
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Delay/Veh:	33.0	33.0	33.0	22.3	22.3	22.3	13.5	13.5	13.5	5.7	5.7	5.7
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	33.0	33.0	33.0	22.3	22.3	22.3	13.5	13.5	13.5	5.7	5.7	5.7
HCM2kAvg:	10	10	10	7	7	7	15	15	15	3	3	3

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #209 Graham/Lincoln

Cycle (sec): 60 | Critical Vol./Cap. (X): 0.367
Loss Time (sec): 6 (Y+R = 4 sec) | Average Delay (sec/veh): 7.6
Optimal Cycle: 21 | Level Of Service: A

Street Name:	Graham St.						Lincoln Blvd.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	0 1	0 0	0	1 0	0 1	0
Volume Module:												
Base Vol:	2	0	150	7	0	15	7	427	0	134	374	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	2	0	150	7	0	15	7	427	0	134	374	0
Added Vol:	0	0	16	-1	0	0	0	-4	0	23	1	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	2	0	166	6	0	15	7	423	0	157	375	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	2	0	166	6	0	15	7	423	0	157	375	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	2	0	166	6	0	15	7	423	0	157	375	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	2	0	166	6	0	15	7	423	0	157	375	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.87	1.00	0.87	0.85	1.00	0.85	0.99	0.99	1.00	0.58	1.00	1.00
Lanes:	0.01	0.00	0.99	0.29	0.00	0.71	0.02	0.98	0.00	1.00	1.00	0.00
Final Sat.:	20	0	1624	459	0	1147	31	1858	0	1093	1900	0
Capacity Analysis Module:												
Vol/Sat:	0.10	0.00	0.10	0.01	0.00	0.01	0.23	0.23	0.00	0.14	0.20	0.00
Crit Moves:	****							****				
Green/Cycle:	0.28	0.00	0.28	0.28	0.00	0.28	0.62	0.62	0.00	0.62	0.62	0.00
Volume/Cap:	0.37	0.00	0.37	0.05	0.00	0.05	0.37	0.37	0.00	0.23	0.32	0.00
Uniform Del:	17.4	0.0	17.4	15.8	0.0	15.8	5.6	5.6	0.0	5.0	5.4	0.0
IncremntDel:	0.5	0.0	0.5	0.0	0.0	0.0	0.2	0.2	0.0	0.2	0.2	0.0
Delay Adj:	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
Delay/Veh:	17.9	0.0	17.9	15.9	0.0	15.9	5.8	5.8	0.0	5.2	5.5	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	17.9	0.0	17.9	15.9	0.0	15.9	5.8	5.8	0.0	5.2	5.5	0.0
HCM2kAvg:	3	0	3	0	0	0	4	4	0	2	3	0

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #210 Lincoln/Halleck

Cycle (sec): 60 Critical Vol./Cap. (X): 0.651
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 12.1
Optimal Cycle: 35 Level Of Service: B

Street Name:	Halleck St.						Lincoln Blvd.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Ovl			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	0 0	0	0 0	1! 0	0	1 0	0 1	0	0 0	0 1	0
Volume Module:												
Base Vol:	0	0	0	153	0	161	138	401	3	0	382	202
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	153	0	161	138	401	3	0	382	202
Added Vol:	0	0	0	26	0	16	14	16	0	0	12	30
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	179	0	177	152	417	3	0	394	232
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	179	0	177	152	417	3	0	394	232
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	179	0	177	152	417	3	0	394	232
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	0	0	179	0	177	152	417	3	0	394	232
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	0.78	1.00	0.78	0.61	1.00	1.00	1.00	0.95	0.95
Lanes:	0.00	0.00	0.00	0.50	0.00	0.50	1.00	0.99	0.01	0.00	0.63	0.37
Final Sat.:	0	0	0	748	0	739	1153	1885	14	0	1136	669
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.24	0.00	0.24	0.13	0.22	0.22	0.00	0.35	0.35
Crit Moves:				****							****	
Green/Cycle:	0.00	0.00	0.00	0.37	0.00	0.37	0.53	0.53	0.53	0.00	0.53	0.53
Volume/Cap:	0.00	0.00	0.00	0.65	0.00	0.65	0.25	0.42	0.42	0.00	0.65	0.65
Uniform Del:	0.0	0.0	0.0	15.8	0.0	15.8	7.6	8.4	8.4	0.0	10.0	10.0
IncremntDel:	0.0	0.0	0.0	2.8	0.0	2.8	0.2	0.3	0.3	0.0	1.6	1.6
Delay Adj:	0.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00
Delay/Veh:	0.0	0.0	0.0	18.6	0.0	18.6	7.8	8.7	8.7	0.0	11.6	11.6
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	18.6	0.0	18.6	7.8	8.7	8.7	0.0	11.6	11.6
HCM2kAvg:	0	0	0	8	0	8	3	5	5	0	9	9

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #211 Lincoln/Girard

Cycle (sec): 60 Critical Vol./Cap. (X): 0.706
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 15.5
Optimal Cycle: 40 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Ovl			Include			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	0 0	0	1 0	0 0	1	1 0	1 0	0	0 0	0 1	0
Volume Module:												
Base Vol:	0	0	0	187	0	149	333	256	0	0	436	164
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	187	0	149	333	256	0	0	436	164
Added Vol:	0	0	0	0	0	49	3	31	0	0	34	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	187	0	198	336	287	0	0	470	164
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	187	0	198	336	287	0	0	470	164
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	187	0	198	336	287	0	0	470	164
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	0	0	187	0	198	336	287	0	0	470	164
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	0.95	1.00	0.85	0.95	1.00	1.00	1.00	0.97	0.97
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	0.00	0.00	0.74	0.26
Final Sat.:	0	0	0	1805	0	1615	1805	1900	0	0	1359	474
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.10	0.00	0.12	0.19	0.15	0.00	0.00	0.35	0.35
Crit Moves:				****			****				****	
Green/Cycle:	0.00	0.00	0.00	0.15	0.00	0.41	0.26	0.75	0.00	0.00	0.49	0.64
Volume/Cap:	0.00	0.00	0.00	0.71	0.00	0.30	0.71	0.20	0.00	0.00	0.71	0.54
Uniform Del:	0.0	0.0	0.0	24.4	0.0	11.9	20.0	2.2	0.0	0.0	11.9	6.1
IncremntDel:	0.0	0.0	0.0	8.4	0.0	0.3	4.8	0.1	0.0	0.0	2.6	0.5
Delay Adj:	0.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00
Delay/Veh:	0.0	0.0	0.0	32.8	0.0	12.1	24.8	2.2	0.0	0.0	14.5	6.6
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	32.8	0.0	12.1	24.8	2.2	0.0	0.0	14.5	6.6
HCM2kAvg:	0	0	0	5	0	3	7	2	0	0	10	7

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #212 Presidio/Letterman/Lincoln

Cycle (sec): 100 Critical Vol./Cap. (X): 0.853
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 20.9
Optimal Cycle: 0 Level Of Service: C

Street Name:	Lincoln/Presidio						Presidio/Letterman					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	0 1	0	0 1	0 1	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	106	425	8	28	393	42	74	16	147	6	40	102
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	106	425	8	28	393	42	74	16	147	6	40	102
Added Vol:	24	12	13	6	21	0	0	0	9	19	0	9
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	130	437	21	34	414	42	74	16	156	25	40	111
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	130	437	21	34	414	42	74	16	156	25	40	111
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	130	437	21	34	414	42	74	16	156	25	40	111
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	130	437	21	34	414	42	74	16	156	25	40	111
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.95	0.05	0.14	1.69	0.17	0.30	0.07	0.63	0.14	0.23	0.63
Final Sat.:	494	512	25	70	865	89	152	33	320	68	109	303
Capacity Analysis Module:												
Vol/Sat:	0.26	0.85	0.85	0.49	0.48	0.47	0.49	0.49	0.49	0.37	0.37	0.37
Crit Moves:		****		****				****			****	
Delay/Veh:	12.4	35.5	35.5	15.6	15.3	15.0	15.1	15.1	15.1	13.3	13.3	13.3
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	12.4	35.5	35.5	15.6	15.3	15.0	15.1	15.1	15.1	13.3	13.3	13.3
LOS by Move:	B	E	E	C	C	B	C	C	C	B	B	B
ApproachDel:	30.4			15.3			15.1			13.3		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	30.4			15.3			15.1			13.3		
LOS by Appr:	D			C			C			B		

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #213 Lombard/Presidio

Cycle (sec): 60 Critical Vol./Cap. (X): 0.861
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 24.6
Optimal Cycle: 64 Level Of Service: C

Street Name:	Presidio Blvd.						Lombard St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	0 1	0	1 0	1 0	0	0 0	0 0	0	1 0	0 1	0
Volume Module:												
Base Vol:	0	409	324	214	335	0	0	0	0	341	0	188
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	409	324	214	335	0	0	0	0	341	0	188
Added Vol:	0	19	31	20	29	0	0	0	0	32	0	30
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	428	355	234	364	0	0	0	0	373	0	218
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	428	355	234	364	0	0	0	0	373	0	218
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	428	355	234	364	0	0	0	0	373	0	218
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	428	355	234	364	0	0	0	0	373	0	218
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	0.94	0.94	0.95	1.00	1.00	1.00	1.00	1.00	0.95	1.00	0.85
Lanes:	0.00	0.55	0.45	1.00	1.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Final Sat.:	0	975	809	1805	1900	0	0	0	0	1805	0	1615
Capacity Analysis Module:												
Vol/Sat:	0.00	0.44	0.44	0.13	0.19	0.00	0.00	0.00	0.00	0.21	0.00	0.13
Crit Moves:		****		****						****		
Green/Cycle:	0.00	0.51	0.51	0.15	0.66	0.00	0.00	0.00	0.00	0.24	0.00	0.24
Volume/Cap:	0.00	0.86	0.86	0.86	0.29	0.00	0.00	0.00	0.00	0.86	0.00	0.56
Uniform Del:	0.0	12.9	12.9	24.9	4.3	0.0	0.0	0.0	0.0	21.8	0.0	20.0
IncremntDel:	0.0	8.4	8.4	23.3	0.1	0.0	0.0	0.0	0.0	16.0	0.0	1.9
Delay Adj:	0.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Delay/Veh:	0.0	21.3	21.3	48.2	4.4	0.0	0.0	0.0	0.0	37.8	0.0	21.9
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	21.3	21.3	48.2	4.4	0.0	0.0	0.0	0.0	37.8	0.0	21.9
HCM2kAvg:	0	16	16	8	3	0	0	0	0	10	0	4

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #214 Presidio/Pacific

Cycle (sec): 60 Critical Vol./Cap. (X): 0.525
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 4.1
Optimal Cycle: 27 Level Of Service: A

Street Name:	Presidio Blvd.						Pacific Ave.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	9	703	19	56	606	24	3	6	5	19	33	37
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	9	703	19	56	606	24	3	6	5	19	33	37
Added Vol:	0	30	0	0	40	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	9	733	19	56	646	24	3	6	5	19	33	37
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	9	733	19	56	646	24	3	6	5	19	33	37
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	9	733	19	56	646	24	3	6	5	19	33	37
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	9	733	19	56	646	24	3	6	5	19	33	37
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.99	0.99	0.99	0.91	0.91	0.91	0.90	0.90	0.90	0.87	0.87	0.87
Lanes:	0.01	0.97	0.02	0.08	0.89	0.03	0.21	0.43	0.36	0.21	0.37	0.42
Final Sat.:	22	1812	47	134	1542	57	367	734	612	353	614	688
Capacity Analysis Module:												
Vol/Sat:	0.40	0.40	0.40	0.42	0.42	0.42	0.01	0.01	0.01	0.05	0.05	0.05
Crit Moves:					****						****	
Green/Cycle:	0.80	0.80	0.80	0.80	0.80	0.80	0.10	0.10	0.10	0.10	0.10	0.10
Volume/Cap:	0.51	0.51	0.51	0.53	0.53	0.53	0.08	0.08	0.08	0.53	0.53	0.53
Uniform Del:	2.1	2.1	2.1	2.1	2.1	2.1	24.4	24.4	24.4	25.5	25.5	25.5
IncremntDel:	0.3	0.3	0.3	0.4	0.4	0.4	0.2	0.2	0.2	3.0	3.0	3.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Delay/Veh:	2.3	2.3	2.3	2.5	2.5	2.5	24.6	24.6	24.6	28.6	28.6	28.6
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	2.3	2.3	2.3	2.5	2.5	2.5	24.6	24.6	24.6	28.6	28.6	28.6
HCM2kAvg:	5	5	5	6	6	6	0	0	0	3	3	3

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #215 Presidio/Jackson

Cycle (sec): 60 Critical Vol./Cap. (X): 0.614
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 10.1
Optimal Cycle: 32 Level Of Service: B

Street Name:	Presidio Blvd.						Jackson St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	8	575	54	54	579	28	55	101	4	71	132	47
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	8	575	54	54	579	28	55	101	4	71	132	47
Added Vol:	0	30	0	0	40	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	8	605	54	54	619	28	55	101	4	71	132	47
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	8	605	54	54	619	28	55	101	4	71	132	47
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	8	605	54	54	619	28	55	101	4	71	132	47
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	8	605	54	54	619	28	55	101	4	71	132	47
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.98	0.98	0.98	0.92	0.92	0.92	0.82	0.82	0.82	0.87	0.87	0.87
Lanes:	0.01	0.91	0.08	0.08	0.88	0.04	0.34	0.63	0.03	0.28	0.53	0.19
Final Sat.:	22	1693	151	135	1546	70	535	983	39	467	869	309
Capacity Analysis Module:												
Vol/Sat:	0.36	0.36	0.36	0.40	0.40	0.40	0.10	0.10	0.10	0.15	0.15	0.15
Crit Moves:					****						****	
Green/Cycle:	0.65	0.65	0.65	0.65	0.65	0.65	0.25	0.25	0.25	0.25	0.25	0.25
Volume/Cap:	0.55	0.55	0.55	0.61	0.61	0.61	0.41	0.41	0.41	0.61	0.61	0.61
Uniform Del:	5.6	5.6	5.6	6.0	6.0	6.0	18.9	18.9	18.9	20.0	20.0	20.0
IncremntDel:	0.5	0.5	0.5	1.0	1.0	1.0	0.7	0.7	0.7	2.8	2.8	2.8
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Delay/Veh:	6.2	6.2	6.2	7.0	7.0	7.0	19.7	19.7	19.7	22.8	22.8	22.8
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	6.2	6.2	6.2	7.0	7.0	7.0	19.7	19.7	19.7	22.8	22.8	22.8
HCM2kAvg:	7	7	7	9	9	9	3	3	3	6	6	6

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #216 Presidio/Washington

Cycle (sec):	60	Critical Vol./Cap. (X):	0.576
Loss Time (sec):	6 (Y+R = 4 sec)	Average Delay (sec/veh):	8.6
Optimal Cycle:	30	Level Of Service:	A

Street Name:	Presidio Blvd.						Washington St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	20	609	35	44	566	48	68	125	13	20	62	28
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	20	609	35	44	566	48	68	125	13	20	62	28
Added Vol:	0	30	0	0	40	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	20	639	35	44	606	48	68	125	13	20	62	28
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	20	639	35	44	606	48	68	125	13	20	62	28
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	20	639	35	44	606	48	68	125	13	20	62	28
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	20	639	35	44	606	48	68	125	13	20	62	28
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.97	0.97	0.97	0.93	0.93	0.93	0.87	0.87	0.87	0.91	0.91	0.91
Lanes:	0.03	0.92	0.05	0.06	0.87	0.07	0.33	0.61	0.06	0.18	0.57	0.25
Final Sat.:	53	1699	93	112	1537	122	547	1005	105	315	978	441
Capacity Analysis Module:												
Vol/Sat:	0.38	0.38	0.38	0.39	0.39	0.39	0.12	0.12	0.12	0.06	0.06	0.06
Crit Moves:					****			****				
Green/Cycle:	0.68	0.68	0.68	0.68	0.68	0.68	0.22	0.22	0.22	0.22	0.22	0.22
Volume/Cap:	0.55	0.55	0.55	0.58	0.58	0.58	0.58	0.58	0.58	0.29	0.29	0.29
Uniform Del:	4.8	4.8	4.8	4.9	4.9	4.9	21.1	21.1	21.1	19.7	19.7	19.7
IncremntDel:	0.5	0.5	0.5	0.7	0.7	0.7	2.3	2.3	2.3	0.4	0.4	0.4
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Delay/Veh:	5.3	5.3	5.3	5.6	5.6	5.6	23.4	23.4	23.4	20.1	20.1	20.1
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	5.3	5.3	5.3	5.6	5.6	5.6	23.4	23.4	23.4	20.1	20.1	20.1
HCM2kAvg:	7	7	7	8	8	8	5	5	5	2	2	2

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #218 Arguello/Washington St

Cycle (sec):	100	Critical Vol./Cap. (X):	0.873
Loss Time (sec):	0 (Y+R = 4 sec)	Average Delay (sec/veh):	26.0
Optimal Cycle:	0	Level Of Service:	D

Street Name:	Arguello Blvd.						Washington St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 1	0 0	1	0 0	1! 0	0	0 0	0 1	0	0 0	1! 0	0
Volume Module:												
Base Vol:	20	465	57	20	551	11	0	8	24	82	5	20
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	20	465	57	20	551	11	0	8	24	82	5	20
Added Vol:	0	20	0	0	24	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	20	485	57	20	575	11	0	8	24	82	5	20
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	20	485	57	20	575	11	0	8	24	82	5	20
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	20	485	57	20	575	11	0	8	24	82	5	20
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	20	485	57	20	575	11	0	8	24	82	5	20
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.04	0.96	1.00	0.03	0.95	0.02	0.00	0.25	0.75	0.76	0.05	0.19
Final Sat.:	26	619	739	23	659	13	0	128	385	390	24	95
Capacity Analysis Module:												
Vol/Sat:	0.78	0.78	0.08	0.87	0.87	0.87	xxxx	0.06	0.06	0.21	0.21	0.21
Crit Moves:	****				****			****		****		
Delay/Veh:	24.8	24.8	7.9	32.2	32.2	32.2	0.0	9.8	9.8	11.2	11.2	11.2
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	24.8	24.8	7.9	32.2	32.2	32.2	0.0	9.8	9.8	11.2	11.2	11.2
LOS by Move:	C	C	A	D	D	D	*	A	A	B	B	B
ApproachDel:	23.1			32.2				9.8			11.2	
Delay Adj:	1.00			1.00				1.00			1.00	
ApprAdjDel:	23.1			32.2				9.8			11.2	
LOS by Appr:	C			D				A			B	

Parking Demand Calculations

Alternative 1

		LONG-TERM DEMAND							SHORT-TERM DEMAND							TOTAL DEMAND		
	Unit	Space per Unit	Emps per KGSF	% Auto	VOR	Midday Demand (spaces)	Evening Demand (spaces)	Weekend Demand (spaces)	Daily Veh. Trips	% Non-work	Trip Ends	Turnover Rate	Midday Demand (spaces)	Evening Demand (spaces)	Weekend Demand (spaces)	Midday	Evening	Weekend
Industrial/Warehouse	317 gsf		1.53	67.2%	1.08	0	0	0	1	60%	2	6	0	0	0	0	0	0
Office	436,408 gsf		3.27	59.1%	1.03	819	41	82	3,586	47%	2	6	140	7	14	960	48	96
Retail	69,065 gsf		2.86 [a]	64.9%	1.37	94	62	70	4,008	92%	2	10	184	123	138	278	185	208
Restaurant	3,975 gsf		2.86 [a]	64.9%	1.37	5	5	5	615	92%	2	7	30	40	40	46	46	46
Lodging	22 rooms	1	---	---	---	11	22	22	65	---	---	---				11	22	22
Conference	25,537 gsf		1.53	64.7%	1.26	20	13	27	88	92%	2	3	14	9	18	34	22	45
Recreational	12,800 gsf		0.81	59.6%	1.50	4	3	5	163	92%	2	4	19	23	23	23	25	28
YMCA	21,067 gsf		0.81	59.6%	1.50	7	7	7	630	92%	2	4.5	64	81	81	71	87	87
Cultural/Educational	213,281 gsf		1.53	64.0%	1.50	139	93	127	3,217	92%	2	10	148	99	135	287	191	261
Theatre	1,320 seats		0.023 [a]	64.0%	1.40	6.9	14	14	503	92%	2	1	156	313	232	163	326	245
Residential	123 du	2.5	---	---	---	153	307	307	438	---	---	---				153	307	307
Infrastructure	28,852 gsf		0.81	53.7%	1.08	12	1	1	9	60%	2	6	0	0	0	12	1	2
Disney Family Museum	82,072 gsf		0.5	64.0%	1.50	17	10	10	1,056	92%	2	4.5	108	79	189	125	89	199
Museum	- gsf		0.5	64.0%	1.50	0	0	0	0	92%	2	4	0	0	0	0	0	0
TOTAL						1,289	578	678	14,379				865	773	869	2,163	1,349	1,546
TOTAL EXCLUDING INFANTRY TERRACE						1,233	466	565					865	773	869	2,097	1,239	1,434

[a] SFPD Guidelines Table C-1.

Notes:

Estimates include Building 102 which accounts for approximately 87/15/23 spaces during the midday weekday, evening and weekend, respectively.

Alternative 2

			LONG-TERM DEMAND							SHORT-TERM DEMAND							TOTAL DEMAND		
		Unit	Space per Unit	Emps per KGSF	% Auto	VOR	Midday Demand (spaces)	Evening Demand (spaces)	Weekend Demand (spaces)	Daily Veh. Trips	% Non-work	Trip Ends	Turnover Rate	Midday Demand (spaces)	Evening Demand (spaces)	Weekend Demand (spaces)	Midday	Evening	Weekend
Industrial/Warehouse	28,253	gsf		1.53	67.2%	1.08	27	1	3	83	60%	2	6	4	0	0	31	2	3
Office	440,837	gsf		3.27	59.1%	1.03	827	41	83	3,358	47%	2	6	132	7	13	959	48	96
Retail	30,240	gsf		2.86	64.9%	1.37	41	27	31	1,755	92%	2	10	81	54	61	122	81	91
Restaurant	24,336	gsf		2.86	64.9%	1.37	33	33	33	3,766	92%	2	7	186	247	247	219	280	280
Lodging	130	rooms	1	---	---	---	65	130	130	383	---	---	---				65	130	130
Conference	25,537	gsf		1.53	64.7%	1.26	20	13	27	88	92%	2	3	14	9	18	34	22	45
Recreational	-	gsf		0.81	59.6%	1.50	0	0	0	0	92%	2	4	0	0	0	0	0	0
YMCA	21,067	gsf		0.81	59.6%	1.50	7	7	7	630	92%	2	4.5	64	81	81	71	87	87
Cultural/Educational	263,464	gsf		1.53	64.0%	1.50	172	115	156	3,724	92%	2	10	171	114	156	343	229	312
Theatre	800	seats		0.023	64.0%	1.40	4.2	8	8	305	92%	2	1	95	189	140	99	198	149
Residential	63	du	2.5	---	---	---	79	158	158	227	---	---	---				79	158	158
Infrastructure	28,323	gsf		0.81	53.7%	1.08	11	1	1	8	60%	2	6	0	0	0	12	1	2
Disney Family Museum	82,072	gsf		0.5	64.0%	1.50	17	10	10	1,056	92%	2	4.5	108	79	189	125	89	199
Museum	-	gsf		0.5	64.0%	1.50	0	0	0	0	92%	2	4	0	0	0	0	0	0
TOTAL							1,304	545	647	15,383				854	780	906	2,159	1,325	1,552
TOTAL EXCLUDING INFANTRY TERRACE							1,248	432	534					854	780	906	2,102	1,212	1,440

[a] SFPD Guidelines Table C-1.

Notes:

Estimates include Building 102 which accounts for approximately 87/15/23 spaces during the midday weekday, evening and weekend, respectively.

Alternative 3

		LONG-TERM DEMAND							SHORT-TERM DEMAND							TOTAL DEMAND		
	Unit	Space per Unit	Emps per KGSF	% Auto	VOR	Midday Demand (spaces)	Evening Demand (spaces)	Weekend Demand (spaces)	Daily Veh. Trips	% Non-work	Trip Ends	Turnover Rate	Midday Demand (spaces)	Evening Demand (spaces)	Weekend Demand (spaces)	Midday	Evening	Weekend
Industrial/Warehouse	317 gsf		1.53	67.2%	1.08	0	0	0	1	60%	2	6	0	0	0	0	0	0
Office	488,499 gsf		3.27	59.1%	1.03	917	46	92	3,959	47%	2	6	155	8	16	1,072	54	107
Retail	33,762 gsf		2.86	64.9%	1.37	46	30	34	1,959	92%	2	10	90	60	68	136	91	102
Restaurant	3,975 gsf		2.86	64.9%	1.37	5	5	5	615	92%	2	7	30	40	40	36	46	46
Lodging	58 rooms	1	---	---	---	29	58	58	171	---	---	---				29	58	58
Conference	25,537 gsf		1.53	64.7%	1.26	20	13	27	88	92%	2	3	14	9	18	34	22	45
Recreational	- gsf		0.81	59.6%	1.50	0	0	0	0	92%	2	4	0	0	0	0	0	0
YMCA	21,067 gsf		0.81	59.6%	1.50	7	7	7	630	92%	2	4.5	64	81	81	71	87	87
Cultural/Educational	234,246 gsf		1.53	64.0%	1.50	153	102	139	2,794	92%	2	10	129	86	117	281	188	256
Theatre	600 seats		0.023	64.0%	1.40	3.2	6	6	229	92%	2	1	71	142	105	74	148	112
Residential	63 du	2.5	---	---	---	79	158	158	227	---	---	---				79	158	158
Infrastructure	31,785 gsf		0.81	53.7%	1.08	13	1	1	9	60%	2	6	0	0	0	13	1	2
Disney Family Museum	82,072 gsf		0.5	64.0%	1.50	17	10	10	1,056	92%	2	4.5	108	79	189	125	89	199
Museum	50,000 gsf		0.5	64.0%	1.50	11	6	6	584	92%	2	4	67	49	97	78	55	104
TOTAL						1,300	443	544	12,323				729	554	731	2,028	997	1,276
TOTAL EXCLUDING INFANTRY TERRACE						1,244	331	432					729	554	731	1,972	885	1,163

[a] SFPD Guidelines Table C-1.

Notes:

Estimates include Building 102 which accounts for approximately 87/15/23 spaces during the midday weekday, evening and weekend, respectively.

Alternative 4

		LONG-TERM DEMAND							SHORT-TERM DEMAND							TOTAL DEMAND		
	Unit	Space per Unit	Emps per KGSF	% Auto	VOR	Midday Demand (spaces)	Evening Demand (spaces)	Weekend Demand (spaces)	Daily Veh. Trips	% Non-work	Trip Ends	Turnover Rate	Midday Demand (spaces)	Evening Demand (spaces)	Weekend Demand (spaces)	Midday	Evening	Weekend
Industrial/Warehouse	317 gsf		1.53	67.2%	1.08	0	0	0	1	60%	2	6	0	0	0	0	0	0
Office	510,277 gsf		3.27	59.1%	1.03	958	48	96	4,125	47%	2	6	162	8	16	1,119	56	112
Retail	33,762 gsf		2.86	64.9%	1.37	46	30	34	1,959	92%	2	10	90	60	68	136	91	102
Restaurant	3,975 gsf		2.86	64.9%	1.37	5	5	5	615	92%	2	7	30	40	40	36	46	46
Lodging	- rooms	1	---	---	---	0	0	0	0	---	---	---				0	0	0
Conference	25,537 gsf		1.53	64.7%	1.26	20	13	27	88	92%	2	3	14	9	18	34	22	45
Recreational	12,800 gsf		0.81	59.6%	1.50	4	3	5	163	92%	2	4	19	23	23	23	25	28
YMCA	21,067 gsf		0.81	59.6%	1.50	7	7	7	630	92%	2	4.5	64	81	81	71	87	87
Cultural/Educational	183,246 gsf		1.53	64.0%	1.50	120	80	109	2,780	92%	2	10	128	85	116	247	165	225
Theatre	600 seats		0.023	64.0%	1.40	3.2	6	6	229	92%	2	1	71	142	105	74	148	112
Residential	112 du	2.5	---	---	---	140	279	279	402	---	---	---				140	279	279
Infrastructure	31,785 gsf		0.81	53.7%	1.08	13	1	1	9	60%	2	6	0	0	0	13	1	2
Disney Family Museum	82,072 gsf		0.5	64.0%	1.50	17	10	10	1,056	92%	2	4.5	108	79	189	125	89	199
Museum	- gsf		0.5	64.0%	1.50	0	0	0	0	92%	2	4	0	0	0	0	0	0
TOTAL						1,333	483	581	12,058				686	527	656	2,018	1,009	1,237
TOTAL EXCLUDING INFANTRY TERRACE						1,277	371	468					686	527	656	1,963	898	1,125

[a] SFPD Guidelines Table C-1.

Notes:

Estimates include Building 102 which accounts for approximately 87/15/23 spaces during the midday weekday, evening and weekend, respectively.

Transit Ridership Calculations

Alternative 1

AM Peak Hour

ORIGIN/	TOTAL		Muni 1, 1AX & 1BX		Muni 28 & 29		Muni 30 & 30X		Muni 41 & 45		Muni 43		PresidiGo		AC TRANSIT		BART		GGT BUSES		Caltrain	
DESTINATION	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT
Superdistrict 1	70	32	2	3			19	7	20	9			29	14								
Superdistrict 2	170	79	4	7	50	22			1	1	86	36	28	12								
Superdistrict 3	141	66	3	5	32	14	8	3	8	5	39	16	51	22								
Superdistrict 4	116	54			71	34			0	0	34	16	10	4								
East Bay	142	66	2	4	1	1	7	3	61	22			88	42	49	21	91	39				
North Bay	123	57			25	12							22	8					121	52		
South Bay	60	28			7	4	6	4	14	7			32	14			30	13			30	13
Other	46	21									23	11	23	11			41	18			5	2
ALL ORIGINS	869	404	11	18	187	87	40	17	105	44	183	79	284	126	49	21	161	69	121	52	34	15

PM Peak Hour

ORIGIN/	TOTAL		Muni 1, 1AX & 1BX		Muni 28 & 29		Muni 30 & 30X		Muni 41 & 45		Muni 43		PresidiGo		AC TRANSIT		BART		GGT BUSES		Caltrain	
DESTINATION	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT
Superdistrict 1	56	70	3	2			13	18	16	20			24	30								
Superdistrict 2	138	171	6	5	41	51			2	1	64	84	22	28								
Superdistrict 3	110	136	5	4	22	29	7	8	9	9	27	35	40	50								
Superdistrict 4	89	111			55	68			1	0	27	33	7	10								
East Bay	149	184	5	3	2	2	6	8	46	68			100	120	48	62	90	116				
North Bay	106	132			22	26							17	23					99	128		
South Bay	78	96			10	12	9	10	17	22			41	52			36	46			36	46
Other	90	111									45	56	45	56			75	97			8	11
ALL ORIGINS	815	1011	19	14	152	188	35	45	90	121	162	208	297	368	48	62	201	259	99	128	44	57

Alternative 2

AM Peak Hour

ORIGIN/	TOTAL		Muni 1, 1AX & 1BX		Muni 28 & 29		Muni 30 & 30X		Muni 41 & 45		Muni 43		PresidiGo		AC TRANSIT		BART		GGT BUSES		Caltrain	
DESTINATION	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT
Superdistrict 1	69	32	2	3			19	7	20	9			29	14								
Superdistrict 2	168	79	4	6	50	22			1	1	85	36	28	12								
Superdistrict 3	138	65	3	5	31	14	8	3	8	5	38	16	50	22								
Superdistrict 4	114	53			70	33			0	0	33	16	10	4								
East Bay	148	69	2	4	1	1	7	3	63	23			92	44	51	22	94	41				
North Bay	123	58			25	12							22	8					121	53		
South Bay	66	31			8	4	7	4	16	7			35	15			32	14			32	14
Other	56	27									28	13	28	13			50	22			6	2
ALL ORIGINS	881	414	11	18	184	87	40	18	107	45	185	81	294	133	51	22	176	77	121	53	38	16

PM Peak Hour

ORIGIN/	TOTAL		Muni 1, 1AX & 1BX		Muni 28 & 29		Muni 30 & 30X		Muni 41 & 45		Muni 43		PresidiGo		AC TRANSIT		BART		GGT BUSES		Caltrain	
DESTINATION	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT
Superdistrict 1	67	80	3	2			16	21	19	23			29	34								
Superdistrict 2	164	195	7	5	49	58			2	1	77	96	27	33								
Superdistrict 3	135	161	6	4	27	34	9	10	11	11	32	42	50	59								
Superdistrict 4	111	132			68	81			1	0	33	39	9	12								
East Bay	144	171	4	3	2	2	5	7	43	63			99	112	47	58	88	108				
North Bay	120	143			24	29							19	25					112	138		
South Bay	64	76			8	9	7	8	14	17			35	41			30	37			30	37
Other	55	65									28	33	28	33			46	57			5	6
ALL ORIGINS	862	1022	20	15	179	213	38	46	90	116	170	209	295	348	47	58	164	201	112	138	35	43

Alternative 3

AM Peak Hour

ORIGIN/	TOTAL		Muni 1, 1AX & 1BX		Muni 28 & 29		Muni 30 & 30X		Muni 41 & 45		Muni 43		PresidiGo		AC TRANSIT		BART		GGT BUSES		Caltrain	
DESTINATION	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT
Superdistrict 1	67	30	2	3			18	6	19	8			28	13								
Superdistrict 2	164	73	4	7	48	21			1	1	83	33	27	10								
Superdistrict 3	136	60	3	5	31	13	7	3	8	4	38	15	49	20								
Superdistrict 4	111	50			69	31			0	0	33	15	10	4								
East Bay	140	63	2	4	1	1	7	3	61	21			86	39	48	20	90	37				
North Bay	119	53			24	11							21	7					117	48		
South Bay	61	27			7	4	7	3	15	7			32	13			30	12			30	12
Other	50	22									25	11	25	11			44	18			5	2
ALL ORIGINS	848	378	11	18	180	81	39	16	104	42	178	73	278	117	48	20	163	67	117	48	35	14

PM Peak Hour

ORIGIN/	TOTAL		Muni 1, 1AX & 1BX		Muni 28 & 29		Muni 30 & 30X		Muni 41 & 45		Muni 43		PresidiGo		AC TRANSIT		BART		GGT BUSES		Caltrain	
DESTINATION	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT
Superdistrict 1	46	59	2	2			11	15	13	17			20	25								
Superdistrict 2	112	144	6	4	33	43			2	1	52	71	18	24								
Superdistrict 3	86	110	4	3	18	24	5	7	7	7	21	29	31	40								
Superdistrict 4	69	89			43	55			1	0	21	26	5	8								
East Bay	143	185	5	4	2	2	6	8	46	70			95	119	46	62	86	116				
North Bay	91	118			19	24							14	20					84	113		
South Bay	82	106			11	13	10	12	19	25			43	57			38	51			38	51
Other	108	139									54	70	54	70			90	121			10	13
ALL ORIGINS	738	951	17	13	125	161	32	42	86	121	148	196	280	362	46	62	214	288	84	113	48	65

Alternative 4

AM Peak Hour

ORIGIN/	TOTAL		Muni 1, 1AX & 1BX		Muni 28 & 29		Muni 30 & 30X		Muni 41 & 45		Muni 43		PresidiGo		AC TRANSIT		BART		GGT BUSES		Caltrain	
DESTINATION	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT
Superdistrict 1	70	31	2	3			19	7	20	8			29	13								
Superdistrict 2	170	76	4	7	50	21			1	1	86	34	28	11								
Superdistrict 3	142	63	3	6	32	14	8	3	8	4	39	16	51	21								
Superdistrict 4	117	52			72	32			0	0	34	15	10	4								
East Bay	139	62	2	4	1	1	7	3	60	21			86	39	48	20	89	36				
North Bay	123	55			25	12							22	8					120	49		
South Bay	58	26			7	4	6	3	14	6			31	12			28	12			28	12
Other	41	18									21	9	21	9			36	15			4	2
ALL ORIGINS	859	382	11	19	187	83	39	16	103	42	181	74	278	117	48	20	153	63	120	49	32	13

PM Peak Hour

ORIGIN/	TOTAL		Muni 1, 1AX & 1BX		Muni 28 & 29		Muni 30 & 30X		Muni 41 & 45		Muni 43		PresidiGo		AC TRANSIT		BART		GGT BUSES		Caltrain	
DESTINATION	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT
Superdistrict 1	51	65	3	2			12	17	14	19			22	28								
Superdistrict 2	124	159	6	5	37	48			2	1	58	78	19	26								
Superdistrict 3	98	126	5	4	20	27	6	8	8	8	24	33	35	46								
Superdistrict 4	80	102			49	63			1	0	24	30	6	9								
East Bay	138	177	5	3	2	2	6	8	44	67			92	114	45	60	83	111				
North Bay	97	124			20	25							15	21					89	120		
South Bay	73	94			10	12	9	10	17	22			38	51			34	45			34	45
Other	87	112									44	56	44	56			73	97			8	11
ALL ORIGINS	748	960	18	14	138	176	32	43	84	118	149	198	272	350	45	60	189	254	89	120	42	56

Appendix B
Programmatic Agreement for the Main Post Update

Preserving America's Heritage

October 26, 2010

Mr. Craig Middleton
Executive Director
Presidio Trust
P.O. Box 29052
34 Graham Street
San Francisco, CA 94129

Ref: *Main Post Update to the Presidio Trust Management Plan*
Presidio of San Francisco National Historic Landmark, San Francisco County, California

Dear Mr. Middleton:

Enclosed is your copy of the fully executed Programmatic Agreement (PA) for the referenced project. By carrying out the terms of the agreement, you will fulfill your responsibilities under Section 106 of the National Historic Preservation Act (NHPA) and the regulations of the Advisory Council on Historic Preservation (ACHP). The original signature page for the ACHP will remain on file at our office.

During the latter part of the consultation process, the issue arose of the Presidio Trust's compliance with Section 110(f) of the NHPA and how that might be reflected in the PA. We believe the PA does indeed fulfill the requirements of Section 110(f) as set forth in the ACHP's regulations at 36 CFR § 800.10, *Special requirements for protecting National Historic Landmarks*.

When a National Historic Landmark such as the Presidio may be directly and adversely affected by an agency action, Section 110(f) requires that the agency to the maximum extent possible, undertake such planning and actions as may be necessary to minimize harm to such landmark, and…afford the Advisory Council on Historic Preservation a reasonable opportunity to comment on the undertaking." Section 800.10 of the ACHP's regulations authorize an agency to use the standard Part 800 process to meet this obligation, with the provision that the ACHP be requested to participate in the consultation process and that the Secretary of the Interior be invited to participate also.

In the present case, the Presidio Trust has met these requirements. The ACHP has participated and has signed the PA. The Secretary, acting through the National Park Service (NPS), has participated in the consultation throughout. In addition, the ACHP requested and the NPS provided to the Presidio Trust and the consulting parties a Section 213 report (as authorized by

the NHPA), assessing "the significance of any historic property, describing the effects of any proposed undertaking on the affected property, and recommending measures to avoid, minimize, or mitigate adverse effects." That report informed the consultation and influenced the outcome as embodied in the final PA.

By its signature on the final PA, the ACHP has indicated its concurrence in the actions taken by the Presidio Trust to meet its Section 110(f) obligations.

We commend your staff, particularly Mr. Robert Thomson, for their hard work and dedication in reaching a successful conclusion to the Section 106 process.

If we may be of further assistance as the agreement is implemented, please contact Ms. Katharine R. Kerr at (202) 606-8534, or via e-mail at kkerr@achp.gov.

Sincerely,

John M. Fowler
Executive Director

Enclosure

PROGRAMMATIC AGREEMENT
AMONG
THE PRESIDIO TRUST,
THE CALIFORNIA STATE HISTORIC PRESERVATION OFFICER,
THE NATIONAL PARK SERVICE, AND
THE ADVISORY COUNCIL ON HISTORIC PRESERVATION,
FOR
THE MAIN POST UPDATE TO THE PRESIDIO TRUST MANAGEMENT PLAN
PRESIDIO OF SAN FRANCISCO NATIONAL HISTORIC LANDMARK,
SAN FRANCISCO, CALIFORNIA

WHEREAS, the Presidio Trust (Trust) proposes to amend the planning concept for the *Main Post District: Visitor and Community Center* section with the Main Post Update to the Presidio Trust Management Plan (PTMP) for Area B of the Presidio of San Francisco (Project), a designated National Historic Landmark District (NHLD) within the boundaries of the Golden Gate National Recreation Area (GGNRA); and

WHEREAS, the Trust plans to enact this Project pursuant to the Presidio Trust Act, 16 U.S.C. 460bb appendix, thereby making the Undertaking subject to review under Section 106 of the National Historic Preservation Act (NHPA), 16 U.S.C. § 470f, and its implementing regulations, 36 CFR Part 800, and Stipulation X of the *Programmatic Agreement Among the Presidio Trust, National Park Service, the Advisory Council on Historic Preservation, and the California State Historic Preservation Officer Regarding the Presidio Trust Implementation Plan and Various Operation and Maintenance Activities for Area "B" of the Presidio of San Francisco, Golden Gate National Recreation Area* ("Presidio Trust Programmatic Agreement" (PTPA)), as amended; and

WHEREAS, the Federal Highway Administration, California Department of Transportation and San Francisco County Transportation Authority have accounted for adverse effects to the Presidio NHLD located within the Main Post in a separate Section 106 consultation on the replacement of Doyle Drive, completed in 2008; and

WHEREAS, the Trust completed a Section 106 consultation on the Main Parade Rehabilitation in November 2007, resulting in a conceptual design included for reference in this PA as Appendix H, and major elements including pavement removal and turf installation are proceeding; and

WHEREAS the Trust initiated consultation under Stipulation X of the PTPA, as amended, and in concert with the Advisory Council on Historic Preservation (ACHP) elected to combine consultation with Subpart B of 36 CFR Part 800; and

WHEREAS, the Trust has defined the Area of Potential Effect (APE) for this Undertaking as the NHLD, depicted on the map in Appendix A; and

WHEREAS, the Trust has determined that the Undertaking will adversely affect the NHLD, and has consulted with the California State Historic Preservation Officer (SHPO) pursuant to 36 CFR Part 800 and Stipulation IX(A) of the PTPA; and

WHEREAS, the Trust has completed a draft update to the Presidio of San Francisco National Historic Landmark forms in 2008 and has submitted the update to the National Park Service's Pacific West Regional Office (PWRO); individual eligibility determination of post-World War II resources is still

ongoing; and regardless of eligibility or contributing status of those resources the Trust does not propose to change the Main Post Update to the PTMP projects associated with those resources; and

WHEREAS, the Trust has consulted with the National Park Service's PWRO and the GGNRA regarding the effects of the undertaking on historic properties and has invited them to sign this Programmatic Agreement (Agreement) as an invited signatory; and

WHEREAS, in accordance with 36 CFR § 800.6(a)(1) and Stipulation X of the PTPA, the Trust has notified the ACHP of its adverse effect determination providing the specified documentation, and the ACHP has chosen to participate in the consultation pursuant to 36 CFR § 800.6(a)(1)(iii); and

WHEREAS, pursuant to 36 CFR § 800.2 (c)(5) the National Trust for Historic Preservation, Presidio Historical Association, San Francisco Architectural Heritage, Descendents of the de Anza and Portola Expedition, Sierra Club, National Parks Conservation Association, Barbara Voss (archaeologist), People for a Golden Gate National Recreation Area, Cow Hollow Association, Neighborhood Association for Planning at the Presidio, Laurel Heights Improvement Association, Marina Community Association, San Francisco Film Society, Interfaith Center at the Presidio, Contemporary Art Museum at the Presidio, and Larkspur Hotels and Restaurants have participated in the consultation, and have been invited to be concurring parties to this Agreement; and

WHEREAS, the Trust consulted with representatives of Native American groups identified by the California Native American Heritage Commission as having knowledge of cultural resources in the project area and San Francisco County, and has incorporated comments from that consultation into this Agreement; and

WHEREAS, the Trust documented the findings of effect in a document called *Finding of Effect for the Main Post Update* (Appendix B), which was released in July 2009; and

WHEREAS, the ACHP requested a report from the Director of the NPS under Section 213 of the National Historic Preservation Act (NHPA) [16 U.S.C. § 470u] detailing the significance of the NHLD, describing the effects of the Undertaking on the NHLD, and recommending measures to avoid, minimize, or mitigate adverse effects, in August 2008; and

WHEREAS, the National Park Service's PWRO submitted its completed Section 213 report to the ACHP in April 2009 (available on the Trust website at http://www.presidio.gov/trust/projects/mp/mpdocs.htm) which concurred with the Trust's finding of adverse effect, and informed the consultation; and

WHEREAS, the Art Museum proposal included in the February 2009 MPU was withdrawn in July 2009; and

WHEREAS, the Trust, through the consultation process and in compliance with the NHPA, including Sections 106 and 110(f), has modified the Undertaking to avoid, minimize or mitigate the adverse effects identified in the *Finding of Effect for the Main Post Update*, and described this modified Undertaking in a *Final Main Post Update* (August 2010); and

WHEREAS, the Trust has proposed the removal or relocation of Buildings 40 and 41 as part of the El Presidio: The Birthplace of San Francisco project; and

WHEREAS the Trust is conducting a parallel review process in accordance with the National Environmental Policy Act (NEPA) for the development of a Supplemental Environmental Impact

Statement, which has included the solicitation of public input on the potential impacts of the Undertaking on historic properties; and

WHEREAS, all projects located in the Main Post that are not described in the following stipulations will be reviewed according to Stipulation VII of the Presidio Trust Programmatic Agreement (PTPA); and

NOW, THEREFORE, the Trust, ACHP, SHPO, and NPS agree that the Undertaking will be implemented in accordance with the following stipulations in order to take into account the effect of the Undertaking on historic properties.

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STIPULATIONS

The Trust shall ensure that following measures are carried out:

I. ROLES AND RESPONSIBILITIES

A. The Presidio Trust, the SHPO, and the NPS will review and comment on draft designs submitted in accordance with Stipulation II(C) and draft and/or comment on documents submitted in accordance with Stipulation II(B), (D) and (E), may raise and resolve objections according to Stipulation V(A) and may amend or terminate this agreement according to Stipulation VI. The NPS, as an invited signatory, will have the same roles and responsibilities as the other signatory parties. The Trust will be responsible for organizing public meetings, distributing materials for review during the design development process, and reporting in accordance with Stipulations II(C) and IV(A).

B. The ACHP may raise objections according to Stipulation V(A) and resolve objections according to Stipulation V(B) and may amend or terminate this agreement according to Stipulation VI. The ACHP will not participate in design reviews described under Stipulation II(C).

C. Concurring parties may review and comment on draft designs and treatment plans submitted pursuant to Stipulation II(C) and may raise objections according to Stipulation V(B). Consulting parties that do not concur with the PA-MPU will have the same participation opportunities as the public.

D. The public may participate and comment in public meetings according to Stipulation II(C).

II. TREATMENT OF HISTORIC PROPERTIES

A. Summary of Treatment Measures and Limits of New Construction

For components of the Undertaking determined to result in adverse effects to historic properties and to the cultural landscape as documented in the final Finding of Effect for the Main Post Update (Appendix B), measures to avoid, minimize and mitigate the adverse effects of the Undertaking are described below. References below to the "Secretary's Standards" refer to the Secretary's Standards for the Treatment of Historic Properties: Standards for Preservation, Rehabilitation, Restoration and Reconstruction (NPS, 1995 and updates); the Secretary's Standards for Treatment of Cultural Landscapes (NPS, 1996 and updates); and/or the Secretary's Standards and Guidelines for Archaeology and Historic Preservation (NPS, 1983 and updates). It would not be uncommon for multiple standards to apply to a single component of the Undertaking.

