Final Report

Mission Bay
Public Safety Building
Transportation Assessment

Prepared for the
City and County of San Francisco
Department of Public Works

Adavant Consulting

January 6, 2010

TABLE OF CONTENTS

Page

1. INTRODUCTION 1

2. SETTING 2

3. PROJECT CHARACTERISTICS 2

4. TRAVEL DEMAND 5
   - 4.1 Trip generation 6
   - 4.2 Mode split 7
   - 4.3 Parking Demand 8
   - 4.4 Comparison to other projects 10

5. MISSION BAY AREA DEVELOPMENT 11
   - 5.1 1998 Mission Bay Plan 11
   - 5.2 UCSF Mission Bay 14
   - 5.3 Mission Bay development status 16
   - 5.4 Mission Bay travel demand 17

6. CONCLUSIONS 19

APPENDICES
- Appendix A—Employee and visitor estimates
- Appendix B—Parking Demand
- Appendix C—Police and fire station studies
- Appendix D—1998 Mission Bay Final SEIR
- Appendix E—2008 UCSF Medical Center at Mission Bay FEIR

LIST OF TABLES

Page

TABLE 1
Mission Bay Public Safety Building—Proposed Development Program 3

TABLE 2
Mission Bay Public Safety Building Characteristics 5

TABLE 3
Mission Bay Public Safety Building—Weekday Trip Generation Rates 6

TABLE 4
Mission Bay Public Safety Building—Weekday Person Trip Generation 7

TABLE 5
Mission Bay Public Safety Building—Weekday Person Trip Generation by Mode
Weekday Daily and PM Peak Hour 7

TABLE 6
Mission Bay Public Safety Building—Vehicle Trip Generation
Weekday Daily and PM Peak Hour 8

TABLE 7
Mission Bay Public Safety Building—Weekday Parking Demand 8

TABLE 8
Mission Bay Public Safety Building—Permitted Parking Needs 9

TABLE 9
Average Travel Demand Rates Comparison—Weekday Daily and PM Peak Hour 11

TABLE 10
Mission Bay Development Program Comparison—
Summary of Proposed Development by Land Use 13

TABLE 11
Mission Bay Development Employment Comparison 14

Page

TABLE 12
Mission Bay South Plan Area—Development Program for Blocks X3 and 36 to 39 16

TABLE 13
Mission Bay Area Plan Development Status 17

TABLE 14
Mission Bay Area Plan Travel Demand—Weekday Daily and PM Peak Hour 18

TABLE 15
Mission Bay Area Plan—Intersection LOS Comparison at Project Buildout
Weekday PM Peak Hour 19

LIST OF FIGURES

Page

FIGURE 1
Proposed Location for a Public Safety Building in Mission Bay 1

FIGURE 2
Mission Bay Public Safety Building—Pedestrian and Vehicular Access 3

FIGURE 3
SFPD Headquarters and Southern Station Buildings in Mission Bay—
Estimated Visitor and Employees Arrival and Departure Patterns 4

FIGURE 4
Mission Bay Area Plan Land Uses 12

FIGURE 5
UCSF Mission Bay Medical Center Site 15

MISSION BAY PUBLIC SAFETY BUILDING TRANSPORTATION ASSESSMENT

1. INTRODUCTION

This report is a summary of the results of a transportation assessment conducted for a proposed Public Safety Building for the San Francisco Police Department (SFPD) and Fire Department (SFFD), to be located within the Mission Bay Redevelopment Area of San Francisco. The proposed site would be a 1.5-acre City-owned parcel at the southeast corner of the intersection of Third and Mission Rock Streets (See Figure 1). The decommissioned and closed Fire Station No. 30 occupies the southwestern corner of the site.

Figure 1
Proposed Location for a Public Safety Building in Mission Bay
(Source: SF Justice Facilities Improvement Study, December 2008)

The site is within Development Block 8 of the Mission Bay South Redevelopment Plan, which is zoned for public facilities, including a police and a fire station. The San Francisco Board of Supervisors certified the Final Subsequent Environmental Impact Report (SEIR) for the Mission Bay Project in September 1998.

2. SETTING

The site for the proposed location of the Public Safety Building in Mission Bay fronts Mission Rock Street on the north, Third Street on the west, and China Basin Street on the south. A planned residential development will be immediately east of the proposed project.

Third Street is a major north-south arterial in the southeastern section of San Francisco, extending northerly from the interchange with Highway 101 and Bayshore Boulevard to Market Street. Between 16th Street and Channel Street, Third Street has two northbound and two southbound lanes, with exclusive left-turn lanes provided at major signalized intersections. Muni's Third Street light rail service operates in an exclusive median strip. Two light rail station platforms (one northbound and one southbound) are in this median strip of Third Street, at the intersection with Mission Rock Street. On-street parking is prohibited on Third Street.

China Basin Street is a new roadway under construction and will extend east from Long Bridge Street, west of Third Street, to Terry François Boulevard, near San Francisco Bay. It will accommodate one traffic lane and one parking lane each way. Twelve-foot sidewalks will be provided on the north and south sides of the street. There will be a stop sign at the intersection of China Basin and Third Streets to control the minor China Basin Street movement. Because of the light rail tracks in the raised median of Third Street, vehicles will be allowed to turn right only into and out of China Basin Street.

As part of the Mission Bay Project, Mission Rock Street will be realigned and extended from Fourth Street to Terry François Boulevard. It will accommodate one traffic lane and one parking lane each way. Twelve-foot sidewalks will be provided on the north and south sides of the street. The intersection of Mission Rock and Third Streets is controlled by a traffic signal, and all turning movements are allowed.

3. PROJECT CHARACTERISTICS

The proposed project calls for a Public Safety Building, composed of a police headquarters building[1], a police station, and a new fire station to be collocated at the Third/Mission Rock site. Table 1 is a summary of the planned square footages for each of the project components. The estimated total size for the proposed project is 320,200 gross square feet (gsq.ft.).

Figure 2 shows the ground-level layout for the proposed project. As shown in the figure, the pedestrian and vehicular entrances to the fire station would be located on the south side of Mission Rock Street. The SFPD's Southern Station would be at the southeast corner of the intersection of Third and Mission Rock Streets.

Public pedestrian access to the police headquarters building would be on Third Street, while parking for approximately 245 permitted vehicles, such as patrol cars, unmarked vehicles, and department vehicles, would be accessible from the north side of China Basin Street. No passenger drop-off/pickup area would be available on Third Street, where on-street parking is prohibited.

[1] The SFPD headquarters would be relocated from its current location on Bryant Street to the proposed project site.

Table 1
Mission Bay Public Safety Building
Proposed Development Program

Project Component	Size (gsq.ft.)
Police Headquarters Building	130,500
Police Southern Station	27,000
Fire Station	22,000
Fire House No. 30	6,200
Parking (245 spaces)	134,500
Total	**320,200**

Source: SFDPW – December 2009

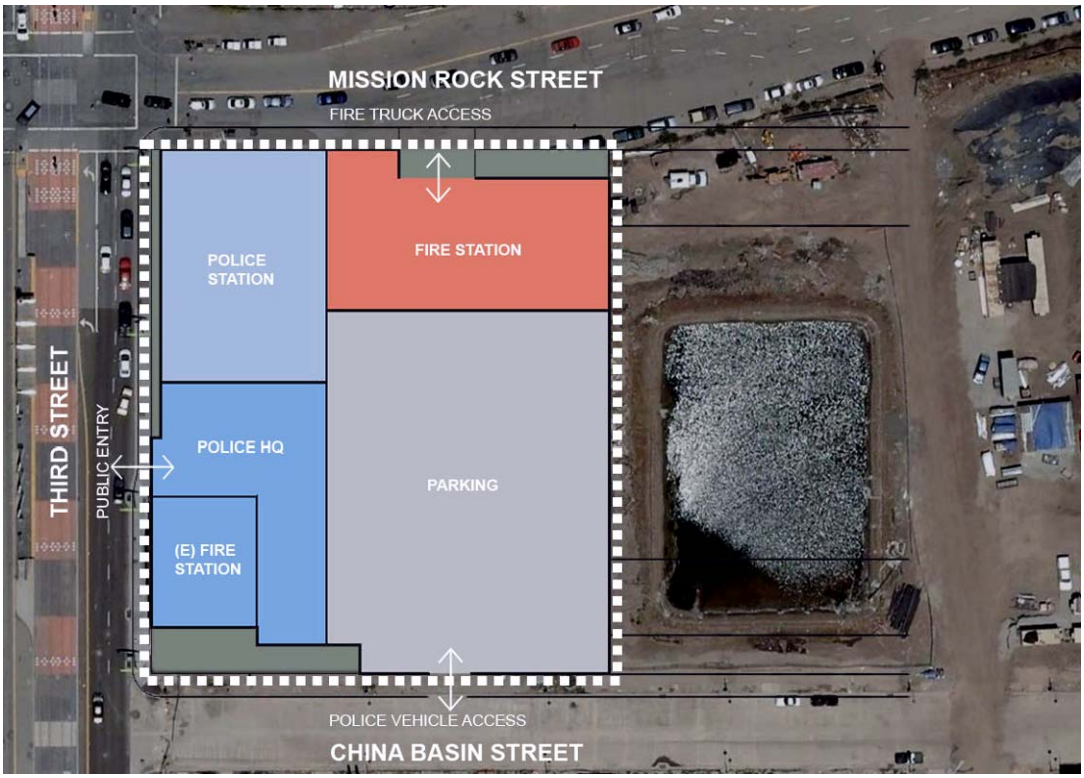


Figure 2
Mission Bay Public Safety Building—Pedestrian and Vehicular Access
(Source: SF Justice Facilities Improvement Study, December 2008)

The San Francisco Department of Public Works[2] (SFDPW) anticipates that the Police Headquarters Building would have approximately 264 employees on a typical day, while the Police Southern Station would have 125 employees, including 65 police officers. The expected

[2]Public Safety Building—Estimated Employee Start Times, SFDPW, Tom Eliot Fisch, February 2009

number of employees by employment unit for the Police Headquarters Building and the Police Station are detailed in Appendix A.

Typical work shifts at the Police Headquarters Building would start between 6 and 9 AM for an eight- to ten-hour shift, with some staff having access to the building during off-hours. The Southern Station would operate 24 hours a day, seven days a week. There would be four 10-hour shifts for the patrol officers starting at 6 AM, 11 AM, 4 PM, and 9 PM. Parking spaces for 156 police department vehicles and authorized visitors, plus 74 marked and unmarked patrol vehicles would be provided at the facility. In addition, 15 parking spaces for the new fire station would also be provided at the same facility.

The Police Headquarters Building would be open to the public generally from Monday through Friday, from 8 AM to 5 PM, with approximately 230 visitors coming to the building on a typical day. A multi-function space capable of holding a maximum 60 people would be used during the day for presentations to the Command Staff, Divisions use, media conferences or classrooms, and could also be utilized for community meetings, which are not included in the above figures since they would typically take place after regular business hours. The Southern Station would see approximately 100 visitors per day, most of them arriving between 8 AM and 6 PM. Appendix A includes a description of the expected number of visitors to the Police Headquarters Building and the Police Station by unit.

Figure 3 is a summary of the combined employee and visitor arrival and departure patterns to the Police Headquarters Building and the Police Station.

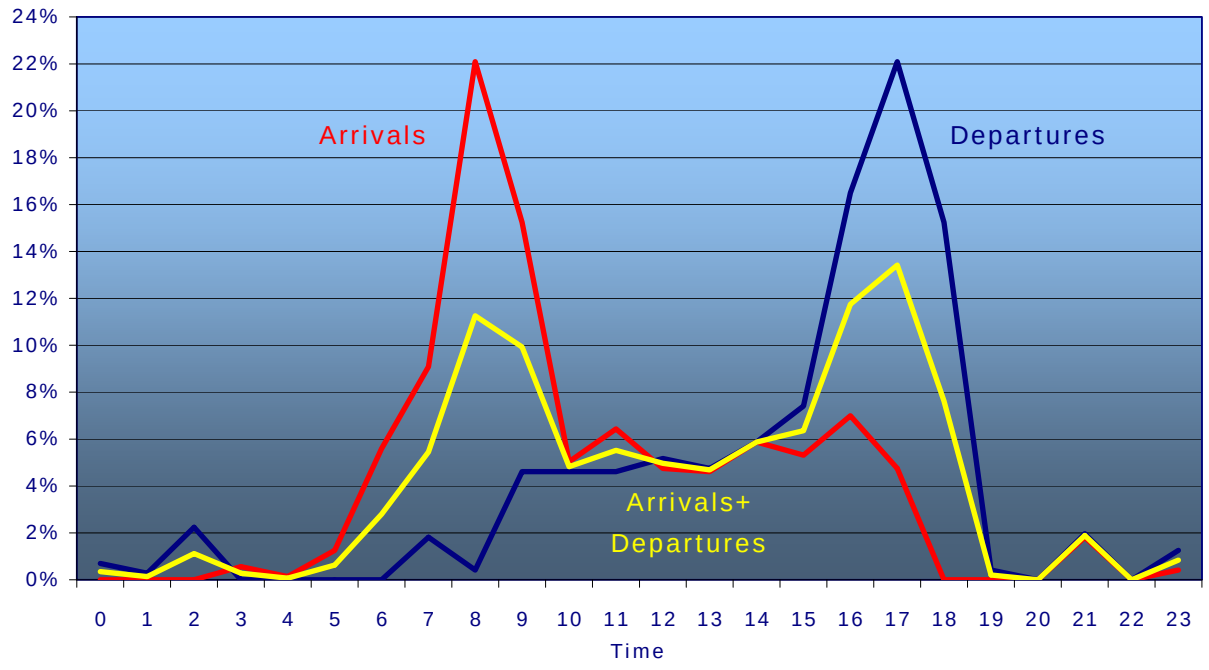


Figure 3
SFPD Headquarters Building and Southern Station in Mission Bay
Estimated Visitor and Employees Arrival and Departure Patterns
(Source: Public Safety Building—Estimated Employee Start Times, SFDPW, Tom Eliot Fisch, February 2009)

As shown in Figure 3, the combined arrivals would be concentrated around 7 to 9 AM, while the departures would mostly take place from 4 to 6 PM. The morning and evening peak arrivals and departures would take place at 8 AM (11.5 percent, 98 percent inbound and 2 percent outbound) and at 5 PM (13.5 percent, 18 percent inbound and 82 percent outbound).

Similar information provided for the proposed fire station[3] indicates that there would be between nine and 15 employees on-site on a typical day, depending on staffing needs. This includes a fire engine and four firefighters, plus a hook-and-ladder truck and five firefighters. A fire chief and a rescue squad would add six individuals. The fire station would be staffed 24 hours a day, all days of the year. All employees would work 24-hour shifts, which officially start at 8 AM. There would be an indeterminate number of visitors to the fire station, including walk-ins and tours, which, for travel demand purposes, have been estimated at 20 per day.

