



DRAFT ENVIRONMENTAL IMPACT REPORT

San Francisco 2004 and 2009 Housing Element

Volume I: Draft EIR (Section I to Section V.G)

PLANNING DEPARTMENT
CASE NO. **2007.1275E**

STATE CLEARINGHOUSE NO. 2008102033

Draft EIR Publication Date:	June 30, 2010
Draft EIR Public Hearing Date:	August 5, 2010
Draft EIR Public Comment Period:	June 30, 2010 – August 16, 2010



**SAN FRANCISCO
PLANNING
DEPARTMENT**

Written comments should be sent to:
Environmental Review Officer | 1650 Mission Street, Suite 400 | San Francisco, CA 94103

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SAN FRANCISCO PLANNING DEPARTMENT

DATE: June 30, 2010
TO: Distribution List for the 2004 and 2009 Housing Elements Draft EIR
FROM: Bill Wycko, Environmental Review Officer
SUBJECT: Request for the Final Environmental Impact Report for the 2004 and 2009 Housing Elements Project (Planning Department File No. 2007.1275E)

This is the Draft of the Environmental Impact Report (EIR) for the 2004 and 2009 Housing Elements Project. A public hearing will be held on the adequacy and accuracy of this document. After the public hearing, our office will prepare and publish a document titled "Comments and Responses," which will contain all relevant comments on this Draft EIR and our responses to those comments. It may also specify changes to this Draft EIR. Those who testify at the hearing on the Draft EIR will automatically receive a copy of the Comments and Responses document, along with notice of the date reserved for certification; others may receive a copy of the Comments and Responses and notice by request or by visiting our office. This Draft EIR together with the Comments and Responses document will be considered by the Planning Commission in an advertised public meeting and will be certified as a Final EIR if deemed adequate.

After certification, we will modify the Draft EIR as specified by the Comments and Responses document and print both documents in a single publication called the Final EIR. The Final EIR will add no new information to the combination of the two documents except to reproduce the certification resolution. It will simply provide the information in one document, rather than two. Therefore, if you receive a copy of the Comments and Responses document in addition to this copy of the Draft EIR, you will technically have a copy of the Final EIR.

We are aware that many people who receive the Draft EIR and Comments and Responses have no interest in receiving virtually the same information after the EIR has been certified. To avoid expending money and paper needlessly, we would like to send copies of the Final EIR in Adobe Acrobat format on a CD to private individuals only if they request them. Therefore, if you would like a copy of the Final EIR, please fill out and mail the postcard provided inside the back cover to the Major Environmental Analysis division of the Planning Department within two weeks after certification of the EIR. Any private party not requesting a Final EIR by that time will not be mailed a copy. Public agencies on the distribution list will automatically receive a copy of the Final EIR.

Thank you for your interest in this project.

1650 Mission St.
Suite 400
San Francisco,
CA 94103-2479

Reception:
415.558.6378

Fax:
415.558.6409

Planning
Information:
415.558.6377

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I. ACRONYMS/ABBREVIATIONS AND GLOSSARY

ACRONYMS/ABBREVIATIONS

ABAG	Association of Bay Area Governments
ACE	U.S. Army Corps of Engineers
ACMs	asbestos-containing materials
ACS	American Community Survey
AC Transit	Alameda-Contra Costa Transit District
ADA	Americans with Disabilities Act
AED	Automatic External Defibrillator
APE	Areas of Potential Effect
ARB	California Air Resources Board
AST	aboveground storage tanks
BAAQMD	Bay Area Air Quality Management District
BART	Bay Area Rapid Transit
BCDC	Bay Conservation and Development Commission
BLIP	Branch Library Improvement Program
BMPs	Best Management Practices
BP	before the present
BRT	Bus Rapid Transit
BSO	Building Structure and Object
BSP	Better Street Plan
C-3-G	Downtown General District
C-3-S	Downtown Support District