1. Project-Specific Treatments

a. El Presidio: The Birthplace of San Francisco

The archaeological program at El Presidio may only proceed as follows:

i. Standards and guidelines to direct archaeological efforts at El Presidio will be developed and will apply to all work undertaken at the site, including work by professional and academic partners of the Trust; terms and details for these standards and guidelines to direct archaeological methods at El Presidio are set forth in Stipulation II(H).

ii. Treatment recommendations will be developed for the phased implementation of an interpretive landscape at El Presidio, including:

1. Reduction of parking from 252 daily stalls to 75 daily stalls, and;

2. Measures to periodically close Moraga Avenue, Mesa and Graham Streets using removable bollards for ongoing excavation and special events, and;

3. Representations of the dimensions and layout of the colonial settlement, and measures to rehabilitate the character-defining features of the *plaza de armas*.

Review of schematic designs for above will be conducted according to terms set forth in Stipulation II(C).

iii. Prior to implementing a course of action involving NHL-contributing Buildings 40 or 41 the Trust will consult with signatory and concurring parties according to terms set forth in Stipulation II(C)(2).

b. Archaeology Lab and Curation Facilities

Rehabilitation, new construction, and demolition associated with the Archaeology Lab and Curation Facility may only proceed as follows:

i. NHL-contributing Building 46 will be demolished. Prior to demolition, Building 46 will be fully documented according to the Historic American Buildings Survey (HABS) according to terms set forth in Stipulation II(D).

ii. A connecting structure not to exceed 500 square feet (sq/ft) will be constructed between Buildings 47 and 48, with a height not to exceed the roof ridge of Buildings 47 and 48; new construction will follow conceptual plans attached as Appendix C; review of rehabilitation and new construction for Buildings 47, 48, and the new connector will be conducted according to terms set forth in Stipulation II(C), and will follow conceptual plans attached as Appendix C.

iii. The Trust and NPS-GGNRA will cooperatively draft an agreement on the management of archaeological collections recovered from the Presidio NHLD within six (6) months of executing this agreement.

c. Presidio Lodge

Rehabilitation and new construction associated with the Presidio Lodge may only proceed as follows:

i. Non-NHL contributing Building 34 will be demolished.

ii. Total new construction for lodging use on the site bound by Lincoln Boulevard, Sheridan Avenue, Graham and Anza Streets will not exceed 70,000 sq/ft (reference conceptual site plan attached as Appendix D).

iii. New construction will be roughly based on the historic barracks layout that was present between Anza and Graham Streets (ca. 1860-1945), with heights not to exceed 30'; the southern edge of new construction will be set back no less than 150' from Building 95 (reference conceptual site plan attached as Appendix D).

iv. Designs for foundations, utility connections and underground parking using the basement of Building 34 will take into account the presence of subsurface archaeological features, and the Trust will seek solutions through the review process to avoid adverse effects associated with excavation.

v. Buildings 86 and 87 may be adaptively reused for lodging according to treatment recommendations in an HSR, developed according to terms set forth in Stipulation II(E) and the Secretary's Standards.

vi. Prior to completion of schematic designs for the Presidio Lodge, an Archaeological Management Assessment (AMA) will be prepared (reference Stipulation II(G)). If the AMA anticipates an adverse effect to archaeological features, the Trust will draft a proposed Treatment Plan according to terms set forth in Stipulation II(G)2.

vii. Reviews of rehabilitation and new construction will be conducted according to terms set forth in Stipulation II(C) and will follow conceptual plans attached as Appendix D.

d. Presidio Theatre

Rehabilitation and new construction associated with the Presidio Theatre (Building 99) may only proceed as follows:

i. The *Finding of Effect for the Main Post Update* acknowledges that construction of an 18,000 sq/ft addition would have an adverse effect on the Theatre. In order to minimize that effect, Building 99 and its surrounding landscape will be rehabilitated and new construction designed according to the treatment recommendations in an HSR, developed according to terms set forth in Stipulation II(E). The HSR will presume an addition of 18,000 square feet.;

ii. The interior of Building 99 will be retained as a single auditorium.

iii. An addition not to exceed 18,000 sq/ft, including a transparent connector, may be located to the west of Building 99, with a height not to exceed the eave of Building 99.

iv. Designs for the addition will take into account the presence of subsurface archaeological features, and the Trust will seek solutions through the review process to avoid adverse effects associated with excavation.

v**.** Review of rehabilitation and new construction will be conducted according to terms set forth in Stipulation II(C) below, and will follow conceptual plans attached as Appendix E.

e. Presidio Chapel

Rehabilitation and new construction associated with the Presidio Chapel (Building 130) may only proceed as follows:

i. In order to minimize the effect of an addition, Building 130 and its surrounding landscape will be rehabilitated and new construction designed according to the treatment recommendations in an HSR, developed according to terms set forth in Stipulation II(E). The HSR will presume an addition of 4,000 square feet.

ii. An addition not to exceed 4,000 sq/ft may be located to the west of Building 130, with a height not to exceed the sills of the west elevation windows; the addition will be perpendicular to the west wall of the sanctuary, allowing a large portion of the west wall to be visible.

iii. Designs for the addition will take into account the presence of subsurface archaeological features and the Trust will seek solutions through the review process to avoid adverse effects associated with excavation.

iv. Review of rehabilitation and new construction will be conducted according to terms set forth in Stipulation II(C), and will follow conceptual plans attached as Appendix F.

f. Pedestrian Access & Parking Improvements

Pedestrianization of specified roads and development of the following parking facilities in the Main Post may only proceed in accordance with the Secretary's Standards and as follows:

i. Traffic signals will not be installed at any location in the Main Post.

ii. Portions of Arguello Boulevard (between Moraga and Sheridan Avenues) and Sheridan Avenue (between Graham and Montgomery Streets) will be closed to vehicular traffic using removable bollards; historic widths and alignments of these NHL-contributing resources will be retained and roads will be resurfaced with a historically compatible paving material; reviews for treatment of historic roads will be conducted according to terms set forth in Stipulation II(C).

iii. In coordination with the SHPO, a determination of eligibility (DOE) to the National Register of Historic Places (NRHP) will be completed regarding Building 385 in accordance with Stipulation II(I), as associated with the Moraga Avenue parking lot, within three (3) months after the execution of the Agreement. If the building is found eligible to the NRHP the building will be documented in accordance with Stipulation II(D)(1).

iv. Parking lots at Taylor Road and Moraga Avenue will be developed to avoid adverse effects to Buildings 113, 118 and 386, according to conceptual plans attached as Appendix G; treatment of archaeological resources will follow terms set forth in Stipulation II(G).

v. The Main Post Bluff parking facility will be developed according to conceptual plans attached as Appendix G; an archaeological Identification Plan will be developed for the Main Post Bluff parking facility prior to completion of schematic designs. An AMA will be prepared based on any additional testing that may be required according to the Identification Plan. If the AMA anticipates an adverse effect to archaeological features, the Trust will draft a proposed Treatment Plan according to terms set forth in Stipulation II(G)2.

vi. Reviews for the design of the parking facility will be conducted according to terms set forth in Stipulation II(C).

B. Development of Design Guidelines & Cultural Landscape Documentation

1. Cultural Landscape Report

The Trust will organize, update and supplement existing cultural landscape documentation into a Cultural Landscape Report for the Main Post (CLR-MP) according to the format recommended by Chapter 7 (Management of Cultural Landscapes) of NPS 28: Cultural Resource Management Guideline within six (6) months of the execution of this agreement document. The CLR-MP will be developed according to the process described in Appendix K.

Focused cultural landscape and planning & design guidelines may be completed for the Chapel, Theater and Taylor Road Parking areas prior to the completion of the broader CLR-MP and Main Post Planning & Design Guidelines. These focused studies would receive the same level of review as the larger studies, as described in Appendix K.

2. Main Post District-Wide Guidelines

The Planning District Concepts and Guidelines for the Main Post District that are included in the 2002 PTMP (pp. 62-69) remain the overarching guidance under this Agreement. The Trust will also revise the February 2007 Main Post Planning & Design Guidelines (available on the Trust's website at www.presidio.gov) according to the Final Main Post

Update within six (6) months of the execution of this agreement. The updated Main Post Planning & Design Guidelines will be appended to the CLR-MP, and developed according to the process described in Appendix K.

3. Project-Specific Design Guidelines

Project-specific design guidelines for the Presidio Lodge, Presidio Theatre and Presidio Chapel will be based on the CLR-MP, revised Main Post Planning and Design Guidelines, and treatment recommendations in the HSRs for the applicable buildings. These design guidelines shall be finalized as part of the HSR for each project, and shall constitute final design guidelines, to be considered in project design reviews as set forth in Appendix K.

4. Coordination with Design of the Main Parade

a. Guidelines will be included in the updated Main Post Planning and Design Guidelines to ensure compatibility between the Presidio Lodge design and the rehabilitated Main Parade.

b. Project specific design guidelines for the Presidio Lodge will incorporate directives from the Main Post Planning and Design Guidelines ensuring compatibility between the new Lodge construction and the adjacent Main Parade.

c. Prior to finalizing schematic designs for the eastern edge of the Main Parade (also known as the "Anza Esplanade", reference Appendix H), the Trust will hold a public meeting on the proposed design for that feature.

d. Following the public meeting the Trust FPO or designee will distribute a 90% design development submittal to the signatory and concurring parties for review. The design submittal will be made available via the Trust website (www.presidiotrust.gov), in hard copy in the Trust's Library, or in hard copy mailed upon request.

e. Written comments from the signatory parties on these design submissions received by the Trust within twenty-one (21) calendar days of the submission will be considered. If a party does not comment within twenty-one (21) calendar days, and does not notify the Trust and request an additional period to submit comments that shall not exceed ten (10) calendar days, the Trust may proceed.

C. Project Design Reviews – New Construction and Rehabilitation

1. Design Review Steps, Process for PA-MPU Projects

a. Using site-specific and district-wide design guidelines, the design guidelines in the PTMP, and/or treatment recommendations from HSRs, the Trust FPO or designee will work with project proponents to develop designs for new construction and rehabilitation described under Stipulation II(A)(1)(a-f).

b. The Trust is responsible for ensuring that design submittals are complete prior to distributing them for review. These designs will be submitted to signatory and concurring parties, and the public, for further consultation and comment according to the processes described in Appendix K.

c. The Trust FPO or designee will be responsible for notifying participating parties of the intent to hold public meetings and on-site briefings in accordance with Appendix K at least thirty (30) calendar days prior to the event taking place.

2. Consultation on Treatment of Buildings 40 and 41

a. Prior to completion of schematic designs for El Presidio interpretive landscape, and after the completion of the CLR, the Trust will initiate consultation with signatory and concurring parties to determine the appropriate treatment of Buildings 40 and 41, and will consider all measures for avoidance, minimization or mitigation.

b. Because the landscape design for El Presidio will be phased, phases of the plan that do not propose to adversely affect Buildings 40 and 41 may proceed according to the process described in Appendix K. Implementation of earlier phases of the treatment plan will not preclude any outcome as to the final treatment of Buildings 40 or 41.

c. The Trust FPO or designee will initiate consultation by notifying signatory and concurring parties of its intent to hold a public meeting thirty (30) calendar days prior to scheduling the meeting. Trust staff will present proposals, with the full range of treatment options, related to the above-referenced project at the session and will solicit comment from attendees. Following the public meeting, the Trust, NPS, SHPO and concurring parties will meet to consider the proposals and comments from the meeting and discuss how effects should be resolved.

d. Where the parties agree on how effects will be resolved, they shall document such agreement along with a process for implementing the terms of agreement (including, but not limited to, documentation, rehabilitation and/or relocation plans, or other mitigation measures).

e. If, after consultation, the parties do not agree on how effects will be resolved, then the FPO or designee shall notify the ACHP and treat the matter as an objection under the terms of Stipulation V(A) Dispute Resolution.

D. HABS/ HAER/HALS Documentation & Other Mitigation Measures

1. Prior to demolition of Building 46, finalizing the treatment plan for Buildings 40 or 41, or demolition of any building that has been found individually eligible to the NRHP in accordance with Stipulation II(I) or that is subsequently found to be contributing to the NHLD, the Trust will complete recordation and documentation of these resources, as necessary, in accordance with the *Secretary of the Interior's Standards and Guidelines for Architectural and Engineering Documentation*, prior to start of construction. The Presidio Trust shall consult with the NPS HABS/HAER/HALS program in the PWRO to determine the level and kind of recordation appropriate for the resources.

2. In addition to the requisite copies for final submission to the Heritage Documentation Programs, the Trust will make archival, digital and bound library-quality copies of HABS/HAER/HALS documentation available, as appropriate, to the NPS/GGNRA Archives and Records Center.

3. The signatory parties may develop additional mitigation measures to resolve the demolition of eligible or contributing buildings through consultation not to exceed fifteen (15) calendar days. Where the signatory parties agree on the development of additional mitigation measures, they shall document such agreement along with a process for implementing the terms of agreement. If, after consultation, the signatory parties do not agree on the development of additional mitigation measures, then the FPO or designee shall notify the ACHP and treat the matter as an objection under the terms of Stipulation V(A) Dispute Resolution.

E. Historic Structures Reports

1. The Trust will prepare HSRs for Buildings 86/87, 99 and 130. The HSRs will be written in accordance with the standards established in *Preservation Brief 43: The Preparation and Use of Historic Structure Reports* (National Park Service, 2005). The HSRs will include a history of the property/building, construction history, archaeology, architectural evaluation, conditions assessment, maintenance requirements, recommendations for proposed work, copies of original drawings and specifications (if available), current drawings if different from the original, and historic and current photographs.

2. HSRs will be developed following the execution of this agreement document, and completed prior to additional design development. HSRs will be developed according to the process described in Appendix K.

F. Salvage

For the historic properties that will be demolished under Stipulation II(A), the Trust's qualified personnel will conduct a documented inspection to identify architectural elements and objects that may be reused in rehabilitating similar historic structures, or that may be preserved in a museum collection in accordance with the Secretary's Standards. These decisions will be included in the annual report submitted according to Stipulation IV(A).

G. Archaeology Process

The Trust shall take all reasonable measures to protect archaeological sites and features identified inside the NHLD. To accomplish this and inform the design process, an

Archaeological Management Assessment (AMA) shall be prepared for individual projects or groups of related projects described under Stipulation II(A)(1)(a-g) by a qualified archaeologist prior to the completion of schematic design. The Trust's Principal Archaeologist will provide copies of completed AMA's in the Trust's PTPA Annual Report. Based on the assessment in the *Final Finding of Effect*, the AMA will outline a course of action for the projects. This course of action shall include one or more of the following:

1. Identification Plan

A project-specific plan shall be developed at the completion of the schematic phase for projects anticipated to have an adverse effect but that require further identification to understand the content and dimensions of the features, to assess the nature and extent of the effect, and/or to guide continuing efforts to avoid or minimize the adverse effect. For archaeological features identified the Trust may assume eligibility. Identification will further refine recommendations in the AMA and may lead to a monitoring or treatment plan.

2. Treatment Plan

A project-specific plan shall be developed for those projects that have unavoidable adverse effects and where existing identification is sufficient to proceed to treatment, or for which further identification is incorporated within the treatment plan. If through identification the plan anticipates and includes the treatment of prehistoric resources the Trust will seek to incorporate Native American comments and concerns, taking into account direct affects to cultural resources as well as indirect affects to Native American cultural values. The plan will describe protection measures for unaffected archaeological features, relevant research questions to be answered, methods for data recovery, monitoring during construction, responsibilities and coordination, and the interpretation and curation of recovered materials. The plan will describe the mitigation sufficiently to serve as a scope of work and for the purpose of developing a budget. Treatment Plans will be reviewed according to terms set forth in Appendix K.

3. Monitoring Plan

A project-specific plan shall be developed for those projects that are not anticipated to have an adverse effect, or that have been designed to avoid adverse effect during design development but that nonetheless are within proximity to identified or predicted archaeological features. The monitoring plan will describe measures to protect archaeological features, and in the event that Native American human remains are encountered will include protocol measures adhering to NAGPRA and all applicable state and federal laws; the monitoring plan will also include the proposed location and frequency of monitoring along with required documentation procedures. Measures to identify, assess, and determine the appropriate treatment of archeological features should they be encountered will be consistent with the discovery protocols.

4. Discovery Protocol

A standard response protocol shall be developed by the Trust within thirty (30) calendar days of the execution of this agreement for all projects in the event of a discovery. For projects without any anticipated effects, this will be the only condition required prior to implementation. In the event of a discovery the Trust may assume

eligibility for the purposes of treatment. Should circumstances arise where the Trust cannot address discoveries in a manner consistent with the protocol, the Trust shall notify the SHPO and NPS of the discovery and any project-related time constraints, then agree upon reasonable time frames for consultation. The Trust shall take into account any timely comments prior to making a final decision on treatment. This protocol will describe the Trust's methods to comply with the Archaeological Resources Protection Act and Native American Graves Protection and Repatriation Act.

H. Archaeology Program for El Presidio and the Main Post

In keeping with the Secretary of the Interior's Standards for Preservation Programs pursuant to Section 110 of the NHPA (1998) the Trust shall institute an archaeology program to further identify, research, and use the archeological sites and features within the NHLD as public interpretive facilities. This effort will focus on El Presidio and will include ongoing scholarship, incremental conservation-minded excavation, landscape commemoration that preserves subsurface features, interpretation of the archaeology process and findings for the public, and dissemination of the information being recovered through educational programs. To provide necessary detail for the management approach, the archaeological methods involved, and the landscape designs for the site of El Presidio described under Stipulation II(A)(1)(a), the Trust will further develop the following documents:

1. Levantar

The Trust shall update and finalize *Levantar* the Archaeological Management Plan (AMP) for El Presidio (drafted and reviewed in 2004 per Stipulation XII(E) of the PTPA, and available on the Trust's website at www.presidiotrust.gov) within ninety (90) calendar days of the execution of this agreement to reflect the direction provided in the Main Post Update and in this Agreement. Following execution of this Agreement, the updated version of *Levantar* will be distributed to the signatory and concurring parties to this PA via the Trust's website (www.presidiotrust.gov) and via hard copy in the Trust's Library for comment. Written comments from the parties that are received by the Trust within ninety (90) calendar days of the review session will be considered. If a party does not comment within ninety (90) calendar days, and does not notify the Trust to request an additional period to submit comments that shall not exceed ten (10) calendar days, the Trust may proceed with finalization of the document.

2. Standards and Guidelines

The Trust shall develop standards and guidelines to direct archaeological methods at El Presidio and the Main Post for field investigations, laboratory processes, mapping, and reporting. These standards and guidelines will facilitate both current interpretation and future research, and will ensure consistency amongst the various archaeological initiatives of the Trust and its academic and professional partners. These standards will be informed by the agreement developed between NPS-GGNRA and the Trust referenced in Stipulation II(A)(1)(b)(iii). The standards and guidelines will be completed within twenty-four (24) months of the execution of this Agreement, and will be submitted to SHPO for a twenty-one (21) calendar day review. This report will be periodically updated to reflect developments in the field of archaeology.

I. Individual Eligibility of Post-World War II Resources

Within three (3) months of execution of this Agreement, the Trust will complete a DOE to the NRHP eligibility with the SHPO for post-World War II resources in the Main Post, particularly Buildings 34, 63, 68, 93, 98, 205, 215, 231, 385 and 387. If a building is found individually eligible to the NRHP it will be documented in accordance with Stipulation II(D)(1) prior to start of construction.

III. PTPA UPDATE

The Trust will initiate consultation to review the PTPA for amending or updating with that document's signatory and concurring parties within six (6) months of executing this Agreement with the goal of completion by 2013 when the PTPA expires.

IV. ADMINISTRATIVE STIPULATIONS

A. Reporting

On or before January 30 of each reporting year, so long as this Agreement is in effect, the Trust will include project updates in conjunction with its PTPA annual report, describing how the agency is carrying out its responsibilities under this Agreement. The Trust will make the annual report available via its website (www.presidiotrust.gov), and a hard copy in the Trust Library, and through a mailing to the signatory and concurring parties to this agreement.

B. Professional Standards

All activities regarding history, collections management, historical archaeology and prehistoric archaeology, architecture, landscape architecture, and architectural history that are accomplished pursuant to this Agreement will be carried out by or under the direct supervision of persons meeting the *Secretary of the Interior's Professional Qualification Standards* relevant to the portion of the project being considered.

C. Report Dissemination

The Trust will require that all reports resulting from implementation of treatment plans, the AMP and AMAs meet contemporary professional standards and the *Secretary of the Interiors Standards for the Treatment of Historic Properties*; the *Secretary of the Interior's Standards and Guidelines for Archaeological Documentation*; and the "Secretary of the Interior's Standards and Guidelines for Architectural and Engineering Documentation" (*Federal Register*, 2003). Copies of all final reports will be provided to SHPO, the Northwest Information Center at Sonoma State University, and the NPS/GGNRA Archives and Records Center.

D. Post Review Discoveries

If it appears that an undertaking will affect a previously unidentified property that may be eligible for inclusion in the National Register, or that may contribute to the NHLD, or affect a known historic property in an unanticipated manner, the Trust will stop construction activities in the vicinity of the discovery and take all reasonable measures to avoid or minimize harm to the property. The Trust shall notify signatories within two (2) working days of the discovery by phone and shall e-mail and describe the FPO or designee's assessment of National Register eligibility of the property and proposed

actions to resolve the adverse effects. The signatory parties shall respond within two (2) working days of the notification by e-mail. The Trust FPO or designee shall take into account their recommendations regarding National Register eligibility and proposed actions, and then shall carry out appropriate actions. The Trust FPO or designee shall provide the signatories a report of the actions when they are completed.

V. DISPUTE RESOLUTION

A. Raising and Resolving Objections – Signatory Parties

1. Should any signatory party object to the manner in which the terms of this Agreement are implemented or to any documentation prepared in accordance with and subject to the terms of this Agreement, the party will notify the Trust and the other signatory parties. The Trust will consult with the other signatory parties for no more than fourteen (14) calendar days to resolve the objection, once the Trust notifies all signatory parties of the objection. If the signatory parties agree that the objection is resolved through such consultation, the issue in question may proceed in accordance with the terms of that resolution. An extension of the consultation period may be requested by signatory parties not to exceed an additional ten (10) calendar days.

2. If, after initiating such consultation, the Trust determines that the objection cannot be resolved through consultation, the Trust FPO or designee will forward all documentation, including the Trust's proposed response to the objection, to the ACHP.

    a. The ACHP shall provide the Trust with its advice on the resolution of the objection within thirty (30) calendar days of receiving the documentation. Prior to reaching a final decision on the dispute, the Trust shall prepare a written response that takes into account any timely advice or comments regarding the dispute from the ACHP, signatories and concurring parties, and shall provide them with a copy of this written response. The Trust will then proceed according to its final decision.

    b. If the ACHP does not provide its advice regarding the dispute within the thirty (30) calendar day time period, the Trust may make a final decision on the dispute and may proceed accordingly. Prior to reaching such a final decision, the Trust shall prepare a written response that takes into account any timely comments regarding the dispute from the signatories and concurring parties to the Agreement, and shall provide all parties to this Agreement with a copy of such written response.

    c. The Trust's responsibility to carry out all other actions subject to the terms of this Agreement that are not the subject of the dispute shall remain unchanged.

B. Raising and Resolving Objections – Concurring Parties

The Trust will respond to objections raised by concurring parties and the public in writing within thirty (30) calendar days of receiving the objection. The Trust will provide copies of all objections made by concurring parties to the signatory parties. The Trust may discuss with signatory parties issues that are raised by concurring

parties prior to responding. The Trust will provide concurring and signatory parties concurrently with a copy of its final written decision regarding any objection.

VI. AMENDMENTS AND TERMINATION

A. Amendment

Any amendment to this Agreement must be made in writing and signed by all signatories. While consultation on the amendment is underway, the terms of the existing PA will remain in effect. The amendment will be effective on the date a copy signed by all of the signatories is received by the ACHP or such later date as may be specified in the amendment.

B. Termination

1. If any signatory party to this Agreement determines that its terms will not or cannot be carried out, that party shall immediately consult with the other parties to attempt to develop an amendment per Stipulation V(A), above. If within thirty (30) calendar days (or within another time period agreed to by all signatories) an amendment cannot be reached, any signatory party may terminate the Agreement upon written notification to the other signatory parties.

2. Once the Agreement is terminated, and prior to work continuing on the Undertaking, the Trust shall either (a) execute a programmatic agreement pursuant to 36 CFR § 800.14(b)(3), or (b) review such projects under Subpart B of 36 CFR Part 800. The Trust shall notify the signatories as to the course of action it will pursue.

VII. DURATION

A. This Agreement will be in effect through the Trust's implementation of the Undertaking, and will expire and have no further force or effect when the Trust, in consultation with the other signatories, determines that the terms of this Agreement have been fulfilled. The Trust will provide the other signatories with written notice of its determination and of the expiration of this Agreement.

B. Five (5) years after the date of executing this Agreement, the Trust FPO or designee will notify signatory parties in writing to organize a review of the Agreement for the purposes of amending or updating its terms. Ten (10) years after the date of executing this Agreement, if its stipulations are not carried out it will expire and prior to work continuing on the Undertaking, the Trust shall either (a) execute a programmatic agreement pursuant to 36 CFR § 800.14(b)(3), or (b) review such projects under Subpart B of 36 CFR Part 800. Prior to such time, the Trust may consult with the other signatories to reconsider the terms of the Agreement and may extend or amend it in accordance with Stipulation V(A) above. The Trust shall notify the signatories as to the course of action it will pursue.

VIII. CONCURRING PARTY INVOLVMENT IN IMPLEMENTATION OF THIS AGREEMENT

A. No work stipulated per this Agreement involving concurring parties shall proceed until forty five (45) calendar days after the execution of this Agreement by the required signatories.

B. If a consulting party does not sign this Agreement as a concurring party within forty five (45) calendar days after the execution of this Agreement by the required signatories, the Presidio Trust may proceed with work stipulated per this Agreement involving concurring parties.

C. A consulting party can become a concurring party after the forty five (45) calendar-day period with the written agreement of all signatory parties.

D. If a consulting party becomes a concurring party to the Agreement after forty five (45) calendar days after the execution of the Agreement subject to stipulation VIII(C) above,, the Presidio Trust shall not be required to revisit prior completed consultations stipulated in this Agreement or reconsider previous findings or determinations made prior to the date that such consulting party becomes a concurring party.

EXECUTION of this Agreement by the signatories and implementation of its terms evidence that the Trust has afforded the signatory and consulting parties an opportunity to comment on the Undertaking and its effects, and has taken into account the effects of this Undertaking on historic properties, and further that in compliance with the requirements of 36 CFR Part 800 and Section 110(f) of the NHPA, the Trust has afforded the ACHP a reasonable opportunity to comment on the Undertaking. This Agreement may be executed in any number of counterparts and each counterpart shall be deemed to be an original document. All executed counterparts together shall constitute one and the same document, and any counterpart signature pages may be detached and assembled to form a single original document.

SIGNATORIES:

PRESIDIO TRUST

By: _____ Date: 10/21/10

Name: Craig Middleton

Title: Executive Director

ADVISORY COUNCIL ON HISTORIC PRESERVATION

By: John M. Fowler Date: 10/26/10

Name: John Fowler

Title: Executive Director

CALIFORNIA STATE HISTORIC PRESERVATION OFFICER

By: _____ Date: 22 OCT 2010

Name: Milford Wayne Donaldson, FAIA

Title: State Historic Preservation Officer

NATIONAL PARK SERVICE

By: Frank Dean Date: Oct. 22, 2010 By: Cynthia Gilly Date: 10/25/10

Names: Frank Dean
Titles: Superintendent, Golden Gate National Recreation Area

Christine S. Lehnertz
Director, Pacific West Regional Office

724 **LIST OF APPENDICES**

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APPENDIX A: AREA OF POTENTIAL EFFECT (APE) FOR THE MAIN POST UPDATE (UNDERTAKING)

Area of Potential Effect

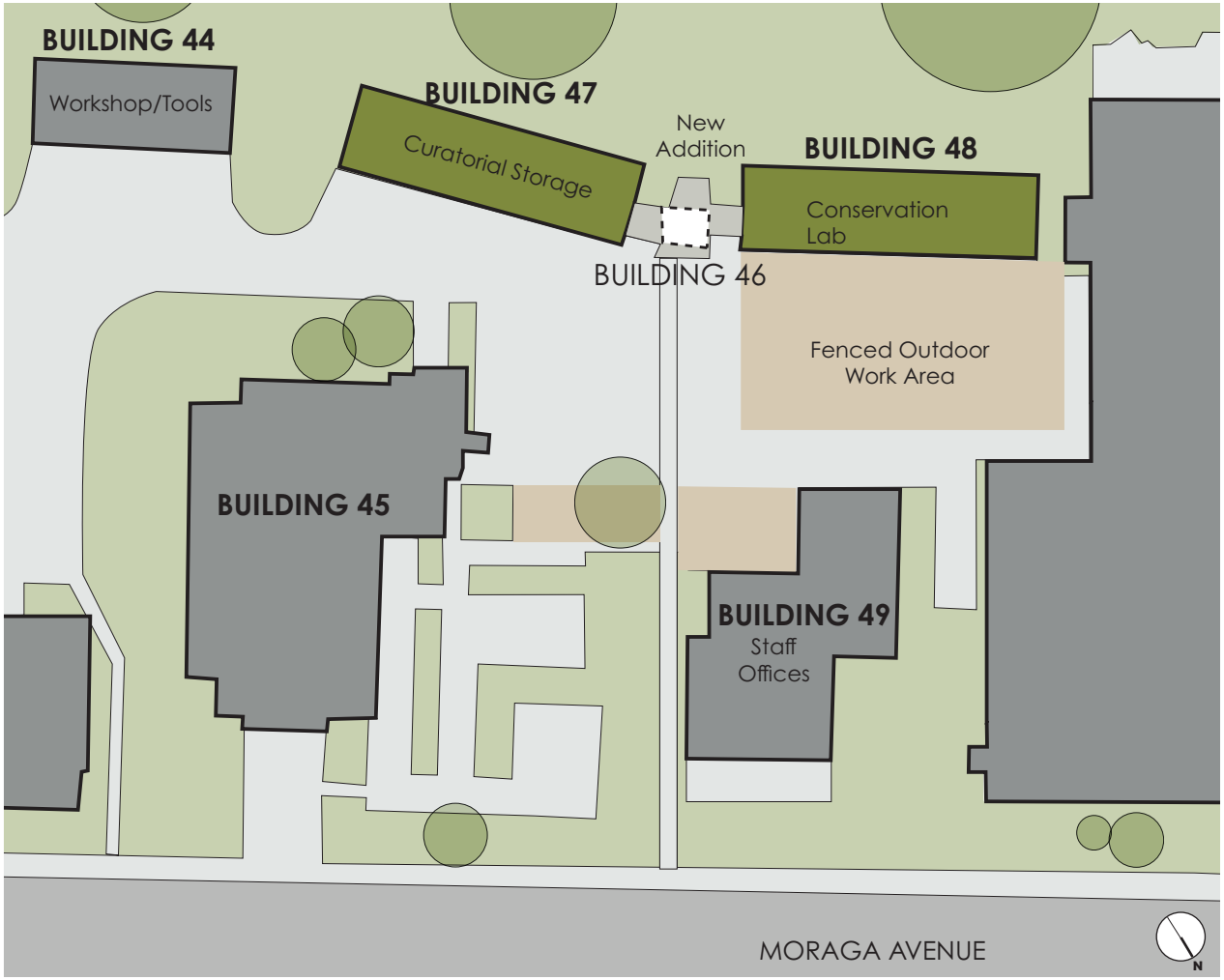
Main Post Project Area

Area of Potential Effect

April 2008
Main Post Supplemental Environmental Impact Statement

Appendix B: Final Finding of Effect

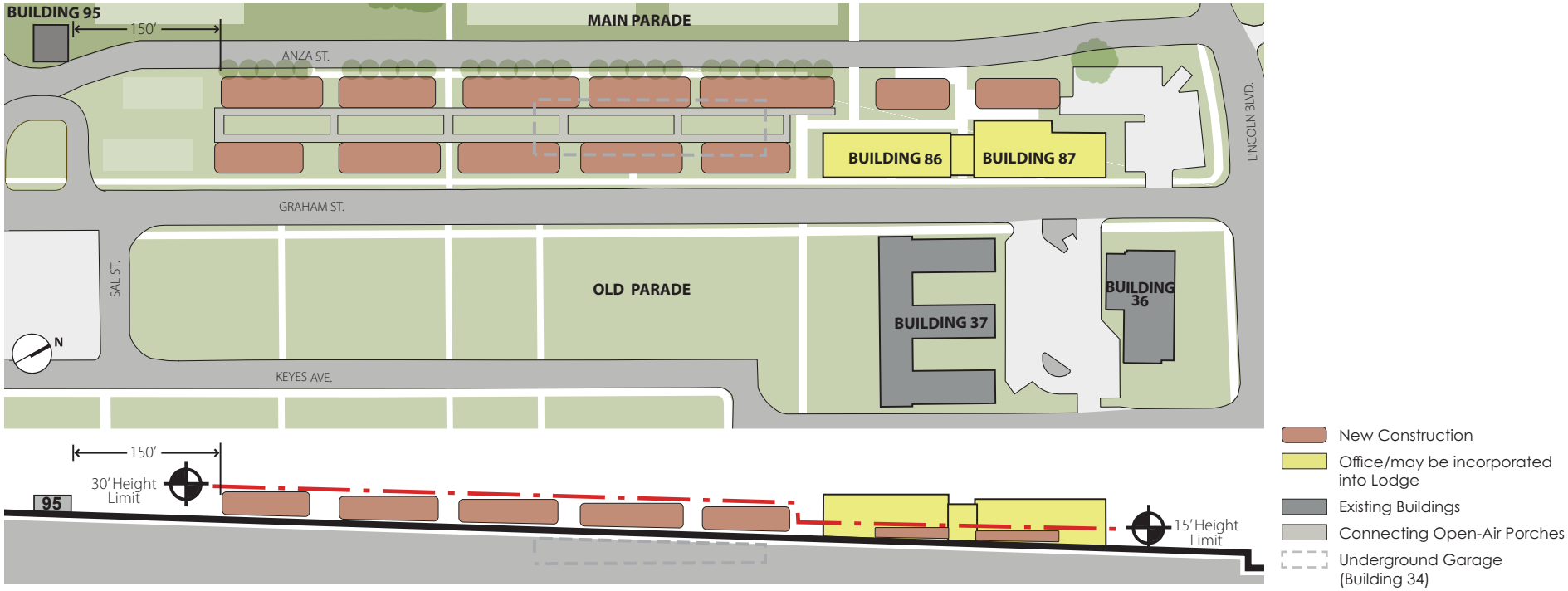
The Final Finding of Effect for the Main Post Update (FFOE, July 2009) can be found on the Trust website at: http://library.presidio.gov/archive/documents/MP_FFOE_Jul2009.pdf



PROJECT PARAMETERS

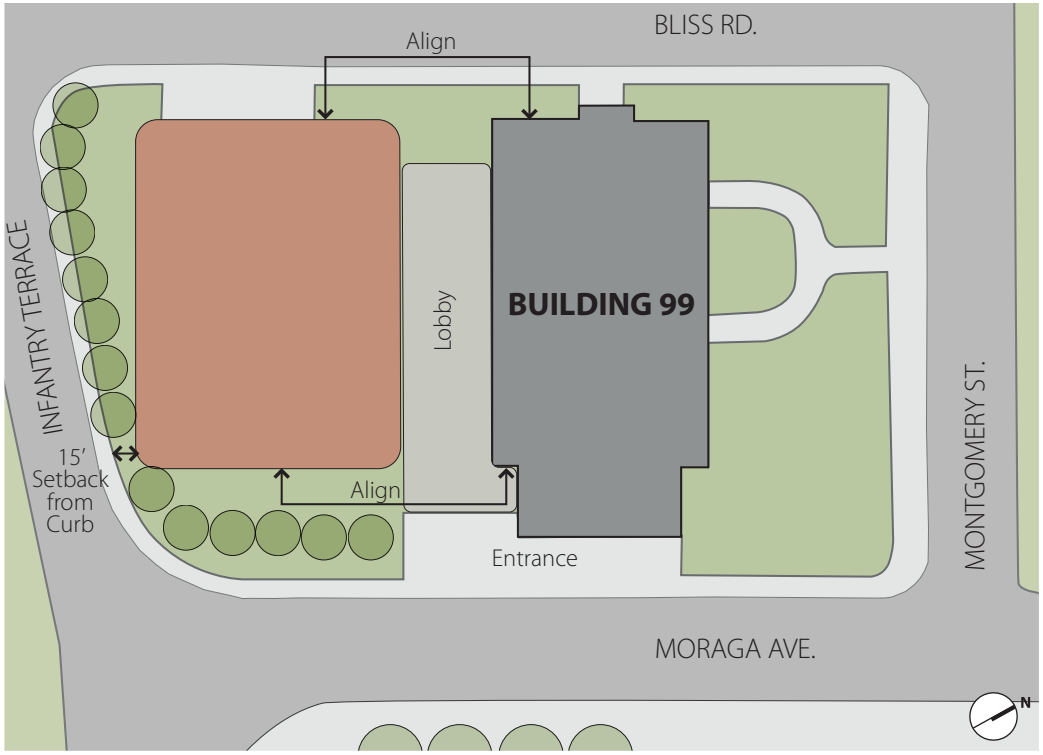
- Rehabilitate NHL-contributing Buildings 47 and 48.
- Demolish NHL-contributing Building 46; provide HABS recordation for Building 46.
- Limit new construction to 500 square feet to connect Buildings 47 and 48; addition not to exceed the height of the roof ridge of Buildings 47 and 48.

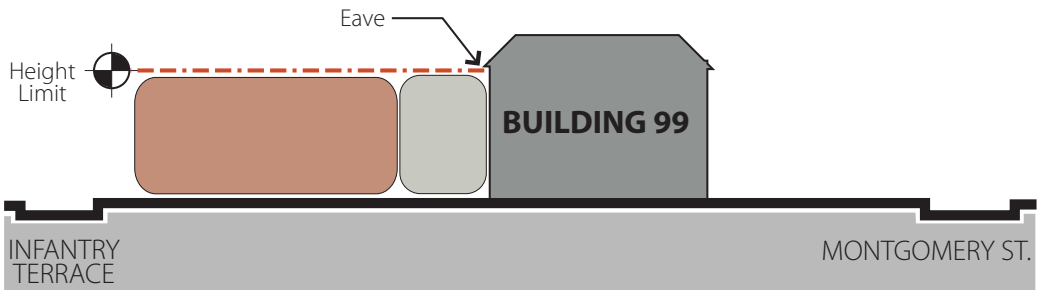
Archaeology Lab and Curation Facilities
Outdoor Education and Work Area
Connecting Structure
Building Removed (Building 46)



PROJECT PARAMETERS

- Demolish non-NHL contributing Building 34.
- Limit new construction to 70,000 square feet.
- Apply design guidelines and HSR treatment recommendations; design review process for new construction, guided by PA-MPU.
- Design the lodge to respond to Main Parade Ground rehabilitation design.
- Limit height of new construction to 30 feet above existing grade.
- Base the building footprint on the pattern of the historic barracks that once occupied the site between Graham Street and Anza Street.
- Set back the southern edge of new construction at least 150' from Building 95 to avoid El Presidio archaeology.
- Identification of buried archaeological features will be completed prior to final design to inform efforts to avoid or minimize adverse effects.
- An underground parking garage may also be constructed utilizing the basement of Building 34 to serve the Presidio Lodge (up to 50 spaces).
- Buildings 86 and 87 may be rehabilitated and incorporated into the Lodge.

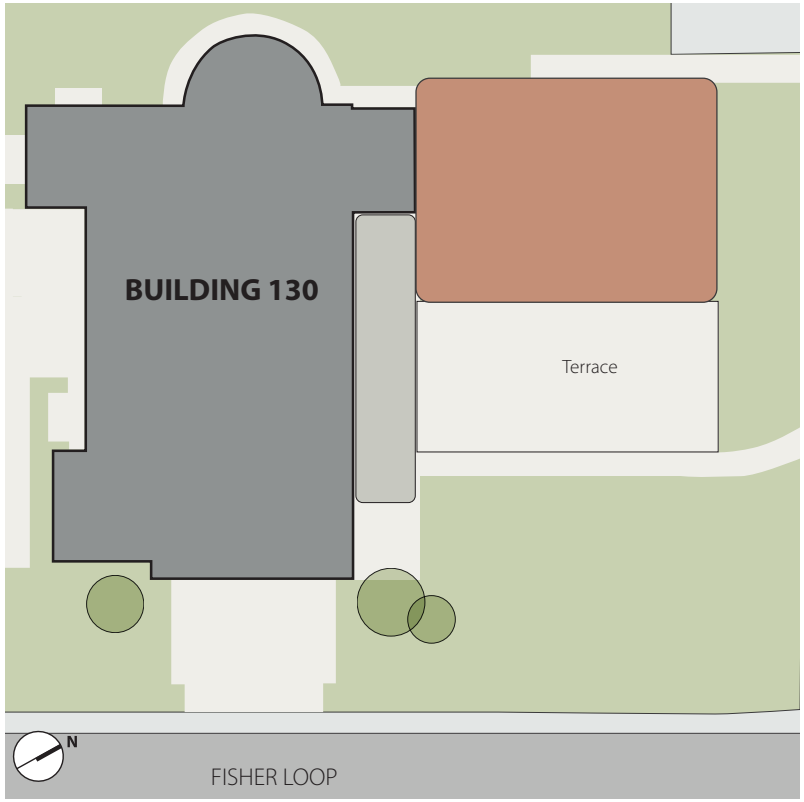




PROJECT PARAMETERS

- Prepare an HSR for Building 99.
- Rehabilitate NHL-contributing Building 99, retaining its single auditorium and historic orientation to Moraga Avenue.
- Limit new construction to 18,000 square feet; limit height to the eave of the existing theater.
- Pull new construction away from the historic building with a transparent connector.
- Apply design guidelines and HSR treatment recommendations; design review process for new construction guided by the PA-MPU.

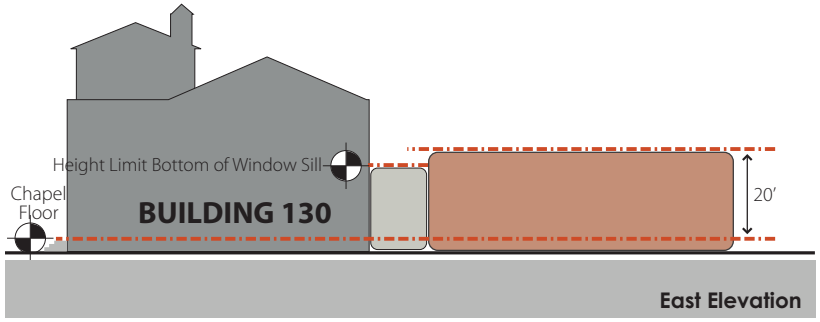
New Construction
Existing Historic Theater
Connecting Structure

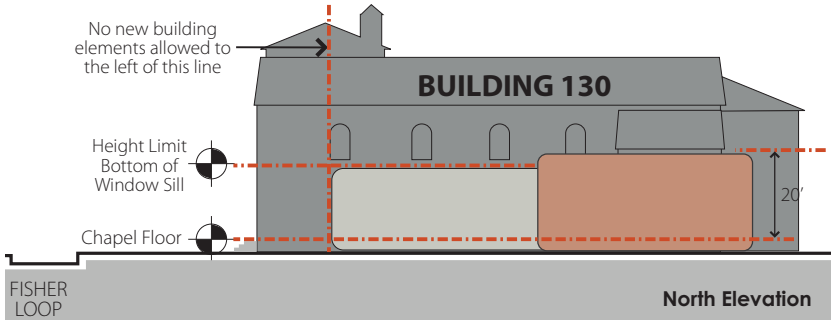


PROJECT PARAMETERS

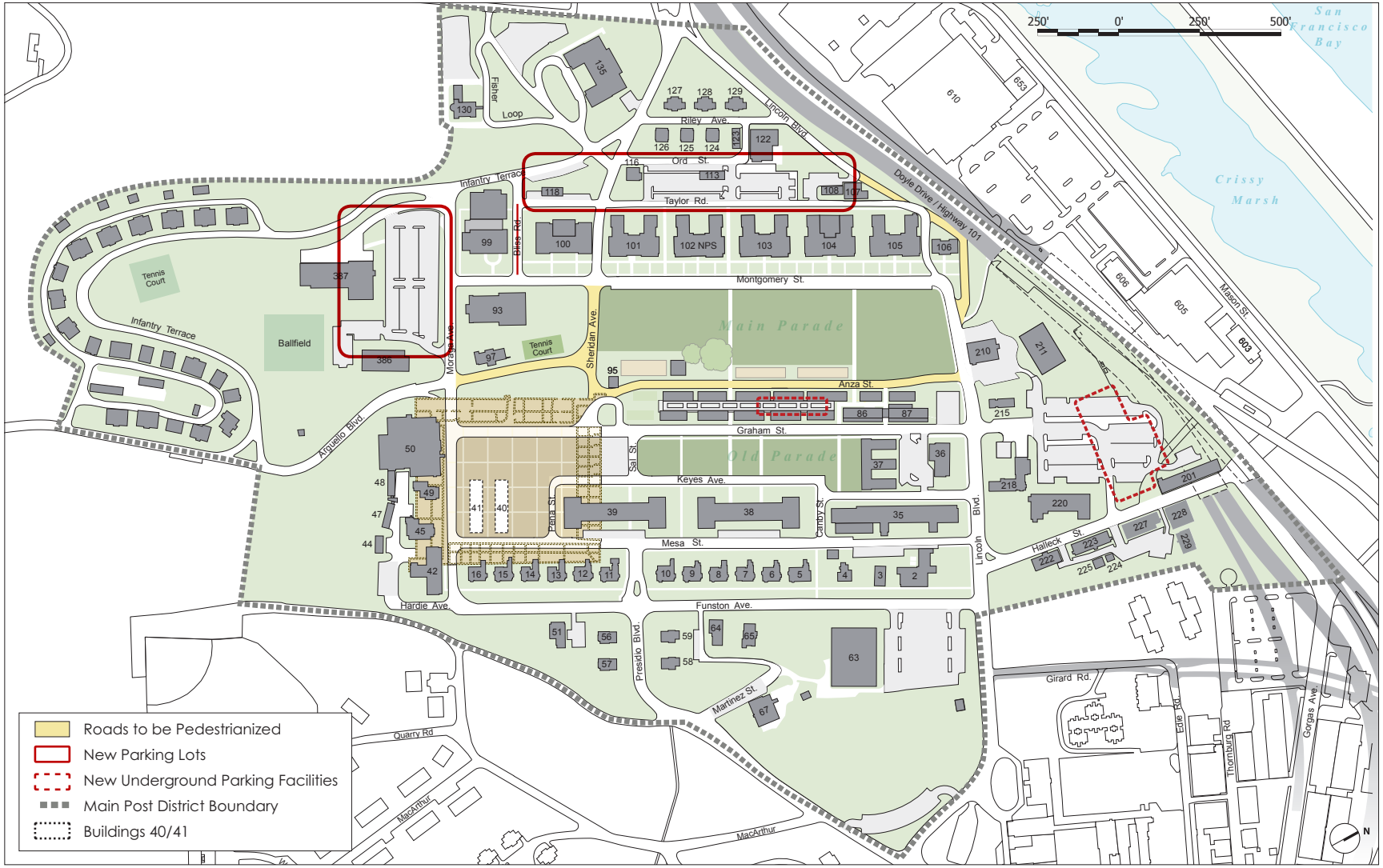
- Prepare an HSR for Building 130.
- Rehabilitate NHL-contributing Building 130.
- Limit new construction to 4,000 square feet on the west of building 130; limit the height of the connecting structure to the sills of the west elevation windows and the height of new construction to 20 feet above finished floor level.
- Orient the addition to be perpendicular to the west wall of the sanctuary, allowing a large portion of the west wall to be visible.
- Apply design guidelines and HSR treatment recommendations; design review process for new construction guided by PA-MPU.