Table 2 below is a summary of the estimated number of employees, visitors, and permitted/official vehicles for each of the project components.

Table 2
Mission Bay Public Safety Building Characteristics

Project Component	Employees	Visitors	Average Employee Density (gsq.ft./employee)	Permitted/ Official Vehicles
Police Headquarters Building	264	230	494	156
Police Southern Station	125	100	216	74
Fire Station	15	20	1,467 [a]	15
Total	**404**	**350**	**464**	**245**

Note:
[a] Amount of sq. ft. does not include existing fire house No. 30 (6,200 sq.ft.)
Source: SFDPW, SFFD – December 2009

4. TRAVEL DEMAND

The approach and methods used to estimate the travel demand of development projects in San Francisco are required to follow, to the extent feasible, the Planning Department's guidelines (SF Guidelines),[4] supplemented with additional trip generation data obtained from other well recognized sources, such as the Institute of Transportation Engineers (ITE) Trip Generation Manual.[5]

[3]Written communication from M. Thompson, Assistant Deputy Chief, SFFD, to P. Wong, SFDPW Bureau of Architecture, February 27, 2009

[4]Transportation Impact Analysis Guidelines for Environmental review, San Francisco Planning Department, October 2002

[5]Trip Generation, 8th Edition, Institute of Transportation Engineers, Washington D.C., 2008

Since the proposed Public Safety Building would be considered a "nonstandard" use, with unique trip generation and travel behavior characteristics[6], the assessment of its travel demand cannot follow most of the methods presented in the SF Guidelines. Similarly, the ITE Trip Generation Manual does not include a land use for police or fire facilities, so the specific project information provided by SFDPW and SFFD and summarized in the previous section of this report has been used to determine the expected travel demand for the project. In addition, the travel demand rates estimated for the proposed Public Safety Building have been compared with those used in similar studies in other jurisdictions, as an additional check.

4.1 TRIP GENERATION

Table 3 is a summary of the estimated employee densities and trip generation for each of the three project components. A trip is defined as a single or one-way journey with either the origin or destination at the proposed project site. Thus, a trip can be either to or from the site, and a single visit to a site is counted as two project trips, one toward and one away from the site.

Table 3
Mission Bay Public Safety Building
Weekday Trip Generation Rates

Project Component	Employees (person trips/employee)	Visitors (person trips/visitor)
Police Headquarters Building	5.0	2.0
Police Southern Station	5.0	2.0
Fire Station	4.0	2.0
Average	**5.0**	**2.0**

Source: Adavant Consulting – December 2009

Two trips per person (one trip on arrival and one trip on departure) have been assumed for transportation analysis purposes for each visitor to the Public Safety Building. On the other hand, each employee at the Police Headquarters Building and Southern Station was assumed to make five trips per day on average. This accounts for the arrival and the departure trips, plus three trips away from the site for police patrolling or other purposes, plus deliveries during the work day. Another assumption is that each employee at the Fire Station would make four trips per day on average, which accounts for one arrival and one departure, plus one trip away and one back during the day for other purposes.

The ratio of five daily trips per employee has been derived from trip generation data presented in the Table C-1 of the SF Guidelines for office and manufacturing/industrial land uses. In addition, these rates closely match the number of trips that would result from using the same four-person trips per employee assumed for the fire station, and then adding two trips for each assigned official vehicle.

[6] The Police Headquarters Building includes several uses for SFPD operations that would be considered atypical in an administrative office building such as a Multi-Function/CompStat space used for presentations to the Command Staff, Divisions use, media conferences or classrooms, an Operations Center and a Call Center staffed 24/7 to coordinate logistics, immediate response and outside communications during crisis situations, and a Data Center. (Source: Public Safety Building Program Report, Tom Eliot Fisch, February 2009)

Applying the trip generation rates shown in Table 3 to the expected number of employees and visitors presented in Table 2, it is possible to estimate the number of daily person trips to the Public Safety Building for each of its components. This information is summarized in Table 4, which shows that the proposed project would generate 2,705 daily person trips.

By applying the peak hour factors presented in Figure 3, it is possible to calculate the number of trips that would be generated by the proposed project during the AM and PM peak hours. As shown in Table 4, the Public Safety Building would generate 312 person trips during the AM peak hour and 365 person trips during the PM peak hour.

Table 4
Mission Bay Public Safety Building
Weekday Person Trip Generation

Project Component	Daily	AM Peak Hour	PM Peak Hour
Police Headquarters Building	1,780	205	240
Police Southern Station	825	95	111
Fire Station	100	12	14
Total	**2,705**	**312**	**365**

Source: Adavant Consulting – December 2009

4.2 MODE SPLIT

The project-generated person trips have been allocated among different travel modes in order to determine the number of auto, transit, and other[7] trips. Mode split assumptions are based on data contained in the SF Guidelines for employee and visitor trips to Superdistrict 3 (SD3),[8] which is where the project would be located.

Table 5
Mission Bay Public Safety Building Person Trip Generation by Mode
Weekday Daily and PM Peak Hour

	Person Trips			
Period	**Auto [a]**	**Transit**	**Other [b]**	**All Modes**
Daily	1,921	464	320	2,905
PM Peak Hour	259	63	43	365
Modal Share	*71%*	*17%*	*12%*	*100%*

Note:
[a] Combined average vehicle occupancy is 1.3 persons per vehicle
[b] Includes walking, bicycling, motorcycling, and additional modes

Sources: SF Guidelines, Adavant Consulting – December 2009

[7] The "other" category includes walk, bicycle, motorcycle and additional modes

[8] Superdistricts are travel analysis zones established by the Metropolitan Transportation Commission (MTC). These Superdistricts provide geographic subareas for planning purposes in San Francisco. SD3 generally covers the southeast quadrant of the City.

Table 5 is a summary of the weekday daily and PM peak hour trip generation by mode of travel for the proposed project. On a typical day, 71 percent of the person trips would be by auto, 17 percent would be by transit, and 12 percent would be by other modes.

As shown in Table 6, the proposed project would generate or attract 1,446 vehicle trips on a typical weekday, 195 of them (35 inbound and 161 outbound) during the PM peak hour.

Table 6
Mission Bay Public Safety Building Vehicle Trip Generation
Weekday Daily and PM Peak Hour

	Vehicle-Trips		
Period	**Inbound**	**Outbound**	**Total**
Daily	723	723	1,446
PM Peak Hour	35	161	195

Source: SF Guidelines, Adavant Consulting – December 2009

4.3 PARKING DEMAND

Parking demand for the Public Safety Building was determined based on methods presented in the SF Guidelines. Parking demand consists of both long-term (typically employees) and short-term (typically visitors and deliveries). Long-term parking demand was estimated by applying the average mode split and the vehicle occupancy from the trip generation estimation to the number of employees for each of the project components. Short-term parking was estimated based on the total daily visitor trips and average daily parking turnover rate (5.5 vehicles per space per day). Parking demand calculations for the Public Safety Building are detailed in Appendix B.

Table 7 presents the estimated midday and evening peak parking demand for the Public Safety Building. The combined components would generate a total midday parking demand of 273 spaces (16 short-term and 257 long-term) and 234 spaces in the evening (13 short-term and 221 long-term).

Table 7
Mission Bay Public Safety Building
Weekday Parking Demand

Project Component	**Midday**			**Evening**		
	Short-Term	**Long-Term**	**Total Spaces**	**Short-Term**	**Long-Term**	**Total Spaces**
Police Headquarters Building	10	146	156	8	117	125
Police Southern Station	5	96	101	4	89	93
Fire Station	1	15	16	1	15	16
Total	**16**	**257**	**273**	**13**	**221**	**234**

Source: SF Guidelines, Adavant Consulting – December 2009

The proposed project would provide permitted parking for fleet vehicles at the Mission Bay Public Safety Building, as summarized in Table 8.

Table 8
Mission Bay Public Safety Building
Permitted Parking Needs

Project Component	Parking Spaces
Police Headquarters Building	156
Police Southern Station	74
Fire Station	15
Total	**245**

Source: SFDPW – December 2009

Employees are expected to use some of these permitted spaces to park City-owned vehicles used for commuting, and some spaces may be used to park certain private vehicles that may be used for City work. In addition, Southern Station officers would park their private vehicles in the spaces used for their official vehicles while they are on patrol. This would satisfy some of the long-term parking needs presented in Table 7 and would reduce the overall need for parking.

San Francisco does not consider parking supply as part of the permanent physical environment. Parking conditions are not static, as parking supply and demand varies from day to day, from day to night, from month to month, etc. Hence, the availability of parking spaces (or lack thereof) is not a permanent physical condition, but changes over time as people change their modes and patterns of travel.

Parking deficits are considered to be social effects, rather than impacts on the physical environment as defined by CEQA. Under CEQA, a project's social impacts need not be treated as significant impacts on the environment. Environmental documents should, however, address the secondary physical impacts that could be triggered by a social impact. (CEQA Guidelines § 15131(a).) The social inconvenience of parking deficits, such as having to hunt for scarce parking spaces, is not an environmental impact, but there may be secondary physical environmental impacts, such as increased traffic congestion at intersections, air quality impacts, safety impacts, or noise impacts caused by congestion. In the experience of San Francisco transportation planners, however, the absence of a ready supply of parking spaces, combined with available alternatives to auto travel (e.g., transit service, taxis, bicycles or travel by foot) and a relatively dense pattern of urban development, induces many drivers to seek and find alternative parking facilities, shift to other modes of travel, or change their overall travel habits. Any such resulting shifts to transit service in particular, would be in keeping with the City's "Transit First" policy. The City's Transit First Policy, established in the City's Charter Section 16.102 provides that "parking policies for areas well served by public transit shall be designed to encourage travel by public transportation and alternative transportation." Alternative means of travel to the project site include Muni Metro light rail service, which has a stop in front of the proposed Public Safety Building, walking or bicycling, with Terry François Boulevard being designated as a Class II bicycle route (route 5, striped bicycle lanes) in the San Francisco Bicycle Plan.

The transportation analysis accounts for potential secondary effects, such as cars circling and looking for a parking space in areas of limited parking supply, by assuming that all drivers would

attempt to find parking at or near the project site and then seek parking farther away if convenient parking is unavailable. Moreover, the secondary effects of drivers searching for parking is typically offset by a reduction in vehicle trips due to others who are aware of constrained parking conditions in a given area. Hence, any secondary environmental impacts which may result from a shortfall in parking in the vicinity of the proposed project would be minor, and the traffic assignments used in the transportation analysis, as well as in the associated air quality, noise and pedestrian safety analyses, reasonably addresses potential secondary effects.

4.4 COMPARISON TO OTHER PROJECTS

In order to ascertain that the travel demand results estimated in this analysis are valid, an additional reasonableness check was performed. Travel demand data and estimates were gathered from transportation studies performed for other police and fire stations in other jurisdictions, most of them in California. Specifically the following five studies were gathered and reviewed:

- Proposed police facility in the city of San Mateo, California;
- Existing police facility in Mammoth Lakes, California;
- Proposed police facility in Los Gatos, California;
- Proposed fire station in Scotts Valley, California; and
- Proposed fire station in Gainesville, Florida.

The characteristics of these emergency services facilities are detailed in Appendix C. Table 9 is a summary of several average travel demand rates obtained from these five studies and a comparison with rates derived from the proposed project.

As shown in Table 9, the average travel demand rates for the police and fire components of the proposed Public Safety Building in Mission Bay are, for the most part, within the range of those gathered from the other studies. The average employment densities of the five studies are lower but are comparable to those of the proposed project, which results in lower person trip rates per 1,000 gsq.ft. for the Public Safety Building project.

In addition, none of the studies calculated or collected data for person trips; rather, all of them used vehicle trips as their travel demand variable. On the other hand, all but the city of San Mateo study were conducted for projects in suburban or rural areas, with minimal or no opportunities for transit or pedestrian travel. Thus, the vehicle trip rates in Table 9 for these five studies should be viewed as comparable, albeit slightly lower, to the person trip rates of the Public Safety Building project.

Table 9
Average Travel Demand Rates Comparison
Weekday Daily and PM Peak Hour

	Approximate Employee Density (gsq.ft. / employee)	Daily Trips per Employee		Daily Trips per 1,000 gsq.ft.		PM Peak Hour Factor % in / % out
		Person Trips	Vehicle Trips	Person Trips	Vehicle Trips	
POLICE FACILITIES						
Average for Three Studies	300	N/A [a]	4.1	N/A [a]	14.5	13.6% 41/59
Mission Bay [b]	400	6.7	3.1	16.5	7.7	13.5% 18/82
FIRE STATION						
Average for Two Studies	1,200	N/A [a]	7.0	N/A [a]	5.8	14.3% 20/80
Mission Bay [c]	1,500 [d]	6.7	4.0	4.5	2.7	13.5% 18/82

Notes:
[a] The studies did not survey or calculate person trips; the counts and travel demand estimates were done for vehicle trips only. Most of the facilities have or would have very limited transit or pedestrian travel opportunities. Thus, the vehicle trip rates for these studies could be viewed as comparable to the person trip rates of the Public Safety Building project.
[b] Mission Bay Police Headquarters Building and Police Southern Station combined.
[c] Mission Bay Fire Station.
[d] Excludes existing Fire House No. 30.

Source: Adavant Consulting from various sources – December 2009

All of the PM peak hour factors (the percentage of daily trips that take place during the PM peak hour) shown in Table 9 are also very similar, as well as the inbound and outbound percentages shown for the fire station. The average inbound and outbound percentages shown for the police facilities for the three studies (41 percent in/59 percent out) is more balanced than the percentages shown for the Mission Bay Police Headquarters Building and Police Southern Station combined (18 percent in/82 percent out). This is most likely due to the relatively larger administrative component of the proposed project, which would skew the ratio toward the outbound, similar to the standard ratio found in government office use, which is 20 percent in/80 percent out.

5. MISSION BAY AREA DEVELOPMENT

5.1 MISSION BAY PLAN

The Mission Bay Development Plan covers approximately 300 acres of land and is near the eastern shoreline of San Francisco, about one mile south of the downtown Financial District. The Mission Bay Area is bounded by Townsend Street on the north, Interstate 280 on the west, Mariposa Street on the south, and San Francisco Bay on the east, as shown in Figure 4. The San Francisco Board of Supervisors certified the Final SEIR for the Mission Bay plan in September 1998 and established the Mission Bay North and South Redevelopment Project Areas two months later.