CA	California
CAC	Citizen Advisory Committee
CAFÉ	Corporate Average Fuel Economy
CalARP	California Accidental Release Program
Californios	refers to the inhabitants of California of Spanish or Mexican descent during the Spanish and early American period
Caltrain	Peninsula Commute Service
Caltrans	California Department of Transportation
CAP	Citywide Action Plan
CAPSS	Community Action Plan for Seismic Safety
CAT	Climate Action Team
CCAR	California Climate Action Registry
CCR	California Code of Regulations
CDFG	California Department of Fish and Game
CCSF	City and County of San Francisco
CDMG	California Division of Mines and Geology
CE	California-listed Endangered
CEC	California Energy Commission
CEQA	California Environmental Quality Act
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CERCLIS	Comprehensive Environmental Response, Compensation, and Liability Information System
CESA	California Endangered Species Act
CFCs	chlorofluorocarbons
Cfp	California Fully Protected Species

CFR	Code of Federal Regulations
CGS	California Geological Survey
CHBC	California Historic Building Code
CHMIRS	California Hazardous Material Incident Report System
CHN	Community Health Network
CHP	California Highway Patrol
CH ₄	methane
CIE	Cultural, Institutional, Education and Other Public Facilities
City	City and County of San Francisco
CIWMB	California Integrated Waste Management Board (now CalRecycle)
cm	centimeter
CMA	Congestion Management Agency
CMP	Congestion Management Program
CNDDB	California Natural Diversity Database
CNEL	Community Noise Exposure Level
CO	carbon monoxide
CO ₂	carbon dioxide
CO ₂ e	carbon dioxide equivalent
CRHR	California Register of Historical Resources
CRWQCB	California Regional Water Quality Control Board
CSC	California Species of Special Concern
CSO	Combined Sewer Overflow
CT	California-listed Threatened
CU	Conditional Use

CUPA	Certified Unified Program Agency
CWA	Clean Water Act
Cwl	California Watch List
C&R	Comments and Responses
DAH	Direct Access to Housing
dB	decibel
dBA	A-weighted decibel scale
DBI	Department of Building Inspection
DEHP	di (2 ethylhexyl) phthalate
DOC	Department of Conservation
DOF	Department of Finance
DOSD	Division of Safety of Dams
DPR	Department of Parks and Recreation
DPW	Department of Public Works
DTSC	Department of Toxic Substances Control
DWR	Department of Water Resources
EE	Environmental Evaluation
EIR	Environmental Impact Report
EOC	Emergency Operations Center
EOP	Emergency Operations Plan
EPA	Environmental Protection Agency
ERP	Emergency Response Plan
FAR	Floor-to-area ratio
FD	Federally-delisted

FE	Federally-listed Endangered
FEMA	Federal Emergency Management Agency
FESA	Federal Endangered Species Act
FHWA	Federal Highway Administration
FIFRA	Federal Insecticide, Fungicide, and Rodenticide Act
FIRM	Flood Insurance Rate Maps
FMMP	Farmland Mapping and Monitoring Program
FT	Federally-listed Threatened
FTA	Federal Transit Administration
FY	fiscal year
G	gravity
GGBHTD	Golden Gate Bridge, Highway, and Transportation District
GGNRA	Golden Gate National Recreation Area
GHG	Greenhouse Gas
Gpcd	gallons per capita per day
GWP	global warming potential
HASP	Health and Safety Plan
HCD	Housing and Community Development, State Department of
HCM	Highway Capacity Manual
HCP	Habitat Conservation Plan
HDMT	Healthy Development Management Tool
HFCs	hydrofluorocarbons
HHWP	Hetch Hetchy Water and Power
HMP	Hazard Mitigation Plan

HMUPA	Hazardous Material Unified Program Agency
HOA	Housing Opportunity Area
HPSZ	Hunters Point Shear Zone
HUD	Housing and Urban Development
I	Interstate
IM	Implementation Measure
IPCC	Intergovernmental Panel on Climate Change
IPM	Integrated Pest Management
Kfsh	thin-bedded sandstone and shale
Kfss	massive sandstone
kV	kilovolt
kWh	kilowatt hours
LBP	Lead based Paint
lbs	pounds
LCFS	Low Carbon Fuel Standard
LEM	Location Efficient Mortgage
LIM	Land Inventory and Monitoring
LOP	Local Oversight Program
LOS	Level of Service
LUST	Leaking Underground Storage Tank
L_{dn}	Day-Night Average Level
L_{eq}	Equivalent Energy Noise Level
L_{max}	Maximum instantaneous noise level
L_{min}	Minimum instantaneous noise level