New Construction
Existing Historic Chapel
Connecting Structure



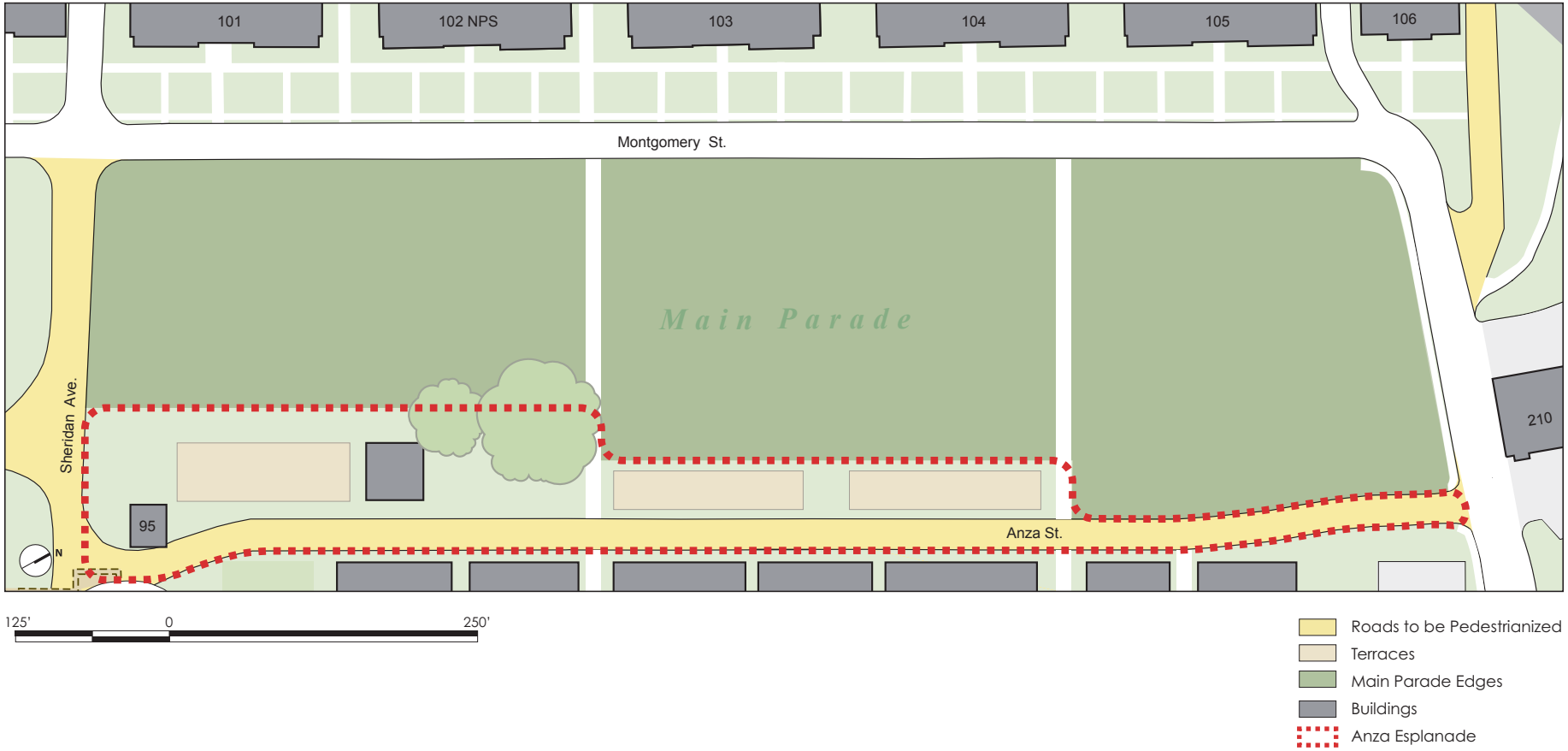


APPENDIX G: CONCEPTUAL SITE PLANS FOR PEDESTRIAN ACCESS AND PARKING IMPROVEMENTS



PROJECT PARAMETERS

- Traffic signals will not be installed in the Main Post.
- Portions of the NHL-contributing Arguello Boulevard and Sheridan Avenue will be converted to pedestrian use.
- Current widths and alignments of NHL-contributing roads will be retained; roads will be resurfaced with a historically compatible paving material.
- Identification of buried archaeological features will be completed prior to final design to inform efforts to avoid or minimize adverse effects.
- Taylor Street parking lot will retain historic garages, Buildings 113 and 118; Moraga Avenue parking lot will retain Building 386.


101
102 NPS
103
104
105
106
Montgomery St.
Main Parade
Sheridan Ave.
210
95
Anza St.
N
125'
0
250'
Roads to be Pedestrianized
Terraces
Main Parade Edges
Buildings
Anza Esplanade

Appendix I: Presidio Trust Programmatic Agreement

The Presidio Trust Programmatic Agreement (PTPA) can be found on the Trust website at:
http://library.presidio.gov/archive/documents/ProgrammaticAgreement.pdf

Appendix J: Glossary of Terms
Programmatic Agreement for the Main Post Update

Area of Potential Effects (APE): The geographic area or areas within which an undertaking may directly or indirectly cause alterations in the character or use of historic properties, if any such properties exist. The area of potential effects is influenced by the scale and nature of an undertaking and may be different for different kinds of effects caused by the undertaking.

Avoidance: One of the three methods for resolving an adverse effect (along with minimization and mitigation) according to 36 CFR Part 800 – Protection of Historic Properties. Avoidance indicates that an action that would have caused an adverse effect will no longer occur (i.e. a building that was slated for demolition will be retained).

Adverse effect: Direct or indirect harm to historic properties listed on or eligible for inclusion in the National Register of Historic Places.

Compatibility: Consistent, congruous; capable of existing together in harmony. Used in the same context here as in the Secretary of the Interior's Standards for Rehabilitation.

Conceptual plan: Initial designs that initiate the design development process, and include general concepts rather than detailed renderings.

Concurring Party: Consulting parties are invited by the agency official to concur with and sign the programmatic agreement. Concurring parties have been granted specific roles and responsibilities that are more limited than those of the signatory parties. Refusal of any party invited to concur does not invalidate the agreement document.

Connector: Enclosed or open spaces that function to connect buildings.

Construction document (CDs): Drawings, plans and specifications that are created for use by an architect and contractors for pricing and planning construction of a designed building or structure. This level of documentation follows Design Development.

Consultation: The process of seeking, discussing, and considering the views of other participants, and, where feasible, seeking agreement with them regarding matters arising in the section 106 process.

Cultural Landscape Report (CLR): A comprehensive document that includes documentation, analysis, and evaluation of historical, architectural, archaeological, ethnographic, horticultural, landscape architectural, engineering and ecological data as appropriate. Documentation is assessed to evaluate the history, significance, and integrity of the landscape including treatment recommendations appropriate for the landscape's significance, condition and planned use, as well as documentation of implemented treatments.

Design Development (DD): The process that follows final schematic design, and lays out mechanical electrical, plumbing, structural and architectural details. Often this phase specifies design elements such as material types and location of windows and doors.

Design Guidelines: Policies that describe parameters, limits and directives to inform rehabilitation or new construction in order to avoid or minimize impacts to existing historic structures, features and landscapes.

Gross building area: Total floor area of a building, measured from its outside walls.

Footprint: The ground level square footage of a building.

Historic Structure Reports (HSR): A comprehensive document that provides documentary, graphic, and physical information about a property's history and existing condition to inform preservation planning and make treatment recommendations. The document can also be organized to meet site or project specific goals, such as research objectives or programmatic needs.

Infill construction: New construction that is located within an existing or formerly developed area, such as a building complex or row of buildings.

Minimization: One of the three methods for resolving an adverse effect (along with avoidance and mitigation) according to 36 CFR Part 800 – Protection of Historic Properties. Minimization indicates a method or measure designed to lessen the intensity of an impact on a particular resource (i.e. impacts related to new construction are made smaller by reducing or reallocating the total square footage of new construction).

Mitigation: One of the three methods for resolving an adverse effect (along with avoidance and minimization) according to 36 CFR Part 800 – Protection of Historic Properties. Mitigation indicates that a separate action is undertaken to compensate for, or otherwise address, an adverse effect (i.e. an agency develops a program to interpret an impacted resource).

Height: Measurement taken from the grade level to the highest point of a building. Does not include accessories or wiring that function to service a building.

Historic Property: Any prehistoric or historic district, site, building, structure, or object included in, or eligible for inclusion in, the National Register of Historic Places maintained by the Secretary of the Interior. This term includes artifacts, records, and remains that are related to and located within such properties. The term includes properties of traditional religious and cultural importance to an Indian tribe or Native Hawaiian organization and that meet the National Register criteria.

Invited Signatory: An agency or organization that is invited by the agency official to be a signatory to a programmatic agreement, and has the same rights as required signatories.

Public: Any interested individual or group that has not signed the agreement document as either a signatory or concurring party.

New Construction: Additional net square footage of built space, excluding landscape improvements and other open space amenities.

National Historic Landmark (NHL): A nationally significant historic place designated by the Secretary of the Interior because it possesses exceptional value or quality in illustrating or interpreting the heritage of the United States. The Presidio was designated an NHL in 1962.

National Historic Preservation Act (NHPA): Federal legislation passed in 1966 that is intended to preserve historical and archaeological sites in the United States. The act created the National Register of Historic Places, the list of National Historic Landmarks, and the State Historic Preservation Offices. Among other things, the act requires Federal agencies to evaluate the impact of all federally funded or permitted projects on historic properties (buildings, archaeological sites, etc.) through a process known as Section 106 review.

Plan (or Plan View): A drawing made to scale to represent the top view or a horizontal section of a structure, (i.e. a floor layout of a building).

Programmatic Agreement: A document that records the terms and conditions agreed upon to resolve the potential adverse effects of a Federal agency program, undertaking or other situations in accordance with § 800.14(b).

Public Meeting: An in-person gathering whereby the agency presents up-to-date information on projects, takes questions, and engages in a dialogue with interested parties

Rehabilitation: According to the Secretary of the Interior's Standards, the act or process of making possible a compatible use for a property through repair, alterations, and additions while preserving those portions or features which convey its historical, cultural, or architectural values.

Resolution: A stage in the Section 106 process where adverse effects are addressed through avoidance, minimization or mitigation. Resolution typically concludes with a Memorandum of Agreement (MOA) or Programmatic Agreement (PA). This part of the process is described in the NHPA regulations at 36 CFR 800.6.

Schematic design: The process that follows a conceptual design. It should include estimated square footage of each usage type and any other elements that achieve the project goals. During schematic design, an architect commonly develops study drawings that include spatial relationships, scale, and form. Schematic design also is the research phase of the project, when zoning requirements or jurisdictional restrictions are discovered and addressed.

Section 106: The section of the NHPA that requires federal agencies to consider the effects of their actions on historic properties and seek comments from an independent reviewing agency, the Advisory Council on Historic Preservation. The purpose of Section 106 is guide consultation to identify historic properties potentially affected by an undertaking, assess the effects of that undertaking, and seek ways to avoid, minimize or mitigate any adverse effects on historic properties.

Section 110: The section of the NHPA that sets out the broad historic preservation responsibilities of federal agencies to ensure that historic preservation is fully integrated into ongoing programs.

Signatory: Signatory parties are required participants in a programmatic agreement. They include the lead agency (in this case, the Trust), the ACHP, NPS and the SHPO. Signatory parties generally have enhanced roles and responsibilities as compared to signatory parties. These typically include the ability to terminate or amend an agreement document.

Square footage: The sum of all areas on all floors of a building, measured in feet.

Undertaking: A project, activity, or program funded in whole or in part under the direct or indirect jurisdiction of a Federal agency, including those carried out by or on behalf of a Federal agency; those carried out with Federal financial assistance; and those requiring a Federal permit, license or approval.

Sources: 36 CFR 800.16 – Definitions; Random House Dictionary; AIA Knowledge Resources Staff; Wikipedia.com; NPS-28 and the Secretary's Standards for the Treatment of Historic Properties

Appendix K: Design Review Steps, Process for PA-MPU Projects

PA-MPU Projects:

Archaeology Lab & Curatorial Facility	El Presidio: The Birthplace of San Francisco
Presidio Lodge	Pedestrian Access (Historic Road Conversions)
Presidio Theatre	Parking Improvements (Main Post Bluff Parking Facility)
Presidio Chapel	Parking Improvements (Moraga Avenue Parking Lot)
Parking Improvements (Taylor Road Parking Lot)	

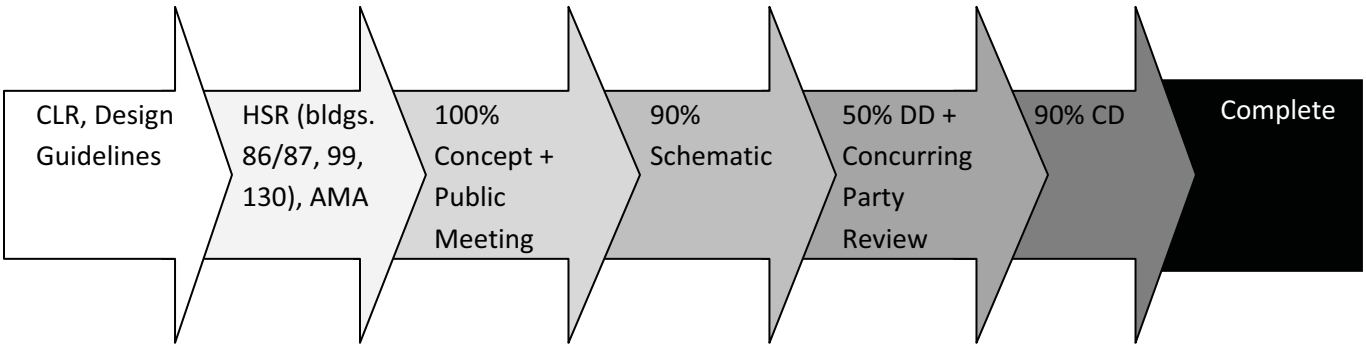
Review timelines for each phase: twenty-one (21) calendar days. Unless otherwise specified, review steps described below involve signatory parties only.

The Trust FPO or designee will be responsible for distributing design submissions and/or information for review. Design submittals and/or information will be made available via the Trust website (www.presidiotrust.gov), in hard copy in the Trust's Library, or in hard copy mailed upon request. Written comments from all parties on these design submissions received by the Trust within twenty-one (21) calendar days of the submissions will be considered. If a party does not comment within twenty-one (21) days, and does not notify the Trust and request an additional period that shall not exceed ten (10) days, the Trust may proceed. In the event that multiple review periods overlap, the Trust will consult with signatory parties to prioritize and determine alternative review timelines.

Group A:

Project(s): Presidio Lodge, Presidio Theatre, Presidio Chapel, El Presidio: The Birthplace of San Francisco, Parking Improvements (Main Post Bluff Parking Facility)

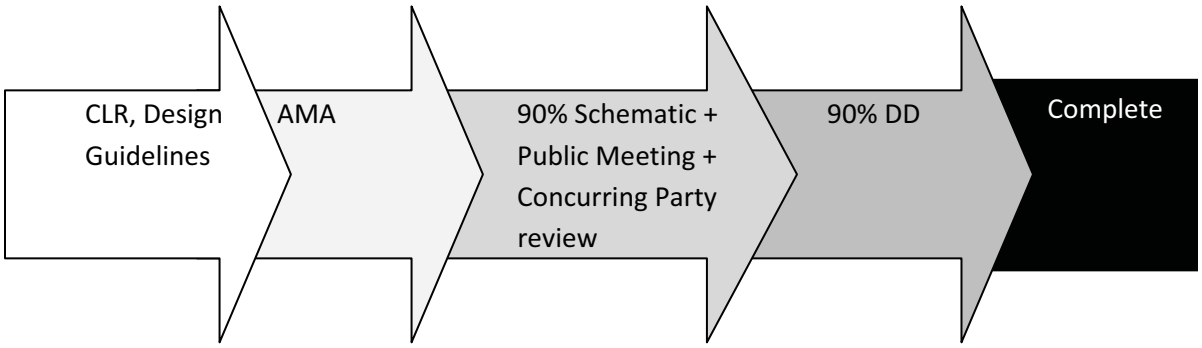
Review Process: Begins with conceptual design described by the project parameters in MPU and Appendix D of the PA-MPU, followed by the below sequence:



Group B:

Project(s): Parking Improvements (Taylor Road Parking Lot, Moraga Avenue Parking Lot), Pedestrian Access (Historic Road Conversions)

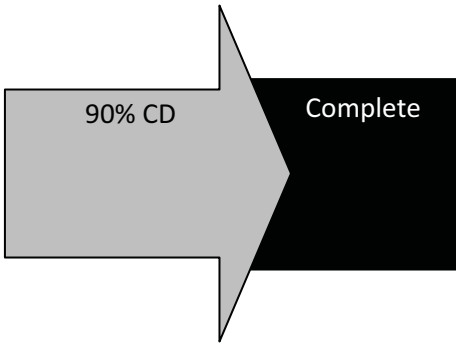
Review Process: Begins with conceptual design described by the project parameters in MPU and Appendix G of the PA-MPU, followed by the below sequence:



Group C:

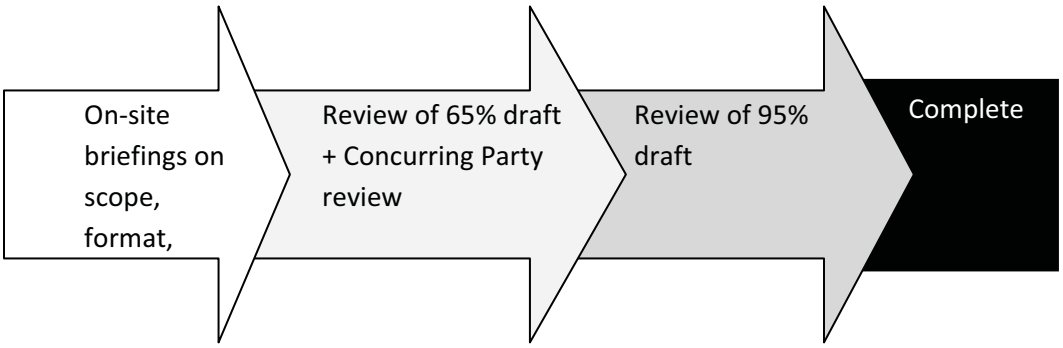
Project(s): Archaeology Lab & Curatorial Facility

Review Process: Conceptual, schematic, DD and 90% CDs are complete, project parameters in MPU, followed by the below sequence:



<u>Process for Development of CLR, HSR's (for buildings 86/87, 99, 130), Archaeological Treatment Plans, Design Guidelines for the Main Post</u>

Review timelines for each phase: 21 days



Appendix C
Post-Construction Stormwater Best Management Practices

Appendix C
Post-Construction Stormwater Best Management Practices

Introduction

The following are post-construction stormwater Best Management Practices (BMPs) for use on projects on the Main Post. The purpose of these BMPs is to provide project designers with guidance in the selection, design, and implementation of BMPs that are appropriate for use on the Main Post and to ensure a consistent approach to stormwater management. This is not intended to be a complete list of the possible BMPs.

The Presidio has been operating under the 1994 Presidio Stormwater Master Plan (SMP) (Dames & Moore 1994). The SMP is being updated to reflect changes in stormwater routing and new NPDES Phase II stormwater permitting requirements. The NPDES Phase II permit requires operators of small municipal separate storm sewer systems (MS4s) to "develop, implement, and enforce a stormwater management program designed to reduce the discharge of pollutants from their MS4 to the maximum extent practicable, to protect water quality, and to satisfy the appropriate water quality requirements of the CWA." The program requires six (minimum) control measures:

- Public education and outreach
- Public participation/involvement
- Illicit discharge detection and elimination
- Construction site runoff control
- Post-construction runoff control
- Pollution prevention/good housekeeping (EPA 2005b)

These BMPs were selected because they are established, effective methods of reducing stormwater runoff and enhancing stormwater quality. They are also intended to comply with post-construction runoff control requirements of the NPDES Phase II permit.

Construction sites with more than 1 acre of ground disturbance would also be required to develop a stormwater pollution prevention plan (SWPPP) containing construction specific BMPs (EPA 2005c).

Recommended BMPs

BMPs for the Main Post should employ techniques such as disconnecting downspouts, minimizing the amount of impervious surfaces, reducing runoff velocities by using sheet flow, providing areas for stormwater to

collect and infiltrate, and integrating vegetated swale infiltration areas and/or exfiltration trenches into new parking lots and other impervious areas. The BMPs listed below take into consideration the limited space available for placement of BMPs within the district and site conditions such as variable site soils and infiltration rates. See Figures C-1 through C-4 for graphical representations of BMPs.

DISCONNECTED DOWNSPOUTS

Most of the existing buildings within the Presidio have pipe connections from the roof downspouts to underground pipe collection systems. Disconnecting downspouts, in conjunction with other infiltration-based BMPs, increases the time of concentration resulting in reduced effective flow rates and improves water quality.

SHALLOW VEGETATED SWALES AND OTHER INFILTRATION AREAS

This BMP consists of constructing small, vegetated depressions located adjacent to buildings and/or paved areas to promote infiltration. These swales would include overflow structures connecting to the existing storm drain system to collect runoff when rainfall exceeds storage of the depression and permeable topsoil over an under-drain to ensure collected water infiltrates in a timely fashion. It is recommended that planted infiltration areas be integrated near storm drain piping systems to allow convenient connection of overflow structures if needed. These features should be planted with vegetation that is compatible with variety of soil moisture conditions. Operation and maintenance of these areas can be integrated into standard landscape maintenance activities. This measure could be coupled with disconnecting downspouts or other similar BMPs.

UNDERGROUND EXFILTRATION TRENCHES

This measure consists of perforated piping surrounded by gravel and filter fabric to form a highly permeable zone that promotes infiltration of stormwater, resulting in improved water quality and a reduction of discharge flow rates. Exfiltration trenches can be incorporated into planned new collection piping at relatively low cost and provide significant improvements in overall system performance. Exfiltration trenches can be a viable alternative when surface plant-based infiltration features are not practical.

POROUS PAVEMENT PARKING LOTS

Porous pavement, gravel or properly processed recycled concrete (placed over a geo-grid to provide strength) can be used as a substitute to impervious asphalt or concrete. This BMP is recommended for use with an adjacent shallow vegetated swale infiltration area including physical low water permeable topsoil drawdown feature in the event rainfall exceeds parking lot storage. Incorporating porous parking areas promotes separation of pollutants from stormwater while increasing the infiltration rate. Porous pavement is recommended for use in areas where subsurface soils have suitable permeability and groundwater is sufficiently low, and/or storm drain piping systems are present to allow integration of an under-drain recovery.

RETENTION AND DETENTION PONDS

Use of retention and detention ponds to provide water treatment and to attenuate peak flows represents an effective means of reducing impacts on surrounding areas. Retention facilities retain water, are typically wet

year-round, and allow for a stronger aesthetic presence within a project. When appropriately sited and integrated with local groundwater conditions and surrounding land uses, retention facilities can provide significant habitat potential. In addition, retention facilities generally require less maintenance than detention facilities. Detention facilities typically only detain or slow down water and can be designed to dry out after each storm event. Depending on depth to groundwater during the rainy and dry seasons, maintenance of these facilities may increase due to variable vegetation growing conditions, which can allow invasive species of plants to propagate. The decision to use detention or retention should be integrated with the local seasonal groundwater levels, need for habitat, planned land uses surrounding the area, and amount of storage required. Control of mosquito breeding and associated West Nile virus is an important consideration in designing these facilities. There are numerous means available to interrupt the mosquito reproductive cycle that can be implemented to address this issue.

BMP Selection and Siting

To ensure successful performance of the BMPs over their life cycle, it is important the most appropriate BMP be selected for each opportunity. Below is a summary of critical design considerations for each class of BMP along with a synopsis of ideal site characteristics.

DISCONNECTED DOWNSPOUTS

In general, disconnection of downspouts can be achieved without compromising the use of a facility or building. However, where there are use areas in the vicinity and/or significant amounts of impervious surfaces, infiltration of downspout runoff can pose a challenge. It is recommended that the area of roof be evaluated for resultant runoff rates and compared with the available vegetated area below each downspout. Integration of shallow infiltration areas nearby can act to capture and infiltrate the roof runoff. If suitably located and or sufficiently sized vegetated areas are not available, piping may be needed to direct the runoff to a suitable area where infiltration can occur.

VEGETATED SWALES AND OTHER INFILTRATION AREAS

Wherever turf or planted areas are planned, vegetated swales and other infiltration areas can be incorporated. In general, use of a perforated under-drain is needed to ensure recovery of the captured volume of runoff. The plant palate used should be integrated with the depth and duration of expected inundation. Depth of inundation should also be coordinated with the expected use of the surrounding area and special consideration given for safety if children or animals may be using the area. To ensure the vegetated swale and other infiltration areas function properly, the following lessons learned should be incorporated into the design, including (Johns et al. 2006; Coyle et al. 2006):

- Construction of the infiltration areas should be scheduled after the surrounding contributing drainage area has been stabilized with vegetation to minimize the amount of fine sediments that can wash into the infiltration area and avoid potential clogging of the planned permeable topsoil;

- Permeable topsoil should be utilized in the bottom of the infiltration areas to provide robust percolation capacity while providing a suitable organic planting mixture to support vegetation;
- The permeable topsoil should be lightly proof-rolled and not compacted to retain its permeable characteristics; and
- An under-drain system with perforated piping, gravel bed and non-woven filter fabric wrap should be utilized below the permeable topsoil to ensure infiltration water does not accumulate and is discharged rapidly allowing the infiltration areas to empty and be ready for the next rainfall event as soon as possible.

UNDERGROUND EXFILTRATION TRENCHES

Wherever new underground storm drains are proposed, underground exfiltration trenches should be considered. The area drained by the pipe system and associated runoff rate should be evaluated when designing an exfiltration trench. In general, the length and width of the trench should consider the overall volume from the first flush to ensure suitably short drawdown. It is recommended that percolation tests be performed at the elevation of the proposed trench bottom for every 500 square feet of trench bottom. The percolation tests should be double-ring infiltrometers and performed per the ASTM standard (ASTM 2003). Also, the subsurface soil conditions should be sampled and evaluated in the laboratory for soil type, fines content, and plasticity. Finally, seasonal high groundwater levels should be ascertained to ensure they will be a minimum of 10 feet below the bottom of the trench to confirm the site is appropriate for use of an exfiltration trench.

POROUS PARKING LOTS

To optimize the performance of porous parking areas to store and treat runoff, several features should be incorporated to minimize the potential for over-saturating the underlying soils. These features include the following.

Limiting Run-On Potential

Runoff from areas surrounding the parking lots should generally be directed around the parking lot perimeter to avoid concentrating stormwater into the parking lot gravel.

Minimizing Cut

In general, it will be recommended that parking lots be graded to minimize cutting into existing topography and underlying soils, protecting the aerated unsaturated zone that exists above the seasonal water table.

Optimizing Location

Parking lots should generally be located at least partially over historic fill areas and if possible adjacent to sloped areas that will act to draw down the water table in the vicinity of the parking lots.

Strengthening Existing Soils

A permeable geo-grid will be recommended to be placed over existing soils to ensure vehicle loads are properly supported and will avoid the potential for “pumping” of native soils due to wheel loading. In addition, the porous pavement and/or gravel surface treatment for parking lots is a

readily available mix that has been shown to have a good gradation/grain size that provides a strong but permeable surface for vehicle wheel loads.

RETENTION AND DETENTION PONDS

Use of retention or detention ponds should be considered only for areas not accessible by the general public. Due to their generally being located in the lower portion of the watershed and intercepting flows from larger pipes with higher flow rates and the ponds themselves having relatively deep and/or larger configurations, it is desirable to use these features in controlled access areas. In general, side slopes can be low to ensure that anyone who falls into a pond can climb out, but it may be desirable to fence ponds to ensure access is controlled. It is recommended that these features be considered for the areas along existing larger trunk storm sewer mains near the base of the bluff at the north end of the Main Post and similar areas. The ponds will act to collect sediment and lower the likelihood that sediment will plug the flatter-sloped portions of the mains that extend north to the bay. Due to their intended value of providing attenuation of peak flows and allowing controlled removal of sediment, along with some improvement in water quality, retention and detention ponds can be sited anywhere the mains are under unused land. Considering their ideal location at the base of the bluff, use of retention and detention ponds associated with Doyle Drive stormwater collection and treatment may prove ideal for the Trust to consider and/or advocate.

Depth to season groundwater should set the bottom elevation of the ponds and the hydraulic grade line of the associated trunk main used to design the inlet and outlet structures. In general, it is envisioned that the ponds will be located where the steeper hydraulic grades occur at the base of the bluff so that the inflow velocities can be attenuated and an overflow control structure to limit the migration of sediment downstream will have minimal negative impact on the capacity of the system.

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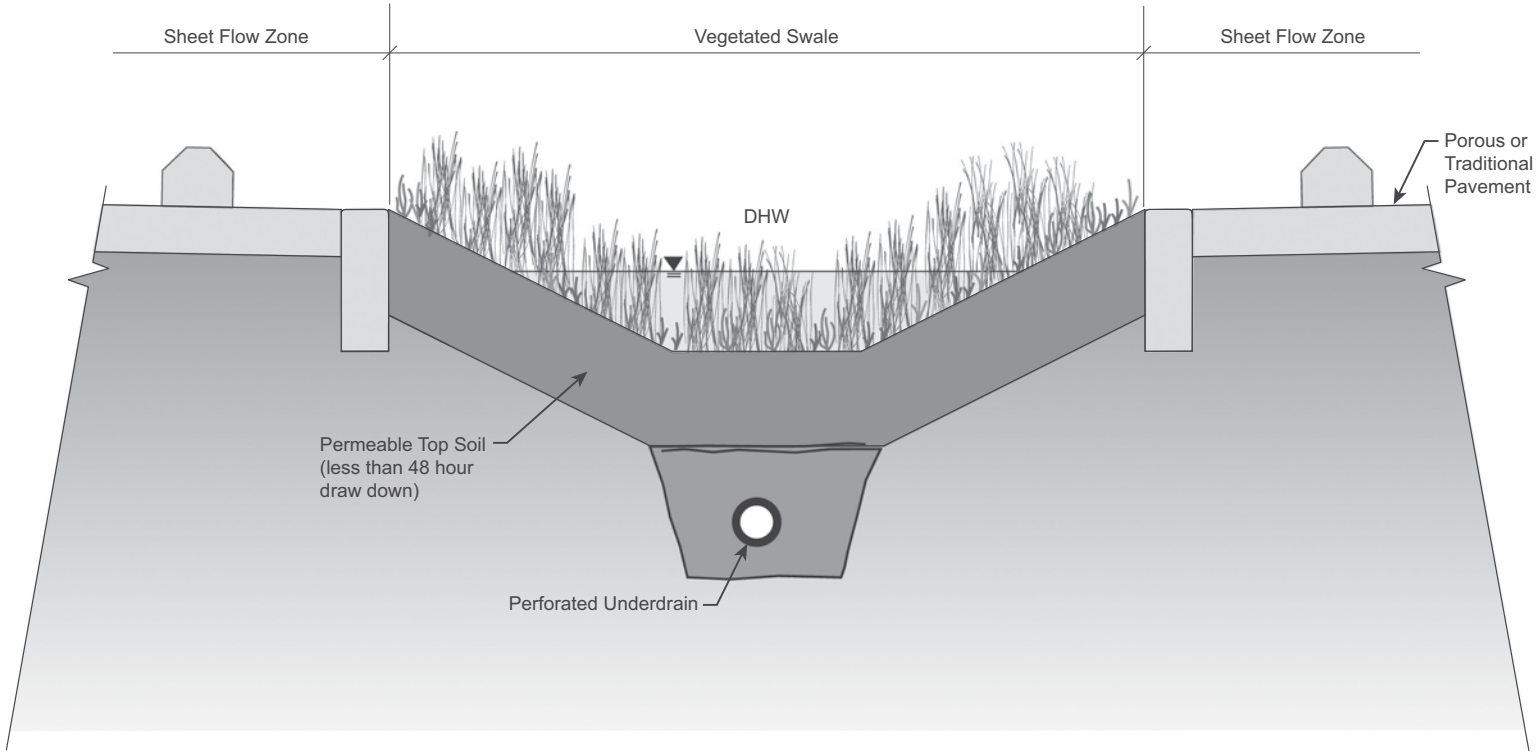
Figures

C-1 Typical Vegetated Swale Section

C-2 Typical Infiltration Area Section

C-3 Typical Porous Pavement Section

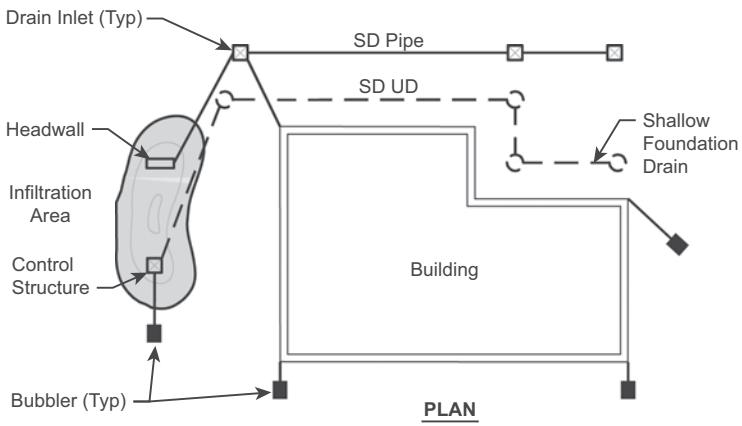
C-4 Typical Detention Pond Section



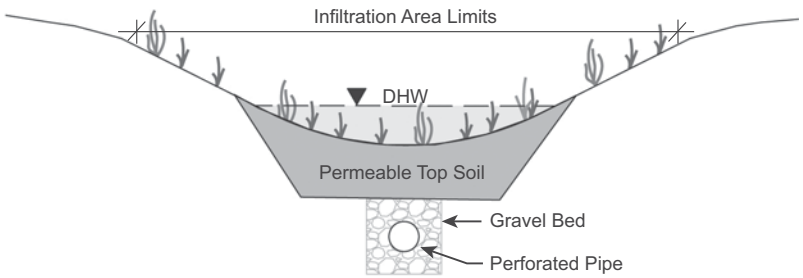
FEATURES

- Parking Lot Focused
- Root Zone Treatment Benefits
- Underdrain Back-up
- Native Plants
- Sized to Capture First Flush
- Enhanced Aesthetics
- Normal Landscaping Maintenance

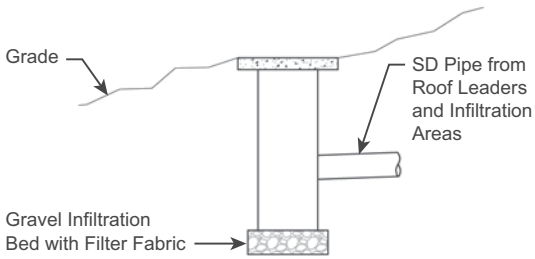
Source: URS Corporation 2008



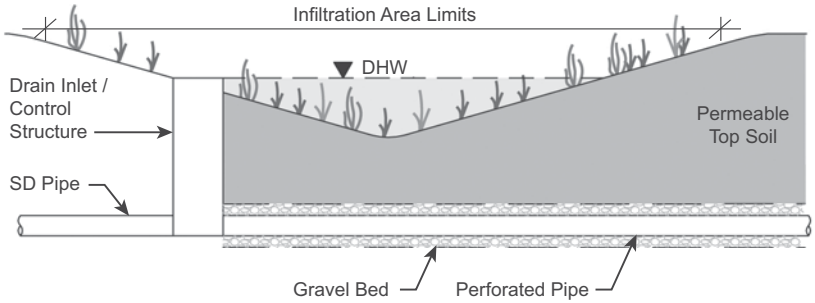
PLAN



SECTION



BUBBLER

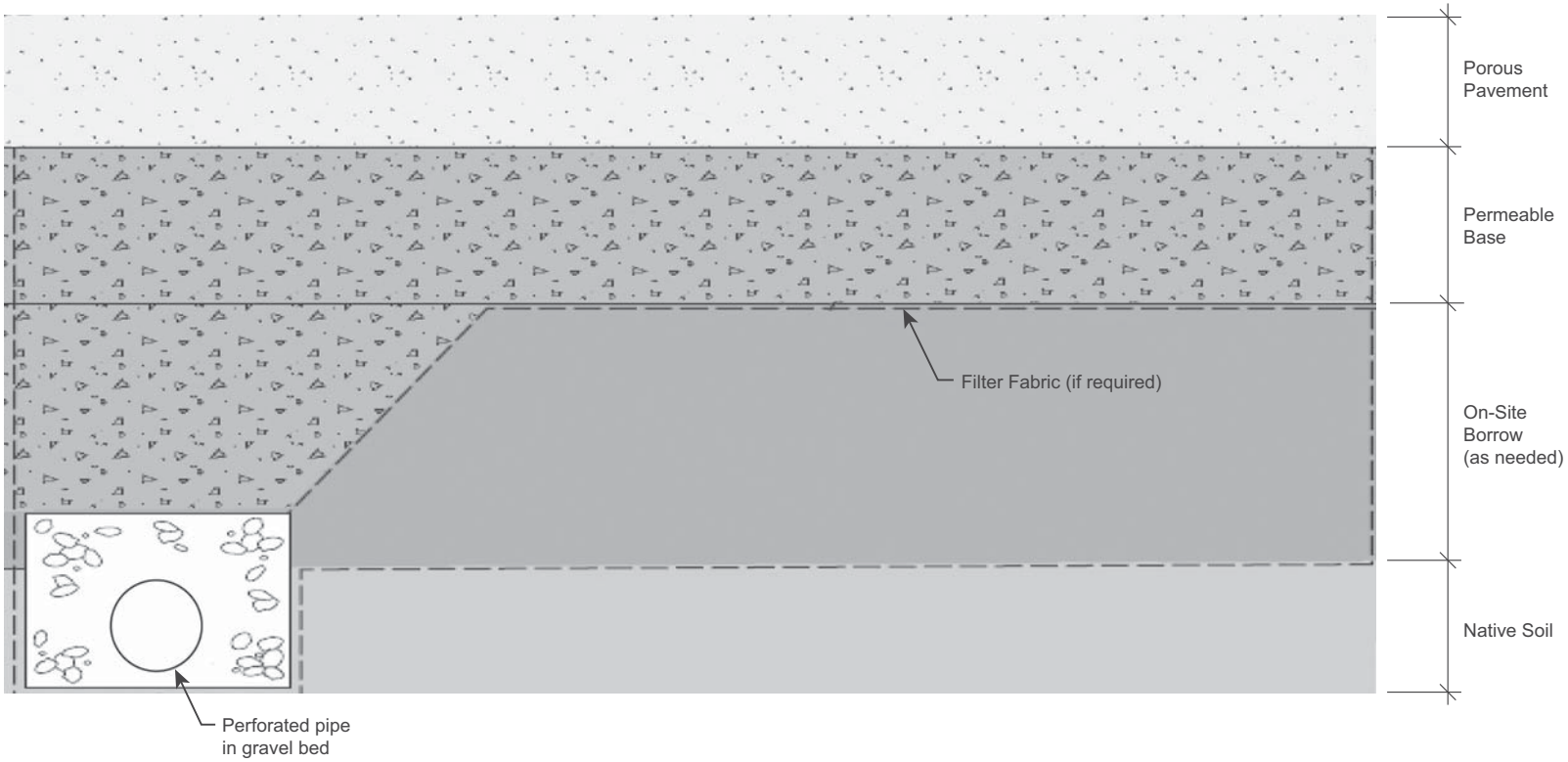


PROFILE

FEATURES

- Compatible with Existing Vegetated Areas
- Flexible Cross Section
- Supports Variety of Open Space Uses
- Conforms with Cultural Landscape Requirements
- Turf or Native Plant Palate Compatible
- Sized to Capture First Flush
- Enhanced Aesthetics
- Normal Landscaping / Maintenance

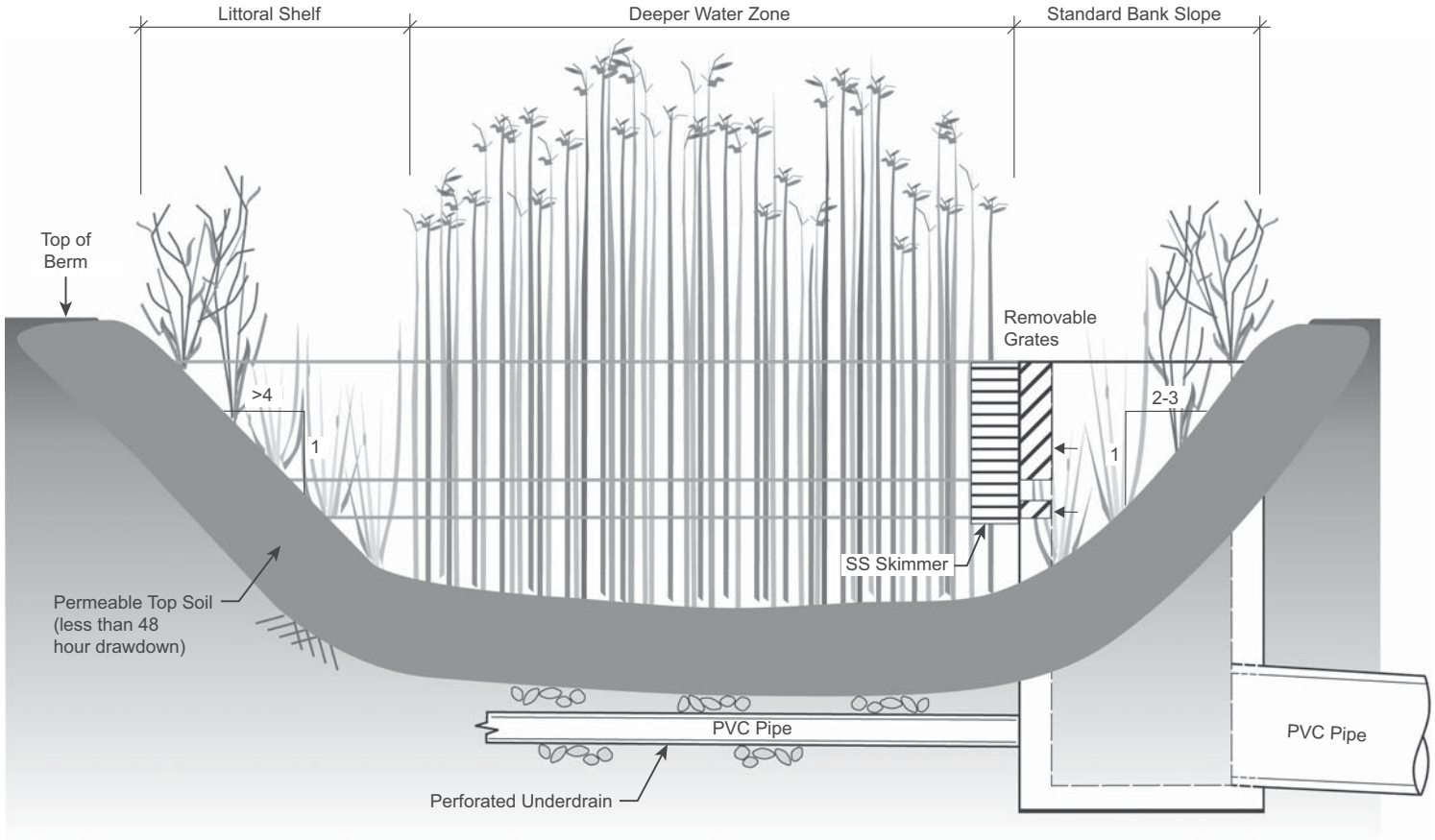
Source: URS Corporation 2008



FEATURES

- Segregate Heavy Vehicle Traffic
- Minimize Capital and O&M Costs
- Ensure Robust Permeable Foundation
- Avoid Run-on
- Underdrain Backup
- Neutral Material Selection
- Address Potential Landscaping Impacts

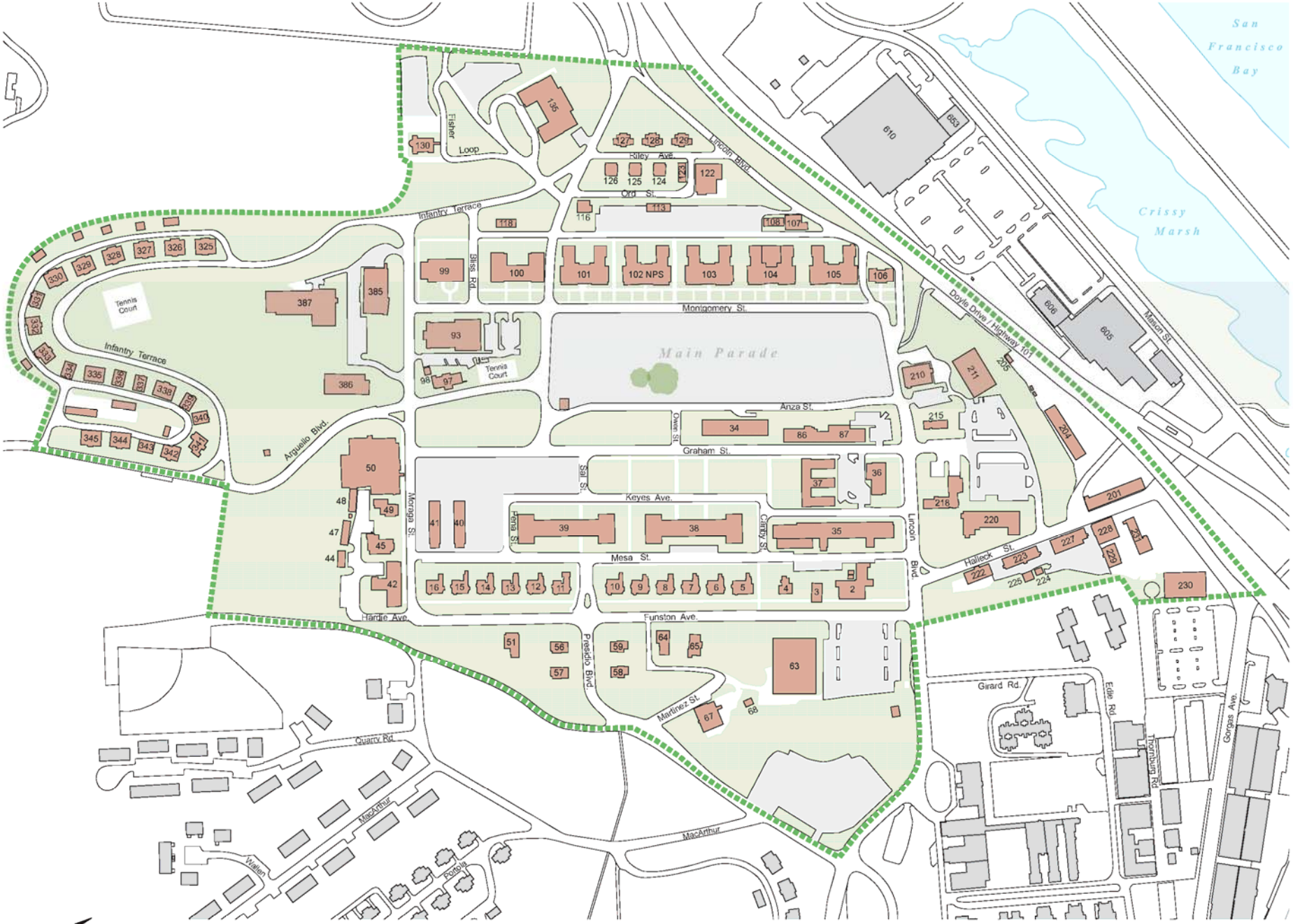
Source: URS Corporation 2008



FEATURES

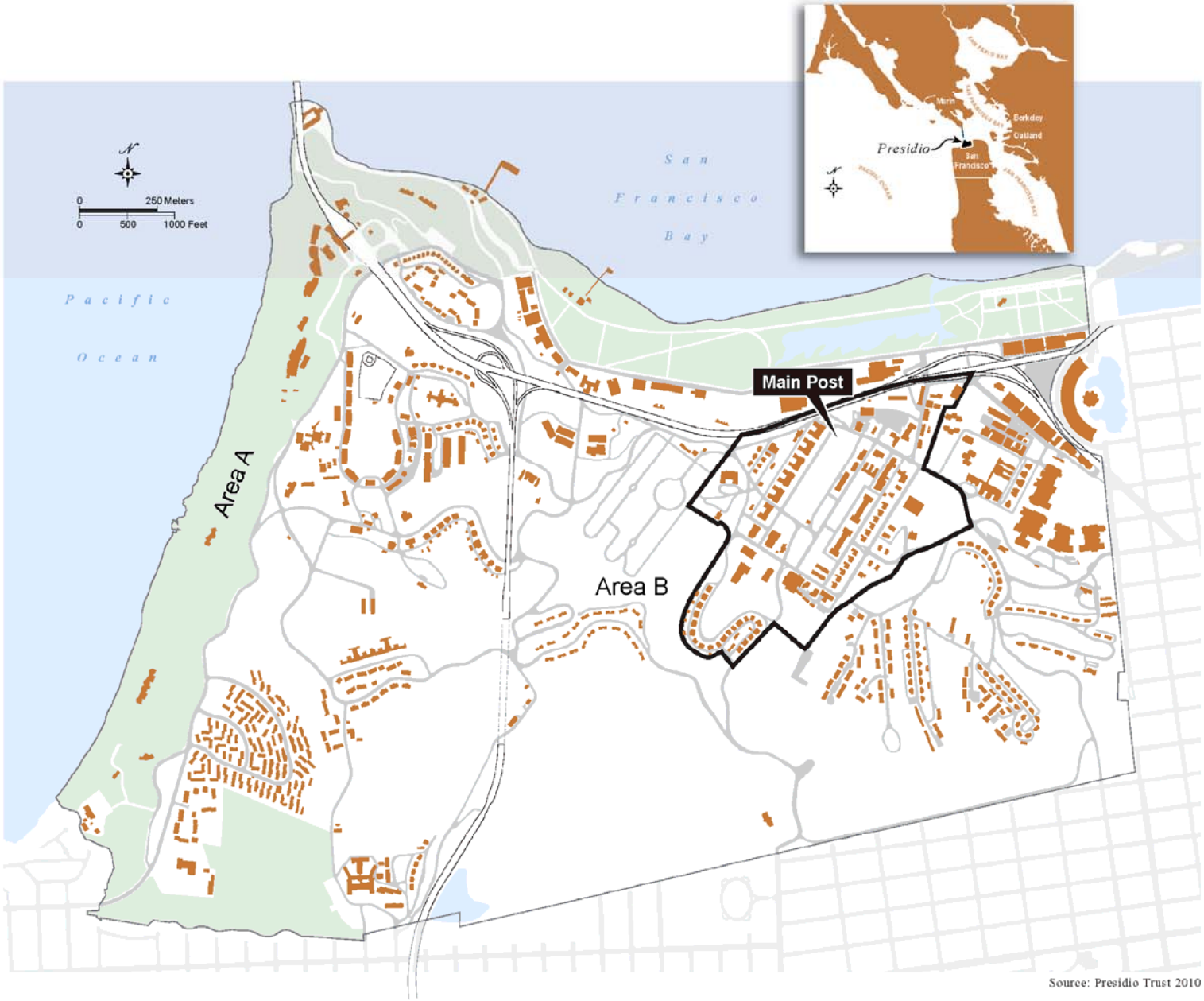
- Further Down Watershed
- Water Quality Focused
- Larger Pipe Systems
- Planted Banks
- Captures Sediment Floating Oil, Grease, Debris / Litter
- Protects Downstream Piping from Sedimentation Build-up
- Flow Attenuation

Source: URS Corporation 2008



Source: Presidio Trust 2010

Main Post Planning District



Source: Presidio Trust 2010

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Presidio Trust Management Plan
Main Post Update

Response to Comments

THE PRESIDIO TRUST
NOVEMBER 2010

"As part of the Golden Gate National Recreation Area, the Presidio's significant natural, historic, scenic, cultural and recreational resources must be managed in a manner which is consistent with sound principles of land use planning and management, and which protects the Presidio from development and uses which would destroy the scenic beauty and historic and natural character of the area and cultural and recreational resources."