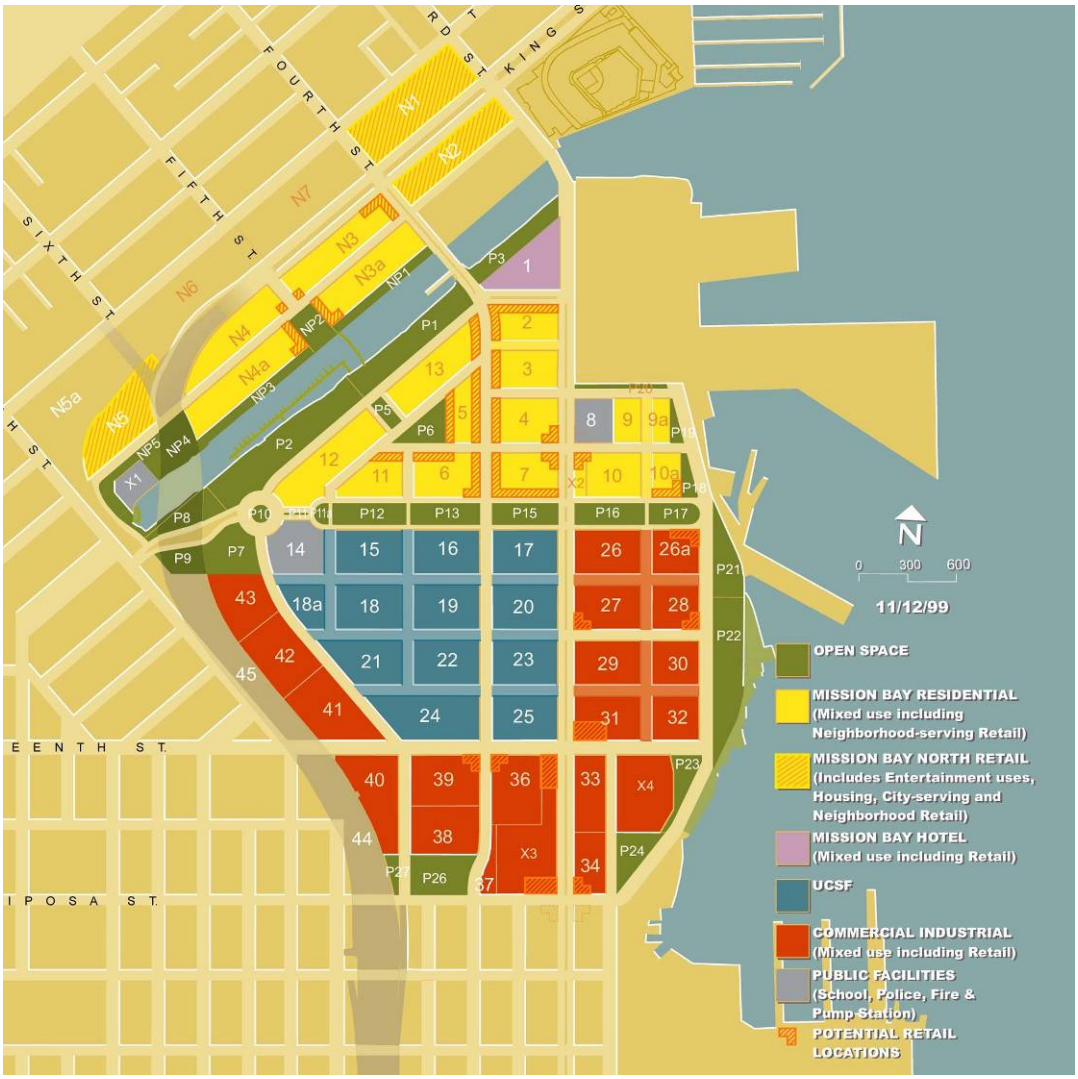


Figure 4
Mission Bay Area Plan Land Uses

The approved Mission Bay Development Plan calls for a mixed-use development, which includes the following:

- Approximately 6,000 residential units on the north and south sides of China Basin Channel;
- About 500,000 gsq.ft. of city- and neighborhood-serving retail space;
- A 43-acre University of California San Francisco (UCSF) site, containing 2.65 million gsq.ft. of instruction, research, and support space;
- A mix of approximately 6.5 million gsq.ft. of life sciences research and development, technology, and office space, plus a UCSF Medical Center surrounding the UCSF site to its west, south, and east;

- A 500-room hotel between Third and Fourth Streets south of China Basin Channel;
- A 500-student public school, a public library, and a new police and fire station; and
- Approximately 47 acres of open space, including eight acres within the UCSF site.

The 1998 Mission Bay SEIR evaluated the potential impacts of several alternatives and variants to the proposed project, as it was originally conceived in 1997 when the environmental studies were initiated. The plan approved by the Board of Supervisors in 1998 is virtually the same as what is described in the SEIR as the "Combination of Variants"[9] and reflects changes and enhancements proposed by the project sponsors to the original plan, who envisioned a more intense development.

Table 10 is a summary of the land use differences between the Project Alternative, as was proposed in the SEIR, and the Combination of Variants Alternative. More detailed land use tables from the 1998 SEIR are included in Appendix D.

Table 10
Mission Bay Development Plan Program Comparison
Summary of Proposed Development by Land Use

Land Use	Project [a]	Combination of Variants [b]	Change
Residential Units	6,090	6,090	0
Commercial Industrial and Office (gsq.ft.)	5,557,000	6,621,000	1,064,000
Retail (gsq.ft.)	1,507,000	941,000	-566,000
Hotel (rooms)	500	500	0
Public Open Space (acres)	47	47	0
Public Facilities (acres)	5.2 [c]	5.2 [c]	0
UCSF Campus (gsq.ft.)	2,650,000	2,650,000	0

Notes:
[a] Defined as the Project Alternative in the Mission Bay SEIR (1998), Volume I, Table III.A.1, p. III.2.
[b] Defined in Mission Bay SEIR (1998), Volume II, Table VII.G.1, p. VII.50; virtually the same as that approved by the Board of Supervisors in 1998.
[c] Includes 1.5 acres for existing Channel Pump Station, 1.5 acres for new police and fire stations, and 2.2 acres for a 500-student public school.
Source: Final Mission Bay SEIR, San Francisco Planning Department September 1998

As shown in Table 10, the approved project represents a 37 percent reduction in retail space, all of it within the City-serving land use category in the South Plan Area, which in turn is replaced by a 20 percent increase in commercial industrial and office uses.

Table 11 is a summary of the employment differences between the Project Alternative and the Combination of Variants Alternative. As shown, overall, the Combination of Variants Alternative provides 1,310 more jobs (approximately four percent) in the Mission Bay Area than the Project Alternative.

[9]Final Mission Bay SEIR, Volume II, pp. VII.46 to VII.66, San Francisco Planning Department, September 1998

Table 11
Mission Bay Plan Development Employment Comparison

Plan Area	Project	Combination of Variants	Change
Mission Bay North	2,071	1,761	-310
Mission Bay South			
Central Subarea [a]	1,082	1,082	0
East Subarea	9,271	10,031	760
West Subarea	8,290	9,150	860
UCSF Subarea	9,280	9,280	0
Subtotal Mission Bay South	*27,923*	*29,543*	*1,620*
Total Mission Bay	**29,994**	**31,304**	**1,310**

Note:
[a] Includes approximately 100 employees for the Police and Fire Stations in Block 8.
Source: Final Mission Bay SEIR, San Francisco Planning Department September 1998

5.2 UCSF MISSION BAY

As described in the previous section, the Mission Bay plan includes a UCSF campus. It would comprise 12 blocks west of Third Street, east of Owens Street, and north of 16th Street and would contain 2.65 million gsq.ft. for instruction, research, and support uses. In 2002, UCSF amended its 1996 Long-Range Development Plan (LRDP) and added housing as an approved use within the Mission Bay campus and removed an equivalent amount of approved support uses.

The LRDP Amendment #1 EIR[10] showed that the proposed replacement of support uses by student housing represents an overall increase in vehicle trips of 0.4 percent for the entire Mission Bay South Plan Area during the PM peak hour, which would fall well within the margin of error of the original estimates.

In 2008, UCSF initiated the environmental review for a proposed UCSF Medical Center, which would be located in Blocks X3 and 36 to 39 in the Mission Bay South Plan Area (Figure 5). The center would consist of a hospital, an ambulatory care center (ACC), an energy center, and parking.

[10]UCSF LRDP Amendment #1 Final SEIR, Tables 3-3 and 3-4, pp 3-14 and 3-15, January 17, 2002

Figure 5
UCSF Mission Bay Medical Center Site
Source: UCSF Medical Center at Mission Bay FEIR, August 2008

As shown in Figure 5, the site for the proposed medical center is bounded by 16th Street on the north, Mariposa Street on the south, Owens Street on the east, and Third Street on the west. Fourth Street runs parallel to Third Street and Owens Street between Blocks X3 and Blocks 36 through 39.

The medical center would be built in two major phases. The first would consist of a 289-bed hospital, approximately 240,000 gsq.ft. of ACC space, and a 35,000 gsq.ft. energy center, all located on Blocks X3, 36, and 37. The second phase would expand these uses to a total of 550-beds and potentially 436,500 gsq.ft. of ACC space. The Phase 2 development would be located on Blocks 38 and 39.

Table 12 is a summary of the land use differences in Blocks X3 and 36 to 39 for the original Mission Bay Plan (Combination of Variants Alternative) and the proposed UCSF Medical Center. As shown in the table, the proposed medical center represents a 16,100 gsq.ft. reduction in land use within the project site, compared to the Mission Bay Plan. More detailed land use tables from the 2008 UCSF Medical Center at Mission Bay FEIR are included in Appendix E.

Table 12
Mission Bay South Plan Area
Development Program for Blocks X3 and 36 to 39

Land Use Type	Land Use Intensity (gsq.ft.)
Mission Bay Plan (Combination of Variants) [a]	
Commercial Industrial and Office	1,743,000
Neighborhood-serving retail	10,100
City-serving retail	50,000
Total	**1,803,100**
UCSF Medical Center [b]	
Phase 1 (Blocks 36, 37 and X3)	993,500
Phase 2 Expansion (Blocks 38 and 39)	793,500
Total	**1,787,000**

Notes:
[a] Combination of Variants Alternative - UCSF Amendment #2 Hospital Replacement FEIR (2005), Table 4.11-11, p. 4.11-35.
[b] UCSF Medical Center at Mission Bay FEIR (2008), Table 3-2, p. 3-14.
Source: UCSF 2005, 2008

5.3 MISSION BAY DEVELOPMENT STATUS

As of December 2008, approximately 2,970 housing units have been constructed in the Mission Bay Plan Areas, including 2,440 in the North Area and 530 in the South Area. An additional 390 units are being constructed in the North Area, which is where approximately 202,600 gsq.ft. of retail and commercial space has been built already.

Several life science research, biotechnology and office buildings, totaling about 1.2 million gsq.ft., have been completed. Several buildings totaling about one million gsq.ft. have also been constructed on the UCSF campus, including research buildings, a campus community center, and student housing.

Table 13 is a summary of the current development status of the Mission Bay as of December 2008.

Table 13
Mission Bay Area Plan
Current Development Status

Land Use Type	Built [a] (Dec. 2008)	Currently Planned [b]	Maximum Allowed [c]	Change [d]
Mission Bay North				
Residential Units	2,443	520	3,000	37
Commercial and Retail (gsq.ft.)	202,600	1,400	556,000	352,000
Mission Bay South				
Residential Units	529	2,520	3,090	41
Commercial Industrial and Office (gsq.ft.)	1,156,700	3,721,300 [e]	4,878,000	0
Retail (gsq.ft.)	0	324,900 [e]	324,900	0
Hotel [f] (rooms)	0	500	500	0
Public School [g] (acres)	0	2.2	2.2	0
Other Public Facilities (acres)	1.5 [h]	1.5 [i]	3.0	0
UCSF Campus (gsq.ft.)	1,007,900	1,642,100	2,650,000	0
UCSF Medical Center (gsq.ft.)	0	1,787,000	1,787,000	0

Notes:
- [a] Mission Bay Development Group, December 2008.
- [b] Estimated development program remaining to be built in Mission Bay.
- [c] Mission Bay Plan Combination of Variants Alternative plus UCSF Medical Center Project—Mission Bay Project SEIR (1998), Volume II, Table VII.G.1, p. VII.50, and UCSF Medical Center at Mission Bay FEIR (2008), Table 3-2, p. 3-14.
- [d] Maximum development allowed under the Mission Bay Plan minus projects already built minus currently planned developments.
- [e] The exact amount of development planned for these land uses is not known but is assumed to be equal to the maximum amount allowable under the Mission Bay Plan.
- [f] Block 1 in the South Plan Area.
- [g] For up to 500 students, Block 14 in the South Plan Area.
- [h] Channel Pump Station, Block X1 in the North Plan Area.
- [i] New police and fire stations, Block 8 in the South Plan Area.

Source: Adavant Consulting from various sources – December 2009

The data in Table 13 show that most of the land uses would be on track to meet the maximum allowable program, with a couple of exceptions. It is likely that the maximum number of allowable residential units (6,090) will not be reached; rather 6,012 units, or 1.2 percent fewer, will be constructed.

More significantly, approximately 352,000 gsq.ft. of planned entertainment-oriented retail in the North Plan Area will not be built. This corresponds to a 25-screen, 6,500-seat movie theater originally planned for Block N2, which after further consideration was deemed not feasible by the project's master developer.

5.4 MISSION BAY TRAVEL DEMAND

Table 14 is a summary of the travel demand for different scenarios of the Mission Bay project in terms of person trips and vehicle trips for the weekday daily and pm peak hour conditions.

Table 14
Mission Bay Area Plan Travel Demand
Weekday Daily and PM Peak Hour Trips Comparison

Scenario	Daily			PM Peak Hour		
	Person Trips	Transit Trips	Vehicle Trips	Person Trips	Transit Trips	Vehicle Trips
Combination of Variants Alternative [a]	289,067	61,867	112,201	30,735	6,753	13,056
Office/R&D at Blocks 36-39 and X3 [b]	27,147	5,435	12,765	3,131	649	1,490
UCSF Medical Center at Blocks 36-39 and X3 [c]	19,850	4,663	8,569	2,243	538	1,009
Combination of Variants Alternative with UCSF Medical Center	281,770	61,095	108,005	29,847	6,642	12,575
Difference with Combination of Variants Alternative	-7,297 -3%	-772 -1%	-4,196 -4%	-888 -3%	-111 -2%	-481 -4%
Mission Bay Public Safety Building [d]	2,705	464	1,446	365	63	195
Combination of Variants Alternative with UCSF Medical Center, plus Public Safety Building in Block 8	284,475	61,559	109,451	30,212	6,705	12,770
Difference with Combination of Variants Alternative	-4,592 -2%	-308 -0.5%	-2,750 -2%	-523 -2%	-48 -1%	-286 -2%

Notes:
- [a] Defined in Mission Bay Project SEIR (1998), Volume II, Table VII.G.3, p. VII.56; virtually the same as approved by the Board of Supervisors in 1998.
- [b] Derived from land uses assigned to the West Subarea; Mission Bay Project SEIR (1998), Volume I, Tables V.E.6 and V.E.8, pp. V.E.58 and V.E.62, and Volume II, Table VII.G.2, p. VII.51.
- [c] UCSF Medical Center at Mission Bay FEIR (2008), Tables 4.6-5 through 4.6-13, pp. 4.6-19 trough 4.6.23.
- [d] Tables 5 and 6 from this report; pp. 7 and 8.

Source: Adavant Consulting from various sources – January 2010

As shown in Table 14, the proposed replacement of research and office uses with UCSF Medical Center in Blocks X3 and 36 to 39 in the South Plan Area represents a three to four percent reduction in the number of daily and PM peak hour trips, compared to the Combination of Variants Alternative.

The proposed addition of the Public Safety Building in Block 8 of the South Plan Area represents a two percent increase in the number of person or vehicle trips for the daily and PM peak hour periods, which would fall within the expected daily variations of traffic volumes.

Table 15 is a comparison of cumulative 2015 levels of service (LOS) under the Combination of Variants Alternative and those of the Mission Bay Project for some key intersections likely to be traveled to and from the Mission Bay Public Safety Building. Average delays at most intersections would improve, with three intersections experiencing improvements in LOS. The intersection of Seventh Street and Mission Bay Drive, in particular, would improve from an unacceptable LOS E to an acceptable LOS D. The intersection of Fourth and Townsend Streets would degrade somewhat but would still maintain an acceptable LOS C.

Table 15
Mission Bay Area Plan
Intersection Level of Service Comparison at Project Buildout
Weekday PM Peak Hour

Intersection	Project		Combination of Variants Alternative	
	Delay (Seconds per Vehicle)	LOS	Delay (Seconds per Vehicle)	LOS
Third and Townsend Streets	79.7	F	78.8	F
Third and King Streets	99.1	F	114.4	F
Fourth and Townsend Streets	14.4	B	18.2	C
Fourth and King Streets	52.1	D	63.3	D
16th and Seventh Streets	32.2	D	16.9	C
16th and Fourth Streets	29.2	D	31.4	D
16th and Third Streets	25.2	D	17.3	C
Mariposa Street/I-280 On-Ramp	16.6 C	16.4 C		
Mariposa Street/I-280 Off-Ramp-Owens Street	35.9 D	29.2 D		
Mariposa and Fourth Street	13.6	B	10.2	B
Mariposa and Third Street	23.7	C	18.6	C
Seventh Street and Mission Bay Drive	42.3	E	30.0	D

Source: Mission Bay Project SEIR (1998), Volume II, Table VII.G.4, p. VII.58

6. CONCLUSIONS

This report is a summary of the results of a transportation assessment conducted for a proposed Public Safety Building in Block 8 of the Mission Bay South Plan Area of San Francisco. The proposed project calls for the Police Administrative Headquarters, the Police Station, and the Fire Station to be collocated at the Third/Mission Rock site. The estimated total size for the proposed project with the 245-space parking garage is 320,200 gsq.ft.

There would be an average of 404 employees and 350 visitors coming to the site on a typical weekday, which represents a daily and PM peak hour demand of 2,705 and 365 person trips, respectively. About 1,446 daily vehicle trips (total both ways) and 195 PM peak hour vehicle trips would be generated by or would travel to the site. These travel demand estimates are similar to those obtained from other police and fire station studies conducted in California and Florida.

The preparers of the Mission Bay Project SEIR assumed that the police and fire stations in Block 8 would accommodate about 100 employees. The addition of about 300 employees that could be expected at the Public Safety Building under the proposed project represents a one percent increase over the total employment assumed in the Mission Bay SEIR for the South Plan Area under the Combination of Variants Alternative. This is well within the average daily employment variation, including employee absenteeism, etc., of about five percent.

The addition of the Public Safety Building also represents a two percent increase in the number of person or vehicle trips for the daily and PM peak hour periods, which would fall within the expected daily variations of traffic. In addition, the intersections in the Mission Bay South Area that would most likely be traveled by those vehicles arriving at or departing from the Public Safety Building show sufficient capacity at project buildout under the Combination of Variants Alternative to accommodate the modest increase in traffic expected as a result of the project.

The Public Safety Building would also increase the transit ridership in the Mission Bay Area by less than one percent for the daily and PM peak hour periods compared with the Combination of Variants Alternative, which would fall within the expected daily variations in transit ridership. Muni's Third Street light rail service (T-Third) envisioned as part of the Mission Bay Plan has been fully operational since April 2007 and includes a stop in the median of Third Street, across from the proposed Public Safety Building.

In addition, the Public Safety Building would comply with all the requirements in regard to pedestrian and bicycle conditions as contained in the Design for Development and Streetscape Master Plan documents adopted as part of the overall Mission Bay Redevelopment Project.

Furthermore, the proposed replacement of research and office uses with UCSF Medical Center in Blocks X3 and 36 to 39 in the South Plan Area represents a three to four percent reduction in the number of daily and PM peak hour trips, compared to the Combination of Variants Alternative. This is a greater reduction than the increase in trips caused by the Public Safety Building. Thus, the construction of the proposed Public Safety Building in Mission Bay is not expected to create any significant transportation impacts.

APPENDICES

APPENDIX A
EMPLOYEE AND VISITOR ESTIMATES

Public Safety Building at Mission Bay

PROJECT TRIP GENERATION SUMMARY

Program	Size	Parking Spaces	Employees	Visitors
Police Headquarters Bldg.	130,500 sq.ft.	156 vehicles	264 employees	230 visitors
Police Southern Station	27,000 sq.ft.	74 vehicles	125 employees	100 visitors
- staff			*65 employees*	
- officers			*60 employees*	
Fire Station	22,000 sq.ft.	15 vehicles	15 employees	20 visitors
Subtotal	**179,500 sq.ft.**	**245 vehicles**	**404 employees**	**350 visitors**
Fire House No. 30	6,200 sq.ft.			
Police Parking	134,500 sq.ft.			
TOTAL	**320,200 sq.ft.**			

Program	Avg. Employee Density	Daily Trip Generation Rates	
Police Headquarters Bldg.	494 sq.ft./empl.	5.0 p-trips/empl	2.0 p-trips/visitor
Police Southern Station	216 sq.ft./empl.	5.0 p-trips/empl	2.0 p-trips/visitor
Fire Station	1,467 sq.ft./empl.	4.0 p-trips/empl	2.0 p-trips/visitor
TOTAL	**444 sq.ft./empl.**	**5.0 p-trips/empl**	**2.0 p-trips/visitor**

	Number of Daily Person Trips			AM Peak Hour
Program	Employees	Visitors	Total	Person Trips
Police Headquarters Bldg.	1,320 person-trips	460 person-trips	1,780 person-trips	205 person-trips
Police Southern Station	625 person-trips	200 person-trips	825 person-trips	95 person-trips
- staff	*325 person-trips*			
- officers	*300 person-trips*			
Fire Station	60 person-trips	40 person-trips	100 person-trips	12 person-trips
TOTAL	**2,005 person-trips**	**700 person-trips**	**2,705 person-trips**	**312 person-trips**

	Number of Daily Vehicle Trips		
Program	Employees	Visitors	Total
Police Headquarters Bldg.	732 vehicle-trips	114 vehicle-trips	846 vehicle-trips
Police Southern Station	480 vehicle-trips	50 vehicle-trips	530 vehicle-trips
- staff	*180 vehicle-trips*		
- officers	*300 vehicle-trips*		
Fire Station	60 vehicle-trips	10 vehicle-trips	70 vehicle-trips
TOTAL	**1,272 vehicle-trips**	**174 vehicle-trips**	**1,446 vehicle-trips**

	Number of PM Peak Hour Trips			PM Peak Hour
Program	Employees	Visitors	Total	Vehicle-trips
Police Headquarters Bldg.	178 person-trips	62 person-trips	240 person-trips	114 vehicle-trips
Police Southern Station	84 person-trips	27 person-trips	111 person-trips	72 vehicle-trips
- staff	*44 person-trips*			*31 vehicle-trips*
- officers	*41 person-trips*			*41 vehicle-trips*
Fire Station	8 person-trips	5 person-trips	14 person-trips	9 vehicle-trips
TOTAL	**271 person-trips**	**95 person-trips**	**365 person-trips**	**195 vehicle-trips**
				35 inbound
				161 outbound

Mode	No. of Daily Trips	PM Peak Hour Trips	
Auto	1,921 person-trips	259 person-trips	71%
Transit	464 person-trips	63 person-trips	17%
Other	320 person-trips	43 person-trips	12%
TOTAL	**2,705 person-trips**	**365 person-trips**	**100%**

Program	Average Daily Trip Rates			
Police HQ plus Station	6.7 p-trips/empl.	16.5 p-trips/ksq.ft	3.1 veh-trips/empl.	7.7 veh-trips/ksq.ft
Fire Station	6.7 p-trips/empl.	4.5 p-trips/ksq.ft	4.0 veh-trips/empl.	2.7 veh-trips/ksq.ft
TOTAL	**6.7 p-trips/empl.**	**15.1 p-trips/ksq.ft**	**3.1 veh-trips/empl**	**7.1 veh-trips/ksq.f**

Program	Average PM Peak Hour Trip Rates			
Police HQ plus Station	0.90 p-trips/empl.	2.23 p-trips/ksq.ft	0.48 veh-trips/empl.	1.18 veh-trips/ksq.ft
Fire Station	0.90 p-trips/empl.	0.61 p-trips/ksq.ft	0.63 veh-trips/empl.	0.43 veh-trips/ksq.ft
TOTAL	**0.90 p-trips/empl.**	**2.03 p-trips/ksq.ft**	**0.48 veh-trips/empl**	**1.09 veh-trips/ksq.f**

Public Safety Building at Mission Bay
Police Administration/Headquarters
24 h./day - 7 days a week
Open to the public M-F 8 a.m. to 5 p.m. **(156 department vehicles)**

	Time																								
PERSONNEL	**0:00**	**1:00**	**2:00**	**3:00**	**4:00**	**5:00**	**6:00**	**7:00**	**8:00**	**9:00**	**10:00**	**11:00**	**12:00**	**13:00**	**14:00**	**15:00**	**16:00**	**17:00**	**18:00**	**19:00**	**20:00**	**21:00**	**22:00**	**23:00**	**TOTAL**
Administration								1	4	4															9
Chief Office									10	5															15
Equal Employment Opportunity								2	1																3
Fiscal								2	8	4															14
Field Operations Bureau HQ							1	6	3	8	1														19
Legal						1	2	4	10	2															19
Management Control							1	3	11																15
Payroll								3	5	3	1														12
Permits							1	1	7	2															11
Planning							2	2	2	9	1														16
Police Commission Office										2															2
Professional Standards							1			2															3
Record Entry				4	1	3	2	3								3	2							3	21
Recruitment									2																2
Staff Services								7	23	6															36
Support Services						5	5	4	12	8			1		9	2		1							47
Technology								12	2	6															20
TOTAL ARRIVE	**0**	**0**	**0**	**4**	**1**	**9**	**15**	**50**	**100**	**61**	**3**	**0**	**1**	**0**	**9**	**5**	**2**	**1**	**0**	**0**	**0**	**0**	**0**	**3**	**264**
	0.0%	**0.0%**	**0.0%**	**1.5%**	**0.4%**	**3.4%**	**5.7%**	**18.9%**	**37.9%**	**23.1%**	**1.1%**	**0.0%**	**0.4%**	**0.0%**	**3.4%**	**1.9%**	**0.8%**	**0.4%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**1.1%**	**100.0%**
TOTAL DEPART (estimated)	**5**	**2**	**1**	**0**	**0**	**0**	**0**	**0**	**3**	**0**	**0**	**0**	**4**	**1**	**9**	**15**	**50**	**100**	**61**	**3**	**0**	**1**	**0**	**9**	**264**

Mission Bay District Station (Total staff 125) **(74 marked and unmarked vehicles)**
24 h./day - 7 days a week **(8 to 10 vehicles used during one shift)**

	Time																								
PERSONNEL	**0:00**	**1:00**	**2:00**	**3:00**	**4:00**	**5:00**	**6:00**	**7:00**	**8:00**	**9:00**	**10:00**	**11:00**	**12:00**	**13:00**	**14:00**	**15:00**	**16:00**	**17:00**	**18:00**	**19:00**	**20:00**	**21:00**	**22:00**	**23:00**	**TOTAL**
Officers shift starts							20					15					15					15			65
Staff (estimated)							5	15	25	15															60
TOTAL ARRIVE	**0**	**0**	**0**	**0**	**0**	**0**	**25**	**15**	**25**	**15**	**0**	**15**	**0**	**0**	**0**	**0**	**15**	**0**	**0**	**0**	**0**	**15**	**0**	**0**	**125**
	0.0%	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**20.0%**	**12.0%**	**20.0%**	**12.0%**	**0.0%**	**12.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**12.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**12.0%**	**0.0%**	**0.0%**	**100.0%**
Officers shift ends			15					15									20					15			65
Staff Depart (estimated)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	15	25	15	0	0	0	0	0	60
TOTAL DEPART	**0**	**0**	**15**	**0**	**0**	**0**	**0**	**15**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**5**	**35**	**25**	**15**	**0**	**0**	**15**	**0**	**0**	**125**