FROM THE PRESIDIO TRUST ACT (P.L.104-333)

Presidio Trust Management Plan
Main Post Update
Response to Comments
The Presidio of San Francisco, CA

This document includes summaries of all substantive written and oral comments received following the release of the draft supplemental environmental impact statement (SEIS) and supplement to the draft SEIS (supplement) for the Main Post Update to the Presidio Trust Management Plan, and responses to the comments. This document, together with new analysis, information, and changes made in response to comments, will be filed as the final SEIS.

Comments on Draft SEIS and Supplement

Notices of the availability of the draft SEIS and supplement were published in the Federal Register, and provided on the Presidio Trust's web site and through direct mailings. The draft SEIS and supplement were made available for public review and comment on June 13, 2008 and March 6, 2009, respectively. The notice for the draft SEIS initially announced a public comment period ending July 31, 2008, but this was extended until the end of the comment period for the supplement (June 1, 2009) to allow receipt of more in-depth comments that promoted a better-informed decision. The public was invited to provide oral comment on the draft SEIS and supplement at three Presidio Trust Board of Directors meetings on July 14, 2008, December 9, 2008, and April 7, 2009 and two other public meetings on April 1, 2009 and April 22, 2009. By the close of or shortly after the comment period, the Trust received comments from 6 public agencies, 2 elected officials, 51 organizations, and 2,845 individuals.

Responses to Comments on Draft SEIS and Supplement

The Trust has responded to all substantive public comments according to the requirements of 40 CFR 1503. Responses provide explanations and clarifications related to the content of the draft SEIS and supplement. Where changes to the document have been made in response to comments, these changes are identified. Questions posed by commentors are either answered or acknowledged as outstanding issues. References to the draft SEIS, supplement, technical analyses, and other source materials are included as appropriate.

Wait Period and Public Meeting

The Trust will circulate the final SEIS for at least 30 days before making a decision on the final action. Although there is no requirement for the Presidio Trust to respond to comments received on the final SEIS, all comments received during the 30-day wait period will be considered before the Trust reaches a final decision in a Record of Decision (ROD).

For More Information Contact

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Presidio Trust Management Plan
Main Post Update

Response to Comments

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Introduction

This document includes summaries of all substantive written and oral comments received following the release of the draft Supplemental Environmental Impact Statement (SEIS) for the Presidio Trust Management Plan Main Post Update (Main Post Update) in June 2008 and the supplement to the draft SEIS for the Main Post Update in February 2009, and responses to the comments according to the requirements of the National Environmental Policy Act (NEPA).[1] This document, together with new analysis, information, and changes made in response to comments to the draft SEIS and supplement, will be filed as the final SEIS. The final SEIS is a supplement to and tiers[2] from the 2002 final EIS for the Presidio Trust Management Plan (PTMP), the Presidio Trust's comprehensive land use plan and policy framework for Area B of the Presidio of San Francisco (Presidio). The final SEIS identifies alternatives to the planning concept for the 120-acre Main Post district at the Presidio identified in the PTMP. The final SEIS also evaluates a number of actions the Trust wishes to pursue in order to realize the PTMP vision of the Main Post as the "heart of the park," and identifies the mitigated preferred alternative, which is further described in the Main Post Update.

INVITING COMMENTS ON THE MAIN POST UPDATE DRAFT SEIS

The Trust released the draft SEIS for public comment on June 8, 2008. Notice of the availability of the draft SEIS was provided by the U.S. Environmental Protection Agency (EPA) on June 13, 2008 (73 FR 33814). The EPA's notice of availability identified the 45-day time period for public review of the draft SEIS to end July 31, 2008. In response to requests from interested parties, the Trust extended the prescribed comment period by 50 days to September 19, 2008 (73 FR 45092), again by 31 days to October 20, 2008 (73 FR 53295), again by 27 days to November 17, 2008 (73 FR 60368), and again by 28 days to December 15, 2008 (73 FR 67898). By extending the comment period, the Trust anticipated more in-depth comments on the draft SEIS to promote a better-informed decision on the proposed action. More than 300 copies of the draft SEIS were distributed to commenting agencies and the public. The draft SEIS was also made available for review at the Trust headquarters, at local libraries, and on the Trust's web site.

The public was invited to provide oral comment on the draft SEIS at Trust Board of Directors meetings on July 14, 2008, where

[1] *See 40 CFR 1503 (response to comments).*

[2] *See 40 CFR 1502.20 and 40 CFR 1508.28 (tiering). Tiering is defined as the coverage of general matters in broader EISs, with subsequent narrower tiered statements or environmental analyses, incorporating, by reference, general discussions and concentrating solely on the issues specific to the statement subsequently prepared. The CEQ NEPA Regulations encourage the use of tiered documents to "eliminate repetitive discussions of the same issues" and to "focus on the issues which are ripe for decision and exclude from consideration issues already decided or not yet ripe." The final PTMP EIS can be viewed at the Presidio Trust Library or on the Trust's website at* http://www.presidio.gov/Trust/Documents/EnvironmentalPlans/.

approximately 700 individuals attended and at which 125 spoke, and on December 9, 2008, where approximately 200 individuals attended and at which 67 spoke.[3] In addition, the Trust conducted approximately 23 guided walks during the summer of 2008 (June 15 to August 27) to provide information, answer questions, and accept public "comment cards" on the draft SEIS and the various proposals being considered. These walks and tours were attended by over 1,500 people. The Trust also hosted five workshops: one on July 28, 2008 attended by approximately 100 people to discuss the transportation and parking analysis section of the draft SEIS; three during the fall of 2008 (September 25, September 28, and October 2[4]) attended by approximately 125 people to provide additional opportunities to discuss the draft SEIS and the alternative concepts for the Main Post; and one on November 19, 2008 attended by approximately 120 people to update the public about the compliance process, familiarize them with the applicable standards for building in a historic site, and introduce most recent strategies that had been developed. Additionally, the Trust participated in numerous meetings with neighborhood groups, resource conservation organizations, professional and civic associations, and various commissions of the City and County of San Francisco, including the Planning Commission and Landmarks Preservation Advisory Board.

By the time the supplement to the draft SEIS was circulated in February 2009, the Trust had received comments from 5 public agencies, 1 elected official, 51 organizations, and 2,343 individuals, including form letters.[5] In general, many of the commentors expressed a strong desire to enhance and maintain the historic character of the Main Post, and ensure that the Main Post is preserved as a place of natural beauty and as an oasis in the city for future users. The same commentors noted how unique the Main Post is and the importance of maintaining its strong sense of place. Many commented that the Main Post should have a high level of public accessibility, particularly in the Montgomery Street Barracks, and that the plan to reveal El Presidio would be an important asset. While most commentors were against the now-withdrawn museum of contemporary art (CAMP) proposal[6] on the Main Post, many were open to the museum being located elsewhere on the Presidio. In addition, though commentors were concerned about new construction, they were also open to the addition of new buildings as long as they were consistent with the character of the Main Post. The provision of lodging on the Main Post was seen as appropriate, particularly in regards to reuse of Pershing Hall. However, there was some skepticism regarding the need for new construction of a freestanding lodge along the eastern edge of the Main Parade. Finally, most supported expanding the Presidio Theatre, converting a portion of Building 50 into a Heritage Center, and

[3] *Transcripts of the July 14, 2008 and December 9, 2008 public meetings can be viewed at the Presidio Trust Library and on the Trust's web site, and constitute part of the formal public record.*

[4] *Transcripts and a summary of the September 25, September 28, and October 2, 2008 Main Post workshop series can be viewed at the Presidio Trust Library and on the Trust's web site.*

[5] *Comment letters are available for review at the Presidio Trust Library and constitute part of the formal public record.*

[6] *The CAMP is no longer being evaluated because in 2009 the proponent abandoned their effort to build the contemporary art museum at the Main Post.*

developing a state-of-the-art Archaeology Center in the buildings and garages adjacent to Building 50.

INVITING COMMENTS ON THE SUPPLEMENT TO THE MAIN POST UPDATE DRAFT SEIS

The Trust announced in a December 8, 2008 press release and a December 12, 2008 Federal Register notice (73 FR 75777) that, as the result of the Trust's analysis of the alternatives in the draft SEIS and the analysis developed in the course of consultation under Section 106 of the National Historic Preservation Act (NHPA), and in consideration of public comment, it had identified a preferred alternative and would analyze the alternative in a supplement to the draft SEIS. In the announcements, the Trust indicated that it elected to address the preferred alternative in a supplement to the draft SEIS to best integrate and satisfy its NEPA and NHPA requirements. The announcements also informed the public that the Trust would continue to accept public comments on the draft SEIS until the deadline for comments on the supplement. The Trust Board of Directors held a public meeting on December 9, 2008 to explain the preferred alternative and accept public comment. Approximately 250 people attended the meeting and 68 offered comments.

The Trust made the supplement to the draft SEIS available to the public at the beginning of the last week of February 2009. The EPA published notice that the supplement was filed by the Trust and received on March 6, 2009 (74 FR 9817-9818). The EPA's notice of availability identified the 45-day time period for public comment to end April 20, 2009, which the Trust extended by 7 days to April 27, 2009 at the request of the public (74 FR 15265), and again by 35 days to June 1, 2009 (74 FR 18706). More than 300 copies of the supplement were transmitted to commenting agencies and individuals. The supplement was also made available for review at the Trust headquarters, at local libraries, and on the Trust's web site.

The Trust initially decided to hold three public meetings during the comment period for the supplement to provide opportunities for the public to provide oral comment. However, in response to public requests, the format of the third public meeting was changed to a planning workshop that provided an overview of the transportation issues being analyzed through the Main Post planning and environmental review process. Trust and City and County of San Francisco staff were also on hand to answer questions about transportation issues. The first public meeting on April 1, 2009 was attended by approximately 40 people and 19 spoke. The second meeting, held by the Trust Public Board of Directors on April 7, 2009, was attended by approximately 375 people and 84 spoke. The transportation workshop on April 22, 2009 was attended by approximately 125 people and 23 spoke.[7]

From March 6, 2009 through April 18, 2009, the Trust maintained a drop-in (10:00 AM to noon Fridays and Saturdays) Main Post Information Center in Building 105 for the public to learn more about the preferred alternative and the planning and environmental review process. Illustrations and other information about proposals in the alternative were

[7] *Transcripts of the April 1, 2009 and April 7, 2009 public meetings and the April 22, 2009 workshop can be viewed at the Presidio Trust Library and on the Trust's web site, and constitute part of the formal public record.*

displayed, and Trust staff were present to answer questions and make comment cards available.

The Trust also held two informal "open houses" on May 18, 2009 and May 20, 2009, at which Trust staff were available to respond to questions about the proposed projects for the Main Post as well as questions about historic resources, transportation and parking, visitor use, and environmental sustainability. Approximately 30 people attended the two sessions.

By the close of or shortly after the 87-day comment period for the supplement (March 6, 2009 – June 1, 2009), the Trust received comments from 7 public agencies, 1 elected official, 51 organizations, and 2,845 individuals, including form letters and those comments received on the draft SEIS.[8] In general, commentors recognized and appreciated the changes the Trust made in plans for the Main Post between the draft SEIS and the supplement but still had key concerns about several of the proposed projects. Some appreciated the improvements to the CAMP's design, size, and appearance to limit its visual prominence, while others felt the design was as "troubling" as the original proposal. Those commentors that previously were in favor of the lodge and theater welcomed the added improvements to the designs, noting that the changes were a step in the right direction. Others did not support demolition of Buildings 40 and 41 to better interpret the archaeological site of El Presidio. Many also remained concerned about impacts related to traffic and parking, especially on surrounding neighborhoods.

[8] *Comment letters are available for review at the Presidio Trust Library, and constitute part of the formal public record.*

CONTENTS OF THIS DOCUMENT

Following this introduction, the document is divided into two sections:

- Section 1: Background on Comments provides background demographic information on the comment letters, and a summary of the form letters and petitions received during the comment period.
- Section 2: Responses to Comments provides summaries of all comments received, along with written responses.

Background on Comments

This section provides demographic information on the comments received on the draft SEIS and supplement, including geographic origin, general affiliation with various government agencies or public interest groups, user type (neighbor, dog walker, etc.), and format (email, letter, comment card, form letter, oral, etc.). A summary of the form letters and petitions received during the public comment period is also provided. This information, which allows the Trust to better understand its commenting public, should be interpreted with caution, as those who commented do not constitute a valid random or representative sample of the general public. It should also be noted that regardless of the form or source of public comment, the Trust considered all comments and gave them equal attention.

1.1 GEOGRAPHIC ORIGIN OF COMMENTS

A total of approximately 2,829 separate comments in the form of emails, letters, comment cards, form letters, and petitions, with approximately 8,537 signatures, were received on the draft SEIS and supplement during the public comment period. A total of 1,488 written comments (emails, letters, and cards) were received from 14 states, the District of Columbia, and 3 foreign countries. Of those emails, letters, and cards for which addresses were provided, approximately 97 percent (775 individual submissions) were received from California (Table 1). Of those from California, 623 (80 percent) were from San Francisco. Comments from within the Presidio and nearby neighborhoods generated 227 letters and emails (36 percent of the San Francisco total) (Table 2).

1 ORIGIN OF WRITTEN COMMENTS

Country	*State*	*Number of Comments*
United States	Arizona	2
	California	775
	Colorado	1
	District Of Columbia	1
	Georgia	1
	Maryland	1
	Michigan	1
	Minnesota	1
	New York	2
	Ohio	1
	Oregon	2
	Tennessee	1
	Utah	1
	Virginia	1
	Washington	1
Italy		1
Sweden		1
United Kingdom		1
No Address Provided		693
TOTAL		**1,488**

2 REGIONAL DISTRIBUTION OF CALIFORNIA COMMENTS

Region	*Location*	*Zip Codes/ County*	*Number of Submissions*
City and County of San Francisco	Presidio	94129	46
	Neighborhoods Bordering Park[a]	94115, 94118, 94121, 94123	181
	Remainder of County		396
Subtotal			**623**
Other Bay Area Counties	North Bay		27
	South Bay		18
	East Bay		37
Subtotal			**82**
Other California	Northern California		2
	Greater Sacramento		5
	Central Coast		1
	San Joaquin Valley		5
	Southern California		4
	Unspecified California		53
Subtotal			**70**
TOTAL			**775**

[a] *Includes Cow Hollow, Pacific Heights, Presidio Heights, and the Richmond District.*

1.2 ORGANIZATIONAL AFFILIATION OF COMMENTS

Eighty-seven (87) letters and emails were received from 59 federal, state, and local agencies and interested organizations. Neighborhood associations and heritage and historic preservation groups represented approximately half (43) of the letters and emails received from agencies and organizations (Table 3).

3 ORGANIZATIONAL AFFILIATION OF COMMENTS

Type of Affiliation	*Name*	*Number of Submissions per Affiliation Type*
PUBLIC AGENCIES	Advisory Council on Historic Preservation United States Department of the Interior, National Park Service, Golden Gate National Recreation Area (2) United States Environmental Protection Agency, Region IX (2) California Department of Parks and Recreation, Office of Historic Preservation (3) City and County of San Francisco, Film Commission City and County of San Francisco Landmarks Advisory Board	10
ELECTED OFFICIALS	City and County of San Francisco, Gavin Newsom, Mayor, Office of the Mayor City and County of San Francisco, Michela Alioto-Pier, Member, Board of Supervisors, District 2 (2)	3
NEIGHBORHOOD ASSOCIATIONS	Cow Hollow Association (3) Lake Street Residents Association Laurel Heights Improvement Association (2) Lombard Hill Improvement Association Marina Community Association (4) Neighborhood Associations for Presidio Planning (2) Neighborhood Parks Council Pacific Heights Residents Association (2) Planning Association for the Richmond (2) Presidio Heights Association of Neighbors Presidio Neighborhood Representative Work Group (2) Russian Hill Neighbors	22

3 ORGANIZATIONAL AFFILIATION OF COMMENTS

Type of Affiliation	*Name*	*Number of Submissions per Affiliation Type*
HERITAGE AND PRESERVATION GROUPS	Buffalo Soldiers Library California Heritage Council (3) California Pioneers of Santa Clara County Coast Defense Study Group Council on America's Military Past (2) Los Californianos National Trust for Historic Preservation, Western Office Presidio Historical Association (6) San Francisco Architectural Heritage St. Francis #30 Chapter of the Questers Save the Presidio (2) Victorian Alliance of San Francisco	21
UNIVERSITY OR ACADEMIC GROUPS	Berkeley Law Workshop on Development and the Environment, University of California, Berkeley Department of Anthropology, Stanford University (2) Kumara School North America Reggio Emilia Alliance Reggio Emilia Institute, Sweden Reggio Emilia, Italy San Francisco Child Care Planning and Advisory Council Susan Lyon Education Foundation	9
CONSERVATION ORGANIZATIONS	EarthJustice Foundation for Ecology and Culture National Parks Conservation Association Presidio Environmental Council Sierra Club (2)	6

3 ORGANIZATIONAL AFFILIATION OF COMMENTS

Type of Affiliation	*Name*	*Number of Submissions per Affiliation Type*
PRESIDIO-BASED ORGANIZATIONS	Bay School of San Francisco Interfaith Center at the Presidio Presidio Bowling Center Presidio Child Development Center Presidio Community YMCA Tides Foundation	6
LOCAL CIVIC AND BUSINESS ORGANIZATIONS	Building Owners and Managers Association of San Francisco Richmond District Democratic Club San Francisco Chamber of Commerce (2) San Francisco Democratic Party	5
MUSEUMS AND ARTS ORGANIZATIONS	Academy of Motion Picture Arts and Sciences ArtSpan California Academy of Sciences	3
OTHER NON-PROFIT ORGANIZATIONS	MHONA International San Francisco Labor Council	2
TOTAL		**87**

1.3 FORM LETTERS AND PETITIONS

Approximately 1,335 out of 2,829 comment letters (47 percent) received during the public comment period for the draft SEIS and supplement were form letters[9] reflecting the work of three or more organized campaigns (Table 4). The campaigns for the CAMP each generated 477 and 454 letters, respectively, for a total of 931 letters, or 70 percent of all form letters. In addition, 6 petitions[10] with over 5,700 signatures were received, including one submitted by the Presidio Bowling Center signed by approximately 5,280 individuals (Table 5).

4 FORM LETTERS

Subject	*Number Received*	*Originator*	*Summary*
1. Tell the Presidio Trust that You Support CAMP	477	CAMP	Website (*www.camptoday.org*) provides information about CAMP and a page with "tips for effective letters" to allow viewers to send a message to the Trust in support of (or in opposition to) the contemporary art museum.
2. Support Building CAMP at the Main Post	454	CAMP	Advocates that the contemporary art museum is a once-in-a-lifetime opportunity for San Francisco that cannot be allowed to slip away.
3. Which Vision of the Presidio Do You Want?	9	Save the Presidio	Flyer urges recipients to let the Trust know that they oppose plans for the contemporary art museum, lodge, and Presidio Theatre proposals.
4. Save the Presidio and Oppose Plans for National Park	28	Save the Presidio	Website (*www.savethepresidio.org*) urges viewers to help save the Presidio from excessive development, and provides sample text for letter expressing concern for proposals at the Main Post.
5. Reject the Proposal Currently under Consideration	42	Marina Community Association	Expresses neighbor concerns over plans for the CAMP, lodge, and above-ground parking at the Main Post, and the potentially negative impact on the neighborhood.
6. Oppose the Plans to Construct an Art Museum in the Presidio	324	Unknown	Opposes loss of historical character and status, loss of recreation, and traffic congestion. Suggests there are better sites for the museum within the city.
7. Deep Concern about the Modern Art Museum Proposal Near the "Sacred" Main Parade Ground	—[a]	Unknown	Asks the Trust to reject the Main Parade alternatives (Alternatives 2 and 2A) and consider other alternatives, in particular the Commissary location for the contemporary art museum (Alternative 1).

[a] *Approximately 550 identical emails generated from one user account (nobody@earthlink.net) were received before the account was blocked in order to avoid compromising the Trust's information systems.*

[9] *Form letters were defined as those letters that were received separately but containing identical or very closely paraphrased text.*

[10] *Petitions were defined as single letters signed by multiple members of the public.*

5 PETITIONS

Subject of Petition	*Number of Signatures*	*Originator*	*Summary of Comments*
1. Protest the Trust's Proposals and Disapprove Alternatives 2, 2A and 3	~200	Save the Presidio	Objects to the "large-scale" development being proposed for the Main Post by the Trust and the Fishers, and to the potential loss of the National Historic Landmark designation.
2. Protest the Demolition of the Bowling Center for CAMP	38	Happy Hour League of the Presidio Lanes	Requests a new bowling center built at the Presidio with free parking available and opened prior to closing the current structure.
3. CAMP should not be Located at Main Parade	17	Workers within the Presidio	Offers beliefs that adding a modern structure to the Main Parade would destroy its openness and historical presence, and that other areas within the city would benefit more by having the museum.
4. Disapprove Trust Plans to Close the Bowling Center	~5,280	Presidio Bowling Center	Opposes the Trust's plans to close the bowling center without plans to relocate it. Submits that the bowling center is a valuable community resource that should remain.
5. Oppose the Current "Preferred Alternative" for the Main Post	34	Heidi Englebrechten	Requests that the Trust not consider the art museum, theater, and hotel proposals. Asks that the proposals seek an appropriate home in the city.
6. Oppose the Trust's Traffic Plans in Connection with Doyle Drive Reconstruction and the Main Post Proposals	~145	Presidio Avenue Neighbors	Expresses concern about the methodology, results, and recommendations of the SEIS, especially related to traffic impacts on the neighborhoods surrounding the Presidio and traffic impacts on the roads leading to the Presidio and Arguello Gates.

1.4 SELF-IDENTITY OF COMMENTORS

Slightly more than half of the commentors submitting written comments (805 individuals) did not identify themselves as a particular type of user. Of the 683 commentors that explicitly characterized themselves in some particular manner (e.g., "I am a resident of San Francisco"), the largest groups were local residents (San Francisco, Presidio, Marina, Cow Hollow, lifelong, etc.) (30 percent), neighbors (11 percent), and San Francisco natives (10 percent), accounting for approximately half of the user identities. Frequent users of the Presidio and business owners accounted for another 8 percent of the user types (Table 6).

6 SELF-IDENTITY OF COMMENTORS (USER TYPES)

User Type	*Number of Comments*
Architect	9
Architect with Long Ties to the Bay Area	1
Ardent Fan of San Francisco's Unique Visual Treasures	1
Ardent Preservationist	1
Army Captain (1966-1969)	1
Artist	5
Art Lover	2
Bad Tennis Player	1
Bay Area Resident	1
Board President of a Non-Profit Headquartered in the Thoreau Center	1
Bowler	2
Bowling Alley User	9
Bowling Fan	1
California Native	1
Californian	1
Camping Enthusiast	1
Child Development Center Parent	11
Citizen Concerned with the Preservation of Historical Sites for Future Generations	1
Citizen of San Francisco	4
Co-Author of the Cultural Landscape Assessment of the Main Post	1
Concerned Citizen	7
Concerned Neighbor	2
Concerned San Franciscan	2
Cow Hollow Resident	29
Current President of the Happy Hour League of the Presidio Lanes	1
Descendent of Members of the de Anza Expedition	1
Disabled Navy Veteran	1
Distant Relative of General Joseph Stilwell	1

6 SELF-IDENTITY OF COMMENTORS (USER TYPES)

User Type	*Number of Comments*
Dog Walker	1
Early Childhood Educator	1
Early Childhood Specialist and Community College Instructor	1
Education Professor and Co-Director of a Private Non-Profit Preschool	1
Employee of LucasArts	1
Ex-Active Duty Army Physician	1
Ex-Chairman of the Advisory Commission for the Golden Gate National Parks (1990-1992)	1
Ex-Member of the Presidio Trust Board of Directors (1997-2003)	1
Family Member of 3 who are Buried at the Presidio	1
Father of a 5-Year-Old that Attends the Presidio CDC	1
Father of a New Student at Presidio CDC	1
Father of 2 Children at the Presidio CDC	1
Fifth Generation San Franciscan	1
Founder of the Lincoln Highway Association	1
Fourth Generation San Franciscan	2
Former General Managers of the Presidio of San Francisco	3
Former Military Personnel Stationed at the Presidio	4
Former NYC Elected Official	1
Former President SF Planning Committee	1
Former Presidio Resident	1
Former Resident of San Francisco	2
Former Resident of the Presidio	1
Former San Francisco Mayor	1
Former Teacher	1
Frequent Hiker in the Presidio	1

6 SELF-IDENTITY OF COMMENTORS (USER TYPES)

User Type	*Number of Comments*
Frequent User	32
Frequent Visitor to San Francisco	4
Frequent Visitor to the Presidio	1
Frequent Visitor to the Presidio and San Francisco	1
Frequent Weekend Visitor	1
From Taiwan	1
Grandmother of 3 Small Children that Attend the Presidio CDC	1
Grandparents of 2 Little Girls who have Attended the Presidio CDC	1
Grandson of General John Phillip Wisser	1
Historian	5
Home Owner	3
Home Owner in Jordan Park	1
Home Owner in Nearby Southern Sausalito	1
Infant/Toddler Teacher	1
Korean War Veteran	2
Lifelong Member of the Fine Arts Museum of San Francisco	1
Lifelong Resident of San Francisco	2
Local	2
Long-Term Partner of Trust's Historic and Archaeological Research and Interpretation Program	1
Long-Time Art-Loving Resident of the Bay Area	1
Long-Time Fan of the Presidio	1
Long-Time Neighbor and Dedicated Park Steward	1
Long-Time Participant in the Presidio's Evolution to a Park	1
Long-Time Real Estate and Planning Professional	1

6 SELF-IDENTITY OF COMMENTORS (USER TYPES)

User Type	*Number of Comments*
Long-Time Residents	3
Long-Time San Franciscan	2
Long-Time Supporter of San Francisco Arts	2
Lover of Art Museums	1
Lover of Contemporary Art and Architecture	1
Lover of Modern Art	1
Lover of the Presidio	4
Marina Resident	46
Member and Supporter of the SFMOMA and de Young Museums	1
Member of the California Historical Community	1
Member of the Cow Hollow Association	1
Member of the de Young and Legion of Honor	1
Member of the Golden Gate National Park Conservancy	1
Member of the San Jose Historical Museum	1
Member of the William Kent Society	2
Mother of 3 Boys who Love Bowling	1
Mother of 3 Small Children	1
Museum Go-er (and Member)	1
Native of the Bay Area	1
Nature Lover	1
94-Year-Old Air Force Retiree	1
Not a Native of Your Wonderful City	1
Not a Specialist of the Presidio Trust's Politics	1
Not Anti-Museum	1
Not Frank Fanelli, but Using his Computer	1
Old Lady (72)	1
Old-Time San Franciscan	2
One of the Luckiest [Former] Majors in the U.S. Army	1

6 SELF-IDENTITY OF COMMENTORS (USER TYPES)

User Type	*Number of Comments*
One of the Privileged Few to Live in a National Park and Major American City	1
One of Your Constituents	1
Owner of a Business	21
Pacific Heights Resident	1
Parent	8
Person who Spent her Formative Years as a Military Dependent	1
Post Veterinarian of the Presidio (1980-1983)	1
Pre-School Teacher	1
Pre-School Teacher in Oakland	1
President of Corbett Heights Neighbors	1
Presidio Employee	11
Presidio Neighbor	71
Presidio Heights Resident	8
Presidio Resident	28
Presidio Tenant	1
Presidio Visitor	1
Progressive Marina Resident	1
Project Manager of the September 2002 Cultural Landscape Assessment	1
Promoter of Historic Buildings	1
Proponent of Maintaining the Real Historical Look of the Presidio	1
Proud Bay Area Resident for 79 Years	1
Real Estate Agent	2
Redwood City Resident	1
Resident of the Area	1
Resident on Arguello Boulevard	1
Resident since 1969 Originally from the Midwest (Chicago)	1
Retired CCSF Planner	1
Retired History Teacher	1
Retired Military Officer	1

6 SELF-IDENTITY OF COMMENTORS (USER TYPES)

User Type	*Number of Comments*
Richmond District Resident	15
San Franciscan with an Appreciation of the Long History of the Presidio	1
San Francisco Home Owner	1
San Francisco Lawyer	1
San Francisco Native	72
SF Property Owner	1
San Francisco Resident	66
San Francisco Tour Guide	2
San Francisco Visitor	5
San Francisco Voter	7
2nd-Grade Student and Future Negotiator and Debater	1
Senior Citizen	4
Sierra Club Hike Leader	1
Sister of Jason and Genuine Supporter of Presidio CDC	1
6th-Army Member (1962-1964)	1
Small Business Owner	1
Someone Who has been Intimately Involved in Motion Picture Exhibition in San Francisco for 32 Years	1
Someone Who has Worked in the Art World for 30 Years	1
Someone Who Grew Up in Upstate NY	1
Someone Who Regularly Visits the Presidio	1
Special Education Teacher for the Presidio CDC	1
Strong Preservationist	1
Student of History and Culture	1
Sunset Resident	1
Supporter of CAMP	3
Supporter of Fine Art in San Francisco	1
Taxpayer	6

6 SELF-IDENTITY OF COMMENTORS (USER TYPES)

User Type	*Number of Comments*
Teacher	4
Teacher and a Mother	1
Tenant in Building 39	1
Third-Generation San Franciscan	3
30-Year Resident of Pacific Heights Now in Exile in Kentucky	1
30-Year Resident of San Francisco	3
35-Year Resident of the Bay Area	1
[Unlicensed] Architect	1
Veteran	3
Visitor and Fan of San Francisco	1
Visual Artist and Art Instructor	1
Volunteer Docent for the Presidio	1
Volunteer to the Presidio CDC	1
Volunteer Tutor	1
Voter since 1982	1
Wisconsin Native Living in Minnesota	1
Working Parent	2
YMCA Member	7
TOTAL	**683**

1.5 FORMAT OF COMMENTS

Approximately 77 percent of all commentors choosing to submit their own comments generally sent their written comment letters by email. Only 93 commentors chose to provide their comments orally at one or more of the public hearings without also submitting their comments in writing, while 36 commentors submitted comment cards that were distributed by the Trust before public meetings or following Main Post tours and walks (Table 7).

7 FORMAT OF COMMENTS

Response Format	*Number of Comments*	*Number of Signatures*
Email	1,140	—
Letter (Mail or Fax)	312	—
Comment or Speaker Card	36	—
Form Letter	1,335	1,335
Petition	6	5,714
Unique Oral Comment	93	—

Responses to Comments

This section provides responses to all substantive public comments received on the draft SEIS and supplement to the draft SEIS for the Main Post Update.

2.1 METHODOLOGY AND ORGANIZATION

The volume of comments received and similarity of issues raised provided both the opportunity and the necessity to summarize the comments in order to allow for meaningful responses. Comments and responses were grouped by topic headings generally corresponding to the formats used in the draft SEIS and supplement, and further divided into subject matter summaries. A total of 19 general topic headings and 134 subject matter summaries were used, as listed in the Table of Contents.

Depending upon the level of public interest within a topic and its subject matter, comment summaries may encompass comments submitted by substantial numbers of commentors, or very few. Responses immediately follow each subject matter summary and have been prepared by Trust staff and consultants following review of the comment summary and the full text of the original comments. All comments have been considered and responded to equally. Their importance is not weighted by the source of the comment or any commentor characteristic. The consideration of public comment is not a vote-counting process. Every comment or suggestion has value, whether expressed by one or a hundred commentors, and comments have been addressed for their substance, not for their frequency.

Responses provide explanations and clarifications related to the contents of the draft SEIS and supplement. Where changes in or additions to the text of the documents have been made in response to comments, these are identified. Questions posed by the commentors are either answered or acknowledged as outstanding issues. References to the draft SEIS, supplement, technical analyses, and other source materials are included as appropriate. Cross-referencing between responses is kept to a minimum, resulting in some repetition where the subject matter of comment summaries is similar. Nonetheless, the reader may be referred to more than one group of comments and responses to review all information on a given subject.

Many comments made both in writing and at the public hearings were directed toward the content of the Main Post Update. While these comments did not concern the adequacy or accuracy of the SEIS and therefore do not merit discussion under the NEPA, responses are provided. No responses are provided to comments that merely expressed opinions and did not identify a question or a needed text clarification, correction, or modification. Although responses are not required on comments that simply expressed support for one of the planning proposals or alternatives, all comments have been taken into account in preparing the final SEIS and will be considered by the Trust in reaching its final decision following circulation of the final SEIS.

2.2 MAIN POST UPDATE

1 The Main Post Update Ignores Commitments Made in the PTMP

The Main Post Update is not simply an update of the PTMP, but contradicts some of the basic assumptions and goals of the document. The PTMP places the "highest priority" on "actions that carry out the preservation, rehabilitation, and use of historic buildings and landscapes," a priority that is clearly compromised by the current proposal. The PTMP was based on a promise and an understanding between the Trust and the public worked out over many years and with considerable debate. The Main Post Update breaks that promise and ignores the delicate, longstanding balance between financial self-sufficiency and preservation of natural and cultural resources developed in negotiation between the community and the Trust.

Response The purpose and need for the Main Post Update are consistent with the PTMP's vision for the Main Post as the "heart of the park." The Trust's focus remains the "preservation, rehabilitation, and use of historic buildings and landscapes" in the Main Post and throughout the park. The Main Post Update has changed as a result of public review under the NEPA and NHPA and proposes less overall square footage in the Main Post than does the PTMP. The Main Post Update does provide for 70,000 square feet of new construction for a lodge, rather than the 50,000 square feet assumed in the PTMP for additional office use in the Main Post. New construction would make lodging feasible in the Main Post and would bring a visitor amenity that is traditional in national parks. The Trust would also rehabilitate historic Pershing Hall (Building 42) for lodging.

The Trust has engaged with interested members of the public for more than two years to develop the Main Post Update. The Main Post Update is responsive to many of the concerns expressed by the public, including the level of development in the Main Post.

2 The Proposed Action Is Inappropriate for the Main Post

The Main Post is the heart of the Presidio, of which the Main Parade is a key component, if not the essence. The Main Post Update includes four components (art museum, lodge, terraced lawn, and theater) that are fundamentally incompatible with the historic character of the park and undermine core values of the Main Post. The combined effect of the four additions to the Main Post would fundamentally alter the entire area, converting it from a rich historic district to an upscale mall with little of the charm or character that one might experience in visiting the Presidio.

Response The Main Post Update has been changed as a result of the public review process under the NEPA and NHPA. The proposal to build a museum of contemporary art (CAMP) has been withdrawn; the design concept for a lodge has been modified to reflect the scale and footprint of barracks buildings that once stood on the site proposed for new construction; and designs for both the interior configuration of the theater and its new addition have been modified. Both NEPA and NHPA compliance for rehabilitating the Main Parade were completed in 2007 with a finding of no significant impact.

The Main Post Update retains the Trust's longstanding commitment to reveal and elevate the Presidio's history and to make the park a welcoming place for the public.

3 The Trust Finds Only "Potential" for Main Post as a Heritage Site

In the Main Post Update, the Trust appears tentative about the concept of the Main Post being an important heritage site, suggesting that it only has the potential to be an important heritage site. The Trust should promote the Main Post for the important heritage site that it is today and build its programs around that concept from the outset.

Response The Trust is fully committed to ensuring that the Main Post becomes the important heritage site it should be. Today, much of the Presidio's most important heritage is not discernible. El Presidio, the original Spanish garrison and the birthplace of San Francisco, remains largely hidden. The grand open spaces have lost much of their definition, having been degraded by asphalt and obscured by parking. The Main Post Update would elevate the historic and cultural resources in the Main Post by providing for excavation, interpretation, and surface treatments of El Presidio; an archaeology lab and curation facilities that engage students and the public in the science of archaeology; and a Heritage Center that invites visitors to explore the Presidio's history in depth. The Main Post Update also provides for the rehabilitation and reuse of historic buildings and landscapes, allowing for greater public benefit.

4 The Trust Finds Main Post Open Space Is Not Compelling

The Trust suggests that changes have eroded features that make the Main Post's open spaces compelling. This assertion is not substantiated and is in direct contrast to statements in the PTMP. No features have eroded since 2002 when the PTMP was written. This statement appears to have been added in an attempt to support new, large-scale construction. To the contrary, the Main Post open space is compelling and the proposed new construction would close important visual connections between parade grounds.

Response In the draft Main Post Update, the Trust stated, "Changes since World War II, especially the conversion of parade grounds to asphalt parking lots, have eroded many of the features that make the post's open spaces compelling." The Army paved over the Main Parade and El Presidio and demolished buildings that had separated the Old Parade and Main Parade and had given the parade grounds definition. In the 1940s, the Army built "temporary" barracks on top of El Presidio, diminishing its spatial character. Rehabilitation of El Presidio and the Main Parade was envisioned in the PTMP. The Trust still intends to rehabilitate the Main Parade by replacing asphalt with grass and landscaping, consistent with what was presented in the PTMP. NEPA and NHPA compliance for the Main Parade rehabilitation was completed in 2007 after two years of public process. The Main Post Update calls for rehabilitating El Presidio, which was also identified in the PTMP.

New construction on the site south of Building 34 was identified in the PTMP as a way to re-establish the separation between the Old Parade and Main Parade. The Main Post Update proposes to demolish Building 34, which does not contribute to the National Historic Landmark District (NHLD), and to construct a 70,000-square-foot lodge on the site. The design concept for the lodge has been modified to be more compatible in size and scale with Buildings 86 and 87; it reflects the footprint and scale of barracks buildings that once stood on the site. Demolishing the "temporary" World War II barracks that were built on top of El Presidio would allow the public to experience El Presidio's spatial character, which the Trust believes has greater historic value than the barracks buildings. This approach is consistent with the approach

taken by the National Park Service (NPS) when more than 30 similar buildings were removed from Crissy Field to re-establish the spatial character of the earlier airfield.

5 The Art Museum Visually Stifles the Historic Character of the Main Post

The Main Post Update lists the PTMP core Guidelines for Buildings and Structures, focusing on retaining and restoring historic buildings and connections, requiring new "infill" to be compatible. The Main Post Update presents the contemporary art museum as contributing significantly to the character of the Main Post and the lodge as re-establishing the missing spine between the Old and Main Parade grounds. The museum design, massing, and location would create adverse impacts that could not be mitigated in any reasonable manner without drastic alteration of the proposed action.

Response The proposal for the museum of contemporary art (CAMP) on the Main Post has been withdrawn. The proposed lodge that elicited the comment has since been extensively downsized and revised to respond to commentors' concerns.

6 The Art Museum Is Not Relevant to the Presidio Visitor Experience

An art museum would not add a relevant new dimension to the visitor experience. A large, modern building would overwhelm the Main Parade, and would create an unrelated building and contents that have nothing to do with the essential elements of the park. The Trust should provide a rationale for why all the other activities proposed for the Main Post focusing on the essential elements of the park, are not sufficient to attract visitors and explain why an added, unrelated attraction and unrelated structure at that site are necessary.

Response The proposal for the museum of contemporary art on the Main Post has been withdrawn.

7 The Lodge Should Not Be Built as Described

The proposed lodge's scale and design are out of place and would dominate the proposed history walk along the east side of the Main Parade. The large hotel would form a barrier, as opposed to a connection, between the Main Parade and the Old Parade grounds. The Trust should reengage the public on the design, scale, and massing of the hotel. Lodging on the Main Post should focus, at least largely, on re-using existing structures, including Pershing Hall and the Montgomery Street Barracks. It may be appropriate to evaluate lodging built on a substantially smaller scale (height and size) where the proposed action suggests building the large hotel. The new building should maintain a similar footprint as the current one.

Response The design concept for the lodge has evolved through the Section 106 consultation under the NHPA. The new concept for the lodge reflects the scale and footprint of the barracks buildings that were once located on the site between the Old Parade and Main Parade. New construction on the Graham Street site is a concept supported by the Trust's 2002 cultural landscape documentation as a means to re-establish the separation between the Old and Main Parades that existed during much of the period of significance. New construction would not exceed 70,000 square feet and would be broken up among several small-scale buildings connected by open-air porches. Height restrictions for the new lodge construction would keep it lower than neighboring historic buildings 86/87 and setbacks from other nearby historic buildings (Building 95, the Powder Magazine) would further reduce its effects.

The Programmatic Agreement for the Main Post Update (PA-MPU) (Appendix B of the final SEIS) would set the parameters for further design development, consultation, and review.

8 The Main Parade Is in Sharp Contrast with the Historic Landscaping and Buildings

The upper portion of the Main Parade would become a terraced, hard surface and lawn designed to be compatible with the art museum. The effect of the modern terracing showcases the art museum on an even grander scale as the main focal point of the Main Parade, creating a monumental presence. A complete picture of the Main Parade's appearance and impact, along with the Anza Esplanade buildings, lodge, and art museum, should be presented and analyzed together in their entirety.

Response Greening the Main Parade has long been identified as a key park-making project. NEPA and NHPA compliance for rehabilitation of the Main Parade was completed in 2007 after two years of public process. The design continues to evolve based on public input and the Trust has scaled back the design elements, which now include more landscape and less hardscape than initially proposed. The design concept for the Main Parade remains constant; however, the concept is to remove the parking, replace asphalt with grass, and landscape the eastern edge to return the Main Parade to its initial size and configuration. The Main Parade is evaluated as a cumulative action in the final SEIS.

9 Parking Is Not Identified in El Presidio Figures

The Main Post Update figures do not properly indicate the full extent of parking areas on El Presidio. El Presidio should be restored and parking eliminated from this location.

Response Under the Main Post Update (analyzed as Alternative 2 in the final SEIS), the Trust would reduce the amount of parking on El Presidio, retaining only 75 daily spaces. Figures have been amended accordingly.

10 Road Closures Are Designed to Support the Art Museum and Not Main Post Circulation

The road closures identified in the Main Post Update are designed to support the art museum and are at the expense of the rest of the Main Post, reducing options for traffic circulation and potentially creating traffic bottlenecks. The Trust should not close Sheridan Avenue from Graham Street to Montgomery Street, or Arguello Boulevard from Moraga Street to Sheridan Avenue. These closures restrict future options and constrain traffic. The streets might be closed temporarily for events.

Response Proposed traffic circulation in the Main Post Update is consistent with guidance provided in the PTMP: "The Main Post will be the central arrival area for Presidio visitors, and will become a lively pedestrian district. Site improvements that enhance the historic setting and open spaces will provide clear hierarchy of vehicular and pedestrian circulation routes" (PTMP, page 63). Closing streets to vehicular traffic in the center of the Main Post is intended to improve pedestrian circulation and to enhance the visitor experience of the historic district. Plans would also improve vehicle circulation, creating a "clearer hierarchy of vehicular and pedestrian circulation routes" (PTMP,

page 63). The closures of Sheridan between Graham and Montgomery and Arguello between Moraga and Sheridan to vehicular traffic were described in the Main Parade EA. Removing vehicular traffic from these street segments is an important part of improving pedestrian circulation and the visitor experience in the Main Post. Restricting automobile traffic from these roadway segments would shift additional traffic to other nearby roadways, but the additional traffic would not result in significant congestion on other roadways. As documented in Section 3.3 Transportation of the final SEIS, the nearby intersections of Sheridan/Montgomery and Arguello/Moraga are expected to operate at level of service (LOS) C or better in 2030.