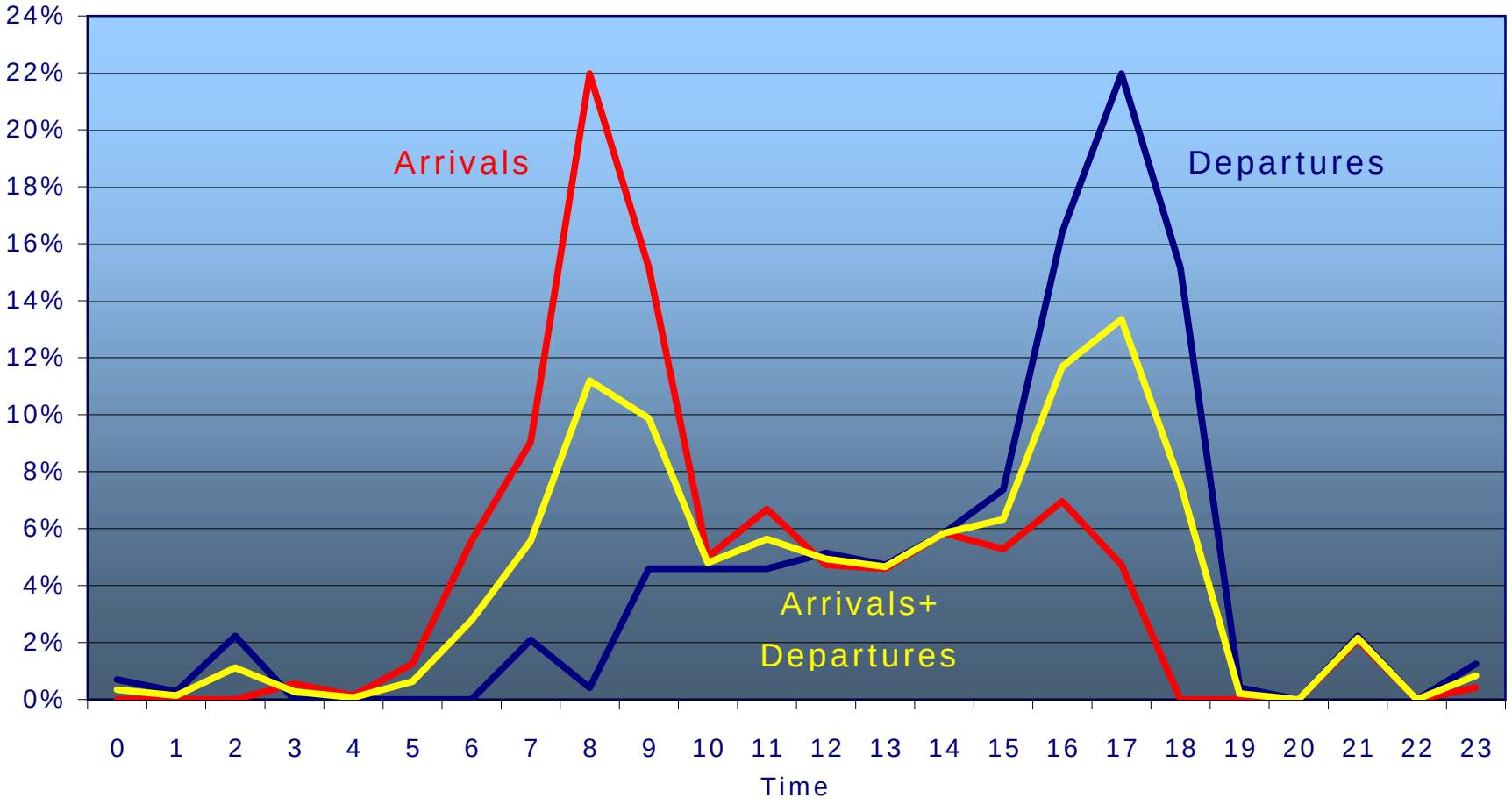
	Time																								
COMBINED PERSONNEL	**0:00**	**1:00**	**2:00**	**3:00**	**4:00**	**5:00**	**6:00**	**7:00**	**8:00**	**9:00**	**10:00**	**11:00**	**12:00**	**13:00**	**14:00**	**15:00**	**16:00**	**17:00**	**18:00**	**19:00**	**20:00**	**21:00**	**22:00**	**23:00**	**TOTAL**
Arrive	0	0	0	4	1	9	40	65	125	76	3	15	1	0	9	5	17	1	0	0	0	15	0	3	389
Depart	5	2	16	0	0	0	0	15	3	0	0	0	4	1	9	20	85	125	76	3	0	16	0	9	389
	0.0%	**0.0%**	**0.0%**	**1.0%**	**0.3%**	**2.3%**	**10.3%**	**16.7%**	**32.1%**	**19.5%**	**0.8%**	**3.9%**	**0.3%**	**0.0%**	**2.3%**	**1.3%**	**4.4%**	**0.3%**	**0.0%**	**0.0%**	**0.0%**	**3.9%**	**0.0%**	**0.8%**	**100.0%**

Public Safety Building at Mission Bay

Police Administration/Headquarters and Mission Bay District Station Combined

TIME	ARRIVALS						DEPARTURES						TOTAL						Percentage		
	Employees		Visitors		Total		Employees		Visitors		Total		Employees		Visitors		Total		IN	OUT	
0:00	0	0.0%	0	0.0%	0	0.0%	5	1.3%	0	0.0%	5	0.7%	5	0.6%	0	0.0%	5	0.3%	0%	100%	
1:00	0	0.0%	0	0.0%	0	0.0%	2	0.5%	0	0.0%	2	0.3%	2	0.3%	0	0.0%	2	0.1%	0%	100%	
2:00	0	0.0%	0	0.0%	0	0.0%	16	4.1%	0	0.0%	16	2.2%	16	2.1%	0	0.0%	16	1.1%	0%	100%	
3:00	4	1.0%	0	0.0%	4	0.6%	0	0.0%	0	0.0%	0	0.0%	4	0.5%	0	0.0%	4	0.3%	100%	0%	
4:00	1	0.3%	0	0.0%	1	0.1%	0	0.0%	0	0.0%	0	0.0%	1	0.1%	0	0.0%	1	0.1%	100%	0%	
5:00	9	2.3%	0	0.0%	9	1.3%	0	0.0%	0	0.0%	0	0.0%	9	1.2%	0	0.0%	9	0.6%	100%	0%	
6:00	40	10.3%	0	0.0%	40	5.6%	0	0.0%	0	0.0%	0	0.0%	40	5.1%	0	0.0%	40	2.8%	100%	0%	
7:00	65	16.7%	0	0.0%	65	9.0%	15	3.9%	0	0.0%	15	2.1%	80	10.3%	0	0.0%	80	5.6%	81%	19%	
8:00	125	32.1%	33	10.0%	158	22.0%	3	0.8%	0	0.0%	3	0.4%	128	16.5%	33	5.0%	161	11.2%	98%	2%	**AM Peak Hour**
9:00	76	19.5%	33	10.0%	109	15.2%	0	0.0%	33	10.0%	33	4.6%	76	9.8%	66	10.0%	142	9.9%	77%	23%	
10:00	3	0.8%	33	10.0%	36	5.0%	0	0.0%	33	10.0%	33	4.6%	3	0.4%	66	10.0%	69	4.8%	52%	48%	
11:00	15	3.9%	33	10.0%	48	6.7%	0	0.0%	33	10.0%	33	4.6%	15	1.9%	66	10.0%	81	5.6%	59%	41%	
12:00	1	0.3%	33	10.0%	34	4.7%	4	1.0%	33	10.0%	37	5.1%	5	0.6%	66	10.0%	71	4.9%	48%	52%	
13:00	0	0.0%	33	10.0%	33	4.6%	1	0.3%	33	10.0%	34	4.7%	1	0.1%	66	10.0%	67	4.7%	49%	51%	
14:00	9	2.3%	33	10.0%	42	5.8%	9	2.3%	33	10.0%	42	5.8%	18	2.3%	66	10.0%	84	5.8%	50%	50%	
15:00	5	1.3%	33	10.0%	38	5.3%	20	5.1%	33	10.0%	53	7.4%	25	3.2%	66	10.0%	91	6.3%	42%	58%	
16:00	17	4.4%	33	10.0%	50	7.0%	85	21.9%	33	10.0%	118	16.4%	102	13.1%	66	10.0%	168	11.7%	30%	70%	
17:00	1	0.3%	33	10.0%	34	4.7%	125	32.1%	33	10.0%	158	22.0%	126	16.2%	66	10.0%	192	13.4%	18%	82%	**PM Peak Hour**
18:00	0	0.0%	0	0.0%	0	0.0%	76	19.5%	33	10.0%	109	15.2%	76	9.8%	33	5.0%	109	7.6%	0%	100%	
19:00	0	0.0%	0	0.0%	0	0.0%	3	0.8%	0	0.0%	3	0.4%	3	0.4%	0	0.0%	3	0.2%	0%	100%	
20:00	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0%	0%	
21:00	15	3.9%	0	0.0%	15	2.1%	16	4.1%	0	0.0%	16	2.2%	31	4.0%	0	0.0%	31	2.2%	48%	52%	
22:00	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0%	0%	
23:00	3	0.8%	0	0.0%	3	0.4%	9	2.3%	0	0.0%	9	1.3%	12	1.5%	0	0.0%	12	0.8%	25%	75%	
TOTAL	**389**	**100%**	**330**	**100%**	**719**	**100%**	**389**	**100%**	**330**	**100%**	**719**	**100%**	**778**	**100%**	**660**	**100%**	**1,438**	**100%**	50%	50%	

SFPD Station and Administration HQ at Mission Bay



Public Safety Building at Mission Bay

PROJECT TRIP GENERATION - WEEKDAY

WORK TRIPS - POLICE STATION OFFICERS/FIRE FIGHTERS

DAILY		**PM PEAK HOUR**	
Total Person-trips:	2,705 person-trips	Total Person-trips:	365 person-trips
Work Trips:	360 person-trips	Work Trips:	49 person-trips

Origins	Distribution [1]	Mode	Percent [2]	AVO [2]	Daily		PM Peak Hour	
					Person Trips	Vehicle-Trips	Person Trips	Vehicle-Trips
Superdistrict 1	8.3%	Auto	100.0%	1.00	30	30	4	4
		Transit			0		0	
		Walk			0		0	
		Other			0		0	
		TOTAL	***100.0%***		***30***	***30***	***4***	***4***
Superdistrict 2	10.6%	Auto	100.0%	1.00	38	38	5	5
		Transit			0		0	
		Walk			0		0	
		Other			0		0	
		TOTAL	***100.0%***		***38***	***38***	***5***	***5***
Superdistrict 3	23.9%	Auto	100.0%	1.00	86	86	12	12
		Transit			0		0	
		Walk			0		0	
		Other			0		0	
		TOTAL	***100.0%***		***86***	***86***	***12***	***12***
Superdistrict 4	7.9%	Auto	100.0%	1.00	28	28	4	4
		Transit			0		0	
		Walk			0		0	
		Other			0		0	
		TOTAL	***100.0%***		***28***	***28***	***4***	***4***
East Bay	14.3%	Auto	100.0%	1.00	51	51	7	7
		Transit			0		0	
		Walk			0		0	
		Other			0		0	
		TOTAL	***100.0%***		***51***	***51***	***7***	***7***
North Bay	5.6%	Auto	100.0%	1.00	20	20	3	3
		Transit			0		0	
		Walk			0		0	
		Other			0		0	
		TOTAL	***100.0%***		***20***	***20***	***3***	***3***
South Bay	26.9%	Auto	100.0%	1.00	97	97	13	13
		Transit			0		0	
		Walk			0		0	
		Other			0		0	
		TOTAL	***100.0%***		***97***	***97***	***13***	***13***
Out of Region	2.5%	Auto	100.0%	1.00	9	9	1	1
		Transit			0		0	
		Walk			0		0	
		Other			0		0	
		TOTAL	***100.0%***		***9***	***9***	***1***	***1***
TOTAL	100.0%	Auto	100.0%	1.00	360	360	49	49
		Transit	0.0%		0		0	
		Walk	0.0%		0		0	
		Other	0.0%		0		0	
		TOTAL	***100.0%***		***360***	***360***	***49***	***49***

Notes:

[1] SF Guidelines, Appendix E - Table E-5 Work Trips to SD3 (All)

Public Safety Building at Mission Bay

PROJECT TRIP GENERATION - WEEKDAY
WORK TRIPS - STAFF

DAILY		PM PEAK HOUR	
Total Person-trips:	2,705 person-trips	Total Person-trips:	365 person-trips
Work Trips:	1,645 person-trips	Work Trips:	222 person-trips

Origins	Distribution [1]	Mode	Percent [1]	AVO [1]	Daily		PM Peak Hour	
					Person Trips	Vehicle-Trips	Person Trips	Vehicle-Trips
Superdistrict 1	8.3%	Auto	46.9%	1.30	64	49	9	7
		Transit	32.7%		45		6	
		Walk	17.7%		24		3	
		Other	2.7%		4		0	
		TOTAL	***100.0%***		***137***	***49***	***18***	***7***
Superdistrict 2	10.6%	Auto	64.6%	1.26	113	89	15	12
		Transit	26.4%		46		6	
		Walk	6.9%		12		2	
		Other	2.1%		4		0	
		TOTAL	***100.0%***		***174***	***89***	***24***	***12***
Superdistrict 3	23.9%	Auto	59.7%	1.25	235	188	32	25
		Transit	20.6%		81		11	
		Walk	15.1%		59		8	
		Other	4.6%		18		2	
		TOTAL	***100.0%***		***393***	***188***	***53***	***25***
Superdistrict 4	7.9%	Auto	75.7%	1.48	98	66	13	9
		Transit	21.5%		28		4	
		Walk	0.0%		0		0	
		Other	2.8%		4		0	
		TOTAL	***100.0%***		***130***	***66***	***18***	***9***
East Bay	14.3%	Auto	68.8%	1.61	162	101	22	14
		Transit	29.7%		70		9	
		Walk	0.0%		0		0	
		Other	1.5%		4		0	
		TOTAL	***100.0%***		***235***	***101***	***32***	***14***
North Bay	5.6%	Auto	86.9%	1.44	80	56	11	8
		Transit	10.5%		10		1	
		Walk	0.0%		0		0	
		Other	2.6%		2		0	
		TOTAL	***100.0%***		***92***	***56***	***12***	***8***
South Bay	26.9%	Auto	88.5%	1.13	392	347	53	47
		Transit	8.8%		39		5	
		Walk	0.0%		0		0	
		Other	2.7%		12		2	
		TOTAL	***100.0%***		***443***	***347***	***60***	***47***
Out of Region	2.5%	Auto	61.8%	1.56	25	16	3	2
		Transit	35.3%		15		2	
		Walk	0.0%		0		0	
		Other	2.9%		1		0	
		TOTAL	***100.0%***		***41***	***16***	***6***	***2***
TOTAL	100.0%	Auto	71.0%	1.28	1,169	912	158	123
		Transit	20.2%		333		45	
		Walk	5.8%		96		13	
		Other	2.9%		48		6	
		TOTAL	***100.0%***		***1,645***	***912***	***222***	***123***

Notes:
[1] SF Guidelines, Appendix E - Table E-5 Work Trips to SD3 (All)

Public Safety Building at Mission Bay

PROJECT TRIP GENERATION - WEEKDAY
NON-WORK TRIPS

DAILY		PM PEAK HOUR	
Total Person-trips:	2,705 person-trips	Total Person-trips:	365 person-trips
Non-Work Trips:	700 person-trips	Non-Work Trips:	95 person-trips