11 The Vision for the Park Should Be a Collaborative and Shared Concept

The Main Post Update refers to the Trust's vision for the park rather than a vision established with its administrative partner (the NPS) and the community. The Trust should reconsider this view and instead offer proposals to its partners and the community for consideration and collaborative planning, well in advance of producing PTMP amendments.

Response Public participation in planning for the Main Post has been ongoing for nearly two decades, beginning with the 1994 NPS General Management Plan Amendment (GMPA).The Trust engaged the public, government agencies, and historic preservation groups throughout two years of public planning and compliance for the PTMP, two years of developing plans for rehabilitating the Main Parade, and throughout the past three years of developing the Main Post Update. Plans for the Main Post tier from the PTMP. Input from the public, the NPS, and historic preservation organizations has greatly influenced the development of the Main Post Update, which remains consistent with the vision for the Main Post that was put forth in the PTMP and the GMPA before it.

12 The Legislated Role of the NPS Visitor Center Should Be Discussed

The Presidio Trust Act states that the Secretary of the Interior shall retain jurisdiction over Building 102 for use as a visitor center and that the NPS, in cooperation with the Trust, is responsible for "providing public interpretive services, visitor orientation, and educational programs" in the Presidio. All the figures in the SEIS show Building 102 as vacant/underutilized for its land use category rather than cultural/educational, while other vacant buildings are shown with an assumed future use. Furthermore, the role of the NPS visitor center identified in the Presidio Trust Act and the Heritage Center identified in the Main Post Update needs to be explained in light of discussions held to date between the NPS and the Trust regarding a combined visitor center.

Response In response to the comment, figures have been changed to identify Building 102 as under the jurisdiction of the National Park Service; the Trust's 5-Year Construction Plan has also been changed. Building 102 is not part of the Main Post Update because it is not part of Area B, nor has anything changed about its expected use since the PTMP was released in 2002. Shortly after the PTMP was released, Building 102 was vacated and has remained vacant, awaiting rehabilitation.

The Trust and the NPS have recently entered into an agreement to plan for a visitor center. While the visitor center would provide broader visitor orientation, the proposed Heritage Center would provide more specific opportunities to explore the Presidio's history. Should the NPS and Trust's decision making about the location of the visitor center require

additional public process and review under the NEPA and NHPA, the agencies would undertake this process and review at the appropriate time. The programmatic relationship between the visitor center and the Heritage Center would be addressed in the course of planning for the visitor center.

The Trust and the NPS have collaborated on a variety of interpretive and programmatic efforts since the Trust assumed jurisdiction of Area B in 1998. The Trust will continue to collaborate with the NPS. This collaboration is reflected in the final Main Post Update.

13 The Heritage Center Should Be Explained

The program description for the proposed Heritage Center appears to overlap in function and staffing with the NPS visitor center. The Trust should review and build upon previous planning work in the area of interpretation for the development of the Heritage Center concept. It is also unclear how the proposed center in the alternatives relates to the NPS visitor center. This should be clarified and the Trust should confirm Building 102 as the NPS visitor center unless and until an alternative location, if determined, is mutually agreed upon between the NPS and the Trust. The important role of the NPS in providing these services should be clearly reflected.

Response In response to the comment, figures have been changed to identify Building 102 as under the jurisdiction of the National Park Service. The Heritage Center is intended to provide opportunities to explore the Presidio's history in depth. It would have the same relationship to a visitor center as the Presidio Nursery might have, that is, as a place where one might pursue a particular interest in depth (i.e., nursery operations, plant biology and propagation techniques, park restoration efforts), as opposed to a visitor center, which is intended to provide general orientation and visitor services.

14 The Placement of the Heritage Center De-Emphasizes the Historic Elements of the Visitor Experience

By placing the Heritage Center in the back of the Officers' Club, the Trust pushes history and the true nature of the Presidio and the Main Post away from the visiting public, where it would be encountered only accidentally or by the truly inquisitive. Visually out of the way and unlikely to be found, the back of the Officers' Club is simply without credibility as a site that would "offer the public a place to begin their exploration of the historic post." Furthermore, the proposed location of the art museum would severely distract from and diminish the importance of the Officers' Club and EI Presidio.

Response The Heritage Center is not planned for the back of the Officers' Club, but for the eastern side of it, with an exhibition in the current exhibition hall, a 5,000-square-foot, state-of-the-art exhibition facility. The Officers' Club is the oldest building in San Francisco and one of its most symbolic; it therefore seems a most fitting place to locate the Heritage Center, which would be prominent in the building. The Heritage Center would not compete with the art museum for prominence, as the CAMP has been withdrawn from further consideration.

15 Buildings 97, 40, and 41 Should Not Be Demolished

These three buildings are the only structures in the Main Post district constructed during World War II. Therefore, demolition of these buildings would eliminate a layer of history that contributes to the significance of the NHLD. Buildings 40 and 41 should be kept in place

until such time as the Trust is ready to commemorate El Presidio and develop plans for their transfer to another portion of the property, such as Crissy Field. Building 97 could be moved as stated in the Main Post Update, and would retain its context and alignment with Arguello Boulevard. Building 97 should be rehabilitated for future use and occupancy and brought up to current seismic code.

Response Buildings 3, 37, 40, 41, and 97 on the Main Post were constructed during the World War II era. After the United States entered World War II, the Presidio became the nerve center for Army operations in defense of the Western United States and Gen. John L. Dewitt led the IX Corps and Fourth Army from his headquarters (Building 35) at the Main Post. Additionally, the adjacent, large-scale identical barracks that were constructed in 1940 (Buildings 38 and 39) were used to support the wartime mission, as were other existing facilities on the Main Post. Buildings 3, 37, 40, and 41 all represent the World War II-era "temporary" type of military construction, of which there are 16 other individual examples in the Presidio, and several more intact collections within the Golden Gate National Recreation Area (notably at Fort Cronkhite).

Under the mitigated preferred alternative (Alternative 2), Building 97 would be retained in its present location and reused. Landscape treatments would be reviewed as treatments are developed for the *plaza de armas*, the first designed open space and the first military parade ground on the Presidio. The Trust has committed in the PA-MPU (Appendix B of the final SEIS) to engage in further consultation before making a decision on the final treatment of Buildings 40 and 41. The Trust foresees removing or relocating Buildings 40 and 41 to re-establish the spatial character of the original plaza. This approach is analogous to the one taken by the NPS in their successful rehabilitation of the historic Crissy Field, which had been similarly obscured by parking and required the removal of later historic buildings for the airfield to re-emerge in the landscape.

Throughout the Main Post and the park there is considerable evidence of the second century of the Presidio's development and of its history as an American Army post. But there is virtually no evidence of its first hundred years – of the ambitions of imperial Spain, the impact of colonialism on indigenous peoples, the intentions of a newly independent Mexico, and the frontier expansion of the United States. El Presidio is arguably one of the most important and symbolic sites in the western United States. These considerations would support the removal or relocation of Buildings 40 and 41.

16 Building 46 Should Not Be Demolished for the Archaeology Lab

The Presidio Trust could incorporate Building 46, a contributing resource to the NHLD, into the plans to recreate a connecting structure that would link the archaeology conservation lab and collections facility. The retention of this building would also reduce the amount of square footage slated for demolition and support the overall goal of preserving contributing elements to the NHLD.

Response Building 46 is a 50-square-foot shed that is in dilapidated condition. It is not feasible to incorporate it into the proposed archaeology lab and curation facilities. The Trust would work with the NPS Heritage Documentation Program to undertake appropriate Historic American Building Survey (HABS) recordation, which is an accepted mitigation.

17 Anza Street Should Retain the Look and Feel of a Street and Not Blend Into the Main Parade

If Anza Street is closed as part of the proposed Anza Esplanade circulation plan, the Trust should ensure that it retains the look and feel of a street rather than being designed to blend into the Main Parade. While the street would be closed to vehicular traffic, retaining the look of a functioning street would convey to visitors the feeling and association of vehicular and pedestrian circulation established when it was an active military installation.

Response While removal of cars and asphalt would alter the present-day appearance and function of Anza Street and other historic streets closed to vehicular traffic, features of the rehabilitated roads, including width, alignment, and paving materials designed as part of the roadway rehabilitations, would be historically compatible.

18 Building 99 Should not Be Subdivided

Building 99 should not be subdivided into two separate screening rooms as part of the Presidio Theatre project. Though the subdivision is planned to be reversible, the act of subdividing the auditorium would diminish the ability of this important interior space to contribute to the building's overall integrity.

Response As outlined in Section 2, Alternatives, of the final SEIS, the theater's interior would not be subdivided.

19 Traffic Lights on the Main Post Should Be Limited

The Trust should limit the number of traffic lights needed in the Main Post district and rely on other forms of traffic calming devices, such as stop signs, to handle the anticipated increase in visitorship.

Response The Trust would not install traffic lights in the Main Post and would continue its traffic demand management programs to reduce the number of cars in the Main Post and throughout the park.

20 The Number of Housing Units Is Unclear

The Trust made a commitment in the PTMP to a range of residential units Presidio-wide. Included in this was a maximum range of 140 to 155 residences at the Main Post, including up to 50 units within new construction. It is not clear what the housing unit total for the Main Post is for each alternative and how these numbers would affect the Presidio-wide unit goal.

Response The number of residential units identified in the PTMP is a park-wide cap of 1,654, not a target number. For each planning district, the number of planned units was presented as a range that reflected general goals. For example, the range of residential units within new construction in the Main Post was estimated at 0 to 50. As stated in the PTMP, "achieving these goals depends on site-specific assessments of building configuration and financial feasibility, as well as progress towards meeting other planning objectives." The PTMP also recognized that the "Main Post historically accommodated a mix of residential and non-residential uses, and a mix of conventional dwelling units and group quarters." The Main Post Update plans to retain a mix of residential and non-residential uses, including the 139 residential units existing at the Main Post. At this time, there is no "domino effect" anticipated because of a reduced number of residential units in the Main Post; if anything, the Main Post Update would reduce the impacts in the Main Post from what was previously anticipated in the PTMP.

2.3 NEPA PROCESS

21 The Main Post Planning Process Has Been Seriously Compromised

The NEPA process has been used to promote a single proposal already received rather than seriously evaluate a wide range of reasonable alternatives for revitalizing the Main Post. The intent of the NEPA process is not being met. The Trust should withdraw the art museum and lodge proposals and suspend the current process.

Response Consistent with the commitments made in the PTMP (pages 128, 130-131), in 2007 the Trust notified the public of its intent to amend the PTMP. The Trust undertook an extensive planning and public review process for a set of projects and improvements, including new construction for a contemporary art museum (CAMP), new construction for a lodge, removal of historic buildings to reveal the original El Presidio, development of an archaeology lab and Heritage Center, rehabilitation of the Presidio Theatre with construction of an addition, construction of an addition to the Presidio Chapel, and parking and circulation improvements that require pedestrianizing roads and building new parking lots. Under the provisions of the NEPA, the Trust began scoping for the Main Post Update in November 2007. In June 2008, the Trust issued a draft Main Post Update and a draft SEIS that analyzed five alternatives for the Main Post. Concurrent with the environmental review, the Trust also engaged in a Section 106 consultation under the provisions of the National Historic Preservation Act (NHPA), and released a draft Finding of Effect (FOE) in August 2008.

In February 2009, the Trust identified a preferred alternative and issued a revised draft Main Post Update and a supplement to the draft SEIS. In July 2009, the Trust issued a final FOE, concluding the assessment phase of the Section 106 consultation, and began the process of resolving the adverse effects that had been identified in the FOE. Throughout the process, documents were available for public review and comment for a minimum of approximately 90 days.

The mitigated preferred alternative (Alternative 2) has changed as a result of both the NEPA and NHPA processes and has been modified specifically to avoid, minimize, or mitigate adverse effects on the National Historic Landmark District as well as to respond to concerns raised by members of the public who have participated in the process. Some of the more substantive changes are as follows:

1. The proposal for the art museum has been withdrawn from further consideration.
2. The amount of construction for a lodge has been reduced and design concepts have changed considerably to reflect the scale and footprint of barracks that once separated the Old Parade and Main Parade grounds.
3. Both the addition to the theater and the configuration of its interior have been modified to preserve the building's historic character.
4. The orientation of the addition for the Presidio Chapel has changed.
5. The historic garages (Buildings 113 and 118) along Taylor Street would be retained.

22 Significant Revisions to the Project Warrant Circulating a Revised Draft SEIS

There have been many "significant revisions" to the project and to its alternatives, as documented in part in the changed Main Post Updates

and undertakings. The last public comments on the draft SEIS and supplement were requested by the Trust in February 2009, and later comments have been kept out of the record. It is not possible for the public to comment on the most recent description of the project described in the administrative Main Post Update of March 2010, and there may have been more changes since that time.

Response According to the CEQ NEPA Regulations (40 CFR 15029[c][1]), a federal agency must prepare a revised draft EIS (i.e., a supplement to a draft EIS) if major federal action remains and the federal agency makes substantial changes in the proposed action that are relevant to its environmental effects, or there are significant new circumstances or information relevant to the environmental concerns that bear on the proposed action or its impacts. CEQ recommends that supplementation is not necessary every time new information comes to light, but rather if new information is of value to the still pending decision-making process. Thus, a supplemental EIS must be prepared if the new information is sufficient to show that the remaining action will affect the quality of the human environment in a significant manner or to a significant extent not already considered.

In December 2008, to best integrate and satisfy its NEPA and NHPA obligations, the Trust did in fact prepare a supplement to the June 2008 draft SEIS for the Main Post Update to address a preferred alternative. The supplement identified and discussed the environmental impacts of a preferred alternative that combined elements of alternatives previously analyzed in the draft SEIS. The supplement to the draft SEIS was circulated for comment on March 6, 2009, along with a revised Main Post Update and a revised draft FOE. Three public meetings, including one before the Trust board of directors meeting, were held on the draft documents.

In July 2009, the proponent for the contemporary art museum (CAMP) discontinued its effort to build the museum at the Main Post. Following the proponent's decision, in April 2010, the Trust identified (via Resolution 10-19) a mitigated preferred alternative, which did not include the CAMP and which contemplated other changes in response to public comment on the supplement to the draft SEIS and feedback obtained through the Section 106 consultation. These changes included modifying the proposals for the Presidio Theatre and Presidio Chapel to better preserve the buildings' historic character; reducing the amount of new construction for the Presidio Lodge to reflect the scale and footprint of barracks previously located on the site; and reducing the overall amount of square footage at the Main Post, resulting in less development (maximum building area) than previously foreseen in the PTMP. The intent of these changes was to avoid, minimize, or mitigate adverse effects on the NHLD as well as to respond to most of the concerns raised by members of the public during review of the supplement to the draft SEIS. In July 2010, the Trust finalized (via Board Resolution 10-28) the mitigated preferred alternative following further consultation under Section 106.

In addition to the CEQ NEPA Regulations, CEQ has issued a variety of general guidance memoranda that concern the implementation of NEPA. One of the more frequently cited and used resources for NEPA practice that federal agencies look to in interpreting the treatment of alternatives under NEPA is CEQ's Forty Most Asked Questions Concerning CEQ's NEPA Regulations (Forty Questions). In Forty Questions No. 29b, CEQ advises if an alternative previously considered in a draft SEIS (in this

case, the preferred alternative in the supplement to the draft SEIS) is modified somewhat to achieve certain mitigation benefits, or for other reasons, the agency need not issue a supplement to the draft SEIS but rather should include a discussion of it in the *final SEIS* (emphasis added). CEQ further advises if the new alternative is a minor variation of one of the alternatives discussed in the draft SEIS (the 2002 PTMP alternative or Alternative 1), but the variation was not given any previous consideration, the agency should develop and evaluate the new alternative in the *final SEIS* (emphasis added). Both of these situations apply to the mitigated preferred alternative (Alternative 2 in the final SEIS) as shown in the comparison in Table 8. The comparison shows that the key difference between the 2002 PTMP alternative and the mitigated preferred alternative is increased public use. The 2002 PTMP alternative provided for more office and residential uses in the Main Post than the Main Post Update. The mitigated preferred alternative reduces the amount of building square footage allocated to those uses and increases the amount of space for cultural, educational, and public serving uses. For example, the new construction identified in the 2002 PTMP alternative for office use is now proposed in the mitigated preferred alternative for lodging (as previously analyzed in the supplement and again in the final SEIS). The mitigated preferred alternative also identifies additional square footage dedicated to the Presidio's heritage and calls for a more open site and reduced parking at El Presidio. The "red-lined" PTMP Main Post chapter of the Main Post Update that amends the Main Post chapter in PTMP also shows that changes to the original PTMP text are indeed few and results in no new significant environmental impacts that were not previously analyzed in the draft SEIS or supplement. Thus, while circumstances have changed somewhat and new information has been provided, the conclusions of the NEPA analyses in the draft SEIS have not been substantially altered.

Because the mitigated preferred alternative only modifies the preferred alternative discussed in the supplement to further mitigate adverse effects on the NHLD, does not differ substantially from the alternative described in the 2002 PTMP, and qualitatively lies within the spectrum of alternatives previously discussed in the draft SEIS and supplement, the Trust believes there is no need or requirement to circulate another supplement to the draft SEIS.

8 COMPARISON BETWEEN 2002 PTMP ALTERNATIVE AND MITIGATED PREFERRED ALTERNATIVE

	2002 PTMP Alternative (Alternative 1 in Draft SEIS)	*Mitigated Preferred Alternative (Alternative 2 in Final SEIS)*	*Change*
TOTAL BUILDING AREA (sf)	1,240,000	1,201,291	-38,709
TOTAL DEMOLITION (sf)	20,000	94,000[a]	+74,000
TOTAL NEW CONSTRUCTION (sf)	110,000	146,500	+36,500
LAND USES (sf)			
Office	570,151	409,505	-160,646
Retail	49,685	34,006	-15,679
Restaurant	– Did Not Specify –	24,336	–
Lodging	26,830	91,830	+65,000
Conference	24,115[b]	25,537	+1,422
Recreation[c]	51,847	21,067	-30,780
Cultural/Educational	233,765	327,010	+93,245
Theater	– Did Not Specify –	33,140	–
Residential	246,703	176,312	-70,391
Infrastructure	38,765	58,548	+19,783
SPECIFIC BUILDING USES/PROJECTS			
El Presidio	Excavation	Commemoration (including potential removal or relocation of Buildings 40 and 41)	
Officers' Club	Special Events	Heritage Center/Special Events	
Buildings 44, 47, 48, and 49	Office/Storage Use	Archaeology Lab	
Building 93	Bowling Center	Park Programs/Visitor Services	
Building 97	Office Use	Park Programs/Visitor Services	
Building 99	Cultural Use	Film Arts/Performing Arts Center	
Buildings 101, 103, and 105	Office Use	Mixed Use (office, cultural/educational, and retail)	
Lodging	Pershing Hall, Funston Street Housing	Pershing Hall, Graham Street Corridor	
Parking[d]	2,000 Surface Spaces	1,910 Spaces (including up to 350 parking spaces below grade)	

[a] *Includes 32,259 square feet to be demolished as part of the Doyle Drive project that was analyzed subsequent to completion of the PTMP.*
[b] *Golden Gate Club (Building 135).*
[c] *Does not include ball field.*
[d] *Excludes Infantry Terrace.*
sf = square feet

23 The SEIS Must Present a Coherent Exposition That Is Reasonably Understandable By the Public

Dimensions not being available and lack of detail on the design and dimensions of the Anza Promenade/Main Parade structures and paving and the paving of Pershing Square, and the ambiguity and confusion about the proposed design of the art museum are bewildering to the public, contrary to NEPA standards for an EIS.

Response While the Trust appreciates the opinion expressed in this comment, it should be noted that many reviewers of the draft SEIS and supplement, including those involved in the Section 106 consultation process under the NHPA and the U.S. Environmental Protection Agency,[11] did not share this concern and were able to use the documents with sufficient ease to provide the Trust with insightful and constructive comments. These specific comments have been responded to in the final SEIS, which also includes a number of changes to graphics and the text designed to make the information more easily accessible to even casual readers. For example, the discussion in Section 2 Alternatives more clearly presents shared projects and improvements among the alternatives, as well as differing features. Separate graphics and tables have been prepared for each alternative to better illustrate proposed changes for new construction, demolition, and circulation. In Section 3 Affected Environment and Environmental Consequences, the alternatives are treated equally for a more comparative analysis of potential impacts. Additional and more detailed renderings (photosimulations) of key projects have been provided in Section 3.8 Visual Resources to better aid in reviewers' understanding of visual impacts. Also, where additional information was specifically requested by reviewers, this has been provided; and where specific comments or questions were posed regarding potential impacts or associated mitigation measures, these have been addressed individually in this volume of the final SEIS.

[11] *The U.S. Environmental Protection Agency (EPA), which is charged with reviewing Draft EISs prepared by other federal agencies and rating them using a rating system that provides a basis upon which the EPA makes recommendations to the lead agency for improving the document, awarded the draft SEIS its highest rating (Lack of Objections or LO). In its comment letter on the supplement, the EPA made minor suggestions, including incorporating the programmatic agreement (PA) into the final SEIS and addressing "some concerns" regarding air quality matters, which the Trust took into account in preparing the final SEIS.*

24 The Main Post Update Is Subject to CEQA

The Main Post Update would have impacts on roadways and neighborhoods outside of the Presidio. While mitigations are offered for impacts outside of the Presidio, the SEIS does not fully analyze the impacts of these mitigations. As has been done for the Doyle Drive project, a California Environmental Quality Act (CEQA) analysis should be performed to fully identify impacts and mitigations of proposed actions outside of the Presidio. The mitigations from the Doyle Drive project should be reviewed, analyzed, and incorporated, where appropriate, within the SEIS.

Response The Main Post Update is not subject to CEQA. The Main Post Update is a planning document proposed for implementation by a single federal agency, the Presidio Trust. Federal actions are subject to the NEPA. The impacts to roadways outside the Presidio that could occur should the City and County of San Francisco be reluctant to implement Trust-identified mitigation measures are fully disclosed and analyzed in Section 3.3 Transportation and Parking as required by the NEPA. In the

case of the Doyle Drive project, the Federal Highway Administration, the California Department of Transportation, and the San Francisco County Transportation Authority jointly proposed to improve the seismic, structural, and traffic safety along Doyle Drive. In that case, a combined NEPA and CEQA document was developed (in accordance with CEQA Guidelines, Sections 15220-15229). Impacts from the Doyle Drive project, including proposed mitigation measures, have been analyzed as a cumulative action in Section 3.12 Cumulative Impacts of the final SEIS.

25 The Final SEIS Should Provide More Detailed Information on Implementation and Funding of Possible Mitigations

The NEPA requires that an EIS disclose adverse environmental effects that cannot be avoided should the proposal be implemented. But an agency will not know if an adverse effect can be avoided unless it has investigated whether it can be avoided. Throughout the draft SEIS, adverse impacts of the proposed action are identified, but there is no indication that the possibility of mitigation has been investigated and determined. Also, if mitigation implementation or anticipated success is questionable (e.g., because of the need for another entity to implement the mitigation or because funding is uncertain), this should be noted and discussed in the final SEIS.

Response At the end of each resource section in Section 3 Affected Environment and Environmental Consequences (for example, Section 3.7 Archaeology), in both the draft and final SEIS, mitigation measures were identified and discussed. As allowed by the Council on Environmental Quality (CEQ) (see Forty Questions Number 19(b)), and as has been Trust practice in all its EISs to date, mitigation measures will be outlined in the Record of Decision (ROD) for the project. As part of the decision to implement the selected alternative, the Trust will adopt a monitoring and enforcement program (MEP) for each mitigation measure to monitor impacts during implementation of the Main Post Update as recommended in CEQ's draft Guidance for NEPA Mitigation and Monitoring, dated February 18, 2010. The MEP will provide for the implementation of the mitigation measures as proposed in the final SEIS, where these measures are within the ability of the Trust to implement. Where measures fall outside of the Trust's jurisdiction, this fact will be noted, along with a description of ways in which the Trust will assist and encourage other agencies to implement these measures. Should the outside agency express concern regarding the likelihood that measures will be adopted, this too will be noted in the ROD.

The City and County of San Francisco (CCSF) has indicated that it may not have funds to signalize intersections under its jurisdiction if and when needed. Under the NEPA, the Trust is not obligated to provide certainty that the CCSF would fund traffic measures, but rather is only required to notify the local agency to implement the measure and encourage it to do so. The Trust will coordinate with the CCSF to determine the contribution of each party to the cost of the traffic improvements at the appropriate time.

26 The Main Parade EA Was Improperly Adopted

The environmental assessment (EA) for the Main Parade was improperly adopted and the findings of that document should be rejected. It is improper for the draft SEIS to rely on the EA when it did not take into consideration the large-scale, massive development of the Main Parade subsequently presented in the Main Post Update.

Response The EA for the Main Parade did include actions that would be analyzed further in the Main Post Update SEIS (such as a lodge at the Building 34 site and a museum at the southern end of the Main Parade)

in its cumulative impacts analysis (Main Parade EA, pages 58-68). The Main Parade project is considered part of the "baseline" analyzed under Alternative 1 in the final SEIS. Table 9 outlines the public process undertaken by the Trust prior to the signing of the Finding of No Significant Impact (FONSI) for the Main Parade EA and documents NEPA and NHPA compliance.

9 OUTLINE OF PUBLIC PROCESS UNDER SECTION 106 (NHPA) AND NEPA FOR THE MAIN PARADE, JANUARY 2004 – NOVEMBER 2007

Date	*Action*
January 13, 2004	Public Workshop 1: Main Parade Ground Public Use and Programming
January 28, 2004	Public Workshop 2: Main Parade Ground Design Concepts
March 30, 2004	Public Workshop 3: Main Parade Conceptual Design
September 22, 2004	Public Workshop 4: Main Parade Ground Context, Historic Character and Public Use
October 25, 2004	Public Workshop 5: Main Parade Ground Revised Design Concepts
March 18, 2005	Notice issued to Initiate Public Scoping and Prepare an Environmental Assessment (EA) for Proposed Improvement to the Main Parade Ground at the Presidio of San Francisco; 75-day comment period begins
March 24, 2005	Initiation of Section 106 Consultation; consultation packages including Area of Potential Effect (APE) and copy of Request for Qualifications (RFQ) for design services, Main Post Cultural Landscape Assessment (CLA) mailed to all signatory parties
April 19, 2005	Comments received from Fort Point and Presidio Historical Association (FPPHA) requesting expansion of APE
April 19, 2005	Consultation meeting held with State Historic Preservation Officer (SHPO) (John Thomas, Mike McGuirt, Steve Mikesell), NPS (Ric Borjes), and Trust (Juli Polanco, Kathleen Forest); Advisory Council on Historic Preservation (ACHP) declined to participate, but agreed that meeting was appropriate. Result: expansion of APE to address FPPHA's concerns
May 23, 2005	Public Scoping Workshop held updating public on the project; FPPHA provides verbal comments on proposal expressing concern over cumulative effects, NEPA process, transit and parking
May 27, 2005	California Heritage Council submits comment letter concurring with FPPHA comments and questioning various elements of new construction as part of the Main Parade project
May 31, 2005	Close of public scoping period
May 31, 2005	FPPHA submits comment letter summarizing its verbal comments from the 5/23 public meeting
June 3, 2005	National Park Service (NPS) submits comment letter expressing support for the revival of the Main Parade, but encouraging rehabilitation of historic buildings over new construction
August 24, 2005	Trust meeting with FPPHA to update on progress with Olin Partnership designs
October 12, 2005	Trust meeting with SHPO to update on 106 consultation around Main Post area, including Main Parade

9 OUTLINE OF PUBLIC PROCESS UNDER SECTION 106 (NHPA) AND NEPA FOR THE MAIN PARADE, JANUARY 2004 – NOVEMBER 2007

Date	*Action*
January 27, 2006	Trust phone call with SHPO (Steve Mikesell) to clarify points on Main Parade project
August 17, 2006	Trust meeting with SF Architectural Heritage (Charles Chase) to review Main Post projects, including Main Parade
September 7, 2006	Trust meeting with FPPHA board to present Main Post projects, including Main Parade
September 22, 2006	Letter received from FPPHA commenting on historic timeline, interpretive planning details from Guillin & Merrell proposal
October 30, 2006	Public Workshop 6: Main Parade Ground Update
December 15, 2006	Trust meeting with National Trust for Historic Preservation to present update on Main Post projects, including Main Parade
December 20, 2006	Members of FPPHA board meet with Trust to discuss interpretive plan, offer suggestions on further research[a]
January 11, 2007	Trust presents latest "Anza Esplanade" plans to FPPHA at the organization's board meeting, receives comments on design and interpretive information[a]
July 2, 2007	Main Parade EA released, 30-day review period begins
August 2, 2007	30-day review period closes
August 13, 2007	Email from SHPO (Amanda Blosser) to Trust indicating no comments or revisions to Main Parade EA
September 7, 2007	Comment letter received from National Trust for Historic Preservation (NTHP) on the Main Parade EA
October 16, 2007	Comment letter received from NPS on the Main Parade EA[b]
November 2, 2007	Final EA and Finding of No Significant Impact (FONSI) released by Presidio Trust

[a] *Meetings to discuss historical interpretation in the Main Post began in response to comments made by the public during the NEPA/NHPA processes. As stated in the EA, the Trust wholly intends to develop historical interpretation in conjunction with the Main Parade project. To that purpose, the EA states the Trust's intention to continue discussions with history organizations and individuals to develop the interpretive themes of the Anza Esplanade.*

[b] *Comments from this letter have informed the latest design developments, which have been incorporated into the analysis in the final SEIS.*

27 The Trust Is Obligated to Work with Other Government Agencies

Under the NEPA, the Trust may not take actions that are entirely in opposition to local/federal government policies. It is the policy of San Francisco to disapprove those major developments that create undue demands for new transit services. NPS policy is to discourage vehicle use in national parks.

Response The NEPA requires the Trust to discuss possible conflicts between a proposed action or alternative and the objectives of land use plans, policies, and controls for the area concerned. This discussion is provided in Section 3.2 Land Use Plans and Policies of the final SEIS. The site is located on the Main Post in Area B of the Presidio, which is under the administrative jurisdiction of the Presidio Trust; Trust policies and regulations are controlling. Additionally, the Presidio is an area of exclusive federal jurisdiction within the City and County of San Francisco (CCSF), and local land use plans, policies, and regulations are inapplicable. Nevertheless, the SEIS describes the San Francisco General Plan, specifically the policy of the Recreation and Open Space Element that calls for preservation of the Presidio and its resources, and its associated guidelines. It should be noted that it is also the Trust's policy to minimize private automobile use within the park, and that the proposed action is consistent with this policy. Refer to pages 46 through 51 of the PTMP for background on the Trust's transportation policies.

Throughout the Main Post Update NEPA process, the Trust has fostered an open relationship with the CCSF, the NPS, and other public agencies. Federal, state, and local agencies that were consulted during the NEPA process are outlined in Section 5.2 List of Persons Consulted of the final SEIS. Comments received from the NPS, CCSF, and other public agencies were incorporated into the final SEIS. The Trust will continue to work with the CCSF and NPS to achieve mutual goals and to minimize possible conflicts between Trust activities and CCSF and NPS policies.

2.4 NHPA PROCESS

28 The NEPA and NHPA Processes are Neither Concurrent nor Integrated

The applicable regulations require that the two processes (NHPA and NEPA) be "concurrent and integrated." That guidance requires that those concurrent and integrated measures be taken before proceeding with NHPA tasks alone. Failure to do so would undermine both processes and would lead to a misinformed agency decision.

Response The Section 106 regulations encourage federal agencies to coordinate their Section 106 process with their NEPA environmental review process. Through coordination and sharing of information and analyses, compliance can be completed in a streamlined fashion that minimizes duplication of effort. This coordination also ensures historic properties receive adequate and timely consideration at the beginning of and throughout the planning process.

Concurrently with the NEPA environmental analyses in the SEIS, the Trust also provided for the review of the proposals within the Main Post Update under the consultation process required by Section 106. This process identified the historic resources that may be affected by an undertaking, assessed the effects on historic resources through a Finding of Effect (FOE), and then looked for ways to "avoid, minimize, or mitigate" the effects identified in the FOE. The final FOE was circulated on July 1, 2009. Section 106 consultation included the National Park

Service, the State Historic Preservation Officer, the Advisory Council on Historic Preservation, and 14 other consulting groups. Table 10 shows the process for coordinating the NEPA and NHPA as explained by draft guidance provided by the Council on Environmental Quality (CEQ) (first two columns of table), and documents compliance steps taken by the Trust (third column).

The draft guidance recognizes that any discussion of coordination between the NEPA and NHPA processes must acknowledge the distinctions between the purposes of Section 106 and NEPA. For instance, where NEPA calls for public disclosure and focuses on alternatives, Section 106 requires a consultative process and focuses on resolving adverse effects to historic properties. NEPA has a closed timeframe in which the process operates, which may not allow adequate time for meaningful Section 106 consultation. Section 106 allows for consultation to be open-ended that continues well past time periods specified for comment under NEPA, as has been the case for the Main Post Update. The guidance also advises that solicitation of public comments under NEPA should not be confused with Section 106 consultation. All the same, for the Main Post Update, detailed consideration of historic properties and preservation concerns that emerged from the Section 106 analysis greatly benefited the shaping and analysis of alternatives under NEPA. The NEPA process for the Main Post Update will conclude in a record of decision (ROD) that will fully account for the provisions of the signed PA-MPU that concluded the NHPA process. A copy of the signed PA-MPU is provided in Appendix B of the final SEIS.

10 COORDINATING THE NATIONAL ENVIRONMENTAL POLICY ACT WITH THE NATIONAL HISTORIC PRESERVATION ACT FOR THE MAIN POST UPDATE

NEPA Guidance	*NHPA Section 106 Guidance*	*Presidio Trust Compliance Steps*
STEPS TAKEN TO DATE		
1 Identify project objectives and scope	Establish “undertaking” • Notify appropriate SHPO • Plan to involve the public • Identify other consulting parties	Notice of Intent sent to consulting parties (ACHP, SHPO, NPS, NTHP, PHA), October 23, 2007 NEPA scoping initiated with Notice of Intent, October 29, 2007

	NEPA Guidance	*NHPA Section 106 Guidance*	*Presidio Trust Compliance Steps*
2		Finding • Undertaking is type that might affect historic properties; or • Project is covered by an existing PA	Section 106 consultation package sent to ACHP, SHPO, NPS, NTHP, and PHA, November 11, 2007
3	Identify social, economic, and environmental constraints	Through consultation: • Identify historic properties • Evaluate historic significance • Resolve eligibility disputes	NEPA scoping continues; public meeting November 28, 2007 1st Section 106 consultation meeting, December 11, 2007 Scoping ends December 15, 2007
4		Finding • Historic properties affected Time to resolve disputes/objections early in the process, in consultation with SHPO and other consulting parties	2nd consultation package sent to consulting parties, January 28, 2008 2nd consultation meeting, February 26, 2008
5	Develop preliminary alternatives		Alternatives, including publicly-suggested Alternative 2A, developed
6	Analyze the impacts of the alternatives	Through consultation, assess adverse effects by applying Criteria of Adverse Effect	Draft SEIS prepared Draft FOE prepared
7		Finding • Adverse effects Time to resolve disputes/objections	3rd consultation package mailed to consulting parties, March 18, 2008

	NEPA Guidance	*NHPA Section 106 Guidance*	*Presidio Trust Compliance Steps*
8	Incorporate alternatives analysis in the NEPA document, and circulate document for comment	Through consultation, consider comments and negotiate mitigation measures	Draft SEIS available for comment, June 13, 2008 Public tours, June, July, August 2008 1st Public Trust Board of Directors (Board) meeting, July 14, 2008 Public Transportation Workshop, July 28, 2008 Draft FOE available for comment, August 8, 2008 3rd consultation meeting, September 16, 2008 Alternatives Workshops, September 25, September 28, October 2, 2008 Public meeting on Conforming New Construction, November 19, 2008
9	Incorporate comments into the identification of a preferred alternative	"Avoid, minimize, mitigate" adverse effects through additional consultation and pursue: • MOA • PA • Other program alternative Time to resolve disputes/objections	Identification of Preferred Alternative, December 5, 2008 4th Section 106 consultation meeting, December 5, 2008 2nd Public Board meeting, December 9, 2008 Supplemental draft SEIS and revised draft FOE available for comment, February 2009 5th Section 106 consultation meetings, April 21-22, 2009 Public comment on all draft documents extended through June 1, 2009, 90 days after release of supplemental draft SEIS/revised draft FOE Release of final FOE, July 1, 2009 6th Section 106 consultation meetings, August 18-20, 2009 Release of first draft PA-MPU, November 17, 2009 7th Section 106 consultation meeting, January 26, 2010 Release of second draft PA-MPU, March 16, 2010

NEPA Guidance	*NHPA Section 106 Guidance*	*Presidio Trust Compliance Steps*
		Release of third draft PA-MPU, August 13, 2010
		8th Section 106 consultation meeting to review draft PA-MPU, September 14-15, 2010
		Release of final, executed PA-MPU, November 2010
		Release of final SEIS for public review, November 2010
NEXT STEPS		
10 Issue FONSI/ROD	File final PA with signatory and consulting parties; include copy in FONSI/ROD	Adopt ROD for public review

29 The Final SEIS Should not Be Prepared Until the PA Is Signed

Because the NHPA Section 213 report was not available when the supplement was produced, the supplement does not fully address the cumulative effects of the proposed project on historic resources. The NHPA Section 213 report finds that the proposed undertaking would have a significant irreversible adverse effect on the Presidio NHLD. The revised draft FOE finds no direct adverse effect to the NHLD. The Trust and NPS documents are in direct conflict. The Trust is working with a number of signatory and concurring parties to develop a programmatic agreement (PA) to avoid, minimize, or mitigate adverse effects of the project on the NHLD. This process may result in further changes to the proposed project. Furthermore, it appears that much of the information that should be included in the final SEIS will be addressed in, or determined by, the PA. For these reasons, the final EIS should not be prepared until the PA is signed, and the PA should be included as an appendix in the final SEIS.

Response Analysis contained in the Section 213 report has been incorporated into the final SEIS. In February 2009, the Trust released a revised draft Main Post Update, a supplement to the draft SEIS for the Main Post, and a draft Finding of Effect (FOE) for the Main Post Update. Overall, the Trust's February 2009 draft FOE and the April 2009 NPS Section 213 report arrived at very similar conclusions. Both documents determined that the preferred alternative as detailed in the February 2009 Main Post Update would diminish the integrity of individual resources within the Presidio and would result in a cumulative adverse effect to the National Historic Landmark District. The analysis from the 2009 draft FOE is consistent with the analysis contained in the February 2009 supplement to the draft SEIS.

In August 2009, the Trust released the final FOE for the Main Post Update. The Advisory Council on Historic Preservation (ACHP) and the State Historic Preservation Officer (SHPO) concurred with the finding of adverse effect and the proposed projects moved forward to the resolution phase of Section 106 consultation. The proposal for the art museum, however, was withdrawn from further consideration.

As a result of additional NHPA consultation, and in response to comments received throughout the NEPA process, the Trust has now analyzed a mitigated preferred alternative (Alternative 2) that incorporates the majority of the recommendations outlined in the NPS Section 213 report. The Programmatic Agreement for the Main Post Update (PA-MPU) has been attached as Appendix B to the final SEIS and the Record of Decision (ROD) will fully account for the provisions of the Section 106 consultation and the effect of the proposed project on historic properties as described in the PA-MPU.

30 The Proposed Action Violates Section 110 of the NHPA

Section 110 of the NHPA requires that the Trust, to the maximum extent feasible, undertake such planning and actions as may be necessary to minimize harm to the NHLD resulting from its undertakings. The draft SEIS acknowledges that demolition of historic buildings in the Main Post would have an adverse effect on historic resources, including the NHLD, and that construction of the CAMP would "diminish the integrity of multiple contributing resources and aspects of the historic scene" and therefore "would have a significant impact on the Main Post and potentially the NHLD." The draft Finding of Effect concurs.

Response As a result of modifications to the projects outlined in the Main Post Update, including the withdrawal of the art museum proposal, the amount of demolition proposed in the mitigated preferred alternative has been greatly reduced from that initially proposed as part of Alternative 2. Likewise, through the Section 106 consultation process, impacts on the NHLD have been avoided, minimized, or in some cases mitigated.

The integrity of the Landmark is extremely important to the Trust. As outlined in ACHP guidance, the review required by Section 110(f) is similar to that required by Section 106 but involves a higher standard of care. The Trust has met the procedural requirements of Section 110(f) of the National Historic Preservation Act via a thorough Section 106 consultation process that has included the following additional steps: engaging the ACHP in consultation to resolve adverse effects, noticing the Secretary of the Interior to provide an opportunity to participate, and the ACHP's reporting the outcome of the process to the Secretary of the Interior. The ACHP has "indicated [by signing the PA-MPU] its concurrence in the actions taken by the Presidio Trust to meet its Section 110(f) obligations."

31 There Has Been Incomplete or Inadequate Consultation with Interested Parties

NHPA regulations require a Federal agency to grant consultative roles to Native American groups and "individuals and organizations with a demonstrated interested in the undertaking... due to the nature of their legal or economic relation to the undertaking or affected properties, or their concern with the undertaking's effects on historic properties." The proposed action is likely to adversely affect significant prehistoric and historic archaeological resources that are important to the heritage of contemporary Native Californians. There is no indication in the draft

SEIS that Native American Heritage Council, Ohlone and Miwok tribal groups, or interested individuals were consulted during the scoping and production of the draft SEIS.

Response The Trust has engaged with a diverse group of individuals and organizations possessing a “demonstrated interest in the undertaking” from the beginning of the Section 106 consultation process. Those parties, numbering 17 in all, include neighborhood groups, historic preservation and natural resource advocacy organizations, a professional archaeologist, project proponents and a group representing descendants of the Presidio’s Spanish founders. Additionally, the Trust consulted with representatives of Native American groups identified by the California Native American Heritage Commission as having knowledge of cultural resources in the project area and the City and County of San Francisco, and has incorporated comments from that consultation into the final SEIS and the PA-MPU (Appendix B of the final SEIS). The list of parties consulted outlined in the final SEIS has been updated to reflect the identified Native American groups.

32 The Trust Has Not Coordinated the NEPA and NHPA Processes

The Trust's revised draft Finding of Effect (FOE) does not analyze effects of various proposals equally because the projects are not equally developed.

Response While it is true that some of the proposed projects in the Main Post Update are further along in the development process than others, this is common in a Section 106 consultation. As a result, the stipulations in the PA-MPU have been tailored to reflect the current status of each of the proposals, and – where appropriate – additional consultation and/or design review has been described.

33 The Trust Has not Adequately Identified All Historic Properties in the Area of Potential Effect (the Main Post)

The 2008 NHL Update has not been finalized and individual National Register eligibility determinations have not yet been completed for post-1947 buildings in the Main Post. Some of these buildings are included in the Main Post Update for demolition.

Response In February 2008, the Trust initiated an update to its 1993 NHL registration forms, focusing on buildings that had been constructed between 1945-1958. A draft of the document, which included contributing status determinations for all buildings in the Presidio, was submitted to the NPS for review and comment prior to finalization. The NPS informed the Trust that it would not complete its review of the 2008 Update until the Section 106 consultation on the MPU was completed. Since the completion of the draft 2008 Update, the Trust has treated all eligible buildings as contributing to the NHL as historic properties. The PA-MPU includes a process for finalizing all eligibility determinations within three months of its execution, as well as direction on how any newly eligible buildings in the Main Post would be treated.

2.5 PRESIDIO TRUST ACT

34 The Preferred Alternative Conflicts with the Trust's Stewardship Mandates Under the Presidio Trust Act

The Presidio Trust Act requires that the leasing, rehabilitation, and improvement of properties within the Presidio be in accordance with the purposes for which the Golden Gate National Recreation Area (GGNRA) was established. The GGNRA's purposes are echoed in the Trust Act, which states that, "as part of the Golden Gate National Recreation Area, the Presidio's significant natural, historic, scenic, cultural and

recreational resources must be managed in a manner which is consistent with sound principles of land use planning and management, and which protects the Presidio from development and uses which would destroy the scenic beauty and historic and natural character of the area and cultural and recreational resources." The Trust Act further directs the Trust to manage the Presidio in accordance with the "general objectives" of the 1994 General Management Plan Amendment (GMPA). Elements of the preferred alternative would not enable the Trust to fulfill these legislative mandates.

Response Congress created the Presidio Trust to preserve and enhance the Presidio as an enduring resource for the American people. The Trust Act as a whole and Section 104, Duties and Authorities of the Trust, in particular, include several legislative obligations to achieve that mission. Among them is a requirement for the Trust to develop a “comprehensive program for management of those lands and facilities within the Presidio which are transferred to the administrative jurisdiction of the Trust” (Trust Act, Section 104(c)). This comprehensive program was developed and adopted as part of the PTMP process and will be revised for the Main Post through the Main Post Update. Both the PTMP and the tiered Main Post Update were drafted “consistent with sound principles of land use planning and management” and in accordance with the purposes set forth in Section 1 of the GGNRA and the general objectives of the GMPA (Statement of General Objectives of the General Management Plan Amendment (GMPA), Presidio Trust Board of Directors Resolution 99-11 (“General Objectives of the GMPA”)).

As a result of comments received during the NEPA process and the parallel Section 106 consultation under the National Historic Preservation Act, the Trust modified the original proposed action, subsequently identified a preferred alternative, and has now analyzed a mitigated preferred alternative (Alternative 2 or Main Post Update). If adopted, the mitigated preferred alternative would “preserve and (where appropriate) enhance the historical, cultural, natural, recreational, and scenic resources” of the Main Post (General Objectives of the GMPA). This would be achieved through three implementation strategies identified in the Main Post Update: 1) reveal the Presidio’s history, 2) create a welcoming place, and 3) employ 21st century green practices.

35 The Preferred Alternative Involves More Construction Than Is Authorized in the Presidio Trust Act

The preferred alternative proposes large-scale changes to the Main Post, including significant new construction, which appear to conflict with the Trust Act's legislative mandates. The Trust Act states that new construction must be "limited to replacement of existing structures of similar size in existing areas of development." As with other portions of the Trust Act, this proviso should guide the Trust in its stewardship of the Presidio. The large increase in new construction, in excess of that authorized in the PTMP, conflicts with this provision and requirement of the Trust Act.

Response The mitigated preferred alternative would decrease the maximum building area square footage outlined in the PTMP (by 14,500 square feet) and only slightly increase maximum new construction (by 36,500 square feet) and maximum new demolition (by 50,000 square feet).[12] Like the 2002 PTMP, the Main Post Update incorporates past

[12] 32,259 square feet of the increase in demolition is attributed to the Doyle Drive project.

planning efforts and seeks to "increase open space, consolidate developed space, and provide for appropriate uses of the Presidio, including uses that involve stewardship and sustainability, cross-cultural and international cooperation, community service and restoration, health and science discovery, recreation, the arts, education, research, innovation and/or communication" (Statement of General Objectives of the General Management Plan Amendment (GMPA), Presidio Trust Board of Directors Resolution 99-11, March 4, 1999). These past planning efforts, as well as the final Environmental Impact Statements for the Letterman Complex (March 2000) and the Public Health Service Hospital (May 2006), are consistent with the Trust's longstanding interpretation and application of Section 104(c) of the Presidio Trust Act as set forth in the PTMP, among other documents.

In keeping with the comprehensive program for the management of Presidio lands and facilities adopted by the Trust as part of the PTMP, aggregate or "banked" square footage of demolished structures (removed on the Main Post or elsewhere on the Presidio) may be used for new construction in existing areas of development, thereby maintaining the overall cap on developed square footage. Aggregate or "banked" square footage was also applied in the 2000 Letterman Complex Record of Decision[13] (ROD) and the subsequent 2007 Public Health Service Hospital ROD,[14] and such use is consistent with past practice by the predecessor federal agencies that managed the area now under the Presidio Trust's administrative jurisdiction.

As stated in the PTMP, the "new construction may take the form of a building addition, an annex adjacent to an existing building, infill buildings set within an existing building cluster, or stand-alone structures in developed areas to replace square footage removed in that location or elsewhere" (PTMP, page 6). The new construction proposed for the Main Post would not change the park-wide cap of 5.6 million square feet established in the PTMP.

36 The Preferred Alternative Diminishes the Integrity of the NHLD, Which Violates the Presidio Trust Act

As a stewardship agency charged with preserving and protecting the Presidio's superlative resources, including its status as a National Historic Landmark District (NHLD), the Trust is encouraged to re-evaluate the preferred alternative in light of these mandates. The Trust must "...to the maximum extent possible, undertake such planning and actions as may be necessary to minimize harm to any National Historic Landmark that may be directly and adversely affected by an undertaking." There are serious concerns about the amount of change proposed at the Main Post, namely through demolition and new construction, and the subsequent

[13] *The former Letterman Complex contained approximately 1.3 million square feet in 50 buildings with the bulk of that space contained in the 451,000-square-foot Letterman Army Medical Center (LAMC) and 356,000-square-foot Letterman Army Institute of Research (LAIR). Under the selected alternative, the LAMC and LAIR buildings would be demolished and replaced with 900,000 square feet of new construction (2000 Letterman ROD, pages 3-6).*

[14] *As outlined in the 2007 Public Health Service Hospital (PHSH) ROD, Selected Action, up to 133,000 square feet (including the 128,000-square-foot non-historic "wings") would be demolished and 35,000 square feet of new construction would occur at the back of Building 1801 and 16,000 square feet of new construction at Belles Street on the "central green" (2007 PHSH ROD, page 6).*

level of effect that the preferred alternative would have on the historic integrity of the Main Post. The NPS Section 213 report concluded that the proposed undertaking would have a significant adverse effect on the Presidio NHLD and therefore proposed a suite of recommendations that could help avoid or minimize this effect. The Trust should seriously consider those recommendations.

Response Both the Trust's Finding of Effect for the Main Post Update (July 2009) and the NPS Section 213 report determined that the preferred alternative as detailed in the February 2009 Main Post Update would diminish the integrity of individual resources within the Presidio and would result in a cumulative adverse effect on the NHLD. Through an ongoing Section 106 consultation process and consistent with the mission of the Trust, the Trust has fulfilled its obligations under the National Historic Preservation Act (NHPA). This includes the more stringent planning mandates of NHPA, Section 110, which states that "Prior to the approval of any Federal undertaking which may directly and adversely affect any National Historic Landmark, the head of the responsible Federal agency shall, to the maximum extent possible, undertake such planning and actions as may be necessary to minimize harm to such landmark…"

The NPS Section 213 report suggested a suite of recommendations that were intended to help avoid or minimize the effects of a plan that included construction of a new museum (CAMP) at the southern end of the Main Parade Ground. As a result of an extensive Section 106 consultation, and comments received during the NEPA process, the art museum proposal was withdrawn in July 2009 and the Trust has further modified the original proposed action, identifying a mitigated preferred alternative that incorporates the majority of the recommendations outlined in the NPS Section 213 report, including:

- Reducing the proposed square footage of new construction and proposed demolition of historic resources;
- Retaining and rehabilitating Building 97; and
- Reducing the footprint, scale, massing, and height of the proposed lodge.

The mitigated preferred alternative also incorporates measures to ensure that the identified closure and pedestrian use of historic roads would not result in an adverse effect and would avoid the use of traffic lights. The mitigated preferred alternative has been developed to avoid, minimize, or mitigate impacts on historic resources and would protect the status of the Presidio as a NHLD.

2.6 ECONOMIC CONSIDERATIONS

37 Financial Information Needs to Be Disclosed

The draft SEIS does not disclose any information on the cost-benefit analysis for any of the alternatives, nor does it share any financial information about the alternatives. This is of concern because of the Presidio Trust mandate to become economically self-sufficient by 2013. It is unclear how each of the alternatives would contribute to fulfilling this financial mandate, and the full costs for each alternative are not disclosed (such as the costs for demolition, construction, buy-out of existing leases, tenant relocation costs, rehabilitation costs for tenant relocation, lost revenues from buildings previously rehabilitated and currently occupied, etc.).

Response The following addresses a number of underlying assertions implicit in the comment: 1) that the financial sustainability mandate is the Trust's sole mandate and the main driver of the PTMP; 2) that new construction can only be justified on the basis of financial need, narrowly defined, or to facilitate historic rehabilitation; and 3) that the cost of implementing the mitigated preferred alternative would undermine further implementation of the PTMP.

1) In addition to the mandate to become financially self-sufficient, the Trust has also been charged by Congress to transform the historic military post into a national park site, a place that welcomes the public. In order to balance the need for financial stability with the need to create a place for the public, the Trust committed in the PTMP to a balanced use of the Presidio's square footage: one-third for housing, one-third for office uses, and one third for cultural, education, and public-serving uses. In making this commitment, the Trust recognized that residential and office uses would be the primary sources of revenue to support the park and that the daily activity of the park community would sustain the Presidio's historic character. The Trust also recognized that the remaining third would not be used primarily for revenue, but for programmatic purposes. Balance was the main driver of the PTMP, and balance among financial sustainability, resources enhancement and protection, and public use continues to be the Trust's principal guideline.

2) The new construction now included in the mitigated preferred alternative has been reduced in response to changes that have come about as a result of the public review process under the NEPA and NHPA. In fact, the mitigated preferred alternative has less total square footage at the Main Post than was identified in the PTMP. The new construction in the mitigated preferred alternative would allow for rehabilitation of the historic Presidio Theatre and for accessibility and program upgrades for the historic Presidio Chapel. New construction would also include a lodge, a fundamental visitor-serving use traditionally found in national parks. Providing lodging at the Main Post would help to welcome the public and make rehabilitation and reuse of the remaining historic buildings more feasible. The PTMP assumed new construction at the Main Post for office use, admittedly a more lucrative use, but one that would not contribute to the public character of the Main Post as the "heart of the park."

Rehabilitation and reuse of historic buildings – not new construction – is still the focus of the mitigated preferred alternative. In addition to rehabilitation and reuse of the Presidio Theatre and Presidio Chapel, the mitigated preferred alternative would allow for reuse of the Officers' Club both as a Heritage Center and as a special events venue; it provides for the rehabilitation and reuse of the historic garages behind the Officers' Club as an archaeology lab and curation facility. The mitigated preferred alternative calls for the rehabilitation of the remaining Montgomery Street Barracks buildings for a mix of uses, with public-serving uses on the ground floors, and calls for the rehabilitation of historic Building 42 for lodging.

3) The purpose and need of the action under consideration by the Trust is to re-establish the Main Post as the "heart of the park." This vision is consistent with the vision for the Main Post presented in the PTMP and does not undermine the Trust's ability to ensure the financial sustainability of the Presidio and the full implementation of the PTMP.

38 The Contemporary Art Museum Proposal Includes a $10 Million Charitable Contribution

The financial incentives associated with the art museum proposal include a $10 million charitable contribution. Use of the charitable contribution would be restricted to rehabilitation of the Main Parade, and given only if the current proposal is approved. The Trust should present to the public the financial impacts of the proposed action, and any conditions placed on financial incentives to the Trust, as the Trust Board will necessarily consider these factors.

Response The proposal to build a museum of contemporary art on the Main Post has been withdrawn and there are no offers of a $10 million charitable gift to rehabilitate the Main Parade in association with any of the projects in the mitigated preferred alternative, nor are there any offers of funding for the Main Parade from any source at this time.

39 Economics Were Considered but not Included for Public Review

Economic considerations were clearly a major factor driving the identification of the preferred alternative, but the Trust has not responded to numerous questions about the anticipated economic effect of the proposal and has not made this information available to the public.

Response Economic considerations factor into the Trust's decisions but were not the major factor in the identification of the mitigated preferred alternative. The mitigated preferred alternative was chosen because it would achieve the purpose and need to reestablish the Main Post as the "heart of the park." It has changed substantially as a result of the public review process under the NEPA and NHPA; it now represents far less development than initially proposed, and its impacts are within the range of impacts analyzed within the final PTMP EIS.

The Trust's 5-year construction plan and annual budget are presented at an annual budget workshop and are kept up-to-date on the Trust's web site at *www.presidio.gov*. The Trust's annual report to Congress presents a comprehensive analysis of costs and revenues. The annual report can also be found on the Trust's web site.

40 Revenues and Expenses Associated with the Art Museum are Not Included

The draft SEIS makes a number of generalized statements about how the proposed alternative will serve as a focal point for attracting additional tenants and investors which would directly and indirectly enhance the financial viability of the Presidio. The SEIS should provide any material (studies, other investigations) that would substantiate this hypothesis. Without concrete data about the current financial status of the Presidio or estimated future revenues, this statement is impossible to assess.

Response It is well-recognized that cultural institutions help stimulate local economies by creating destinations for visitors. Parks also improve the local economy. Many studies have demonstrated the multiple values of cultural institutions such as museums. An example can be found at *http://www.vcu.edu/cppweb/urban/aam%2002%20handout.pdf*. Similar studies exist for parks and open space, such as the one found at *http://openspace2100.org/node/39*. The mitigated preferred alternative has changed, however, and no longer includes an art museum on the Main Post.

41 The 2005 Strategic Plan Should be Updated and Provided

The Trust should analyze the financial impact of the preferred alternative on the 2005 Strategic Plan and provide that analysis to the public for review. The analysis should provide an updated financial forecast.

Response The Trust updates its 5-year construction plan every year and presents the plan as well as its overall budget to the public at an annual budget workshop and in its annual report to Congress. The budget, 5-year construction plan, and annual report can be found on the Trust's web site at *www.presidio.gov*.

42 The Main Post Update Is Predicated in Part on Greening the Main Parade

The Main Post Update is predicated in part on greening the Main Parade, yet the funding for this essential element is left to an uncertain philanthropic effort.

Response Greening the Main Parade has been one of the chief park-making objectives for the Main Post since the Presidio became a national park site. It is not one of the undertakings considered by the Main Post Update, however, but is considered as part of the baseline of completed actions and decisions that the plan builds upon. NEPA and NHPA compliance for the Main Parade project was completed in 2007 before scoping for the Main Post Update began. The Main Parade project will be undertaken as funding becomes available.

43 The Loss of Rental Income from Building 220 is Questionable

Questions are raised regarding the economics of discarding a perfectly usable office structure (Building 34) in order to move the Trust staff into an existing building (220) and use space that could otherwise bring in rental income.

Response Relocating Trust staff from Building 34 to Building 220 or another building in the Presidio would have an economic impact. The decision is not strictly an economic one, however, but rather is based on the purpose and need to re-establish the Main Post as the "heart of the park" and to enhance the public character and experience of the Main Post. The Trust would relocate staff to allow for construction of a lodge on the site of Building 34. The Building 34 site is one of the few sites in the Main Post that can accommodate a lodge because Building 34 does not contribute to the NHLD and the site is a previously developed site.

44 The Economic Impact of the Lodge on Nearby Commercial Lodging Is of Concern

Federal funds may be used to build some or all of the lodge, which would compete with nearby hotels and inns on Lombard Street and elsewhere.

Response Based on the assumed quality, market orientation, and rate segmentation of the proposed lodge, its impact on the Lombard corridor and Marina District hotel and motel uses would be minimal. The lodge would not compete directly with these other lodging facilities because it would be in a different market segment from those accommodations. Indeed, the reverse may be the case: a signature, destination lodge in the Presidio may bring additional business to the Marina District.

2.7 SUPPLEMENT – GENERAL

45 The Alternatives Analysis in the Supplement Appears to Be Deficient

The supplement does not analyze the information related to the preferred alternative in the context of the broader draft SEIS. With the exception of two summary tables, the preferred alternative is nowhere compared to the other alternatives, nor are its potential environmental impacts analyzed in comparison to the impacts that may stem from the other alternatives. This does not provide the public and decision makers with enough information to evaluate the comparative merits of the different alternatives. Rather, it suggests that selection of the preferred alternative may be a predetermined outcome, despite the supplement's assurances to the contrary. The preferred alternative needs to be compared to all the other alternatives presented by the draft SEIS, to enable the public to assess the merits of each alternative.

Response In the June 2008 draft SEIS for the Main Post Update, the proposed action was analyzed as Alternative 2. As a result of comments received during the NEPA process and the parallel Section 106 consultation under the National Historic Preservation Act, the Trust modified the initial proposed action and subsequently identified and analyzed a preferred alternative in the February 2009 supplement to the draft SEIS. Based upon further consultation and public outreach, a mitigated preferred alternative has now been analyzed as Alternative 2 in the final SEIS. As opposed to any "predetermined outcome," each step of this transparent process has resulted in proposed projects and improvements for the Main Post with greatly reduced impacts.

The final SEIS contains a thorough comparison of the mitigated preferred alternative with the other action alternatives – the PTMP Alternative (Alternative 1) and the History Center Alternative (Alternative 3) – as well as with the Status Quo Alternative (Alternative 4). All of the alternatives have different impacts, as explained in each topic area. For example, Section 3.3 Transportation and Parking demonstrates that each alternative would generate a different number of automobile trips to and from the Main Post.

2.8 PURPOSE AND NEED

46 The Claimed Purpose and Need Is Deficient and has Changed from Requirements for a Contemporary Art Museum to that for the Lodge

The purpose and need of the project is so vague as to give no effective basis for determining the reasonable alternatives. The reason the claimed purpose and need remains so oblique is because it is entirely opportunistic and is not grounded in any objectively determinable purpose and need. The Trust is proposing a radical transformation of the Main Post "in order to take into account several proposals, including the art museum, the lodge, and… expansion of the theater" not previously made. The consequence of the claimed purpose and need being entirely opportunistic is that it is formulated so that only one of the alternatives can fulfill it: the art museum, the lodge, and the theater expansion. The proposed art museum, which was key to a planned cultural center, is now gone. The public is unclear as to what the Trust's current "purpose and need" might be, in part because the Trust's original purposes and needs have changed or been withdrawn, and none have been added since. What is needed is a statement of purpose and need that reasonably defines their determinants, and alternatives with timeline and other phased, objectively determinable determinants for the accomplishment of the defined purpose and need.

Response As outlined throughout the duration of the NEPA process for the Main Post Update, the purpose of the Main Post Update is to restore the Main Post as the heart of the Presidio, to update the planning concept for the Main Post district of the Presidio, and to add greater detail to the planning for the Main Post than was possible in the 2002 PTMP. The Main Post Update is needed at this time to take into account several actions that the Trust intends to pursue in order to implement the PTMP vision of the Main Post as the heart of a great urban park. This vision for the Main Post has remained constant since 1994 when the National Park Service stated that the "main post would be the center of visitor activities at the Presidio, and it would offer a variety of programming and interpretation" (final GMPA EIS, page 21). As indicated in the Main Post Update's "red-line" version of the Main Post district chapter of the PTMP, the Main Post Update simply adds more detail and more current information to this overarching concept. Further, the PTMP predicted the need for just this type of update when it anticipated that the plan must "be able to accommodate inevitable changes" (PTMP, p. vii). The PTMP was adopted as a flexible tool that would allow the Trust "to assess the Plan's effectiveness on an ongoing basis as individual projects are implemented" (PTMP, page 136). As the PTMP recognized:

> *At times planning proposals may be considered that are not entirely consistent with the Plan. These proposals will be fully reviewed and considered under the National Environmental Policy Act (NEPA), including all applicable public processes. The final decision on the proposal may constitute a Plan amendment and will be informed by the NEPA public review process for the proposal. The decision amending the Plan will be adopted by resolution of the Presidio Trust Board* (PTMP, page 136).

The Trust has followed this outlined review process for the Main Post Update.

47 Objectives In the Statement of Need Require Clarification

A list of objectives for future planning and building decisions at the Main Post is provided. However, it is not clear how this list relates to the Main Post planning concept presented in the PTMP, as neither that concept nor that of any other planning district has specific objectives. The objectives are a mixture of planning principles and policies and other factors, yet some suggest a new interpretation of PTMP planning principles. Also, it is not clear if the Trust intends to adopt revised planning principles for future plans as well. The Trust should clarify if it is proposing to modify the PTMP planning principles as part of the SEIS, and if so, should fully disclose this intent.

Response The Main Post Update has been rewritten to incorporate a "red-line" version of the PTMP chapter for the Main Post district to show clearly how things have changed since 2002, to incorporate decisions that have already been made, and to identify actions that are now being proposed for the Main Post. The "red-line" PTMP chapter for the Main Post in the Main Post Update forms the basis of the mitigated preferred alternative (Alternative 2) analyzed in the final SEIS. If adopted, the "red-line" text would ultimately amend the PTMP for the Main Post district.

48 The Need for Additional Large-Scale Buildings Should Be Clarified

The Trust states in the final PTMP EIS that "the Plan does not propose new construction to provide additional large-scale buildings as venues to host programs, but rather emphasizes rehabilitation and reuse of existing buildings for preferred uses, including program-related uses." The PTMP did consider museum and lodging uses and identified preferred locations for museum and lodging uses. It is not clear in the SEIS whether the

Trust fully tested and explored the options put forth in the PTMP and as a result of this feasibility testing concluded that construction of "additional large-scale buildings" was needed.

Response The Main Post Update does not propose any additional large-scale buildings, as the contemporary art museum proposal has been withdrawn and the proposed lodge has been reduced in size from what was originally proposed and subdivided into an array of buildings compatible with the Main Post's visual and historic setting. Furthermore, the final SEIS evaluates an array of lodging options, ranging from new construction to rehabilitation of a number of historic buildings, including Pershing Hall (Building 42) and the Upper Funston Avenue Officers' Quarters (Buildings 11-16). As discussed in Section 1 Purpose and Need in the final SEIS, these options are being explored to advance the PTMP vision of making the Main Post a visitor destination befitting a premier national park site.

49 The Need for Presidio-Wide Lodging Should Be Clarified

It is not clear whether the Trust intends to pursue other lodging opportunities in the Crissy Field and Fort Scott districts as identified in the PTMP, which would result in a net increase of square feet allocated to lodging Presidio-wide, or whether the Trust anticipates shifting any of the lodging square footage anticipated for Crissy Field and Fort Scott to the Main Post district.

Response Much of the Presidio has been reserved for those members of the public who are able to rent space to stay at the Presidio on a long-term basis as residents or non-residential tenants. The Trust has also consistently supported the development of accommodations for those members of the public who can only stay and enjoy the Presidio on a short-term basis as lodgers. As outlined in the final SEIS, the purpose of the Main Post Update includes re-establishing the Main Post as the heart of the Presidio. As an amendment to the Main Post district chapter of the PTMP, the Main Post Update would only change the land use preferences for the Main Post. The land use preferences outlined for other districts in the Presidio remain the same.

50 The Lodge Is not Financially "Ripe" and Constrains the Ability of the Trust to Consider Using New Square Footage for Other Projects such as the Visitor Center

The Trust does not have an active proponent for the lodge project, and financial terms do not appear to favor the construction of a lodge at this time. The lodge would account for up to 70,000 square feet of new construction, which leaves little new square footage available for constructing new history or visitor-serving facilities. The Visitor Center study should be completed before making a commitment to a large amount of new construction for a lodge.

Response The MPU is a long-range planning document, and the lodge is a key component of meeting its purpose and need. The Trust has identified the lodge as supporting the MPU's purpose and need to "restore the Main Post as the heart of the Presidio" by providing overnight accommodation to visitors within the park's boundaries, and supporting a round-the-clock vibrancy of the district that existed when hundreds of soldiers resided there each night. It is important to analyze the impacts of the project in the broader context of the district-wide plan. The MPU came about in response to requests from the public (including consulting parties) to analyze all projects in the Main Post together so that cumulative impacts could be understood. Eliminating the lodge from the analysis at this point would be contrary to this effort. This

analysis needs to be undertaken regardless of the current economics of the project. The MPU assumes that the Visitor Center would be in Building 102; should that change, the appropriate analysis would be undertaken.

2.9 ALTERNATIVES

51 All Reasonable Alternatives Should Be Addressed

Each alternative should consider an incremental approach: a phasing in over time of the various components of the alternatives so that the extent to which the purpose has been satisfied can be assessed. Evaluation of this set of alternatives would make some evident as more favorable than others, both in terms of avoiding or mitigating adverse environmental consequences and, by allowing for an expanded time line, increasing the opportunity to fund various alternatives. The alternatives as stated in the SEIS foreclose this type of analysis because they are not formulated as time-phased/interim goal achievement assessed/longer-term funding (and therefore more financially feasible) alternatives.

Response The final SEIS for the Main Post Update assumes that the Trust would implement the mitigated preferred alternative over time and analyzes impacts in 2030 when implementation is forecast to be completed. The Main Post Update affords the Trust important flexibility in managing its resources for the long term. Time-phasing of alternative components could result in an infinite number of possible alternatives. While the Trust must rigorously explore and objectively evaluate all reasonable alternatives, the U.S. Supreme Court has stated that an agency "need not include every alternative device and thought conceived by man." Based on the nature of the proposed action, the Trust has analyzed a reasonable range of alternatives.

52 The Art Museum at the Commissary Site Should Be More Fully Explored

The Commissary site was not fully explored and tested to the same level of detail as the Main Post site at the southern end of the Main Parade. The figure for the art museum should illustrate what it would look like as a museum rather than simply showing a photograph of the current building. Since the PTMP is the Trust's adopted land use management plan, the viability of the Commissary site for the art museum should have been considered more seriously. Also, the SEIS does not explore or consider the option of the Commissary's demolition and compatible replacement construction as another option included in the PTMP.

Response The proposal for the art museum has been withdrawn and is not included in the mitigated preferred alternative.

53 The Total Size of the Art Museum Is Unclear

There appears to be some confusion about the total amount of new construction that the proposed new buildings would entail. The museum is stated to be 75,000 square feet above ground and 35,000 square feet underground parking, for a total of 110,000 square feet. Total new construction for the museum is listed as 99,860 square feet plus exterior uses for plaza and terraces in the amount of 21,661 square feet, for a total of 121,521 square feet. The draft SEIS is unclear whether the 35,000-square-foot garage is in addition to the 121,521 square feet for a total of 156,521 square feet. The draft SEIS should clarify the complete and total size of the proposed museum, including plaza area and garage.

Response The proposal for the art museum has been withdrawn. The final EIS explains how square footage is calculated, but underground garage space is typically not included in the square footage of buildings; rather, only "inhabitable" space is considered in square footage calculations.

54 There Is Insufficient Information to Assess the Art Museum in Alternative 2A

Regarding the art museum and Alternative 2A, details are not provided on the size, configuration, or location at Infantry Terrace under this alternative. The total square footage is absent. It is not possible to assess the impact of Alternative 2A without detail approximating that provided for Alternative 2.

Response In the draft SEIS for the Main Post Update, Alternative 2 was analyzed as the proposed action. Alternative 2A was an "option" under Alternative 2 developed in part to respond to several comments received during scoping for the SEIS. As a result of additional comments received during the NEPA process and the parallel Section 106 consultation under the National Historic Preservation Act, the Trust modified the initial proposed action and subsequently identified preferred alternative and has now analyzed a mitigated preferred alternative. As such, the original Alternatives 2 and 2A have not been carried forward for further analysis.

55 Alternatives for the Art Museum Should Be Evaluated

There has been an inadequate consideration of alternative sites outside of the Presidio for the art museum. There is no analysis of how and/or why the San Francisco Museum of Modern Art (MOMA) would not have supported "the proponent's key objective for public viewing and appreciation." The museum should be located in downtown San Francisco or along the waterfront, areas that are more accessible to visitors and residents, more convenient to high-capacity transit, and more financially beneficial to the city.

Response The range of alternatives analyzed in the SEIS for the Main Post Update was formulated to respond to the identified purpose and need of re-establishing the Main Post as the "heart of the park." Alternative locations outside the Presidio were not analyzed as they would not meet the purpose and need of adding vitality to the Main Post district. Additionally, the proposal for the art museum has been withdrawn.

56 Alternatives for the Presidio Lodge Should Be Considered to Protect Park and Landmark Values

Lodging should be located within existing historic Main Post buildings, such as the Montgomery Street Barracks, and/or amended with the addition of small-scale, freestanding, new lodging along the eastern edge of the Main Parade in a manner that respects the historic scale and setting of the Main Post. Alternative uses for the lodge site should be considered as well as alternative sites for the lodge, including sites outside the Main Post, where construction would not destroy park and landmark values now found in the Main Post.

Response The July 2009 final FOE determined that the lodge would adversely affect historic properties in the Presidio NHL. Through consultation, the adverse effects were resolved through several avoidance, minimization and mitigation measures, including reduction of

the size and scale of new construction, design review, and the development of archaeological treatment measures.

Notwithstanding the resolution of adverse effect, the final SEIS analyzes a hotel in the historic Pershing Hall (Building 42) and bed & breakfasts in the historic Upper Funston Avenue Officers' Quarters (Buildings 11-16). The SEIS also analyzes lodging in rehabilitated historic Buildings 86 and 87 as part of construction of the Presidio Lodge (under Alternative 2). Alternative uses for the lodge site analyzed in the final SEIS include new construction of a 50,000-square-foot office building (under Alternative 1) and continued use of the approximately 32,000-square-foot existing building (Building 34) at the site for office (under Alternatives 3 and 4).

The range of alternatives analyzed in the SEIS for the lodge was formulated to respond to the identified purpose and need of re-establishing the Main Post as the "heart of the park." Alternative sites for the lodge outside the Main Post, including Stilwell Hall at Crissy Field, were analyzed in the final PTMP EIS and not again for the Main Post Update as they would not meet the purpose and need of adding vitality to the Main Post district.

The Trust issued an RFP for lodging in 2007 and found through the lack of responses that lodging was not feasible in the Montgomery Street Barracks buildings.

The Trust believes that these alternative uses and sites satisfy the NEPA requirement for covering a reasonable range of alternatives for the lodge.

57 Alternatives for the History Center Should Be Evaluated

The History Center should be located in an existing building. Instead of placing a History Center at the southern end of the Main Parade as in Alternative 3, other sites should be considered on the Main Post. At least one alternative should be considered for new construction at a new location and at least one alternative should be considered for adaptive reuse of an existing structure.

Response The final SEIS analyzes new construction of a History Center (under Alternative 3), adaptive reuse of historic Building 2 for a Heritage Center (under Alternative 1), and adaptive reuse of another historic building (50) for a Heritage Center (under Alternative 2), all within the Main Post. The Trust believes that these alternative sites satisfy the NEPA requirement for covering a reasonable range of alternatives for the History Center.

58 Alternatives for the Theater Should Be Considered

The theater could be expanded to the west of the existing building to enable an appropriately sized reuse of the existing structure based on analysis of public uses, including interpretive, educational, cultural, performance, and film activities. In deference to its historical use, the addition and the main entrance should be oriented toward Moraga Street. The theater should include uses that complement its location in a national park and a historic district (i.e., uses other than mainstream cinema).

Response As a result of comments received during the NEPA process and the parallel Section 106 consultation under the National Historic Preservation Act, the Trust modified the proposed rehabilitation of the Presidio Theatre (Building 99) analyzed in the draft SEIS. As evaluated in the final SEIS, the Presidio Theatre would be rehabilitated for its

historic use as a venue for film and/or performing arts. The existing theater would not be subdivided and the addition would be subordinate to the historic structure. The main entrance on Moraga Street would be retained as well as the character-defining features of the auditorium interior. The proposed program envisions an international film arts center as well as other cultural and community uses. Other alternatives analyzed in the SEIS for the theater include a cultural/educational facility with no expansion (under Alternative 3) and a "highest and best use," presumably office (under Alternative 4). The Trust believes that these alternative uses satisfy the NEPA requirement for covering a reasonable range of alternatives for the theater.

59 Alternatives Prepared by the PNRWG and NAPP Should Be Evaluated

The draft SEIS does not identify a reasonable range of alternatives and should provide sufficient detail and analysis to allow the selection of any alternative other than the proposed action. The Trust should consider and evaluate alternatives prepared by the Presidio Neighborhood Working Group (PNRWG) and Neighborhood Associations for Presidio Planning (NAPP). PNRWG believes its alternative is based on sound planning principles and focuses on the heritage, history, and archaeology of the Main Post. NAPP asks the Trust to look to the PTMP and re-focus on the integrity of park values, "which nowhere includes the mandate of 'revitalizing a city within a city.'" Both alternatives call for the placement of the art museum outside the Main Post and lodging within existing historic buildings, and a focus on history, with the Heritage Center as an important component, preferably in an existing building.

Response The alternatives proposed by PNRWG and NAPP fall within the range of alternatives analyzed in the final SEIS with potential impacts closely aligned with either Alternative 1 or Alternative 4. Further, the mitigated preferred alternative (Alternative 2) includes many of the principal components of the PNRWG and NAPP alternatives. Alternative 2 features no new construction at the site formerly proposed for the art museum, lodging in historic Building 42, and a freestanding lodge (reduced in size from the former proposal) that may also incorporate historic Buildings 86 and 87. A key principle of Alternative 2 would be to reveal the Presidio's history: to make history central to the visitor experience at the Main Post. A Heritage Center in the historic Officers' Club and an archaeology center that would also include historic buildings remain central to the historic focus. Finally, the Trust believes that enriching the Main Post's cultural vitality and making the area a safe, inviting, and comfortable place for diverse groups of people to gather is a goal that encompasses integral park values.

2.10 LAND USE PLANS AND POLICIES

60 The Preferred Alternative Conflicts with the Presidio Trust Management Plan

The preferred alternative in the draft SEIS represents a dramatic shift away from the PTMP's policies and commitments. This change is not only problematic for the Main Post but could set the stage for the Presidio Trust to pursue additional levels of new construction in other districts of the Presidio not previously considered or analyzed. The Trust should share with the public other changes to the PTMP that it may be contemplating for Area B of the Presidio (namely Crissy Field and Fort Scott) so that the Main Post changes can be understood within that larger planning context. The proposed changes to the Main Post so exceed the parameters of what was considered and approved in the PTMP that either

the preferred alternative needs to be revised to align with the PTMP, or the Trust needs to expand the project boundaries to include those other planning areas that would be affected by actions under consideration at the Main Post.

Response The mitigated preferred alternative (Alternative 2) in the final SEIS generally adheres to the PTMP and poses no constraints on plans in other districts, nor does it imply changes in other districts. Any inconsistencies between the mitigated preferred alternative and the PTMP's policies and commitments are fully discussed in Section 3.2 Land Use Plans and Policies in the final SEIS. The PTMP is a high-level, programmatic document that the Trust anticipated would change in response to changing circumstances (see PTMP, page 136) and to achieve the Trust's goals. Proposed changes to the PTMP that the mitigated preferred alternative would bring about are principally an increased amount of new construction and demolition, but a net reduction of square footage in the district. The mitigated preferred alternative includes more public uses and less residential and office use than identified in the PTMP.

The PTMP identified new construction and building demolition caps for each of the Presidio's planning districts, providing guidance for how the built space of the Presidio would be managed. The PTMP also identified a goal of reducing the amount of square footage in the park from 5.96 million square feet to 5.6 million square feet. The Main Post Update would not change that goal. It is reasonable to expect that the distribution of land uses may shift to some degree, but the Main Post Update would retain the overall commitment made in the PTMP for a balanced use of built space; the Main Post Update would allocate one-third for residential use, one-third for office use, and the remaining one-third for cultural, education, and public-serving uses.

61 Two Large Museums Conflict with the PTMP

The Main Post Update creates internal inconsistencies with the goals of the PTMP due to the lack of direction for the future use of the Commissary site. This site is intended to be converted to a museum under the PTMP. The Main Post Update is narrowly focused and does not invoke PTMP concepts and guidelines for the Crissy Field district. Therefore, the untenable result would be that two large museums in excess of 100,000 square feet could be permitted in the Presidio. This raises the question of whether the Main Post Update and the PTMP can coexist or whether a full revision of the PTMP is necessary to accomplish the project goals as written.

Response The proposal for a museum of contemporary art has been withdrawn and is not analyzed in the final SEIS. The Trust identified preferred land uses in the PTMP, but inherent in the plan is the flexibility to adjust land uses as long as the "general character of the area" is not compromised (see PTMP, page 135). The general character of the Main Post is public, and the purpose and need of the Main Post Update is to re-establish the Main Post into the "heart of the park," a center for the park community and visitors alike. The consistency of the mitigated preferred alternative with the PTMP is discussed in Section 3.2 Land Use Plans and Policies in the final SEIS. The discussion finds that the mitigated preferred alternative is generally consistent with the PTMP, is respectful of the general character of the Main Post, and would help achieve the vision of the Main Post as the "heart of the park."

62 Assertions Regarding NHLD Status Are Contradictory

Section 3.2 Land Use Plans and Policies in the draft SEIS states that under Alternative 2, the Presidio's National Historic Landmark status would be preserved, and that proposed changes within the Main Post would comply with the National Historic Preservation Act and be compatible with the park's setting. This assertion is contradicted in Section 3.6 Historic Resources.

Response As a result of comments received during the NEPA process and the parallel Section 106 consultation under the NHPA, the Trust modified the initial proposed action analyzed as Alternative 2 in the draft SEIS (and the subsequently identified preferred alternative) and has now analyzed a mitigated preferred alternative. Under the mitigated preferred alternative (Alternative 2) in the final SEIS, the Presidio's National Historic Landmark status would be preserved. Consistent with the NHPA, implementation of projects that may result in adverse effects would be guided by the PA-MPU (Appendix B of the final SEIS) with the goal of avoiding, minimizing, or mitigating the adverse effects.

63 Square Footage Totals for Other Planning Districts Should Be Clarified

The Trust should clarify how the square footage changes analyzed in the SEIS would affect or change the total reduction in square footage for the entire Presidio as stated in the PTMP. It is not clear how each of the alternatives included in the SEIS would aid in achieving that goal. Since there is the potential for a net increase in square footage at the Main Post, where would the offset (decrease) in square footage occur? What would the square footage totals be for the other planning districts?

Response The net result of the mitigated preferred alternative would be a reduction of square footage in the Main Post. This alternative and the others considered would not change the target reduction of square footage park-wide, from 5.96 million square feet to 5.6 million square feet, as stated in the PTMP.

2.11 TRANSPORTATION AND PARKING

64 A Park-Wide Transportation, Traffic, and Parking Plan Is Required

The Trust does not have a park-wide transportation, traffic and parking plan and the SEIS is deficient without such a plan. The Trust must prepare such a plan before concluding the SEIS process to properly understand, quantify, and prepare feasible steps to meet expected visitation.

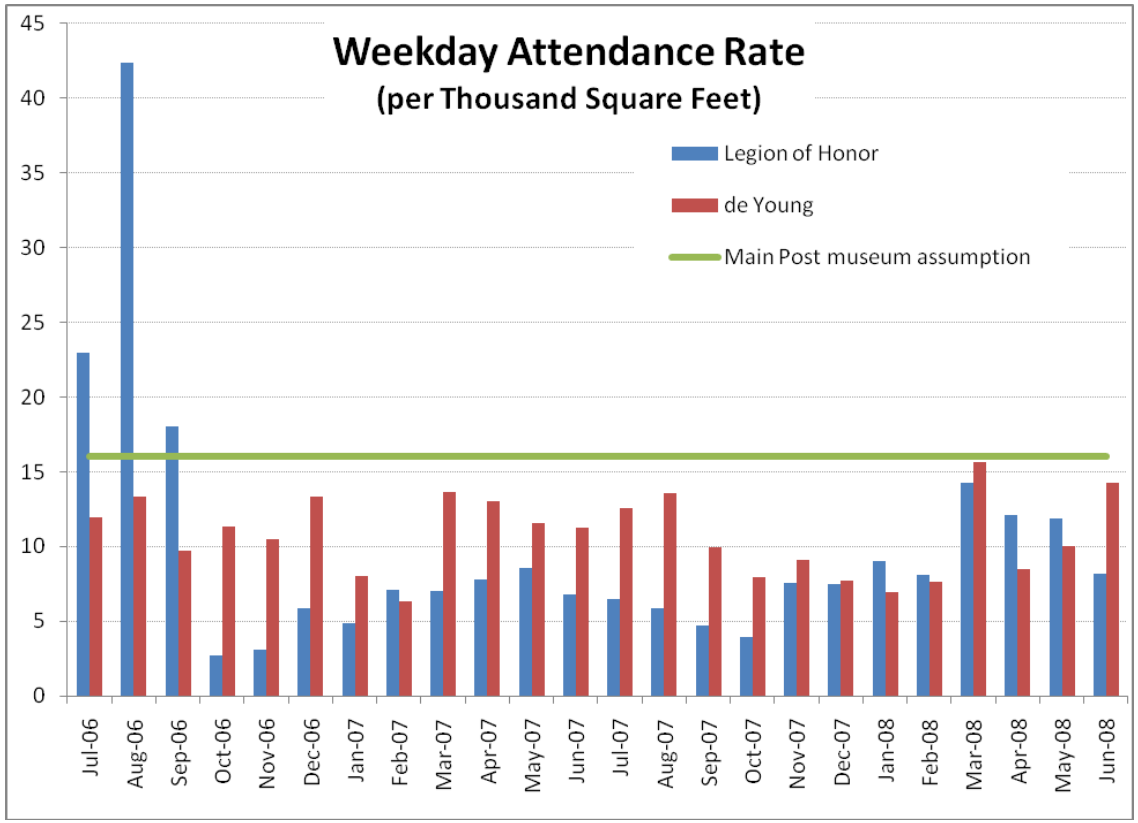
Response Transportation is an integral topic in the park-wide PTMP, which considers vehicular circulation and parking. The PTMP also includes a transportation demand management (TDM) program in Appendix D that identifies sustainable transportation management practices to encourage carpooling, the use of transit and bicycling, and telecommuting. Some TDM strategies are mainly applicable to employees, but eliminating employee automobile trips will benefit the overall amount of traffic generated by uses in the Presidio. The transportation analysis in the final PTMP EIS and the final Main Post Update SEIS consider the cumulative traffic, transit, and parking effects of all uses in the Presidio.

65 The Visitation, Traffic, and Parking Estimates do not Take into Account Seasonal Variations in Attendance at the Main Post Buildings

Museums, in particular, have a very strong seasonal pattern, with peaks and troughs by month, and high peaks associated with special exhibits,

free days or extended hours. The method used in the traffic analysis to estimate daily and weekend traffic is based on annual estimates divided by days in the year. Peak traffic is estimated for weekday hours and weekend hours assuming all visitation and traffic is equally distributed by day and week throughout the year. The differences in monthly visitation are from 30 percent to 100 percent greater than the average. Daily peak traffic and weekend peak traffic are severely understated and should take into account these peak months.

Response The contemporary art museum proposal (CAMP) has been withdrawn. Traffic estimated for the CAMP (formerly part of Alternative 2) and the History Center (Alternative 3) in the draft SEIS and final SEIS is not based on annual estimates divided by days in the year as asserted by the commentor. The weekday trip generation rate used for these projects reflects a typical peak day. A comparison of the assumed attendance rate (person round-trips per thousand square feet) for the History Center compared to average weekday attendance rates for the Legion of Honor and the de Young Museums by month over the past two years is provided below. The assumed trip generation rate for the History Center is 32.1 two-way (or 16.05 round-trip) person trips per thousand square feet, and is well above the average monthly weekday



attendance for these two museums, with the exception of attendance at the Monet exhibition at the Legion of Honor.

66 The CAMP Estimates are Too Low and the History Center Estimates Appear Unsupported or Too High

The traffic impact of the CAMP is severely underestimated compared to Alternative 1. It is probable that the necessary increase in museum estimates would cause demand for parking to exceed supply in the Main Post. These traffic impacts, causing backups and delays in the Main Post and at entry/exit points to the Presidio, would seriously affect the feeling of the Main Post, and are a negative impact not addressed in the SEIS.

Response The contemporary art museum proposal has been withdrawn. See the response directly above regarding the trip generation assumptions used for the museum of contemporary art (formerly in Alternative 2) and History Center (in Alternative 3).

67 An Analysis of the Existing-Plus-Project Condition Is Needed

The traffic analysis scenarios evaluated in the SEIS include only the existing condition and the year 2030 cumulative condition combined with the project-generated traffic. The SEIS needs to provide an analysis of the existing-plus-project condition. Without this scenario, the reader cannot determine the project's traffic impacts on study area intersections. How much of the growth in traffic assumed for year 2030 would be due to increased regional traffic versus traffic generated by the proposed project?

Response A comparison of existing and existing-plus-project conditions with the mitigated preferred alternative (Alternative 2) is provided in Table 11. The table provides the reader an understanding of the relative impacts of the proposed changes in the Main Post. However, because the analysis assumes the existing roadway network and full occupancy of all buildings in the Main Post, it is an artificial construct. Main Post buildings would be occupied over several years, and the direct Doyle Drive access would most likely be complete before all buildings in the Main Post are occupied. Thus, the existing roadway network would likely change before the project (full occupancy of Main Post buildings) is completed.

68 Analysis of Changes in Traffic and Parking Over Time Is Needed

Traffic and parking projections should not be limited to 2030, but rather, should be provided in a minimum of 5-year increments. This kind of timeline is necessary for the public to better comprehend how traffic conditions would change over time, and how any near-term problems would be addressed. The public deserves to see estimates of early changes to traffic and parking conditions and the assumptions on which the estimates are based. Estimates based on a single time in 2030 are projections without a commitment to allow the public real input and understanding of what will be happening over the next 20 years.

Response It is typical for NEPA transportation analyses to consider impacts based on a 20-year time horizon in order to consider the effects of a given project in the context of other projects in the area. In this case, evaluating conditions in 2030 considers new uses at Fort Scott and Crissy Field as well as changes to the roadway network associated with the Doyle Drive reconstruction. In response to public request for a near-term analysis, an “existing-plus-project” traffic analysis was performed for Alternative 2 (see response directly above). In addition, the Trust will continue to periodically monitor traffic conditions, transit ridership, and parking occupancy in order to respond to changes in these conditions over time.

11 COMPARISON OF EXISTING AND EXISTING-PLUS-PROJECT CONDITIONS

	AM Peak Hour				*PM Peak Hour*			
	Existing Conditions LOS & Delay (seconds/vehicle)		*Existing + Alternative 2 LOS & Delay (seconds/vehicle)*		*Existing Conditions LOS & Delay (seconds/vehicle)*		*Existing + Alternative 2 LOS & Delay (seconds/vehicle)*	
Lombard/Divisadero	B	12.4	B	13.5	B	12.0	B	13.7
Lombard/Richardson	A	7.0	A	8.6	A	4.5	A	6.2
Lyon/Lombard	F	68.4	F	>70.0	E	38.0	F	>70.0
Greenwich/Divisadero	B	12.8	B	13.0	B	13.0	B	13.3
Greenwich/Lyon	A	8.3	A	8.3	A	8.3	A	8.4
Francisco/Richardson	B	11.7	B	12.4	B	11.5	B	11.7
Richardson/Gorgas	A	6.7	A	4.6	A	7.2	B	12.2
Doyle/Marina/Lyon	C	26.5	C	26.5	B	11.0	B	11.0
Graham/Lincoln	B	10.7	C	18.6	B	10.5	E	39.6
Lincoln/Halleck	C	22.2	F	>70.0	C	19.9	F	>70.0
Lincoln/Girard	B	14.6	D	28.8	B	14.3	F	>70.0
Presidio/Letterman/Lincoln	C	18.4	F	58.8	B	12.7	E	43.7
Lombard/Presidio	E	42.9	F	59.2	C	24.7	E	36.2
Presidio/Pacific	D	28.5	E	36.5	C	23.4	D	32.3
Presidio/Jackson	E	37.1	F	50.3	D	29.6	E	44.9
Presidio/Washington	C	22.9	D	28.9	C	21.5	D	30.4
Arguello/Jackson	C	15.4	C	17.8	B	14.0	C	16.7
Arguello/Washington St	C	22.6	D	28.4	C	18.6	C	24.7
Arguello/Moraga	B	10.4	B	11.0	B	10.1	B	10.9
Montgomery/Sheridan	B	14.3	C	20.7	A	8.2	B	10.7

69 A Level of Service Analysis Is Inappropriate for Assessing Impacts on Residential Communities

The traffic assessment is conducted only by level of service (LOS) analysis, which is not an appropriate measure of traffic's impact on residential communities and park activities. LOS is a measure of "through-put," which assesses how quickly the total predicted load of vehicles is moved along a commuter route, and does not assess pedestrian safety, compatibility with bicycles, traffic noise, traffic safety impacts, or any of the other factors that relate to the enjoyable use of a park or a residential area. A high LOS supporting a high volume of vehicles is commonly associated with roads that are neither pedestrian- nor bicycle-friendly. Consequently, implementing mitigation measures that improve LOS does not mean that the traffic impact would be made acceptable. Further analysis is required to assess pedestrian safety, compatibility of predicted automobile traffic with bicycle traffic on roadways in the Presidio and the surrounding neighborhoods, traffic

noise, traffic safety impacts, and any of the other factors that relate to the enjoyable use of a park or a residential area.

Response The LOS calculations are a measurement of average vehicle delay at a particular intersection, and vehicle delay is largely a matter of the volume projected to travel through an intersection compared to the intersection's traffic flow capacity. The LOS methodology is the methodology adopted by the San Francisco Planning Department Office of Environmental Review as described in Transportation Impact Analysis Guidelines (October 2002). A LOS A or B rating does not necessarily reflect a high volume of vehicles, since it considers both volume (i.e., demand) and capacity (i.e., supply). LOS A or B could indicate a low-volume street with a wide range of capacity or a higher-volume street with adequate capacity to carry that volume of traffic. Therefore, traffic LOS is not an indicator of safety. Safety concerns are best addressed through intersection design, traffic calming measures, and enforcement of speed limits.

The Trust believes that intersection LOS is a reasonable indicator of traffic congestion but agrees that it is not a superior indicator of overall transportation system performance. The San Francisco Planning Department is considering revisions to its transportation impact analysis methodology to better reflect many of the factors raised by the commentor. Should the San Francisco Planning Department adopt revisions to the existing methodology, the Trust will revise its methodology accordingly.

70 A Special Events Traffic Management Plan Should Be Developed

The frequency of special events is not discussed in the SEIS. While a limited number of special events on an annual basis would not require a technical analysis, a large number of special events could create a burden on the city's transportation system and on adjacent neighborhoods. Mitigation Measure TR-2l states that if parking demand exceeds the supply, the event sponsors may be required to provide special transit service. There is no commitment under this mitigation measure that the parking, transit, and traffic needs of the special events would be managed in a way that would not affect the city's transportation system and adjacent neighborhoods. A provision should be added to the special event traffic management mitigation measure to assure that event sponsors are required to develop a transportation management plan in cooperation with the city to adequately address the transportation needs of such events. The event sponsors should be made financially responsible for the provision of additional transportation services to the Presidio.

Response The Presidio currently hosts over 50 special events each year, and the Trust coordinates with the United States Park Police and other stakeholders (including the City and County of San Francisco) to successfully manage events through a special use permit process. Event planners are required to develop traffic management plans to indicate how event-generated and background traffic, parking, and pedestrian operations would be managed within the area affected on the days of the event. The plans must address site access and parking, pedestrian access, traffic flow and control, and traffic incident management and safety.