Origins	Distribution [1]	Mode	Percent [1]	AVO [1]	Daily		PM Peak Hour	
					Person Trips	Vehicle-Trips	Person Trips	Vehicle-Trips
Superdistrict 1	13.0%	Auto	36.0%	2.03	33	16	4	2
		Transit	19.2%		17		2	
		Walk	33.3%		30		4	
		Other	11.5%		10		1	
		TOTAL	***100.0%***		***91***	***16***	***12***	***2***
Superdistrict 2	14.0%	Auto	68.6%	1.97	67	34	9	5
		Transit	14.5%		14		2	
		Walk	2.4%		2		0	
		Other	14.5%		14		2	
		TOTAL	***100.0%***		***98***	***34***	***13***	***5***
Superdistrict 3	44.0%	Auto	43.7%	2.43	135	55	18	7
		Transit	21.5%		66		9	
		Walk	25.4%		78		11	
		Other	9.4%		29		4	
		TOTAL	***100.0%***		***308***	***55***	***42***	***7***
Superdistrict 4	7.0%	Auto	67.4%	2.51	33	13	4	2
		Transit	16.3%		8		1	
		Walk	7.0%		3		0	
		Other	9.3%		5		1	
		TOTAL	***100.0%***		***49***	***13***	***7***	***2***
East Bay	9.0%	Auto	68.4%	2.59	43	17	6	2
		Transit	29.8%		19		3	
		Walk	1.8%		1		0	
		Other	0.0%		0		0	
		TOTAL	***100.0%***		***63***	***17***	***9***	***2***
North Bay	1.0%	Auto	100.0%	2.11	7	3	1	0
		Transit	0.0%		0		0	
		Walk	0.0%		0		0	
		Other	0.0%		0		0	
		TOTAL	***100.0%***		***7***	***3***	***1***	***0***
South Bay	9.0%	Auto	94.6%	2.28	60	26	8	4
		Transit	3.6%		2		0	
		Walk	1.8%		1		0	
		Other	0.0%		0		0	
		TOTAL	***100.0%***		***63***	***26***	***9***	***4***
Out of Region	3.0%	Auto	73.6%	1.68	15	9	2	1
		Transit	21.1%		4		1	
		Walk	0.0%		0		0	
		Other	5.3%		1		0	
		TOTAL	***100.0%***		***21***	***9***	***3***	***1***
TOTAL	100.0%	Auto	56.1%	2.26	393	174	53	24
		Transit	18.8%		131		18	
		Walk	16.7%		117		16	
		Other	8.5%		59		8	
		TOTAL	***100.0%***		***700***	***174***	***95***	***24***

Notes:
[1] SF Guidelines, Appendix E - Table E-15 Visitor Trips to SD3 (All Other)

APPENDIX B
PARKING DEMAND

Public Safety Building at Mission Bay

PARKING DEMAND CALCULATIONS

PROJECT SIZE

Police Headquarters Bldg.	130,500	sq.ft.
Police Southern Station	27,000	sq.ft.
Fire Station	22,000	sq.ft.
Total	**179,500**	**sq.ft.**

MIDDAY DEMAND

Police Headquarters Bldg.

Short-Term	114	daily visitor vehicle-trips
	5.5	turn-over rate
	100%	of the peak demand (1)
	10	spaces
Long-Term	264	daily employees
	100%	of the peak demand (1)
	146	spaces
Total	**156**	**spaces**

Police Southern Station

Short-Term	50	daily visitor vehicle-trips
	5.5	turn-over rate
	100%	of the peak demand (1)
	5	spaces
Long-Term	65	daily staff employees
	100%	of the peak demand (1)
	36	spaces
	60	daily officers
	100%	of the peak demand (1)
	60	spaces
Total	**101**	**spaces**

Fire Station

Short-Term	10	daily visitor vehicle-trips
	5.5	turn-over rate
	100%	of the peak demand (1)
	1	spaces
Long-Term	15	daily employees
	100%	of the peak demand (1)
	15	spaces
Total	**16**	**spaces**

Total Midday Demand:

Short-Term	16	spaces
Long-Term	257	spaces
TOTAL	**273**	**spaces**

EVENING DEMAND

Police Headquarters Bldg.

Short-Term	114	daily visitor vehicle-trips
	5.5	turn-over rate
	80%	of the peak demand (2)
	8	spaces
Long-Term	264	daily employees
	80%	of the peak demand (2)
	117	spaces
Total	**125**	**spaces**

Police Southern Station

Short-Term	50	daily visitor vehicle-trips
	5.5	turn-over rate
	80%	of the peak demand (2)
	4	spaces
Long-Term	65	daily staff employees
	80%	of the peak demand (2)
	29	spaces
	60	daily officers
	100%	of the peak demand (3)
	60	spaces
Total	**93**	**spaces**

Fire Station

Short-Term	10	daily visitor vehicle-trips
	5.5	turn-over rate
	80%	of the peak demand (2)
	1	spaces
Long-Term	15	daily employees
	100%	of the peak demand (3)
	15	spaces
Total	**16**	**spaces**

Total Evening Demand:

Short-Term	13	spaces
Long-Term	221	spaces
TOTAL	**234**	**spaces**

Note

(1) Peak midday non-residential parking demand typically occurs between 11 a.m. and 2 p.m.
(2) Evening non-residential parking demand typically represents about 80% of the maximum and typically occurs between 2 and 5 p.m
(3) Assumes 100% of the parking demand for patrol officers and firefighters

Parking Demand Equations

Short-term: Number of daily visitor vehicle-trips / 2 / turnover rate
Long-term: Number of employees on a daily basis x % of employees who drive / average vehicle occupancy

Sources: *SF Guidelines* , ULI *Shared Parking* , ITE *Shared Parking Planning Guidelines, SF Planning Code*

APPENDIX C
POLICE AND FIRE STATION STUDIES

Public Safety Building at Mission Bay

PROJECT TRIP GENERATION SUMMARY

POLICE FACILITIES

San Mateo, CA	Proposed	45,000 sq.ft.	195 employees	231 sq.ft./empl.	590 daily veh.trips		3.03 daily veh.trips/empl	13.11 daily veh.trips/ksq.ft.		
					51 AM veh.trips	9% % daily	0.26 AM veh.trips/empl	1.13 AM veh.trips/ksq.ft.	10 20% in	41 80% out
					88 PM veh.trips	15% % daily	0.45 PM veh.trips/empl	1.96 PM veh.trips/ksq.ft	33 38% in	55 63% out
Mammoth Lakes, CA	Existing	12,000 sq.ft.	27 employees	444 sq.ft./empl.	264 daily veh.trips		9.78 daily veh.trips/empl	22.00 daily veh.trips/ksq.ft.		
					28 AM veh.trips	11% % daily	1.04 AM veh.trips/empl	2.33 AM veh.trips/ksq.ft.		
					27 PM veh.trips	10% % daily	1.00 PM veh.trips/empl	2.25 PM veh.trips/ksq.ft	14 52% in	13 48% out
Los Gatos, CA	Proposed	11,000 sq.ft.	23 employees	478 sq.ft./empl.	118 daily veh.trips		5.13 daily veh.trips/empl	10.73 daily veh.trips/ksq.ft.		
					15 AM veh.trips	13% % daily	0.65 AM veh.trips/empl	1.36 AM veh.trips/ksq.ft.	7 47% in	8 53% out
					20 PM veh.trips	17% % daily	0.87 PM veh.trips/empl	1.82 PM veh.trips/ksq.ft	8 40% in	12 60% out
AVERAGE		**22,700 sq.ft.**	**80 employees**	**284 sq.ft./empl.**	**330 daily veh.trips**		**4.13 daily veh.trips/empl**	**14.54 daily veh.trips/ksq.ft.**		
					33 AM veh.trips	**10.0% % daily**	**0.41 AM veh.trips/empl**	**1.45 AM veh.trips/ksq.ft.**	**9 26% in**	**25 74% out**
					45 PM veh.trips	**13.6% % daily**	**0.56 PM veh.trips/empl**	**1.98 PM veh.trips/ksq.ft**	**18 41% in**	**27 59% out**

FIRE STATION

Scotts Valley,CA	Proposed	12,000 sq.ft.	11 employees	1,091 sq.ft./empl.	100 daily veh.trips		9.09 daily veh.trips/empl	8.33 daily veh.trips/ksq.ft.		
					14 AM veh.trips	14% % daily	1.27 AM veh.trips/empl	1.17 AM veh.trips/ksq.ft.	9 64% in	5 36% out
					10 PM veh.trips	10% % daily	0.91 PM veh.trips/empl	0.83 PM veh.trips/ksq.ft	2 20% in	8 80% out
Gainesville,FL	Proposed	N/A sq.ft.	5 employees	N/A sq.ft./empl.	27 daily veh.trips		5.40 daily veh.trips/empl			
AVERAGE		**12,000 sq.ft.**	**10 employees**	**1,200 sq.ft./empl.**	**70 daily veh.trips**		**7.00 daily veh.trips/empl**	**5.83 daily veh.trips/ksq.ft.**		
					14 AM veh.trips	**20.0% % daily**	**1.40 AM veh.trips/empl**	**1.17 AM veh.trips/ksq.ft.**	**9 64% in**	**5 36% out**
					10 PM veh.trips	**14.3% % daily**	**1.00 PM veh.trips/empl**	**0.83 PM veh.trips/ksq.ft**	**2 20% in**	**8 80% out**

APPENDIX D
1998 MISSION BAY FINAL SEIR

FINAL

MISSION BAY SUBSEQUENT ENVIRONMENTAL IMPACT REPORT

City and County of San Francisco Planning Department ◆ San Francisco Redevelopment Agency

Planning Department File No. 96.771E
San Francisco Redevelopment Agency Case No. ER 919-97
State Clearinghouse No. 97092068

Draft SEIR Publication Date: April 11, 1998
Draft SEIR Public Hearing Date: May 12, 1998
Draft SEIR Public Comment Period: April 11, 1998 to June 9, 1998
Final SEIR Certification Date: September 17, 1998

VOLUME I
PROJECT DESCRIPTION, SETTING, AND IMPACT ANALYSIS

● Indicates material that is new or has been revised since publication of the Draft SEIR.

TABLE III.A.1
SUMMARY OF PROPOSED MISSION BAY DEVELOPMENT BY LAND USE /a/

Land Use	Mission Bay North Redevelopment Area	Mission Bay South Redevelopment Area	Grand Total /b/
Residential (dwelling units)	3,000	3,090	6,090 /c/
Commercial Industrial and Office (gross sq. ft.)	0	5,557,000	5,557,000
UCSF (gross sq. ft.)	0	2,650,000	2,650,000
Retail			
Entertainment-Oriented Retail (gross sq. ft.)	389,000	56,000	445,000
City-Serving Retail (gross sq. ft.)	222,000	583,000	805,000
Neighborhood-Serving Retail (gross sq. ft.)	56,000	201,000	257,000
Hotel (rooms)	0	500	500
Public Open Space (acres)	6	41 /d/	47
Public Facilities (acres)/e/	1.5 /f/	3.7 /f/	5.2

Notes:
a. Parking is not included in the gross square footage totals given for each land use. Maximum parking allowances are outlined in this section under "Parking and Loading" under "Redevelopment Plans and Proposed Land Uses," and are discussed in Table V.E.17 and "Parking Impacts" in Section V.E, Transportation: Impacts.
b. The conceptual agreements between the City and Catellus do not cover those portions of the proposed Redevelopment Areas not owned by Catellus. The components of the proposed development program summarized in the Grand Total that are not on land owned by Catellus consist of 90 dwelling units along Third Street, 310,000 gross sq. ft. of City-serving retail on the Castle Metals site, and 250,000 gross sq. ft. of city-serving retail on the Esprit site.
c. Of the 3,000 dwelling units north of the Channel, 20% would be affordable units. Of the 3,090 dwelling units south of the Channel, the Redevelopment Agency would seek non-profit developers to build approximately 1,100 affordable units, i.e., 37%.
d. The 41 acres of public open space in Mission Bay South includes about 8 acres of open space on the proposed UCSF site.
e. The existing Channel Pump Station in Mission Bay North is on about 1.5 acres; the site is not proposed for redevelopment.
f. In addition to the acreages shown in the tables, land under the I-280 that is not otherwise designated Public Open Space would be designated Public Facilities.

Source: Catellus Development Corporation and San Francisco Redevelopment Agency.

and Zoning Map would be amended to conform with the proposed Redevelopment Plans; the *Mission Bay Plan,* Part II of the *Central Waterfront Area Plan,* would be rescinded. The UCSF site would be developed by The Regents as described in the UCSF *1996 Long Range Development Plan* (LRDP)/3/, and as analyzed in the UCSF LRDP Final EIR./4/

The project sponsors are the San Francisco Redevelopment Agency (Redevelopment Agency) and Catellus Development Corporation (Catellus). The public/private cooperative effort has several

TABLE III.A.2
PROPOSED MISSION BAY DEVELOPMENT BY REDEVELOPMENT PLAN LAND USE DESIGNATIONS/a/

Land Use Designation	Mission Bay North Redevelopment Area	Mission Bay South Redevelopment Area	Grand Total/b/
Mission Bay Residential			
Dwelling Units/c/	1,920	3,090 /b/	5,010
Neighborhood-serving Retail (gross sq. ft.)	56,000	111,000	167,000
Mission Bay North Retail			
Entertainment-oriented Commercial (gross sq. ft.)	389,000	0	389,000
City-serving Retail (gross sq. ft.)	222,000	0	222,000
Dwelling Units /c/	1,080	0	1,080
Hotel			
Hotel (rooms)	0	500	500
Entertainment-oriented Commercial (gross sq. ft.)	0	56,000	56,000
UCSF Site/d/			
UCSF uses (gross sq. ft.)	0	2,650,000	2,650,000
City School Site (acres)	0	2.2	2.2
Open Space (acres)	0	8	8
Commercial Industrial			
Commercial Industrial (gross sq. ft.)	0	4,163,000	4,163,000
Neighborhood-serving Retail (gross sq. ft.)	0	58,400	58,400
Commercial Industrial / Retail			
Commercial Industrial (gross sq. ft.)		1,394,000	1,394,000
Neighborhood-serving Retail (gross sq. ft.)		31,600	31,600
City-serving Retail (gross sq. ft.)		23,000	23,000
Mission Bay South Retail			
City-serving Retail (gross sq. ft.)	0	560,000 /b/	560,000
Public Facilities (acres, excluding City school site) /f/	1.5 /e/	1.5	3.0
Public Open Space (acres, excluding UCSF)	6	33	39

Notes:

a. The locations of the proposed land use designations are shown in Figure III.B.3. Parking is not included in the gross square footage totals given for each land use. Maximum parking allowances are outlined in this section in "Parking and Loading," under "Redevelopment Plans and Proposed Land Uses," and are discussed in Table V.E.17 and "Parking Impacts" in Section V.E, Transportation: Impacts.

b. The conceptual agreements between the City and Catellus do not cover portions of the proposed Redevelopment Areas not owned by Catellus. The components of the proposed development program summarized in the Grand Total that are not on land owned by Catellus consist of 90 dwelling units along Third Street, 310,000 gross sq. ft. of city-serving retail on the Castle Metals site, and 250,000 gross sq. ft. of city-serving retail on the Esprit site.

c. Of the 3,000 dwelling units north of the Channel, 20% would be affordable units. Of the 3,090 dwelling units south of the Channel, the Redevelopment Agency would select non-profit developers to build approximately 1,100 affordable units.

d. Refer to Table III.B.1 for details on the UCSF development program.

e. The existing Channel Pump Station, on 1.5 acres of city-owned land, is not proposed for development.

f. In addition to the acreages shown in the tables, land under I-280 that is not otherwise designated Public Open Space would be designated Public Facilities.