Events range in size and magnitude of transportation impacts. Of the more than 50 annual events, fewer than 10 have heavy parking demand. Large races are generally scheduled to pass through the Presidio no later than 11:00 AM. Some large organized events often implement transportation management strategies as a matter of standard practice, including busing participants to and from hotels downtown or other sites.

71 Impacts of Traffic Diversions on Previously Low-Traffic Streets Should Be Considered

Traffic mitigation looks primarily at adding signals to intersections, both within the Presidio and in adjoining neighborhoods. However, the traffic analysis should consider the impact of diverting high volumes of traffic onto previously low-traffic residential streets. Presidio staff has stated the expectation that cars would disperse onto residential surface streets upon leaving the Presidio, thus relieving congestion. Based on other experiences with large developments in the area, such as the California Pacific Medical Center (CPMC) Pacific Site, this would bring adverse impacts to the residential areas. The traffic analysis should assess the impacts of the proposed mitigations, such as signalization, on the nearby residential neighborhoods, paying particular attention to increased traffic levels throughout the day and safety issues such as vehicle speeds, running of lights, and pedestrian safety.

Response The traffic generated by uses in the Main Post would naturally be more dispersed at greater distances from the Main Post. Traffic traveling to and from the Main Post is expected to be dispersed to the Arguello Gate, Presidio Boulevard Gate, Lombard Gate, Marina Gate, and Doyle Drive via Girard Road. The analysis in the SEIS includes two intersections on Greenwich Street to evaluate the possible effect of additional traffic on this street. The resulting levels of service suggest that these intersections would not be significantly affected by the additional traffic generated by the Main Post uses.

Traffic signals are not inherently less safe than stop signs. Enforcement of speed limits and red lights at traffic signals is the responsibility of law enforcement, including the United States Park Police in the Presidio and the San Francisco Police Department in the City and County of San Francisco. The Trust is committed to considering intensifying transportation demand management strategies to minimize traffic volume and thereby avoid the need for traffic signals in the park.

72 Traffic Variations and Interaction with Other Activities in Surrounding Areas Should Be Analyzed

The traffic analysis only looks at AM/PM peak period traffic. The traffic assessment does not assess the distribution of traffic and interaction with other activities in the surrounding area except for the weekday peak AM/PM rush hour. Traffic pattern variations that occur throughout the day, on weekdays vs. weekends, due to seasonal changes, during vacation periods, and so on are not assessed in sufficient detail. Data from other museums clearly demonstrate that museum attendance varies significantly from average (e.g., 33 percent greater in July to 40 percent lower in October). Special exhibits can draw large crowds for extended periods. It is reasonable to expect that, in addition to increasing peak commute demand, increasing recreational visitors would increase the level of traffic throughout the day, possibly to near peak hour levels for extended periods.

Response The commentor is correct that the draft and final SEIS traffic analysis is based on traffic conditions in the AM peak hour and PM peak hour. These periods are analyzed because they are expected to be the time when traffic volumes on the surrounding roadway network are greatest. Traffic conditions at many study intersections are not only affected by traffic generated by uses in the Main Post, but also by pass-through traffic unrelated to uses in the Presidio. Pass-through traffic volumes are greatest during the standard AM and PM commute periods. Therefore, the combination of all traffic volumes is expected to be

greatest during the typical weekday commute hours. Traffic mitigation measures identified for weekday commute hour conditions would also improve the operation of these intersections on weekends.

73 Conflicts Exist with City and National Park Service Transportation Policies

The creation of major destination institutions in the Presidio, which is inadequately served by public transit, conflicts with the San Francisco transit-first policy and with the National Park Service policy to minimize auto use in national parks.

Response The principles of the city's transit-first policy do not restrict types of land use by geographic location. Rather, the principles of the transit-first policy encourage and facilitate traveling by public transit (including taxis and vanpools) as well as bicycling and foot. Specifically, ten principles constitute the city's transit-first policy:

1. To ensure quality of life and economic health in San Francisco, the primary objective of the transportation system must be the safe and efficient movement of people and goods.
2. Public transit, including taxis and vanpools, is an economically and environmentally sound alternative to transportation by individual automobiles. Within San Francisco, travel by public transit, by bicycle and on foot must be an attractive alternative to travel by private automobile.
3. Decisions regarding the use of limited public street and sidewalk space shall encourage the use of public rights of way by pedestrians, bicyclists, and public transit, and shall strive to reduce traffic and improve public health and safety.
4. Transit priority improvements, such as designated transit lanes and streets and improved signalization, shall be made to expedite the movement of public transit vehicles (including taxis and vanpools) and to improve pedestrian safety.
5. Pedestrian areas shall be enhanced wherever possible to improve the safety and comfort of pedestrians and to encourage travel by foot.
6. Bicycling shall be promoted by encouraging safe streets for riding, convenient access to transit, bicycle lanes, and secure bicycle parking.
7. Parking policies for areas well served by public transit shall be designed to encourage travel by public transit and alternative transportation.
8. New transportation investment should be allocated to meet the demand for public transit generated by new public and private commercial and residential developments.
9. The ability of the City and County of San Francisco to reduce traffic congestion depends on the adequacy of regional public transportation. The City and County of San Francisco shall promote the use of regional mass transit and the continued development of an integrated, reliable, regional public transportation system.
10. The City and County of San Francisco shall encourage innovative solutions to meet public transportation needs wherever possible and where the provision of such service will not adversely affect the service provided by the Municipal Railway.

The Presidio Trust shares these principles. As described in the PTMP, "The Presidio Trust will use environmentally responsible transportation strategies to improve mobility within the park, minimize private automobile use, increase the use and availability of public transit and pedestrian and bicycle travel options, and improve connections to regional transportation systems." The Trust has an aggressive transportation demand management (TDM) program in place to reduce overall reliance on the automobile by encouraging alternatives such as walking, biking, carpool/vanpools, and transit. The Trust's TDM program consists of activities conducted by the Trust and by the park's tenants. Activities conducted by the Trust serve residents, employees, and visitors, and currently include a shuttle bus system throughout the park and downtown, parking management, and a Guaranteed Ride Home program.

The park's non-residential tenants are required to participate in the Presidio TDM program through their lease agreements. Each tenant is required to submit a TDM plan. Each tenant's TDM plan must include required activities that promote the park-wide TDM services to their employees. Tenant-specific TDM requirements are subject to individual lease negotiations. More details on the Trust's TDM program can be found in Appendix D of the PTMP.

The provision of destinations in the park does not inherently conflict with the objective of minimizing automobile use. Destination uses are often the cornerstone of park visitor experiences. The Presidio is a park in an urban setting, and the Main Post has historically been and will continue to be the heart of the Presidio. As such, the Main Post is a fitting location for a denser population than other areas of the Presidio and other national parks. This is consistent with the Trust's commitment to public use. It is the Trust's goal to make a portion of the building space in the Main Post available for public uses and to develop a sustainable transportation system; the Trust does not consider these two goals to be mutually exclusive.

The CAMP is no longer being considered for the Main Post. The lodge remains in the mitigated preferred alternative (Alternative 2). It is relatively common for national parks to provide lodging, offering visitors an overnight park experience and allowing them an opportunity to explore the park from a centralized location. Providing overnight accommodations would allow park visitors from afar to experience the Presidio while minimizing the number of trips through the park's gates.

74 Traffic Impacts on the Greater Presidio Should Be Analyzed

The traffic analysis estimates traffic impacts on the Main Post and various gates and intersections outside the Presidio. However, the analysis does not estimate the impact of the art museum and related vehicular traffic on the larger Presidio.

Response The traffic analysis considers the effect of traffic generated by Main Post uses on the intersections that would be most affected by any increases in traffic associated with uses in the Main Post. Presidio intersections farther removed from the Main Post (e.g., Lincoln Boulevard/Kobbe Avenue) would experience a negligible increase in traffic associated with uses in the Main Post and therefore were not included in the analysis. The proposal for a museum of contemprary art has been withrawn, and the comparison of the mitigated preferred alternative (Alternative 2) to Alternative 1 in the final SEIS illustrates the minor changes in delay that would be caused by proposed land use changes in the Main Post.

75 The Parking Demand Assumption Is Inconsistent with the Recreational Use Pattern

The traffic analysis asserts that demand for parking on weekends is expected to be less than on weekdays. This assertion is unsupported and inconsistent with expectations of a recreational use pattern. Museum and recreational uses peak on weekends, and all visitor-serving functions would have full staff on weekends. The number of proposed Main Post parking spaces would not be adequate to serve the larger number of vehicles expected during seasonally high peak visitation months, both daily and on weekends. The SEIS does not include seasonal visitation and related traffic and parking estimates., nor does it address such one-time events as the Pacific Rim Hawaiian Festival and the other many festivals that would consume all parking spaces and make it impossible for the art museum to find parking for its visitors.

Response The contemporary art museum proposal has been withrawn and is no longer included in the mitigated preferred alternative (Alternative 2). Although the Main Post is expected to have more visitor-oriented uses under Alternative 2 than under the PTMP, there would still be a substantial amount of office space at the Main Post. On weekends, office uses typically demand only about 10 percent of the parking area they occupy on weekdays. The reduction in office-related parking demand on weekend days is greater than the estimated increase in parking demand for visitor-oriented uses. Tables in Appendix A identify the estimated parking demand by land use for weekdays, evenings, and weekends for each alternative. For Alternative 2, the table shows that office-related parking demand (before TDM reduction) is 959 spaces on weekdays and 96 spaces on weekends, making over 850 parking spaces available for other uses on weekends.

76 Parking Demand Estimates Should Be Compared to Parking Supply

The SEIS should identify specific areas within the Main Post that are likely to have more parking demand than can be accommodated within walking distance of the attraction and the areas where parking may be underutilized. The statement that "regardless of location, the majority of parking would be within a five minute walk (approximately 1,500 feet) of any building in the Main Post" does not provide information on the location of the parking in relation to the proposed land uses that will create future parking demand. The SEIS does not analyze the parking impacts of the proposed developments on the neighborhoods bordering the Presidio. Some of the visitors of the Letterman Digital Arts Center park on city streets. The SEIS needs to address what measures could be used to reduce parking impacts on adjacent neighborhoods.

Response All uses in the Main Post would generate demand for parking. Due to the shared parking approach, it is impossible to illustrate parking supply and demand for every building at the Main Post. Parking spaces needed by some uses and buildings on weekdays would be free for use by others on weekends. Figures 3, 6, 9, and 12 in the final SEIS illustrate the location of parking in the Main Post and Table 16 in the final SEIS indicates the approximate number of spaces in these parking areas.

The final SEIS does not consider the potential for parking demand from the Main Post to “spill over” into adjacent San Francisco neighborhoods because the walking distance to these neighborhoods from the easternmost point of the Main Post is 12 minutes or more. When combined with the existing parking time restrictions in the adjacent neighborhoods, it is unlikely that visitors or employees would walk from the Lombard Gate to the Main Post. In the neighborhood outside the Lombard Gate, the current time restriction for vehicles without a K

residential parking permit from the city is three hours. Reducing this time restriction from three hours to two hours would further discourage spillover parking from Main Post employees and visitors.

77 Possible Parking Mitigations Should Be Considered

TDM policies that discourage driving into, and parking within, the Presidio increase the probability of Presidio visitors and tenants parking in the neighboring community. The draft SEIS assumes that visitors would not park in the adjoining neighborhoods because of the need for residential permits. However, there is no evidence of effective enforcement programs to date, especially those that do not create even more problems for residents. Installing parking meters in residential neighborhoods is unacceptable. As a result, the traffic analysis ignores a key factor that affects both the quality of life for residents and the ability of local neighborhood-serving businesses to attract clients.

Response The backbone of any TDM program is parking management, and the Trust is dedicated to managing transportation demand to promote sustainable transportation practices, minimize the amount of traffic generated by Presidio uses, and reduce the amount of park land used for parking lots. The Trust is not proposing that parking meters be installed in residential neighborhoods surrounding the Presidio. The purpose of the residential permit zones is to provide more parking spaces for residents by discouraging long-term parking by people who do not live in the area. It is not clear how enforcement of residential parking restrictions is problematic for neighborhood residents. Just as the enforcement of parking restrictions in the Presidio is the responsibility of the United States Park Police, enforcement to ensure effectiveness of the San Francisco preferential residential parking system is the responsibility of the City and County of San Francisco.

The Main Post is at least a 12-minute walk from the nearest Presidio gate (the Lombard Gate). Visitors staying in the Main Post for a couple of hours are unlikely to park this far away to avoid parking fees for such a short period of time. Main Post employees would not be able to legally park in surrounding city residential neighborhoods for the duration of the typical workday. The K residential parking permit zone is near the Lombard Gate, and the current time restriction for vehicles without a K residential parking permit is three hours. Reducing this time restriction from three hours to two hours would further discourage spillover parking from Main Post employees and visitors.

78 Pedestrian and Bicycle Intensity and Traffic Interactions are Misleading

The sections dealing with bicycle and pedestrian usage refer to the Presidio Trails and Bikeways Master Plan, implying that this document contains an accurate assessment of use intensity and traffic interactions. The Presidio Trails and Bikeways Master Plan does not address the issue of traffic intensity and bicycle usage adequately. The traffic analysis should address the parking demands for peak usage, safety issues for pedestrians and cyclists caused by drivers in hunt of the scattered parking spaces, and the overflow impacts on the city.

Response The analysis of pedestrian and bicycle conditions in environmental review documents is typically based on the pedestrian and bicycle facilities and their ability to accommodate the anticipated volumes of bicycle and pedestrian volumes, and the assessment of any project-related safety issues. The Trust agrees that mobility and safety for cyclists are inversely proportional to the volume of automobile traffic

on the same street, but believes traffic hazards can largely be mitigated by dedicated facilities (e.g., striped in-road bike lanes). Given a fixed amount of right-of-way, decisions can be made to make the convenience and safety of cyclists a higher priority than automobile throughput . An example of this is the Trust's decision to reduce the number of automobile lanes on Lincoln Boulevard from four lanes to two lanes with left-turn pockets in order to add bike lanes. Other pedestrian and bicycle facilities described in the Presidio Trails and Bikeways Master Plan would adequately accommodate the expected number of pedestrians and cyclists and minimize conflicts with automobile traffic.

None of the projects evaluated in the final SEIS has been developed to a level of detail that would allow for an assessment of pedestrian and cyclists safety issues. As detailed design for projects progresses, conflicts between pedestrian and cyclist movements and vehicular traffic (e.g., at driveways, loading areas, building ingress/egress points, etc.) would be considered during site-specific review, and measures to address any safety concerns would be incorporated into project plans.

79 Tour Bus Impacts Should Be Analyzed

The traffic analysis should address the possible impacts of tour buses and offer plans to mitigate possible adverse impacts, such as increased noise and vibration in neighboring residential districts.

Response Tour buses are expected to comprise a relatively small percentage of traffic in the Presidio. There are no estimates of the increased volume in tour buses traveling to and from the Presidio. The ability to manage tour bus activity on particular city streets lies with the City and County of San Francisco. The city has restricted tour buses in certain areas surrounding the Presidio, including portions of 25th Avenue and El Camino del Mar outside the 25th Avenue Gate, 15th Avenue immediately outside the Presidio boundary, Marina Boulevard and many of the streets in the Marina district, and a portion of Lyon Street just outside the Lombard Gate.

80 A Discussion of Loading Activities Should Be Provided

It is not clear if loading is envisioned to take place on Presidio streets or within the buildings. If any double-parking occurs as a result of truck deliveries, it would exacerbate the traffic congestion within the Presidio and could spill over or divert to city streets.

Response In some cases, dedicating available curb space to loading functions may be appropriate, particularly if such an approach would allow multiple small buildings to share loading zones. In other cases, an off-street loading dock may be necessary to avoid impacts on traffic flow. In general, the Main Post's historic street network of minor roadways or alleys at the backs of buildings (e.g., Taylor Road, Mesa Street) and primary roadways in front of buildings (e.g., Montgomery Avenue, Funston Avenue) allows space for loading activities to occur at the backs of buildings without adversely affecting traffic flow at the Main Post.

Using the city's methodology, a lodge with 110 rooms, which is included in the mitigated preferred alternative (Alternative 2), is estimated to require two spaces for passenger loading and unloading.

81 Information on the Location and Impacts of New Parking Is Deficient

The supplement does not show new parking areas, nor does it show the expansion of parking at or west of Building 386. The figures in the supplement show the area west of Building 385 as surface parking, when

in fact it is shown as open space in the photos. A "substantial acreage of green" would be lost for parking for the art museum. This should be presented and discussed. In addition, the increase from 250 to 350 spaces at the proposed underground parking area at the north bluff should be presented and its impacts discussed. When Doyle Drive is completed, and Building 201 (and possibly Building 204) are taken down, the area from the existing north bluff lot (100 spaces) would be open space. What alternatives are there to adding a new 300-space underground lot? Have they been considered? What are the impacts of an underground parking garage at that area?

Response Figures 3, 6, 9, and 12 in the final SEIS and Table 16 of the final SEIS illustrate the location of all sizeable parking areas, including the area south of Moraga Street and west of Arguello Boulevard, near Building 386. The demolition of Building 385 would allow for the expansion of this parking lot from 36 spaces to approximately 235 spaces; the loss of "green space" would be minimal compared to the increase in green space in the more centrally located Main Parade.

The surface parking lot at the north bluff would not be eliminated with the construction of Doyle Drive; in fact it is assumed to approximately double in size. Even with the expansion of this surface parking lot, the Doyle Drive tunnel construction would still allow approximately 4.5 acres of green space, extending from the north bluff to Mason Street. Although the north bluff site has been investigated adequately to estimate the feasible number of parking spaces at this location, there is not a sufficient level of detailed design to accurately estimate construction costs. The construction of the Doyle Drive tunnel near this location will allow for the surface lot at the north bluff to be expanded from approximately 100 spaces to over 200 spaces. Given the high construction costs associated with underground parking, the Trust would continue to consider alternative means to accommodate parking demand before building additional underground parking.

82 Estimates of Current Parking Space Utilization and Demand are Outdated

The parking analysis in the supplement does not take into account recent parking fees introduced at parking areas close to or in the Main Post district. Since the last Trust survey, parking tolls have been introduced in many places in and near the Main Post district. The parking tolls have resulted in a huge increase in the use of the Main Parade untolled area. An estimate should be made of the impact of parking fees for existing and proposed land uses wiunder the Main Post Update. No quantitative estimates of the effect of fees on demand have been presented, other than a statement that fees would be charged, which should reduce demand for spaces. Many studies show the elasticity of demand for parking spaces related to fees charged. The Trust should take advantage of those resources and apply their results to the Presidio.

Response The SEIS conservatively assumes a 10-percent reduction in parking demand in the district under the mitigated preferred alternative (Alternative 2), and a 5-percent reduction in demand under Alternative 3. Based on past parking occupancy counts in the district, the Trust expects the reduction in parking demand due to parking fees to be greater than 10 percent, and therefore the reduction assumed under Alternatives 2 and 3 is conservative.

As the commentor notes, there are data available to estimate parking demand elasticities or rates estimating the change in parking demand associated with increases in fees, and these data are useful in estimating changes in parking demand over time. However, elasticities are typically

developed assuming market-rate conditions as a baseline, and parking in the Main Post is still currently free in some areas. Rates relating to changes in parking demand to parking supply vary by location and setting. In order to isolate changes in parking fees as the cause resulting in changes in demand, studies must gather data immediately before implementing changes and again immediately after implementing changes. Most municipalities with limited funding resources are not likely to gather such data twice within such a short period of time.

The Trust will continue to implement parking fees throughout the Main Post in the next few years and will continue to gather data on actual parking occupancy. Actual occupancy will continue to be compared to calculated demand on a regular basis. Comparing calculated estimates to real-world conditions will allow the Trust to continually refine parking demand estimates as parking fees are implemented more comprehensively throughout the Main Post.

83 The Trust Should Accept Financial Responsibility for Implementing Mitigation Measures

Five of the ten intersections that would operate at unacceptable levels of service in year 2030 are under the jurisdiction of the City and County of San Francisco. The SEIS proposes signalization of these intersections as a mitigation measure. The current cost to signalize these intersections is approximately $350,000 each, for a total cost of approximately $1,750,000. The city does not have funds to signalize these intersections. Public hearings are required before new traffic signals are installed within the city. Therefore, even if funding for new traffic signals were available, it cannot be assured that the traffic signal mitigation measures could be implemented. The SEIS needs to provide certainty that if and when traffic mitigation measures would be required they can be funded and implemented.

Response The commentor correctly notes that signalization of city intersections would be under the purview of the City and County of San Francisco. Although signalization is physically feasible, the city may choose not to install signals. The Trust believes that the cost of signalization should be shared since much of the traffic passing through the identified intersections (e.g., Presidio Boulevard/Jackson Street) is not generated by uses in the Presidio, but merely passing through the park. The appropriate share of costs of the Trust and the City and County of San Francisco should be based on the relative volume of traffic traveling through the intersections.

84 More Information on Travel Demand Projections Is Needed

The SEIS does not provide enough information to follow how the transportation trip generation, trip distribution, trip assignment, and mode split assumptions were developed and applied. Therefore, the accuracy of the analysis cannot be assessed.

Response Table 8 in the final SEIS includes daily and peak hour person trip generation rates by land use as well as the percentage of trips assumed to be inbound and outbound. Mode-share assumptions vary with the land use type and whether the trip is internal to the park or not. Table 12 below indicates the assumed mode share for each land use type, as well as the percentage of trips assumed to be internal to the park. Table 9 indicates the resulting total number of daily and peak hour person trips by mode and vehicle trips for each alternative. The mode-split assumptions in Table 12 are also described in the final PTMP EIS Background Transportation Report.

12 MODE SHARE BY LAND USE

Land Use	Percent of Trips Internal to Presidio	Auto Occupancy Rate (persons per auto)	External Trips			Internal Trips		
			Auto	Transit	Bike / Ped / Other	Auto	Transit	Bike / Ped / Other
Industrial Warehouse	20%	1.1	60%	23%	17%	50%	20%	30%
Office	22%	1.0	60%	23%	17%	50%	20%	30%
Retail	30%	1.4	65%	18%	17%	50%	20%	30%
Restaurant	30%	1.4	65%	18%	17%	50%	20%	30%
Lodging	75%	1.3	60%	23%	17%	50%	20%	30%
Conference	25%	1.3	60%	23%	17%	50%	20%	30%
Recreation	50%	1.5	60%	23%	17%	50%	20%	30%
YMCA	25%	1.1	70%	13%	17%	70%	13%	17%
Cultural / Education	20%	1.5	60%	23%	17%	50%	20%	30%
Theater	20%	2.0	75%	18%	7%	75%	18%	7%
Residential	45%	1.2	60%	23%	17%	50%	20%	30%
Infrastructure	80%	1.1	60%	23%	17%	50%	20%	30%
Military	10%	1.5	60%	23%	17%	50%	20%	30%

85 The Amount of Additional Muni Service Needed to Serve Projected Ridership and the Costs to Provide that Service Should Be Evaluated

The SEIS does not provide any information to compare new Muni demand to the available capacity. The SEIS does not provide supporting analysis to conclude that the demand generated by the project could be met by the current or forecasted Muni service. The SEIS assumes increased PresidiGo service that would accommodate one third of the Presidio's transit ridership. Is increased PresidiGo service funded through year 2030?

Response Due to the current severe San Francisco Municipal Transportation Agency (SFMTA) fiscal constraints, it is not possible to estimate future Muni service capacity accurately at this time. Implementation of the Transit Effectiveness Program would result in changes in Presidio-based ridership on routes serving the park, as well as ridership throughout the city. The final SEIS provides a comparison of the projected ridership for each transit under Alternative 1with ridership under Alternatives 2, 3, and 4. The Trust is committed to expanding PresidiGo service to keep pace with demand. If downtown PresidiGo service were to be terminated, additional environmental review would be required.

86 Graphics in the MPU Show a Large New Surface Parking Lot at the North Edge of the Main Post

It is unclear where this proposal comes from, and how it will be reviewed.

Response The Trust is currently working with Caltrans (the lead agency for Doyle Drive) on how the landscape within the Temporary Construction Easement (TCE) for the project, including the Main Post tunnel top, will be treated. Similar to the removal of historic buildings in the Main Post by the Doyle Drive project (Buildings 204 and 230), those decisions are part of a separate undertaking and will be reviewed through the provisions in the PA for Doyle Drive.

87 The Draft SEIS Should Have Included Appendix A -Transportation Data

Public access to the transportation data was limited to viewing the information at the Presidio Trust's library.

Response Appendix A was also posted on the Presidio Trust's web site (*http://library.presidio.gov/archive/documents/MP_SEIS_A.pdf*) and therefore has been widely available for public review. Appendix A is over 200 pages in length and is mostly comprised of intersection level-of-service calculations. The pdf posted on the Trust's web site allowed readers to search the appendix and print only the pages of particular interest.

2.12 AIR QUALITY AND NOISE

88 Air Quality Impacts Are Underestimated

The supplement evaluates average carbon monoxide emissions from vehicle trips for the preferred alternative to be from 533.80 pounds per day. The Bay Area Air Quality Management District (BAAQMD) states that 550 pounds per day of carbon monoxide is a significant impact. The supplement does not estimate air quality impacts properly, given much higher visitation rates expected in the preferred alternative (up to 2.1 million) versus existing conditions (up to 660,000), a ratio of 3.2: 1. The ratio of average weekly vehicle trips between the preferred alternative (16,765) and Alternative 1 (13,951) is1.2:1. The visitation ratio is not consistent with the vehicle trips ratio. Vehicle trips under the preferred alternative are potentially underestimated, and therefore the supplement underestimates the air quality impact.

Response The BAAQMD threshold for carbon monoxide of 550 pounds per day would not be exceeded by the motor vehicle activity caused by any alternative. The calculation method used (URBEMIS2007 model) is established for use in this type of forecast and widely accepted in California. Vehicle trip estimates are slightly lower for the mitigated

preferred alternative in the final SEIS than those shown for the preferred alternative in the supplement. Accordingly, all motor vehicle activity and emission rates for this alternative are lower.

The ratio of visitation to vehicle trip rates varies slightly among the alternatives because the mix of travel modes varies (e.g., transit or biking) due to the different uses. The commentor seeks to compare existing visitation rates to those of the mitigated preferred alternative, but this would not be appropriate because all the alternatives are forecasts of future year (2030) conditions.

89 Global Climate Change and Greenhouse Gas Emissions Should Be Analyzed

To address climate change, there needs to be an established baseline, with set greenhouse gas (GHG) reduction targets. The Main Post Update contains no such targets nor mentions any commitment to provide them. The Trust needs to commit to a 50-percent reduction in the next 30 years. The proposed action would set the framework for whether or not future managers will have that capability or not.

Response As discussed in the global climate change analyses in Section 3.4 Air Quality of the final SEIS, none of the alternatives under consideration would generate large enough quantities of GHGs to cause a substantial impact related to global climate change or disrupt California Air Resources Board (CARB) progress on achieving the goals of the California Global Warming Solutions Act of 2006 (AB32) or California State Executive Order S-3-05. Furthermore, no alternative would cause more than the Council on Environmental Quality's Draft NEPA guidance level of 25,000 metric tons or more of direct CO_2-equivalent GHG emissions per year. Nonetheless, the Trust would meet California's statutory targets and comply with strategies currently identified by the California Air Resources Board. The global climate change analysis properly quantifies and discloses the GHG emissions associated with the alternatives for consideration by decision makers and the public. The primary sources of GHG caused by the alternatives would not be stationary sources that the Trust could directly control; instead, the traffic attracted to the land uses would be the main GHG source. The Trust focuses on implementing transportation demand management strategies to avoid and reduce mobile source activity, which are necessary for mitigating GHG emissions. The Trust would also adopt Mitigation Measure NR-26 *Climate Friendly Parks Program Participation*, which involves creating a GHG inventory and tracking GHG avoidance and reduction against future-year targets.

90 The SEIS Should Show How Air Quality Commitments Would Be Applied

The draft SEIS states that the Trust would adopt Mitigation Measure NR-26 *Climate Friendly Parks Program Participation*, but then only lists the NR-26 commitments, while saying nothing about how commitments would be implemented.

Response The Trust would review the applicability of the commitments to all of its environmental, transportation, and energy-related operations and activities, and integrate the commitments into its strategic planning and budget process. As discussed in Mitigation Measure NR-26, and as recommended by the Council on Environmental Quality, the Trust would use an environmental management system (EMS) as the primary management approach for tracking and reviewing performance following implementation of the commitments.

91 The Conformity Issue Should Be Revisited to Determine Whether the Applicability Threshold Would Be Exceeded by Construction Activities

The supplement refers to the final PTMP EIS, which found that, based on the scale of the proposed demolition and construction activities, it is highly unlikely that the conformity applicability threshold would be exceeded by construction activities during any single year of the phased build-out. The current SEIS revises the PTMP, and the construction and demolition emissions projections for the preferred alternative are not provided. The Trust should revisit the conformity issue and provide the emissions projections for construction and demolition activities under the various alternatives, including the preferred alternative.

Response Construction and demolition emissions projections require a high level of detail regarding the planned construction activity, specific equipment, and phasing of the schedule. These details are unavailable at this preliminary stage of development of the alternatives. To demonstrate that the construction and demolition of the alternatives would not cause emissions exceeding the applicability of the general conformity rule, the final SEIS includes the results of a screening assessment using the Urbemis2007 (version 9.2.4) computer model, which incorporates emission factors established by the California Air Resources Board (CARB) as part of the OFFROAD2007 and EMFAC2007 mobile source emission inventory models to provide preliminary estimates. The construction emissions would vary between alternatives and development timelines. For one year involving site preparation and building construction using a crane, three smaller lifts, and eight other pieces of active heavy equipment, construction would cause approximately 20 tons per year of reactive organic gas (ROG), nitrogen oxides (NOx), and carbon monoxide (CO); 10 tons per year of particulate matter (PM10); and 1 ton per year of diesel particulate matter (as PM2.5). These emissions would be well under the 100-ton applicability threshold for the general conformity rule.

92 Measures to Minimize the Project's PM 2.5 Emissions Should Be Considered

In December 2008, former EPA Administrator Stephen L. Johnson signed a Federal Register notice making final designations of which areas of the country met or did not meet the 2006 particulate matter National Ambient Air Quality Standards, or PM NAAQS. The San Francisco Bay Area was listed in that notice as a non-attainment area. Although the Federal Register notice has not been published and, therefore, no effective date is yet established for such areas, the Trust should consider measures to minimize the project's PM2.5 emissions, and address this in the final SEIS.

Response The federal PM2.5 non-attainment designation for the Bay Area Air Quality Management District (BAAQMD) became effective in December 2009. This designation triggered the requirement that the BAAQMD develop formal plans to bring the region into attainment. The BAAQMD is currently developing a regional plan for state-level requirements that would be the foundation for federal-level PM2.5 management. To ensure consistency with the BAAQMD 2010 Clean Air Plan, the final SEIS includes mitigation measures for transportation management (NR-21 *Transportation Control Measures*, with a minor update) and feasible engine exhaust control (NR-23 *Construction Equipment Exhaust Measures*).

93 The Trust Should Work with Local Agencies to Develop and Implement TDM Strategies

The supplement indicates that the Trust will continue to implement components of the existing transportation demand management program or adopt more aggressive strategies. Adoption of these strategies would increase shuttle and transit usage and reduce hotspot emissions of air pollutants near sensitive receptors such as schools and child care facilities. The Trust should work with local agencies to develop and implement such strategies.

Response The final SEIS notes the new BAAQMD 2010 Clean Air Plan that was recently adopted. To ensure consistency with the BAAQMD 2010 Clean Air Plan, the final SEIS includes a minor update to the mitigation measure for transportation management (NR-21 *Transportation Control Measures*).

94 Noise Impacts on Crissy Field are not Adequately Analyzed for Alternative 1

The draft SEIS states that an art museum at the Commissary site under Alternative 1 would have no impacts on Crissy Field. The Trust estimates that the art museum and other attractions would draw about 2 million more visitors a year to the Presidio, most of whom would be coming in motor vehicles. Thousands of vehicle trips per year passing by Crissy Field Marsh would create noise from cars, motorcycles, motor scooters, go cars, open air and closed tour buses, and the supply trucks necessary to service the museum and lodge. This noise would have a negative impact on Crissy Field.

Response As the contemporary art museum proposal has been withdrawn from further analysis, there is no need to consider off-site alternatives for the proposal. Noise conditions at Crissy Field Marsh would not be substantially affected by the alternatives, which would cause the greatest noise increases within the Main Post district and south of Doyle Drive, the dominant noise source. Alternative 2 would increase peak hour traffic entering the Main Post from Crissy Field (via Halleck Street) by about 30 percent, which would result in a peak hour noise level about one decibel louder than that expected for Alternative 1. The one decibel increase would not be a noticeable change.

95 Noise Impacts on the Neighboring Community are not Analyzed Sufficiently

The draft SEIS only considers the impact of traffic-related noise from the perspective of the Presidio proper. Because the nearest residences within the City and County of San Francisco are over 1,500 feet from the Main Post, the draft SEIS assumes they would not be affected and ignores the impact of Presidio inbound and outbound traffic on the neighboring community.

Response The City and County of San Francisco residences nearest to the Presidio gates would be the most affected by inbound and outbound traffic noise under any alternative. The final PTMP EIS (pages 262-263) identified traffic noise levels at the entry gates and noted that existing noise levels at residences near the gates approach or exceed the Federal Highway Administration (FHWA) Noise Abatement Criteria (NAC) of 67 dBA. The Main Post Update (Alternative 2) and other alternatives would not notably increase traffic noise levels at the gates above those shown in the final PTMP EIS. The greatest traffic noise increase at Presidio entry points would occur at the Lombard Gate, where the peak

hour noise level increase would be less than one decibel. This increase would not be perceptible to the human ear.

2.13 HISTORIC RESOURCES

96 Conclusions of the NPS Section 213 Report Should Be Incorporated Into the SEIS

Since the release of the supplement, the Trust has received the Section 213 report drafted by the National Park Service (NPS) for the Advisory Council on Historic Preservation. The analysis in the supplement draws conclusions about the effects of the preferred alternative on historic and archeological resources at the Main Post that are different from the conclusions in the Section 213 report. The supplement currently states that there would be no adverse effect on the National Historic Landmark District (NHLD) as a result of the preferred alternative and states that the NHLD would be preserved. The Section 213 report concludes that the proposed undertaking would have a significant adverse effect on the NHLD because a significant number of character-defining features and resources, including the Main Post and the El Presidio archeological site, would be adversely and irretrievably affected. The Trust's analysis should be updated to reflect the findings of the Section 213 report.

Response Analysis contained in the Section 213 report has been incorporated into the final SEIS. Both the Presidio Trust's draft and final Finding of Effect for the Main Post Update (MPU) and the NPS Section 213 report, dated April 6, 2009, determined that the preferred alternative as detailed in the February 2009 MPU would diminish the integrity of individual resources within the Presidio and would result in a cumulative adverse effect on the National Historic Landmark District. As a result of an extensive National Historic Preservation Act (NHPA) Section 106 consultation and comments received during the NEPA process, the Trust modified the original proposed action and subsequently identified preferred alternative, and has now analyzed a mitigated preferred alternative (final MPU). The final MPU incorporates the majority of the recommendations outlined in the NPS 2009 Section 213 report. The recommendations from the Section 213 report are listed below, along with discussion of how the MPU responds to the recommendations.

Reduce New Construction The 2009 MPU proposed 253,000 square feet of new construction. The final MPU proposes 146,500 square feet of new construction, a reduction of 106,500 square feet.

Retain Buildings 97, 40, and 41 Building 97 would be retained under the final MPU. Buildings 40 and 41 would be removed or relocated in the future in order to interpret El Presidio, only after additional consultation at that time to consider a full range of alternatives to building removal, and to determine appropriate avoidance, minimization or mitigation measures. Other contributing or eligible buildings retained under the final MPU but not specifically mentioned in the Section 213 report's recommendations are Buildings 113, 118 (garages), and 386 (Post Library).

Develop a "Preservation Plan" in Collaboration with the NPS The MPU and support documents accomplish the same goals as a traditional Preservation Plan. The Trust has appropriately documented and analyzed the cultural resources of the Main Post in order to make informed planning decisions and, in some cases, has committed to doing additional analysis (such as historic structures reports or HSRs) where the information could help inform a better preservation outcome. These

documents would be developed with NPS and other signatory and concurring party input. Additionally, the Trust has agreed to aggregate its existing cultural landscape documentation into a Cultural Landscape Report following NPS-28, Cultural Resource Management Guideline.

Eliminate Traffic Lights The final MPU commits to avoiding installation of traffic lights on the Main Post.

Limit New Construction at the Building 93 Site, or Relocate a Museum to the Commissary Site per the PTMP Under the final MPU, no new construction is proposed at the Building 93 site, and non-historic Building 93 would be reused for new park-focused or visitor-serving uses. No new construction is proposed for the Commissary site under the final MPU.

Reduce Footprint, Scale, Massing, and Height of the Proposed Lodge The lodge has been revised to reduce the scale, massing, and height of the new construction and to incorporate adjacent historic buildings into the program. Total new construction has been reduced to 70,000 square feet. New construction in the revised scheme would be broken into separate, smaller buildings to resemble the historic pattern of development on the site, and arranged in a manner that would not create a hard building plane on the east edge of the Main Parade. New buildings would be lower than Buildings 86 and 87, and a historic structures report (HSR) with treatment recommendations would be developed for those buildings and to guide development on the site.

Reduce the Number of Road Closures The final MPU proposes to remove automobile traffic from existing historic streets (portions of Sheridan Avenue and Arguello Boulevard) to improve pedestrian connectivity, accessibility, and circulation. These roads date to the 19th century and thus were not built for automobile traffic. While removal of cars and asphalt would alter the present-day appearance and function of the contributing resources, features of the rehabilitated roads, including width, alignment, and paving materials, would be historically compatible. This provision would protect the overall historic circulation pattern at the Main Post, return some roads to their pre-automobile function and appearance, and avoid adverse effects on the resources. Additional reviews for these conversions are provided for in the stipulations of the PA-MPU (Appendix B of the final SEIS).

97 Guidelines in the Main Post Update if Followed Would Result in an Adverse Effect on the NHLD

While the guidelines in the MPU are generally based on research and guided by the complex history of the Presidio, there are serious conflicts and contradictions in them. It appears that the basic broad policy and framework issues are based on actual analysis and documentation, but they falter in the individual details relating to new construction or other proposed changes. The guidelines appear to be too lax, and weakened to allow for specific project goals that do not sufficiently relate to or reinforce these broad policies. If followed, they would result in an adverse effect upon the NHLD. Guidelines should simply state that any future development should conform to the Secretary of the Interior's Standards and result in no adverse effect.

Response Projects under the final MPU would have a comprehensive set of design guidelines, both district-wide and site-specific, that would direct the development of each project. The Main Post chapter of the PTMP contains district-wide guidelines such as "ensure that new construction is sited and configured to be compatible with the historic

district." These PTMP district-wide guidelines remain applicable to all projects under the MPU. Site-specific design guidelines for MPU projects (such as height limits) would follow these district-wide guidelines and would follow further parameters developed during the Section 106 consultation on the MPU (such as square footage caps for new construction, setback requirements, and requirements for orientation of new construction). Additional site-specific guidelines would be developed using historic structures reports (HSRs) for some of the projects under the MPU. Application of these design guidelines would take place throughout project development via multi-step project reviews described in the PA-MPU (Appendix B of the final SEIS). Furthermore, the 2007 Main Post Planning & Design Guidelines will be updated to address the projects described in the MPU and will remain applicable to the district as a whole.

98 Impacts on the NHLD Should Be Fully Evaluated and Alternatives are Inconsistent with the Secretary of the Interior's Standards

The SEIS is inadequate because it does not fully evaluate the impacts on the NHLD as a whole. Furthermore, Alternatives 2, 2A, and 3 are inconsistent with the Secretary of the Interior's Standards. The standards clearly permit a historic resource to be given a new use, but they require "minimal changes to the defining characteristics of the site." They also specify that "new work… shall be compatible with the massing, size, scale, and architectural features" of the historic resources. The issues of "minimal change" and compatibility of the proposed new structures with the historic resources are central in the evaluation of the various alternatives.

Response Potential impacts on individual historic resources and the NHLD as a whole (if applicable) are analyzed for each of the alternatives in Section 3.6 Historic Resources and in Section 3.12 Cumulative Impacts of the final SEIS. Potential adverse effects, such as alteration of a property that is not consistent with the Secretary's Standards for the Treatment of Historic Properties, have been identified through the parallel Section 106 consultation process under the National Historic Preservation Act and analyzed in the SEIS. While several of the alternatives may result in negative impacts on historic resources, this does not preclude them being analyzed as reasonable alternatives. To the contrary, the NEPA's "twin purposes" of improving federal decision making and informing the public are accomplished largely through a thorough examination of alternatives.

99 The CAMP Jeopardizes the Integrity of the NHLD

Because the new building as proposed would diminish the integrity of multiple contributing resources and aspects of the historic scene, it would have a significant impact on the historic Main Post and potentially the NHLD. The preferred alternative is not significantly different in this respect from the original proposed alternative. The sprawl and increased hardscape more than offset whatever amount the building height has been reduced.

Response In response to comments, the proposal for a museum of contemporary art at the southern end of the Main Parade has been withdrawn.

100 The CAMP Does not Belong on the Main Post

The proposed museum building is incongruous with the Main Post's unique architectural character, would derogate the Main Post's historic setting, and would jeopardize the integrity of the Presidio NHLD with its dominating, sprawling presence.

Response In response to comments, the proposal for a museum of contemporary art at the southern end of the Main Parade has been withdrawn.

101 The Massing of the CAMP Disrupts the Main Post's Historic Setting

The proposed site of the art museum is an inappropriate intrusion that would disrupt the Main Post's historic setting. As explained in the draft FOE, the art museum at the site would place a large mass of contemporary construction directly in front of Building 100. This would change the contributing building's historic design as a barracks fronting a parade ground in a manner inconsistent with the Secretary's Standards, and result in an adverse effect. Without dramatic alterations to the museum massing, this adverse effect would be impossible to mitigate.

Response In response to comments, the proposal for a museum of contemporary art at the southern end of the Main Parade has been withdrawn.

102 The CAMP Would Interrupt the Rhythm of Open Space and Built Environment and Should Be Relocated Outside the Main Post

The height and breadth of the art museum would intrude upon and detract from the rhythm, scale, and proportion of the Main Post. As stated in the draft FOE, in the location proposed, a large new building would interrupt the rhythm of open space to built environment, thus changing the character of the Main Post's physical features within its setting that contribute to its historic significance. The draft FOE concludes that the action would be inconsistent with the Secretary's Standards and would result in a direct adverse effect on the Main Parade and surrounding contributing buildings. Without dramatic alterations to the museum design, massing, and location, this adverse effect would be impossible to mitigate and the project should be relocated outside the Main Post.

Response In response to comments, the proposal for a museum of contemporary art at the southern end of the Main Parade has been withdrawn.

103 The Impacts of Outdoor Sculptures Should Be Assessed

The draft SEIS states that the CAMP would install large outdoor sculptures in the historic landscape but does not properly identify and assess the adverse effect. Without identifying how sculpture would be selected for outside display and what the criteria would be for impacts of sculpture on the integrity of the Main Post, the draft SEIS does not support its assertion that the introduction of sculpture would have a neutral impact on the integrity of the Main Post. The SEIS should provide the information essential to properly assess the impacts of the outdoor sculptures.

Response In response to comments, the proposal for a museum of contemporary art at the southern end of the Main Parade has been withdrawn. As such, no outdoor sculptures are currently being proposed for this site.

104 The Lodge Should Not Be Built as Described

Despite the most recent lodge concept modifications, the proposed facility's height, bulk, location, and potential impact on known and unknown archaeological resources would result in adverse effects on NHLD resources. Its scale is out of place and would form a barrier, as opposed to a connection, between the Main Parade and Old Parade grounds. The Trust should re-engage the public on the design, scale, and massing of the lodge. Developing lodging on the Main Post should focus at least largely on reusing existing structures, including Pershing Hall and the Montgomery Street Barracks. There are no objections to using the Building 34 site for lodging if the scale is appropriate. The new building should maintain a similar footprint as the current one.

Response In response to comments received during the NEPA process and Section 106 consultation, the amount of new construction for a lodge has been reduced and design concepts have changed substantially to reflect the scale and footprint of the historic barracks that once lined Graham Street. Impacts on archaeological resources would be avoided or minimized through the development of archaeological treatment plans and design reviews. Additional design reviews involving interested parties and the public would take place as the lodge concept is developed, according to the terms of the PA-MPU (Appendix B of the final SEIS). The lodge on Graham Street may incorporate Buildings 86 and 87. Additionally, the final MPU separately provides for the rehabilitation of Pershing Hall for lodging.

105 New Buildings or Landscaping That Compromise the Qualities of the Main Parade are Inappropriate and Should not Be Considered

The primary distinguishing features of the Main Parade are its openness, its shape, and the relative modesty in scale and design of the buildings that define the parade ground. These features cannot be compromised without severely damaging the cultural landscape. A restaurant on the Main Parade (Alternative 2A) would compromise the openness of the parade ground. The new tree plantings proposed for the northeast side in several alternatives are inappropriate as they would compromise the isolation of the Centennial tree. The two trees should remain the only trees in the area.

Response Historically, the Main Parade was lined with buildings on both sides and the open space was actually narrower than the current seven-acre asphalt parking lot. The Montgomery Street Barracks, which border the northwestern edge of the parade grounds, were noted in the 1993 National Historic Landmark update for being “one of the Presidio's most focal and impressive architectural groupings.” New construction proposed for the Presidio Lodge in the final MPU is not designed to compete with the grand scale of the Montgomery Street Barracks but rather to reflect the group of buildings that once dotted the opposite side. The Centennial and Bicentennial trees would be retained and incorporated into a landscape that complements the historic dimensions of the Main Parade.

106 Traffic Signals May Affect the Presidio’s Overall Character and Historic Setting

The SEIS should describe the impact of the proposed installation of traffic signals at many intersections within the Presidio on the overall character and historic setting.

Response The final MPU commits to avoiding installation of traffic signals on the Main Post.

107 The Trust Should Include National Park Service Expertise in Interpreting Historic Features of the Presidio

Interpretation of the Presidio's natural, historic, and cultural resources is the primary responsibility of the National Park Service (NPS) in cooperation with the Trust.

Response The Trust recognizes the importance of interpreting the Presidio's natural, historic, and cultural resources for the public. In passing the Presidio Trust Act, Congress found that "the Presidio's significant natural, historic, scenic, cultural, and recreational resources must be managed in a manner which is consistent with sound principals of land use planning and management…" Consistent with the Trust Act, the Trust continues to work cooperatively with the NPS in "providing public interpretive services, visitor orientation, and educational programs on all lands within the Presidio." Recently, the Trust and NPS entered into a collaborative agreement to inform future development of a visitor center at the Main Post.

108 Mitigation Measures Relating to Historic Resources Are Vague

There are instances where the cumulative effects assessment relies on mitigation measures that may result from the ongoing Section 106 consultation process. The results of the Section 106 process may not be able to offset the effects of the preferred alternative or its contribution to the cumulative impact scenario. Many of the mitigation measures are lacking in detail because the Section 106 compliance process has not been completed. Until the Section 106 process is complete, the Trust is unable to project the degree to which mitigation measures might reduce or offset many of the impacts of the preferred alternative.