Source: Catellus Development Corporation and San Francisco Redevelopment Agency.

TABLE V.E.6
DAILY AND P.M. PEAK HOUR PERSON TRIPS BY LAND USE TYPE

Project Areas	Land Use Type	Land Use Intensity	Land Use Unit /a/	Daily Trips	P.M. Peak Hour Trips
Mission Bay North	Retail	423	ksq. ft.	60,112	2,404
	Restaurant	100	ksq. ft.	19,272	2,602
	Residential	3,000	d.u.	25,200	4,360
	Movie Theater	25	screens	22,089	1,664
	Subtotal			*126,673*	*11,029*
Mission Bay South					
Central Subarea	Retail	167	ksq. ft.	21,787	871
	Hotel	500	rooms	3,325	316
	Residential	3,090	d.u.	26,141	4,522
	Subtotal			*51,253*	*5,710*
East Subarea	Office	1,476	ksq. ft.	24,868	2,760
	Retail	67	ksq. ft.	8,741	350
	R & D	1,476	ksq. ft.	10,776	1,724
	Large Retail	273	ksq. ft.	26,118	2,351
	Subtotal			*70,503*	*7,185*
West Subarea	Office	1,302	ksq. ft.	21,945	2,436
	Retail	23	ksq. ft.	3,001	120
	R & D	1,305	ksq. ft.	9,509	1,521
	Large Retail	310	ksq. ft.	29,658	2,669
	Subtotal			*64,112*	*6,747*
UCSF Subarea	UCSF	2,650	ksq. ft.	20,180/b/	2,754
	School	500	students	1,484	74
	Subtotal			*21,664*	*2,828*
Total Mission Bay North				126,673	11,029
Total Mission Bay South				207,533	22,469
TOTAL PROJECT				334,205	33,499

Notes:
a. ksq. ft. = thousand square feet; d.u. = dwelling units; rooms = hotel guest rooms
b. As noted in the *UCSF Long Range Development Plan FEIR*, about 10% of these trips would be internal trips (see Table 12-1, p. 306). This correlates with the overall assumption that about 10% of the total person trips would be internal trips as explained in "Multi-Use Development Capture Rates" under "Methodology," in Appendix D.
Source: Wilbur Smith Associates.

TABLE V.E.7
PERSON TRIPS BY LAND USE TYPE AND BY MODE

Project Areas	Land Use Type	Daily Person Trips: Mode of Travel: Auto	Transit	Walk/Other	Total	P.M. Peak Hour Person Trips: Mode of Travel: Auto	Transit	Walk\Other	Total
Mission Bay North	Retail	35,631	13,873	10,608	60,112	1,425	555	424	2,404
	Restaurant	13,052	4,376	1,843	19,271	1,762	591	249	2,602
	Residential	12,948	5,682	6,570	25,200	2,240	983	1,137	4,360
	Movie Theater	12,079	6,955	3,054	22,088	910	524	230	1,664
	Subtotal	*73,710*	*30,886*	*22,075*	*126,671*	*6,337*	*2,653*	*2,040*	*11,030*
Mission Bay South									
Central Subarea	Retail	14,425	2,888	4,474	21,787	577	116	179	872
	Hotel	2,661	424	239	3,324	253	40	23	316
	Residential	14,535	5,661	5,945	26,141	2,515	979	1,029	4,523
	Subtotal	*31,621*	*8,973*	*10,658*	*51,252*	*3,345*	*1,135*	*1,230*	*5,711*
East Subarea	Office	15,797	5,568	3,503	24,868	1,753	618	389	2,760
	Retail	5,787	1,159	1,795	8,741	231	46	72	349
	R & D	6,845	2,413	1,518	10,776	1,095	386	243	1,724
	Large Retail	23,127	2,991	0	26,118	2,081	269	0	2,350
	Subtotal	*51,556*	*12,131*	*6,816*	*70,503*	*5,160*	*1,319*	*704*	*7,183*
West Subarea	Office	13,940	4,914	3,091	21,945	1,547	545	343	2,435
	Retail	1,987	398	616	3,001	79	16	25	120
	R & D	6,041	2,129	1,340	9,510	966	341	214	1,521
	Large Retail	26,262	3,396	0	29,658	2,364	306	0	2,670
	Subtotal	*48,230*	*10,837*	*5,047*	*64,114*	*4,956*	*1,208*	*582*	*6,746*
UCSF Subarea	UCSF	12,464	4,322	3,394	20,180/a/	1,870	648	236	2,754
	School	968	287	229	1,484	48	14	11	73
	Subtotal	*13,432*	*4,609*	*3,623*	*21,664*	*1,918*	*662*	*247*	*2,827*
Total Mission Bay North		73,710	30,886	22,075	126,671	6,337	2,653	2,040	11,030
Total Mission Bay South		144,839	36,550	26,144	207,533	15,379	4,325	2,764	22,467
TOTAL PROJECT		218,549	67,436	48,219	334,204	21,716	6,977	4,804	33,497

Notes:

a. As noted in the *UCSF Long Range Development Plan FEIR*, about 10% of these trips would be internal trips (see Table 12-1, p. 306). This correlates with the overall assumption that about 10% of the total person trips would be internal trips as explained in "Multi-Use Development Capture Rates" under "Methodology," in Appendix D.

Source: Wilbur Smith Associates.

TABLE V.E.8
P.M. PEAK HOUR VEHICLE TRIPS BY LAND USE TYPE

Project Areas	Land Use Type	Land Use Intensity	Land Use Units /a/	P.M. Peak Hour Vehicle Trips In	Out	Total
Mission Bay North	Retail	423	ksq. ft.	257	302	559
	Restaurant	100	ksq. ft.	273	320	593
	Residential	3,000	d.u.	1,277	643	1,920
	Movie Theater	25	screens	300	97	397
	Subtotal			*2,107*	*1,362*	*3,469*
Mission Bay South CentralSubarea	Retail	167	ksq. ft.	136	160	296
	Hotel	500	rooms	36	95	131
	Residential	3,090	d.u.	1,436	724	2,160
	Subtotal			*1,608*	*979*	*2,587*
East Subarea	Office	1,476	ksq. ft.	113	1,219	1,332
	Retail	90	ksq. ft.	55	64	119
	R & D	1,476	ksq. ft.	71	761	832
	Large Retail	250	ksq. ft.	489	574	1,063
	Subtotal			*728*	*2,618*	*3,346*
West Subarea	Office	1,302	ksq. ft.	100	1,075	1,175
	Retail	23	ksq. ft.	19	22	41
	R & D	1,305	ksq. ft.	62	672	734
	Large Retail	310	ksq. ft.	555	652	1,207
	Subtotal			*736*	*2,421*	*3,157*
UCSF Subarea	UCSF	2,650	ksq. ft.	243	1,379	1,622
	School	500	students	8	18	26
	Subtotal			*251*	*1,397*	*1,648*
Total Mission Bay North				2,107	1,362	3,469
Total Mission Bay South				3,323	7,415	10,738
TOTAL PROJECT				5,430	8,777	14,207

Notes:
a. ksq. ft. = thousand square feet; d.u. = dwelling units; rooms = hotel guest rooms

Source: Wilbur Smith Associates.

FINAL

MISSION BAY SUBSEQUENT ENVIRONMENTAL IMPACT REPORT

City and County of San Francisco Planning Department ◆ San Francisco Redevelopment Agency

Planning Department File No. 96.771E
San Francisco Redevelopment Agency Case No. ER 919-97
State Clearinghouse No. 97092068

Draft SEIR Publication Date: April 11, 1998
Draft SEIR Public Hearing Date: May 12, 1998
Draft SEIR Public Comment Period: April 11, 1998 to June 9, 1998
Final SEIR Certification Date: September 17, 1998

VOLUME II
SETTING AND IMPACT ANALYSIS
(CONTINUED FROM VOLUME I)

● Indicates material that is new or has been revised since publication of the Draft SEIR.

This report has been prepared on post-consumer recycled paper.

TABLE VII.G.1 ●
SUMMARY OF PROPOSED DEVELOPMENT BY LAND USE /a/
PROJECT WITH COMBINATION OF VARIANTS
CURRENTLY UNDER CONSIDERATION BY THE PROJECT SPONSORS

Land Use	Mission Bay North Redevelopment Area	Mission Bay South Redevelopment Area	Grand Total /b/
Residential (dwelling units)	3,000	3,090	6,090/c/
Commercial Industrial and Office (gross sq. ft.)	0	6,621,000	6,621,000
UCSF (gross sq. ft.)	0	2,650,000	2,650,000
Retail			
Entertainment-Oriented Retail (gross sq. ft.)	389,000	56,000	445,000
City-Serving Retail (gross sq. ft.)	111,000	128,000	239,000
Neighborhood-Serving Retail (gross sq. ft.)	56,000	201,000	257,000
Hotel (rooms)	0	500	500
Public Open Space (acres)/d/	6	41/e/	47
Public Facilities (acres)	1.5 /f/	3.7/g/	5.2

Notes:

a. Parking is not included in the gross square footage totals given for each land use. Maximum parking allowances are outlined in this section under "Parking and Loading" under "Redevelopment Plans and Proposed Land Uses," and are discussed in Table V.E.17 and "Parking Impacts" in Section V.E, Transportation: Impacts, pp. V.E.95-V.E.101.

b. The conceptual agreements between the City and Catellus do not cover those portions of the proposed Redevelopment Areas not owned by Catellus. The components of the proposed development program summarized in the Grand Total that are not on land owned by Catellus consist of 90 dwelling units along Third Street, 604,000 gross sq. ft. of commercial/industrial and 50,000 gross sq. ft. of City-serving retail on the Castle Metals site, and 460,000 gross sq. ft. of commercial/industrial/retail and 40,000 city-serving retail on the Esprit site.

   The changes from the proposed project include the reduction of 111,000 gross sq. ft. of city-serving retail in Mission Bay North and 455,000 gross sq. ft. in Mission Bay South, for a total reduction of 566,000 gross sq. ft.; the addition of 1,064,000 gross sq. ft. of Commercial Industrial and Office space in Mission Bay South; and the addition of the 15,000-gross-sq.-ft. commercial building in the open space near Pier 64.

c. Of the 3,000 dwelling units north of the Channel, 20% would be affordable units. Of the 3,090 dwelling units south of the Channel, the Redevelopment Agency would seek non-profit developers to build approximately 1,100 affordable units, i.e., 37%.

d. Additionally, approximately 2 more acres of public open space would be developed by Catellus on adjacent port property outside of the Project Area as an expanded bayfront open space area.

e. The 41 acres of public open space in Mission Bay South includes about 8 acres of open space on the proposed UCSF site.

f. The existing Channel Pump Station in Mission Bay North is on about 1.5 acres; the site is not proposed for redevelopment.

g. In addition to the acreages shown in the tables, land under the I-280 elevated freeway that is not otherwise designated Public Open Space would be designated Public Facilities.

Source: Catellus Development Corporation and San Francisco Redevelopment Agency.

TABLE VII.G.2 ●
PROJECT WITH COMBINATION OF VARIANTS
LAND USE DESIGNATIONS/a/

Land Use Designation	Mission Bay North Redevelopment Area	Mission Bay South Redevelopment Area	Grand Total/b/
Mission Bay Residential			
Dwelling Units/c/	1,920	3,090 /b/	5,010
Neighborhood-serving Retail (gross sq. ft.)	56,000	111,000	167,000
Mission Bay North Retail			
Entertainment-oriented Commercial (gross sq. ft.)	389,000	0	389,000
City-serving Retail (gross sq. ft.)/d/	111,000	0	111,000
Dwelling Units /c/	1,080	0	1,080
Hotel			
Hotel (rooms)	0	500	500
Entertainment-oriented Commercial (gross sq. ft.)	0	56,000	56,000
UCSF Site/e/			
UCSF uses (gross sq. ft.)	0	2,650,000	2,650,000
City School Site (acres)	0	2.2	2.2
Open Space (acres)	0	8	8
Commercial Industrial			
Commercial Industrial (gross sq. ft.)	0	4,163,000	4,163,000
Neighborhood-serving Retail (gross sq. ft.)	0	58,400	58,400
Commercial Industrial / Retail			
Commercial Industrial (gross sq. ft.)/d/	0	2,458,000	2,458,000
Neighborhood-serving Retail (gross sq. ft.)	0	31,600	31,600
City-serving Retail (gross sq. ft.)/d/	0	128,000	128,000
Mission Bay South Retail /d/			
City-serving Retail (gross sq. ft.)	0	0	0
Public Facilities (acres, excluding City school site) /g/	1.5 /f/	1.5	3.0
Public Open Space (acres, excluding UCSF)/h/	6	33	39

Notes:

a. The locations of the proposed land use designations are shown in Figure VII.G.1. Parking is not included in the gross square footage totals given for each land use. Maximum parking allowances are outlined in this section in "Parking and Loading," under "Redevelopment Plans and Proposed Land Uses," and are discussed in Table V.E.17 and "Parking Impacts" in Section V.E, Transportation: Impacts.

b. The conceptual agreements between the City and Catellus do not cover portions of the proposed Redevelopment Areas not owned by Catellus. The components of the proposed development program summarized in the Grand Total that are not on land owned by Catellus consist of 90 dwelling units along Third Street, 560,000 gross sq. ft. of Commercial Industrial and 50,000 gross sq. ft. of city-serving retail on the Castle Metals site, 44,000 gross sq. ft. of Commercial Industrial on the three small parcels at the northeastern corner of the Castle Metals site, and 460,000 gross sq. ft. of Commercial Industrial and 40,000 gross sq. ft. of city-serving retail on the Esprit site.

c. Of the 3,000 dwelling units north of the Channel, 20% would be affordable units. Of the 3,090 dwelling units south of the Channel, the Redevelopment Agency would select developers to build approximately 1,100 affordable units.

d. The changes from the project in gross floor area would be as follows: a reduction of 111,000 gross sq. ft. in Mission Bay North City Serving Retail; the addition of 1,169,000 gross sq. ft. of Commercial Industrial/Retail, of which 1,064,000 gross sq. ft. would be Commercial Industrial and 105,000 gross sq. ft. would be Retail; and the reduction of 560,000 gross sq. ft. of Mission Bay South Retail (thereby eliminating that land use designation).

e. Refer to Table III.B.1 for details on the UCSF development program.

f. The existing Channel Pump Station, on 1.5 acres of city-owned land, is not proposed for development.

g. In addition to the acreages shown in the tables, land under I-280 that is not otherwise designated Public Open Space would be designated Public Facilities.

h. Approximately 2 more acres of public open space would be developed on adjacent port property outside of the Project Area as an expanded bayfront open space area.

Source: Catellus Development Corporation and San Francisco Redevelopment Agency.

project. The reduced retail development associated with no Berry Street crossing would reduce building massing on the northeastern-most block of the Project Area.

- **Transportation**

- Roadway modifications under this combination of variants include the realignment of Terry A. François Boulevard to the west to provide open space closer to the waterfront. There would be no at-grade rail crossing at Berry Street, and Berry Street would be extended around the end of China Basin Channel to intersect with The Common immediately east of the Caltrain tracks. These roadway modifications would provide emergency access from Seventh Street by crossing the median between South and North Common Streets. They would provide direct egress from Mission Bay North's west end to Seventh Street. They would also provide fairly direct access from Mission Bay South to Mission Bay North that would not be dependent on bridges. Pertinent land use changes are discussed above under "Description."

- In summary, these land use changes would change p.m. peak hour trip generation as follows: 2,765 fewer person trips; 1,150 fewer vehicle trips (in- and outbound); fewer inbound transit trips but 40 more outbound transit trips; 10 more inbound and 200 more outbound bicycle and pedestrian trips. The 2,765 fewer p.m. peak hour person trips under this combination of variants would be a reduction of approximately 8% in comparison to the proposed project. Table VII.G.3 compares the p.m. peak hour person trip generation from this combination with that of the project.

TABLE VII.G.3 ●
PM PEAK HOUR PERSON TRIP GENERATION IN 2015
COMBINATION OF VARIANTS COMPARED WITH PROJECT

Area	Project	Combination of Variants	Difference
Mission Bay North	11,030	10,710	-320
Mission Bay South	22,470	20,025	-2,445
Total	33,500	30,735	-2,765

Source: Wilbur Smith Associates

APPENDIX E
2008 UCSF MEDICAL CENTER AT MB FEIR

UCSF MEDICAL CENTER AT MISSION BAY

Final Environmental Impact Report

State Clearinghouse No. 2008012075

Prepared for
University of California San Francisco

August 2008

Changes from the Draft EIR text are indicated by a dot (●)
in the left margin.

225 Bush Street
Suite 1700
San Francisco, CA 94104
415.896.5900
www.esassoc.com

Los Angeles

Oakland

Olympia

Petaluma

Portland

Sacramento

San Diego

Seattle

Tampa

Woodland Hills

207192

ESA

TABLE 3-2
UCSF MEDICAL CENTER AT MISSION BAY PROPOSED DEVELOPMENT BY PHASE

	GSF[a]	ASF[b]	RSF[c]
LRDP Phase (289 bed Hospital)			
Hospital	621,000	473,081	558,900
Outpatient Building (incl. HSB)	213,500	147,761	192,150
Cancer Outpatient Building	123,000	72,781	110,700
Energy Center	36,000	n/a[d]	32,400
Parking spaces: 476 in surface, 600 in parking structure			
LRDP Phase Total	993,500		894,150
Parking: 1,075			
Future Phase (261 bed Hospital)	793,500	tbd[e]	714,150
Parking: + 225–925			
TOTAL (550-bed Hospital)	1,787,000		1,608,300
Parking: 1,300–2,000			

[a] GSF = gross square feet
[b] ASF = assignable square feet -- used for UCSF space assignments
[c] RSF = rentable square feet – used to define entitlement of SFRA Mission Bay Plan development
[d] n/a = not applicable
[e] tbd = to be determined

SFRA entitlement for Blocks 36-39 is 1,020,000 rentable square feet
SFRA entitlement for Block X3 is 588,300 rentable square feet

SOURCE: UCSF Campus Planning, 2008

TABLE 3-3
UCSF MEDICAL CENTER AT MISSION BAY PROJECTED POPULATION

Population	LRDP Phase ~~GSF~~[a]	Future Phase ~~ASF~~[b]	Total ~~RSF~~[c]
Staff	923	973	1,896
House Staff / Intern / Student	172	156	328
Patients, Visitors and Vendors	4,036	3,409	7,445
Total	5,131	4,538	9,669

~~[a] GSF = gross square feet~~
~~[b] ASF = assignable square feet -- used for UCSF space assignments~~
~~[c] RSF = rentable square feet – used to define entitlement of SFRA Mission Bay Plan development~~

SOURCE: UCSF Campus Planning, 2008

TABLE 4.6-4
PERSON-TRIP GENERATION RATES

Population Group	Weekday Daily Person Trip Rate[a]	Weekday PM Peak Hour Trip Rate (Percent of Total Daily Trips)
Physician/Faculty	2.23	12%
Hospital Staff	2.23	23%
House Staff/Intern/Student	2.23	13%
Hospital Patients	2.00	9%
Visitors to Patients	2.00	7%
Outpatients	2.00	9%
Visitors to Outpatients	2.00	9%
Visitors to Hospital/Outpatient Staff	2.00	7%
Vendors to Hospital/Outpatient Staff	2.00	10%

[a] Daily person trips per physician, staff, student, patient, visitor and vendor taken from 2005 LRDP Amendment #2 EIR (2005)

SOURCE: Adavant Consulting, 2008

TABLE 4.6-5
WEEKDAY DAILY PERSON TRIPS

Population Group	LRDP Phase	Future Phase
Physician/Faculty	622	1,153
Hospital Staff	1,405	3,011
House Staff/Intern/Student	415	796
Subtotal Faculty/Staff/Students	*2,442*	*4,960*
Hospital Patients	492	936
Visitors to Patients	1,230	2,340
Outpatients	3,120	5,676
Visitors to Outpatients	3,120	5,676
Visitors to Hospital / Outpatient Staff	78	188
Vendors to Hospital / Outpatient Staff	32	74
Subtotal Patients/Visitors	*8,072*	*14,890*
TOTAL	**10,514**	**19,850**
Current Totals Compared to Totals analyzed in the 2005 EIR	**-4,306**	**-4,685**

SOURCE: Adavant Consulting, 2008

TABLE 4.6-6
WEEKDAY PM PEAK-HOUR PERSON TRIPS

Population Group	LRDP Phase	Future Phase
Physician/Faculty	75	138
Hospital Staff	323	693
House Staff/Intern/Student	54	103
Subtotal Faculty/Staff/Students	*452*	*934*
Hospital Patients	89	168
Visitors to Patients	111	211
Outpatients	218	397
Visitors to Outpatients	281	511
Visitors to Hospital / Outpatient Staff	7	17
Vendors to Hospital / Outpatient Staff	2	5
Subtotal Patients/Visitors	*708*	*1,309*
TOTAL	**1,160**	**2,243**
Current Totals Compared to Total analyzed in the 2005 EIR	**-724**	**-926**

SOURCE: Adavant Consulting, 2008

TABLE 4.6-7
TRIP DISTRIBUTION[a]

Geographic Region	Percentage
San Francisco	61
North Bay	[b]
East Bay	10
South Bay	29
Total	**100**

[a] Based on 2005 LRDP Amendment #2 EIR data
[b] North Bay percentage of 2% included in San Francisco geographic region

SOURCE: Adavant Consulting, 2008

TABLE 4.6-8
MODE CHOICE ALLOCATION[a]

Population Group	Drive Alone	Drop Off	Car-pool	Van-pool	Muni	Other Transit	Bike/ Motor-cycle	Walk
Physician/Faculty	59%	5%	11%	4%	6%	7%	2%	6%
Hospital Staff	36%	5%	15%	9%	21%	5%	2%	7%
House Staff/Intern/Student	36%	5%	15%	9%	21%	5%	2%	7%
Hospital Patients	36%	5%	15%	9%	21%	5%	2%	7%
Visitors to Patients	59%	5%	11%	4%	6%	7%	2%	6%
Outpatients	36%	5%	15%	9%	21%	5%	2%	7%
Visitors to Outpatients	36%	5%	15%	9%	21%	5%	2%	7%
Visitors to Hospital/Outpatient Staff	59%	5%	11%	4%	6%	7%	2%	6%
Vendors to Hospital/Outpatient Staff	100%	0%	0%	0%	0%	0%	0%	0%

[a] Based on transportation surveys conducted at Parnassus Heights in 1992 and 1999, and Mission Bay SEIR data.

SOURCE: Adavant Consulting, 2008

TABLE 4.6-9
WEEKDAY DAILY PERSON TRIPS BY MODE OF TRANSPORTATION – LRDP PHASE

Population Group	Drive Alone	Drop Off	Car-pool	Van-pool	Muni	Other Transit	Bike/ Motor-cycle	Walk	Total[a]
Physician/Faculty	367	31	68	25	37	44	12	37	621
Hospital Staff	506	70	211	126	295	70	28	98	1,404
House Staff/Intern/Student	149	21	62	37	87	21	8	29	414
Subtotal Faculty/Staff/Students	*1,022*	*122*	*341*	*189*	*419*	*135*	*49*	*165*	*2,442*
Hospital Patients	177	25	74	44	103	25	10	34	492
Visitors to Patients	726	62	135	49	74	86	25	74	1,231
Outpatients	1,123	156	468	281	655	156	62	218	3,119
Visitors to Outpatients	1,123	156	468	281	655	156	62	218	3,119
Visitors to Hospital/Outpatient Staff	46	4	9	3	5	5	2	5	79
Vendors to Hospital/Outpatient Staff	32	0	0	0	0	0	0	0	32
Subtotal Patients/Visitors	*3,227*	*402*	*1,154*	*658*	*1,492*	*428*	*161*	*550*	*8,072*
TOTAL	**4,249**	**524**	**1,495**	**847**	**1,912**	**563**	**210**	**714**	**10,514**
Current Totals Compared to Total analyzed in the 2005 EIR	**-1,841**	**-209**	**-591**	**-330**	**-740**	**-227**	**-83**	**-284**	**-4,305**

[a] – Values are rounded. Minor differences in numbers between tables are due to rounding.

SOURCE: Adavant Consulting, 2008

TABLE 4.6-10
WEEKDAY DAILY PERSON TRIPS BY MODE OF TRANSPORTATION – FUTURE PHASE

Population Group	Drive Alone	Drop Off	Car-pool	Van-pool	Muni	Other Transit	Bike/ Motor-cycle	Walk	Total[a]
Physician/Faculty	680	58	127	46	69	81	23	69	1,153
Hospital Staff	1,084	151	452	271	632	151	60	211	3,012
House Staff/Intern/Student	287	40	119	72	167	40	16	56	797
Subtotal Faculty/Staff/Students	*2,051*	*248*	*698*	*389*	*869*	*271*	*99*	*336*	*4,961*
Hospital Patients	337	47	140	84	197	47	19	66	937
Visitors to Patients	1,381	117	257	94	140	164	47	140	2,340
Outpatients	2,043	284	851	511	1,192	284	114	397	5,676
Visitors to Outpatients	2,043	284	851	511	1,192	284	114	397	5,676
Visitors to Hospital/Outpatient Staff	111	9	21	8	11	13	4	11	188
Vendors to Hospital/Outpatient Staff	74	0	0	0	0	0	0	0	74
Subtotal Patients/Visitors	*5,989*	*741*	*2,121*	*1,207*	*2,732*	*791*	*296*	*1,012*	*14,889*
TOTAL	**8,040**	**989**	**2,819**	**1,596**	**3,601**	**1,062**	**396**	**1,347**	**19,850**
Current Totals Compared to Total analyzed in the 2005 EIR	**-2,020**	**-225**	**-638**	**-358**	**-803**	**-245**	**-90**	**-306**	**-4,685**

[a] – Values are rounded. Minor differences in numbers between tables are due to rounding.

SOURCE: Adavant Consulting, 2008

Auto Occupancy

Automobile occupancy (the number of persons per vehicle) is also sensitive to the population group and the type of trip. Table 4.6-11, and Tables 4.6-12 and 4.6-13, detail the average auto occupancy rates, and the weekday daily and p.m. peak-hour vehicle trips by population group, respectively (the latter for *LRDP Phase* and *Future Phase* of the proposed project [and how the proposed project compares to the development envelopes analyzed in the *2005 EIR*]).

TABLE 4.6-11
AVERAGE AUTO OCCUPANCY RATES[a]

Population Group	People per Vehicle
Physician/Faculty	1.1
Hospital Staff	1.2
House Staff/Intern/Student	1.2
Hospital Patients	1.2
Visitors to Patients	1.1
Outpatients and their Visitors	2.4
Visitors to Hospital/Outpatient Staff	1.1
Vendors to Hospital/Outpatient Staff	1.0

[a] Based on transportation surveys conducted at Parnassus Heights in 1992 and 1999.

SOURCE: Adavant Consulting, 2008

TABLE 4.6-12
WEEKDAY DAILY VEHICLE TRIPS

Population Group	LRDP Phase	Future Phase
Physician/Faculty	469	869
Hospital Staff	771	1,653
House Staff/Intern/Student	228	437
Subtotal Faculty/Staff/Students	*1,468*	*2,959*
Hospital Patients	270	514
Visitors to Patients	927	1,764
Outpatients and their Visitors	1,713	3,116
Visitors to Hospital/Outpatient Staff	59	142
Vendors to Hospital/Outpatient Staff	32	74
Subtotal Patients/Visitors	*3,001*	*5,610*
TOTAL	**4,469**	**8,569**
Current Totals Compared to Total analyzed in the 2005 EIR	**-2,480**	**-2,981**

SOURCE: Adavant Consulting, 2008

TABLE 4.6-13
WEEKDAY PM PEAK HOUR VEHICLE TRIPS

Population Group	LRDP Phase	Future Phase
Physician/Faculty	56	104
Hospital Staff	177	380
House Staff/Intern/Student	29	57
Subtotal Faculty/Staff/Students	*262*	*541*
Hospital Patients	24	46
Visitors to Patients	65	124
Outpatients and their Visitors	154	281
Visitors to Hospital/Outpatient Staff	4	10
Vendors to Hospital/Outpatient Staff	4	7
Subtotal Patients/Visitors	*251*	*468*
TOTAL	**513**	**1,009**
Current Totals Compared to Total analyzed in the 2005 EIR	**-412**	**-552**

SOURCE: Adavant Consulting, 2008