Response The parallel National Historic Preservation Act (NHPA) Section 106 consultation process has identified measures to avoid, minimize, or mitigate adverse effects to historic resources from the proposals contained in the final MPU. These measures have been incorporated into the PA-MPU (Appendix B of the final SEIS) that resolved the Section 106 consultation. These same measures have also been identified in Section 3.6 Historic Resources of the final SEIS. A Record of Decision memorializing the Trust's determinations for the Main Post will fully account for the provisions of the Section 106 consultation and the effect of the proposed project on historic properties as described in the PA-MPU.

2.14 ARCHAEOLOGY

109 The Impact on El Presidio Cannot Be Fully Assessed

Neither the Trust nor the NPS has ever conducted investigations that are sufficient to define the boundaries of the El Presidio archaeological site. Hence, while the Trust claims that the preferred alternative includes modifications designed to avoid the northern and western extents of El Presidio, no archaeological evidence has been provided to substantiate that claim. Because the full extent of the El Presidio site is unknown, the impact of the preferred alternative on this unique archaeological resource cannot be fully assessed.

Response The archaeological remains of El Presidio not only consist of architectural elements but also reflect the many and various ways the colonial community of up to 400 people worked and manipulated the

surrounding landscape. Outside the immediate vicinity of El Presidio's walls, the site is discontinuous, composed of myriad elements such as work yards, corrals, gardens, trash pits, and labor camps that are separated from others. It therefore follows that a uniform boundary for El Presidio is very problematic to define. The 2008 NHL update expanded the area of El Presidio, especially in the northern and eastern directions; this expanded area envelopes the site within a buffer that extends to include known intact features and other areas where adjacent remains are predicted. Site-specific testing around El Presidio was sufficient to determine impacts of the History Center (Alternative 3) and the CAMP (which has since been withdrawn from further consideration) and affirmed the northern boundary in the area south of the reduced lodge footprint under the mitigated preferred alternative (Alternative 2).

110 Studies are Insufficient to Adequately Identify and Assess Archaeological Resources That may Be Affected by the Lodge

Studies to date do not support the Trust's conclusion that the proposed lodge site is located outside of El Presidio. Recent studies found Spanish colonial/Mexican-era artifacts within or adjacent to the proposed site, and are not adequate to assess the presence/absence or integrity of Spanish-colonial/Mexican archaeological resources within the area that would be affected by construction of the lodge.

Response Much of the proposed lodge would overlap with and replace the footprint of existing Building 34; therefore, archaeological testing for the lodge consisted of 250 linear feet of excavation within the area of proposed construction south of Building 34. Three trenches were placed at the southern end of the proposed footprint and one trench was placed within the northern extent of the site of El Presidio as identified in 2008. These four excavations were designed to further identify F:9 United States Quadrangle West Side and to provide additional data for the northern boundary of El Presidio. A variety of archaeological deposits consistent with F:9 still exist. The southernmost trench, placed within the boundary of El Presidio, recovered several artifacts and features consistent with F:1 El Presidio. Because these findings correlated with previous archaeological models, the Trust concluded that further destructive testing was unnecessary to understand environmental consequences and to make an assessment of effect. In the mitigated preferred alternative, the lodge has been reduced in size and sited farther from El Presidio as identified in 2008 and based on the recent archaeological testing.

111 Parking and Traffic Patterns Would Prevent Long-Term Interpretation and Research at El Presidio

The Trust should not be planning to use the *plaza de armas* site for over 20,000 square feet of parking spaces. The Trust justifies the removal of Buildings 40 and 41 by arguing that their removal is necessary to interpret the plaza. But these two historic buildings, which are contributing elements to the NHLD, each cover an area of only 4,410 square feet per building, or a total of 8,820 square feet (only a third of the area that the Trust proposes to dedicate to parking within the plaza). The Trust is making parking a priority over protection of significant historic resources. Any management plan for the Main Post should remove all parking from the historic plaza of El Presidio to facilitate research, preservation, and public interpretation of this significant archaeological resource.

Response The Trust has made interpretation a priority over parking at El Presidio and would reduce parking on El Presidio from 252 to 75 daily spaces. Furthermore, the Main Post Update provides for occasionally closing the *plaza de armas* to all traffic and parking to facilitate commemorations, excavation, and other public programming.

112 The Trust's Approach to Archaeological Mitigation Is of Concern

The SEIS generally assumes that archaeological resources that may be affected by the preferred alternative are eligible under Criterion D. Along these lines, the mitigation measures identified by the Trust focus on either avoidance or recovery of information from archaeological resources that may be disturbed or destroyed by actions taken under the preferred alternative. Mitigation measures geared toward data recovery are not by themselves sufficient for archaeological resources that are eligible for listing on the National Register of Historic Places (NRHP). The Trust should evaluate each known and predicted archaeological feature that may be affected by the preferred alternative with regard to all the NRHP criteria, and develop mitigation measures as appropriate.

Response The NPS and Trust have evaluated the predicted and known archaeological features of the NHLD. The archaeological management assessment developed early in the design process for each project described in the mitigated preferred alternative will determine if further site-specific evaluations are necessary to determine appropriate treatments. The archaeological mitigation measures can be used individually or in tandem with other mitigations and represent the range developed in consultation with consulting parties to the Section 106 process under the NHPA.

The following discussion summarizes comments received on each mitigation measure, followed by the Trust's response.

- Mitigation Measure AR-1 *Avoidance*

Although the Trust states that its first priority for mitigation would be avoidance of adverse effects, the SEIS states that archaeological features would be adversely affected by the lodge and museum identified in the preferred alternative. If the Trust is serious about avoiding adverse effects on archaeological sites, it should more aggressively pursue reuse of existing structures and identification of construction sites that are not located within or in close proximity to known archaeological resources.

Response The art museum proposal has been withdrawn and the potential impacts on the western extent of F:1 El Presidio, therefore, would be avoided. In the mitigated preferred alternative, the lodge has been reduced in size and positioned farther from the site of El Presidio as delineated in the 2008 NHLD update and based on recent archaeological testing. Historic Buildings 86 and 87 may be incorporated into the scheme for the proposed lodge, and other historic buildings (e.g., Building 42, Pershing Hall) would be rehabilitated separately to accommodate lodging.

- Mitigation Measure AR-2 *Archaeological Research Design*

This measure leaves open the question of whether or not site-specific archeological research design(s) will be prepared for the new Main Post projects. The Main Post Archaeological Research Design cannot be substituted for a site-specific, project archeological research design since it does not address site-specific impacts.

Response The Archaeological Research Design for El Presidio and the Main Post (titled Revelar) serves as the foundation to support archaeological excavation and the framework to add further avenues of inquiry and site-specific details as necessary. The PA-MPU (Appendix B of the final SEIS) describes a review process for Revelar and treatment plans that would add site-specific information to the research design.

- Mitigation Measure AR-5 *Alternative or Creative Mitigation*

This measure creates a bad loophole that would allow the Trust to expedite construction activity at the expense of archaeological resources. The Trust should commit to a proactive planning process for new construction in archaeologically sensitive areas that acknowledges the likelihood of encountering deeply buried archaeological resources and plans accordingly for that likelihood. Otherwise, alternative mitigation could lead to the loss of unique and incomparable archaeological resources that provide entirely new and unparalleled sources of information about the history of the Presidio. If the cost of mitigation is too great, then the project should be redesigned for avoidance.

Response In the final SEIS, the mitigation measure has been renamed and modified to avoid confusion. This measure is meant to be used in tandem with data recovery, not in lieu of it. The measure is not designed to avoid costs, as was implied in the question. This mitigation serves to amplify the public benefit from the recovery of important information.

113 Consultation with Affected Native American Descendent Communities Has Been Inadequate

Consultation with Native American individuals and groups was initiated extremely late in the process, long after the Trust had identified the preferred alternative. The Trust should expand its Native American consultation program for the Main Post to include all Native American groups whose heritage is connected with the Main Post, prehistoric and historic.

Response The Trust consulted with representatives of Native American groups identified by the California Native American Heritage Commission as having knowledge of cultural resources in the project area and City and County of San Francisco during the identification/assessment phase of the consultation. Research by Trust archaeological staff and their consultants, including archival research, GIS analysis, and geo-archaeological assessments of Presidio soils and sediments, suggests that there are no anticipated project-related ground disturbances in areas that have known sensitivities to Native American archaeological sites. Nevertheless, the Trust conducted outreach via phone, letter, and email to representatives of these groups and has incorporated comments from that consultation into the PA-MPU (Appendix B of the final SEIS).

2.15 VISUAL RESOURCES

114 More Detailed Renderings of Proposals are Needed

The supplement does not provide any meaningful simulations or architectural renderings of the proposed new museum and lodge buildings. Only outlines of the proposed buildings, devoid of any details regarding surface, massing, or architectural style, are provided. These renderings seem to understate the visual impacts of the proposed buildings on the Main Post. This is troubling, particularly when comparing outline renderings with the renderings provided for

Alternative 2, which are more detailed and specific. Please provide more detailed renderings of the proposals to help the public understand their full visual impact.

Response The simulations contained in the final SEIS have been improved to display more information. The previous "wireframe" technique is not used; instead, volumetric shapes with color and a limited amount of detail are now shown to allow the public to better understand the potential effect on the visual setting of the Main Post.

115 The Lodge Creates a Visual Barrier and Changes the Historic Character of the Main Post

The 480-foot-long, box-shaped, flat-roofed lodge would become a massive visual barrier between the Old and the Main Parade grounds, as opposed to providing a connection between the two areas. The lodge would be very intrusive visually and would dramatically change the character of this historic area, not preserve and enhance it.

Response In the mitigated preferred alternative (Alternative 2), the design of the lodge has been changed to reflect the footprint of historic barracks that once occupied the site. Each of the separate structures would be a small two-story building with a gabled or hipped roof. This revised design is more in keeping with the proportions of the surrounding historic buildings and more compatible with the historic Graham streetscape than designs previously proposed for this site. The revised design also incorporates spaces between the buildings ranging from 10 to 20 feet in width. By reducing the size of the individual buildings and by maintaining spaces between them, a "massive visual barrier" would be avoided and future views through the lodge site would be increased. Because the layout of the lodge would be generally based on the historic pattern of buildings previously built on Graham Street, it would preserve and enhance the historic character of the Old Parade.

116 The Architecture of the Art Museum and Lodge Should Be Compatible with the National Historic Landmark District

The design of the art museum and the lodge are not compatible with the National Historic Landmark District. Without mimicking the historic buildings, any new building should include or at least embrace their hallmark characteristics, including color, rooflines, and style. The designs of the art museum and the lodge, as proposed, fail to accomplish this. These structures would be inconsistent with the stated design guidelines, in that they would not be responsive to the surrounding site configuration and adjacent open spaces, and would not be compatible with the massing, size, and scale of the surrounding historic buildings.

Response The contemporary art museum proposal has been withdrawn from further consideration. Additionally, under the mitigated preferred alternative (Alternative 2), the size and design of the lodge have been modified to reduce potential impacts. The new design separates the lodge into small-scaled buildings with a layout generally based on the historic pattern of buildings previously built on Graham Street. With these changes to the design, the lodge would be responsive to the surrounding site configuration and adjacent open spaces and would be compatible with the massing, size, and scale of the surrounding historic buildings.

117 A Visualization of the Anza Esplanade and Presidio Lodge Is Needed

A mockup or renderings of the Anza Esplanade and the lodge is needed so that one can visualize the cumulative impacts on Main Post of both

projects in terms of the seven characteristics of historic integrity. How do the mass, height, scale, association, etc. of one project combine with the other? How crowded will the pedestrian feel from the proximity with the hotel? Are outdoor tables from the hotel next to the Anza Esplanade permitted?

Response The PA-MPU would guide the development of designs for the lodge. The design concept under consideration for the lodge takes into account the design concept and function of the Anza Esplanade. At this time, both projects are in the concept phase. Decisions regarding details such as construction materials, site furnishings, and plantings have not yet been made. The best representation of how the two projects might look together can be found in the district-wide rendering in the MPU; additional graphics are in the PA-MPU. Both projects would be subject to additional design review, which would consider the height, organization, and massing of the lodge on the site, the relationship between the two projects, and other factors. Constraints for the lodge are described in the Project Descriptions section of the MPU, which corresponds with the PA-MPU. A concept diagram for the Anza Esplanade is also included as in the PA-MPU in order to serve as a starting point for further design discussions. Designs for both the lodge and the Anza Esplanade would be directed by the Main Post Planning and Design Guidelines, Cultural Landscape Report, and further consultation among parties to the PA-MPU and the public.

2.16 VISITATION

118 Additional Information on Visitor Use and Experience Should Be Provided

The enhancement of the visitor experience at the Main Post is one of the key objectives of the undertaking and should be analyzed in a manner similar to what was in the final PTMP EIS. This would then enable the reader to compare and reflect upon the impacts of the alternatives on overall visitor experience within a national park environment.

Response Section 3.9 Visitation was revised to clarify the changes in visitor facilities and programs under each alternative and the impact that the projected numbers of visitors would have on the visitor experience. The methodology and analysis of visitation levels in the Main Post Update are consistent with the approach used in the final PTMP EIS.

119 Visitation Impacts are Based on Inadequate Information, Improper Comparisons, Inaccurate Presentations of Data, and Faulty Methodology

The visitation, traffic, and parking estimates do not take into account seasonal variations in attendance at the Main Post buildings. The CAMP estimates are too low, while several of the other building estimates appear unsupported or too high.

Response All visitation estimates are estimates of the total number of visitors each year. Average annual daily visitation was also calculated for each alternative, but only for the purposes of comparison among alternatives. The calculated average annual daily visitation was not used in any analysis, and to eliminate confusion about its intended purpose, the average annual daily visitation estimate has been deleted from the final SEIS.

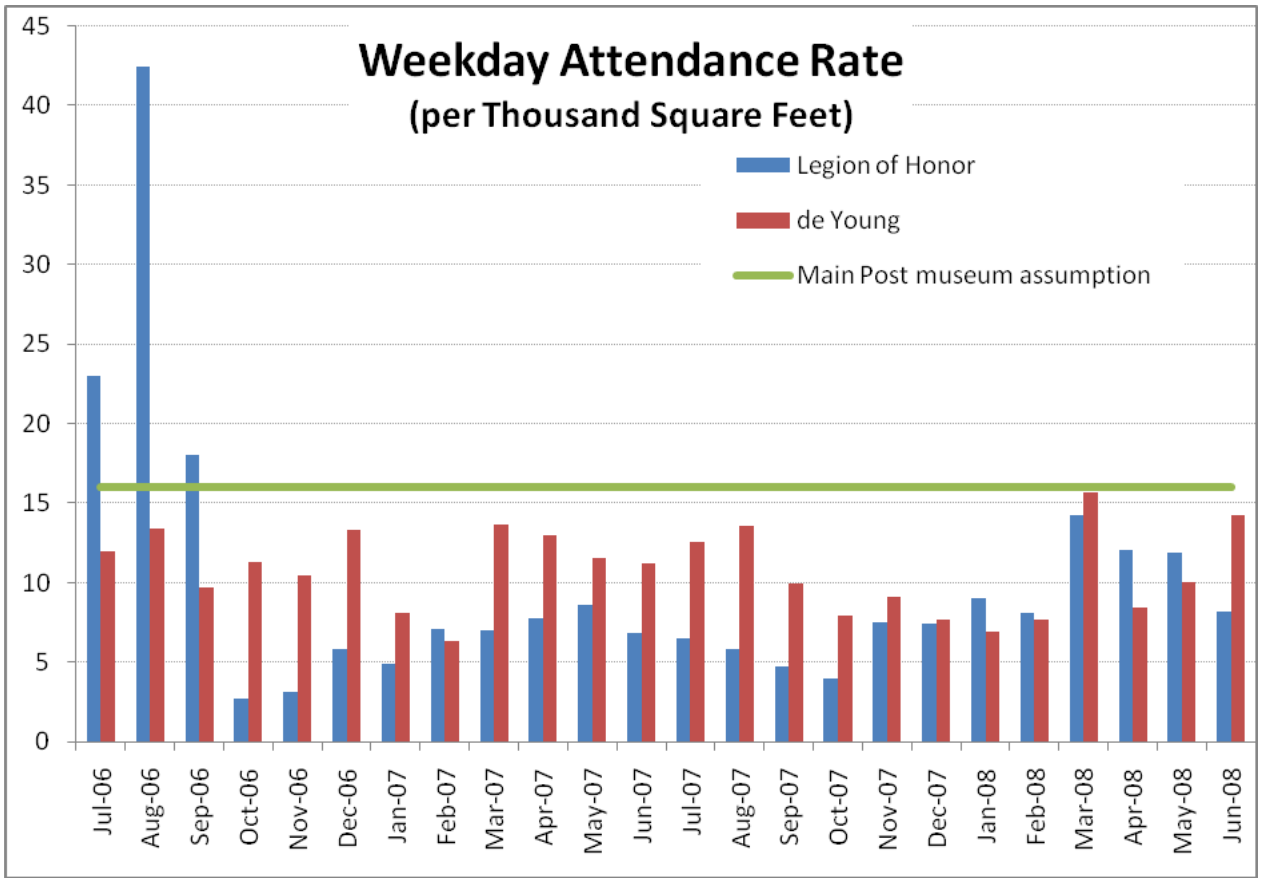
The visitation estimates for the CAMP (formerly part of Alternative 2) and History Center (Alternative 3) were those provided by the project applicants in their respective proposals. These visitation estimates were checked against the annual visitation per thousand square feet from at the de Young Museum. The de Young Museum is approximately 300,000 square feet (in floor area) and attracted between 1.1 and 1.2 million visitors in 2007, for a derived annual visitation rate of 3.6 to 4 annual visitors per thousand square feet of floor area. The proposed 100,000-square-foot (gross exterior square footage) museum of contemporary art was assumed to attract 300,000 to 400,000 visitors per year and the 50,000-square-foot (gross exterior square footage) History Center was assumed to attract 150,000 visitors per year. These visitation estimates are generally consistent with the rates derived from the de Young Museum. Since the visitation estimates are on an annual basis and they were checked against annual visitation to the de Young Museum, the estimates include day-to-day variability and seasonal peaks in attendance.

Traffic estimated for the CAMP (formerly part of Alternative 2) and the History Center (Alternative 3) in the draft SEIS and final SEIS is not based on annual estimates divided by days in the year, as asserted by the commentor. The weekday trip generation rate used for these projects reflects a typical peak day. The chart below provides a comparison of the assumed attendance rate (person round-trips per thousand square feet) for the history center compared to average weekday attendance rates for the Legion of Honor and the de Young Museum by month over the past two years. The assumed trip generation rate for the history center is 32.1 two-way (or 16.05 round-trip) person trips per thousand square feet, and is well above the average monthly weekday attendance for these two museums, with the exception of the Monet exhibition at the Legion of Honor.

Annual visitation estimates for specific projects (e.g., Presidio Lodge, History Center, YMCA Fitness Center) at the Main Post were used when available. In the draft SEIS, in order to estimate visitation for non-specific uses (e.g., cultural/educational space), the daily trip generation rates were multiplied by approximately 330 days per year to determine visitation to general uses. This same approach was used for retail uses and restaurants. A later comparison of restaurant visitation assumptions to actual restaurant activity in the Presidio revealed that this approach grossly overstated the number of restaurant visitors, likely because the restaurant use trip generation rate reflects a busy Friday rather than a slower-paced Tuesday. Similarly, a comparison of this methodology to visitation and attendance rates for less intensive cultural/educational uses (e.g., the International Center to End Violence) indicated that visitation for these non-specific uses was also grossly overstated. Appropriate adjustments were made to the preferred alternative in the supplement to the draft SEIS. These same adjustments have also been made to all alternatives in the final SEIS.

120 The Art Museum Proposal Has No Relation to the Presidio's History

As a military base under the flag of several nations, units stationed at the Presidio have responded to continuing national and local priorities. The Trust does have plans to protect the Presidio's underlying historic resources, and in cooperation with the NPS, to provide related interpretation and education programs for the visiting public. However, building a major new museum (CAMP) with contents that have no relation to the Presidio's history would not contribute to the public appreciation or understanding of the national park and historic landmark district.



Response The mitigated preferred alternative (Alternative 2) no longer includes a museum of contemporary art on the Main Post.

2.17 RECREATION

121 Removal of Recreational Facilities Should not Occur Without Plans for Replacement

The removal of the bowling alley, tennis courts, YMCA, and adult health care and child care buildings should not occur without specific plans for replacement. If the Trust is going to remove these buildings, the Trust and the developer should move those tenants with no cost to the tenants

and re-rent to those tenants on the same terms and conditions as their old leases (same price per square foot).

Response The Trust will make every effort to find suitable space to relocate existing tenants and their programs. However, the Trust is not in a position to underwrite the capital improvements, and must ensure that tenants can demonstrate the overall feasibility of their proposals. The impacts of the removal of the recreational facilities on recreational use and activities are discussed in Section 3.10 of the final SEIS.

122 All Tennis Court Gates Should Be Open for Public Use

Tennis courts gates are locked and only the YMCA has keys to open and use these courts. These are public courts and should be made available to anyone who wants to play regardless of special exceptions made to the YMCA for their exclusive use. The Trust cannot deny access to public courts paid by public money just because the Trust worked out a deal for increased fee income from the YMCA.

Response To make the park accessible to a wide range of programs, the Trust must rely on partnerships, including that with the Presidio Community YMCA, to provide those programs. Creating a dynamic national park that offers appropriate recreational programs requires considerable external support.

2.18 WATER RESOURCES

123 The Water Resources Analysis Is Inadequate and Unsubstantiated

Thick willow stands indicating shallow groundwater are present at the site above the art museum location for Alternative 2A. A spring adjacent to the tennis courts at Infantry Terrace still flows. This information is in contrast to the draft SEIS assertion that groundwater is anticipated to be 50 feet below the existing surface. It is suggested that “perched” groundwater is identified at 26 feet below the surface. The draft SEIS should support the assertion that groundwater is actually perched as differentiated from subsurface hydrology. The draft SEIS should identify the geotechnical investigations referenced and the locations of these investigations.

Response The water resources analysis in Section 3.11 Water Resources of the final SEIS has been updated to include the wetland located in the vicinity of the Infantry Terrance tennis courts. The limits of the wetland are identified in the Presidio wetland resources report dated April 2003. This wetland is the likely source of headwaters for the stream that originally flowed through the Main Post area and contributes to the perched groundwater encountered in the test borings. The wetland would remain undisturbed under all alternatives.

Section 3.11 Water Resources of the final SEIS identifies the investigations and geotechnical studies that encountered subsurface water. The relevant reports are available in the Presidio Trust Library.

124 Significant Impacts to Hydrology Would Occur Contrary to Draft SEIS Assertions

Data from Trust investigations indicate that significant impacts could occur from the proposed action to hydrology. The “Draft Cut and Fill Map 1871-2000” indicates a fill thickness of about 25 feet at the art museum sites for Alternative 2 and 2A, and suggests a steadily decreasing depth (much less than 50 feet) of the former stream ravine towards the south and under the museum sites in Alternatives 2 and 2A.

This 10- to18-foot depth is consistent with the spring north of the tennis courts and the willow stands just to the south of the Alternative 2A art museum site. These data suggest that the assertion that the "groundwater is anticipated to be 50 feet below the existing surface" is incorrect and that the hydrologic analysis is therefore faulty.

Response The water resources analysis in Section 3.11 Water Resources of the SEIS has been updated to include the wetland located near the Infantry Terrace tennis court and to better describe the groundwater table experienced at 50 feet below ground surface and the perched groundwater experienced at 18 to 25.5 feet below ground surface. This wetland is the likely source of headwaters for the stream that originally flowed through the Main Post area and contributes to the perched groundwater encountered in the test borings. Improvements constructed at the Presidio Lodge site (Alternative 2) and History Center site (Alternative 3) would affect the perched groundwater. These impacts are expected to be localized as the groundwater would flow around the below-grade structures. Below-grade structures would require waterproofing to prevent seepage but would not require an active dewatering system.

125 Springs North of Infantry Terrace Tennis Courts Should Be Investigated

The draft SEIS should investigate the springs that come to the surface and the possible wetland area to the north of the Infantry Terrace tennis courts and the wetland's connection to the now-buried creek.

Response The location of the Infantry Terrace wetland has been added to the water resources analysis in Section 3.11 Water Resources of the final SEIS.

126 Stormwater Options Should Be Investigated

The draft SEIS should analyze options other than directing stormwater to the combined sewer system and should determine the impact on the wet weather capacity of the city's combined sewer system.

Response The Main Post has separate stormwater and sanitary sewer systems. Stormwater from the Main Post district is directed to the bay through either direct outfalls or Crissy Field Marsh. The analysis has been updated to clarify this point. Additionally, the SEIS mitigations include incorporation of recommended Best Management Practices during projects implementing the Main Post Update to reduce stormwater runoff and improve water quality.

127 Other Types of Low-Water Impact Plantings Should Be Studied

Low-water impact plantings should emphasize climate-appropriate and wildlife-useful vegetation for the greening of the Main Post rather than solely an expansive lawn.

Response During planning for the Main Parade, many different treatments and design features were considered, reviewed with the public, and ultimately rejected as incompatible with the goals of the project. Drought-tolerant trees and massed shrub plantings were ruled out as incompatible with the historically open character of the site. Other more drought-tolerant ground covers and native grasses were ruled out as they are not compatible with public use of the space. The Main Parade will incorporate a state-of-the-art, water-efficient irrigation system that is plumbed to use recycled water. It will be planted with a turf grass that is moderately drought-tolerant, non-invasive, and durable, and will be maintained in a fashion that is consistent with the Trust's integrated pest management program.

128 Increases in Sewage Flow to the City System Should Be Determined

The draft SEIS does not adequately determine the volume of additional flow of wastewater from the proposed action to the city's combined sewer system and the impact of the additional volume on the available storage capacity for wet weather flows. The draft SEIS should identify actions that would respond to capacity impacts of the project.

Response The sewage generated by all alternatives is discussed in Section 3.13 Other Impacts ("Water Supply and Wastewater" subsection) of the final SEIS. Estimates are consistent with the flows evaluated as part of the PTMP. Using the usage factors included in the PTMP, Alternative 2 would produce approximately 5 percent more wastewater than Alternative 1, or an approximately 7,700-gallon-per-day increase. This increase would represent an approximately 1-percent increase in Presidio-wide wastewater flows and would be well within the existing system capacities. Additionally, wastewater generated from the Main Post would be tributary to the proposed recycled water treatment plant, which would mitigate any impacts on the city's combined sewer system.

129 Water Demands Should Be Identified

The draft SEIS does not adequately identify the amount of additional water demand for the proposed action and whether this amount is consistent with previous projections made for the San Francisco Public Utilities Commission (SFPUC) plan. The draft SEIS should analyze the amount of water used on the greening of the Main Post and by the 2.4 million visitors in Alternative 2. Since no water reclamation plant has been built, and there is no assurance that one would be built, water to green the Main Post's open space would be shipped from Hetch Hetchy Reservoir to supplement water from Lobos Creek. The draft SEIS should identify impacts on the Tuolumne watershed from the proposed action.

Response The projected domestic water demand is discussed in the Section 3.13 Other Impacts ("Water Supply and Wastewater" subsection) of the final SEIS. Water demand from Alternative 2 would be slightly higher than demand from Alternative 1, representing an increase of approximately 5 percent.

The Trust produces approximately 80 percent of the domestic water used at the Presidio from local resources (Lobos Creek Water Treatment Plant). The impact of Alternative 2 on the Tuolumne watershed would be negligible, as the expected increase in domestic water demand would be nominal and would be primarily met by local sources.

The irrigation demand for the greening of the Main Parade was evaluated as part of the Main Parade EA. As discussed in the EA, the SFPUC identifies the Presidio as an "in-city customer/non-residential" and therefore historical water use and projected water demands of Area B are included in its Urban Water Management Plan. These projections are based on the City and County of San Francisco Planning Department's Land Use Allocation 2002, which takes into account projected future development within the Presidio. Because the Presidio is a retail customer, the purchase and use of water from the SFPUC are subject to the SFPUC's water shortage regulations, including mandatory water rationing programs and rate structures adopted during drought conditions

The Trust is committed to reducing the demand for off-site water resources by conserving water and by implementing water recycling in northern and eastern sections of the park (see PTMP, page 55). Since beginning the project to build a recycled wastewater treatment plant in

2001, the Trust has completed project planning and environmental review; obtained a permit for the treatment, distribution, and use of recycled water from the Regional Water Quality Control Board; substantially completed the project design; and is in the process of engaging project partners to execute the project. The Main Parade would be served by the recycled wastewater treatment plant.

130 Impacts from Emerging Contaminants Found in Reclaimed Water Should Be Assessed

If reclaimed water is used to green the Main Parade, the draft SEIS should study the impacts on the environment from the emerging contaminants that pass through the treatment process. The draft SEIS should analyze the nature, extent, fate, and transport of potential contaminants that are released to the environment by reclaimed water.

Response Emerging contaminants, a collection of compounds consisting of trace amounts of pharmaceutical and personal care products, were evaluated in the Water Recycling Project EA in 2001. As discussed in the EA, trace amounts of these compounds in the recycled water would not adversely affect landscape irrigation or any other proposed uses of the recycled water at the Presidio and would not be expected to adversely affect groundwater quality. Furthermore, the Trust committed to keeping abreast of research in this area as this was a new area of concern.

Since 2001, emerging contaminants have been the focus of much research due to their potential impacts on human and environmental health. Based on the available scientific research, emerging contaminants in recycled water used for irrigation are expected to result in minimal human health risk due to the extremely low levels of these compounds in the plant effluent and the low levels of exposure that are expected from use of areas irrigated with recycled water (i.e., picnicking, children playing, sports participation). Application of recycled water at rates to support drought-tolerant grasses would minimize the potential transport of any residual compounds into nearby groundwaters.

Additionally, the State Water Resources Control Board recently adopted a Recycled Water Policy with the purpose of promoting the beneficial use of recycled water. As part of this policy, the State Water Resources Control Board established a blue ribbon committee to look into emerging contaminants (referred to as constituents/chemicals of emerging concern [CEC] in the policy) and specifically monitoring requirements. The committee was tasked with looking into specific questions related to CEC in recycled water:

- What are the appropriate constituents to be monitored in recycled water, including analytical methods and method detection limits?
- What is the known toxicological information for the identified constituents?
- Would the constituents change based on level of treatment and use?
- What are possible indicators that represent a suite of CECs?
- What levels of CECs should trigger enhanced monitoring of CECs in recycled water, groundwater and/or surface water?

The Trust will continue to keep abreast of the blue ribbon committee's activities and will comply with any of the committee's findings that are incorporated into the Trust's permit from the Regional Water Quality Control Board.

131 Site-Specific Impacts of Main Post Bluff Underground Parking Should Be Evaluated

The SEIS defers analysis and environmental review of groundwater impacts associated with underground parking at the north end of the district. Site-specific analysis and environmental review should be conducted for alternatives that include new underground parking at the north end of the district. The potential impact on groundwater discharge to Crissy Marsh is of particular concern.

Response The CEQ NEPA regulations encourage federal agencies to "tier" their NEPA analyses to avoid repetition of issues and to focus on the issues for decision at each level of review, as is the Trust's practice and as has been done in the final SEIS. Because there is no site-specific proposal for underground parking at the Main Post bluff, groundwater impacts are too broad to analyze properly for any meaningful consideration. Based on information developed for the Doyle Drive tunnel within the bluff area, however, underground parking would most likely contain standard drainage features (i.e., a permeable gravel envelope or strip drains) around the structure so that groundwater would be expected to flow easily from the northern areas, under the parking, and toward the bay without being impeded.

2.19 CUMULATIVE IMPACTS

132 The Cumulative Total Impacts Should Be Assessed

The draft SEIS should assess the effect of one environmental consequence on another and determine the grand sum total effect of the increments. Various environmental effects are identified, but there is no detail regarding the incremental effects of the one on the other. Therefore, there has been no assessment of the cumulative total impacts. Further, there is no catalog of past, present, and future contemplated other projects and programs in order to assess their environmental impacts. Simple conclusory statements that there will be cumulative impacts are not adequate descriptions or determinations of cumulative impacts because they do not permit the public (or the Trust) to properly know what the cumulative impact would be, in kind, and/or extent.

Response The commentor is referred to Section 3.12 Cumulative Impacts in the final SEIS. The section tiers from the final PTMP EIS, which provided the context for the discussion and is summarized therein, and enumerates 10 past, present, and reasonably foreseeable actions, including projects by other agencies (i.e., Doyle Drive reconstruction) that were specifically considered in the analysis and are shown on Figure 37. These projects were based on scoping and specifically "cataloged" by the Trust[15] as relevant and useful to the cumulative impact analysis because they could have a significant cause-and-effect relationship with the direct and indirect effects of the mitigated preferred alternative and other alternatives. Specific resources that were discussed included the following: land use, transportation, parking, air quality, noise, historic resources, archaeology, visual resources, visitation, recreation, and water resources. No "simple conclusory statements" were given, but rather, sufficient (and for most resources, quantitative) information commensurate with the impacts of each action was presented

[15] *CEQ does not require agencies to catalog or exhaustively list and analyze all individual actions. The Trust did provide such an inquiry in its cumulative impact analysis, however, to "count what counts" to inform decision-making.*

to confirm that the cumulative effects of the mitigated preferred alternative, as well as the other alternatives, did not reach a point of significant environmental impact with the exception of historic resources and archaeology, for which additional detail was provided.

133 A Cumulative Impact Report Is Required

A "cumulative impact report," complete with pictures, maps, models, and whatever illustration is appropriate, is needed to show what the Main Post would look like after all the proposed projects are built out.

Response A complete picture of all past, present, and reasonably foreseeable actions, including rehabilitation of the Main Parade and projects by other agencies (i.e., Doyle Drive reconstruction) that could reasonably be expected to occur within the Main Post Update time period and that are specifically considered in the SEIS cumulative impact analysis are shown on the Illustrative Plan within the Main Post Update and in Figure 37 in the final SEIS.

Projects not specifically anticipated in the PTMP that were subject to Section 106 consultation include: El Presidio; the archaeology lab and curation facilities; new construction for a Presidio lodge; rehabilitation of the Presidio Theatre and construction of an addition; rehabilitation of the Presidio Chapel and construction of an addition; and improvements to pedestrian access and parking. These projects are further described in the Project Descriptions chapter of the Main Post Update, which provides conceptual renderings and site plans, planning concepts, project parameters, and other details. The Main Post Update, plus other identified projects useful and relevant to the analysis, provide the "big picture" view required by NEPA and form the basis for the SEIS cumulative impact analysis.

Cumulative effects to the Presidio of San Francisco National Historic Landmark (which constitutes the area of potential effect, or APE, for the purposes of Section 106 review) were assessed in the final finding of effect (FOE), released in July 2009. Those effects were resolved through continued consultation, including the avoidance, minimization and mitigation of resource-specific and cumulative adverse effects, and provisions for further consultation and documentation under the PA-MPU (Appendix B).

134 Cumulative Impacts Should Be Spelled Out for All Alternatives

There is no identification and assessment of and differentiation between the incremental impacts of the proposed action/preferred alternative and the other reasonable alternatives.

Response The analysis in Section 3.12 Cumulative Impacts in the supplement determined that the incremental impacts associated with the mitigated preferred alternative, as well as with all other alternatives, are not expected to be significant, with the exception of historic resources and archaeology. In response to the comment, for those cumulative impacts that were quantifiable, the cumulative analysis in Section 3.12 Cumulative Impacts of the final SEIS has been revised to present the range of impacts that are reasonably foreseen in order to address the relative effects of the alternatives, while still avoiding duplicative discussion.

135 The Cumulative Impact Evaluation Should Analyze Expansion of Crissy Field Marsh

Under Alternative 1, the art museum would be relocated to the Commissary. However, the Crissy Marsh expansion project is missing

from the cumulative impacts section. The draft SEIS should include and analyze the impacts of the proposed undertaking in Alternative 1 on the Crissy Field Marsh expansion project, despite the inclusion of the Crissy Field Marsh Expansion Technical Study, Letter of Agreement in the PTMP.

Response The Crissy Field Marsh Expansion Study, completed in March 2004 and available for review on the Trust's web site, considered a broad array of options to achieve long-term ecological viability of Crissy Field Marsh. The purpose of the study was not to develop alternatives but to provide a broad set of feasible options to inform a later environmental review process. At this time, the only project that would have a bearing on the marsh is the revitalization of Tennessee Hollow at its downstream end (the Quartermaster Reach), which would allow for expansion of the marsh south of Mason Street. The Quartermaster Reach project is considered in the cumulative impact analysis in the final SEIS.

136 Transportation and Parking Cumulative Impacts are Severely Discounted

There appears to be no consideration of the development contemplated for Mason Street, the expansion of activity at the north end of Crissy Field, the relocation and expansion of the YMCA at the Commissary, and the increase in cyclists.

Response Buildings along Mason Street were assumed to be occupied in the PTMP. Since the transportation analysis in the SEIS tiers from that in the PTMP EIS, these buildings were also assumed to be occupied in this analysis, with the exception of the Doyle Drive project's demolition of Buildings 605 and 606. As discussed in Section 3.3 Transportation and Parking, the specific travel characteristics for the recent new uses in the northern portion of Crissy Field have been substituted for the less specific land use characteristics assumed in the PTMP EIS, as have specific changes related to the restaurant on Ruger Street and subleasing activity at the Letterman Digital Arts Center.

Relocation and expansion of the YMCA Fitness Center at the Commissary is not considered as part of the Main Post Update. For the purposes of the SEIS analysis, the YMCA Fitness Center is assumed to remain in Building 63 in the Main Post. If the YMCA Fitness Center were to consolidate uses and relocate to another area of the park, the project would be subject to additional environmental review.

137 Cumulative Impacts on the Integrity of the NHLD Should Be Assessed

There is no doubt that the Presidio's high degree of integrity has been eroded over recent years. The anticipated projects would substantially exacerbate this erosion, potentially to an unacceptable level. The NPS has warned that the cumulative impact of the proposed developments severely diminishes the historic character of the Main Post, and significantly diminishes the overall integrity of the NHLD. The assessment of the cumulative effects of the preferred alternative, therefore, should include reasonably foreseeable impacts on the integrity of the Main Post as well as the whole NHLD.

Response The Presidio Trust's final Finding of Effect for the Main Post Update (July 2009) contained a thorough analysis of the potential impacts on individual contributing resources as well as on the National Historic Landmark District as a whole and determined that the preferred alternative as detailed in the February 2009 Main Post Update would diminish the integrity of individual resources within the Presidio and would result in a cumulative adverse effect on the National Historic Landmark District. As a result of an extensive National Historic

Preservation Act (NHPA) Section 106 consultation and comments received during the NEPA process, the Trust modified the preferred alternative and has now analyzed a mitigated preferred alternative (Alternative 2). As outlined in Section 3.6 Historic Resources of the final SEIS, the removal of Buildings 40 and 41 in order to interpret El Presidio would have an adverse effect on these individual resources and the National Historic Landmark District and thus was identified as having a significant impact on historic resources. Likewise, under Section 3.12 Cumulative Impacts, a significant impact on historic resources was analyzed. This impact could be mitigated with the relocation of Buildings 40 and 41 to a compatible location in the Presidio.

138 Cumulative Impacts of Remediation Activities Should Be Analyzed

More information on the Trust's cumulative impact analysis of the ongoing environmental remediation occurring at various sites within the Presidio should be provided. These activities affect land use, traffic, soils, water quality, air quality, and cultural resources.

Response The cumulative impact analysis does not include remediation activities because past environmental analysis conducted for each of the sites has demonstrated that impacts on the affected resources are not significant, and have been proven to be temporary in the short term and inconsequential and beneficial in the long term. The purpose of the cumulative impacts analysis is to focus on meaningful effects to promote better decision making, not simply to produce an exhaustive catalog of environmental effects for its own sake. Remediation activities have been excluded from the analysis because resources of interest would not be affected significantly, and any short-term impacts are not germane to decisions about the proposed action and its alternatives.

139 Affects of Doyle Drive's Accelerated Construction Schedule Should Be Discussed

Additional discussion of the effects of Doyle Drive's construction on the cumulative impact analysis is needed. The effects of the accelerated construction schedule could have impacts on the phasing of Main Post construction and may open up project alternatives that have not been explored.

Response Acceleration of the Doyle Drive project due to federal stimulus money would not result in any impacts that were not previously disclosed in the Doyle Drive final EIS/R, which was used as the basis to determine cumulative impacts that might reasonably be expected as a result of the project. The only upcoming project that would be directly or indirectly affected by Doyle Drive is the revitalization of Tennessee Hollow, where the creek channel intersects with the proposed parkway. The project, known as the Quartermaster Reach, is proceeding according to schedule, and has been subject to noticing, scoping, and environmental review.

140 Cumulative Impacts on the PTMP Should Be Analyzed

The cumulative impacts analysis makes no mention of how the future management of the Presidio is likely to be affected. A detailed discussion of how implementation of the preferred alternative would affect the existing PTMP is needed. The cumulative effects analysis does not acknowledge planning problems that would be created by significantly changing the PTMP’s square footage targets.

Response While the estimated square footage associated with new construction and demolition (including the building demolition for the Doyle Drive project) would increase under the Main Post Update, the overall square footage for the Main Post would be 14,000 square feet less than was estimated for the Main Post district in the PTMP. Thus, the Main Post Update would not significantly change the PTMP square footage targets.

2.20 OTHER IMPACTS

141 Environmental Justice Impacts of Sewage and Stormwater Runoff Should Be Evaluated

The SEIS should analyze the environmental justice impacts of the proposed full build-out of the Presidio on the amount of sewage and stormwater delivered to the Hunters Point wastewater treatment plant.

Response Environmental justice impacts due to the Main Post Update are discussed in Section 3.13 Other Impacts of the final SEIS. The analysis concludes that none of the alternatives would substantially increase the burden on the Bayview and Hunters Point neighborhoods community due to wastewater discharges to the city's wastewater systems. Unlike the City and County of San Francisco, the Presidio (with the exception of the Public Health Service district) does not have a combined sewer system that collects both wastewater and stormwater in the same network of pipes. As stormwater is treated and discharged directly into the bay, the amount of flows transported to the city's treatment plants are substantially lessened. Furthermore, since 1990, total annual wastewater flows within the Presidio have been reduced to approximately 145 million gallons, or less than a third of 1990 flows. Current and projected future flows would represent less than one half of one percent of the dry and wet weather capacities of the Southeast Treatment Plant in the city's Bayview/Hunters Point area. Upon completion, the Trust's proposed on-site water recycling plant would capture and reuse the majority of the Presidio's wastewater flows that are treated at the Southeast Treatment Plant. Implementation of stringent water conservation practices, including requirements for water-efficient fixtures (toilets, faucets, etc.) in all building rehabilitation projects, would also minimize wastewater generation at the park. Although future contribution is very small, the Trust is committed to further reducing these flows to the greatest extent practicable and assist in alleviating any burden placed on the Bayview and Hunters Point neighborhoods.

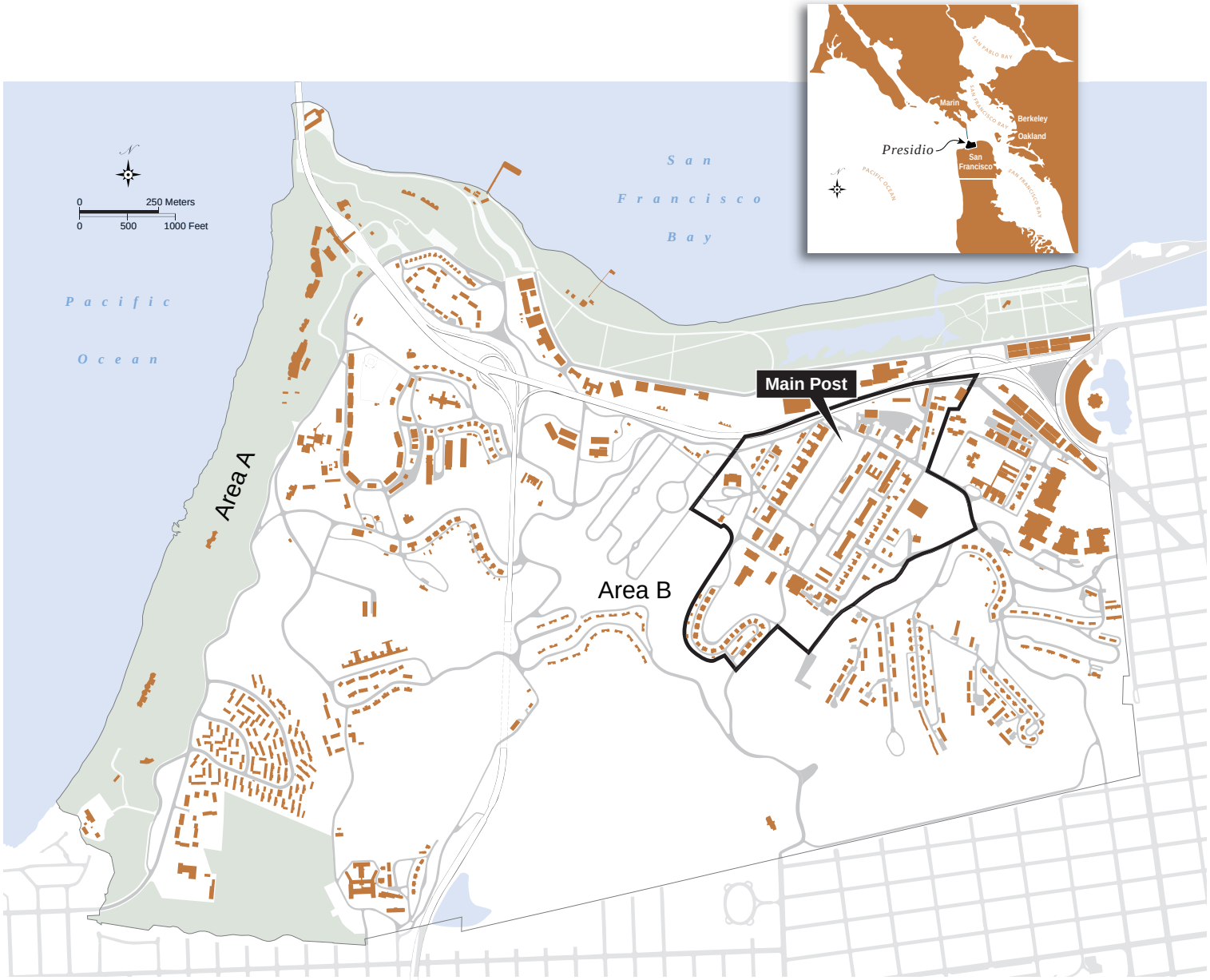
142 The Increased Demand on San Francisco Emergency Services Should Be Reviewed

The Presidio has seen cutbacks in emergency services, creating an increased strain on San Francisco to provide support services that necessarily reduces availability for the city's needs. While projecting a huge increase in visitors to the Presidio, the draft SEIS does not provide solutions from within the Presidio for the anticipated future demand for such services.

Response Since the closing of the Presidio as a military post in 1994 until recently, the National Park Service retained emergency medical response for the park. Additionally, the San Francisco Fire Department (SFFD) provided emergency medical services (EMS) to the Presidio on an as-needed basis when the NPS resources were insufficient to respond to events within its boundaries. Under the terms of an agreement between the Trust, NPS, and the City and County of San Francisco, as of

October 1, 2010, the San Francisco Fire Department (SFFD) is the authority having jurisdiction for EMS in the Presidio. With federal funding to cover EMS and other costs, the SFFD operates Station 51 in Building 218 on the Main Post. The SFFD provides the same level of EMS that is provided in other parts of the city, and staffs its ambulatory crews to comply with all requirements of federal law and regulation pertaining to the provision of EMS and to local agency standards, policies, and medical protocols. Given the physical location of Station 51 on the Main Post, proposals within the Main Post Update would have no impact on EMS response times or proposed staffing.

Source: Presidio Trust 2010



Source: Presidio Trust 2010

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