M	Mercantile
MBTA	Migratory Bird Treaty Act
MEP	Maximum Extent Practicable
Mgd	million gallons daily
MIPS	Management, Information, and Professional Services
MLP	Maximum Load Point
MMI	Modified Mercalli Intensity
MMRP	Mitigation Monitoring and Reporting Program
mph	miles per hour
MPO	Metropolitan Planning Organization
MRZ-4	Mineral Resource Zone 4
MSDS	Material Safety Data Sheets
msl	mean sea level
MS4	Municipal Separate Storm Sewer System
MT	metric tons
MTC	Metropolitan Transportation Commission
MTS	Metropolitan Transportation System
Muni	San Francisco Municipal Railway
Mw	moment magnitude
MW	megawatt
NC(D)	Neighborhood Commercial (District)
NCCP	Natural Community Conservation Plan
NEHRP	National Earthquake Hazards Reduction Program
NEHRPA	National Earthquake Hazards Reduction Program Act

NEPA	National Environmental Policy Act
NESHAP	National Emissions Standards for Hazardous Air Pollutants
NFIP	National Flood Insurance Program
NO	nitric oxide
NO ₂	nitrogen dioxide
NO _x	nitrogen oxides
N ₂ O	nitrous oxide
NOA	Naturally occurring asbestos
NOP	Notice of Preparation
NPDES	National Pollutant Discharge Elimination System
NPL	National Priorities List
NPPA	Native Plant Protection Act
NPRA	National Park and Recreation Association
NPS	National Park Service
NPWWTF	North Point Wet Weather Treatment Facility
NRB	National Register Bulletin
NRCS	Natural Resources Conservation Service
NRHP	National Register of Historic Places
O ₃	ozone
OES	Office of Emergency Services
OPR	Office of Planning and Research
OSHA	Occupational Safety and Health Administration
OWPCP	Oceanside Water Pollution Control Plant
PAH	Polynuclear Aromatic Hydrocarbons

Pb	lead
PCBs	polychlorinated biphenyls
PDR	production, distribution, repair
PFCs	perfluorocarbons
PG&E	Pacific Gas and Electric Company
PM	particulate matter
PM ₁₀	respirable particulate matter
PM _{2.5}	fine particulate matter
PMN	pre-manufacture notice
PMP	Pedestrian Transportation Master Plan
POU	publicly-owned utilities
PPIP	Panama Pacific International Exposition
ppm	parts by volume per million of air
PPV	peak particle velocity
PUC	California Public Utilities Commission
PV	Photovoltaic
Qaf	Artificial Fill
Qd	Dune sand
Qu	Undifferentiated surficial deposits
Qsr	Slope debris and ravine fill
RCRA	Resource Conservation and Recovery Act
RCRIS	Resource Conservation and Recovery Act Information System
RHNA	Regional Housing Needs Allocation
RMS	root mean square

ROGs	Reactive Organic Gases
RPP	Residential Preferred Parking
RPS	Renewables Portfolio Standard
RWQCB	Regional Water Quality Control Board
RWS	Regional Water System
RWSAP	Retail Water Shortage Allocation Plan
Samtrans	San Mateo County Transit District
SARA	Superfund Amendments and Reauthorization Act
SDWA	Safe Drinking Water Act
SEWPCP	Southeast Water Pollution Control Plant
sf	square feet
SFBRWQCB	San Francisco Bay Regional Water Quality Control Board
SFCAP	San Francisco Climate Action Plan
SFCTA	San Francisco County Transportation Authority
SFDPH	San Francisco Department of Public Health
SFFD	San Francisco Fire Department
SFGBO	San Francisco Green Building Ordinance
SFGH	San Francisco General Hospital
SFIA	San Francisco International Airport
SFMTA	San Francisco Metropolitan Transportation Agency
SFO	San Francisco International Airport
SFPD	San Francisco Police Department
SFPL	San Francisco Public Library
SFPUC	San Francisco Public Utilities Commission

SFRA	San Francisco Redevelopment Agency
SFRPD	San Francisco Recreation and Park Department
SFUSD	San Francisco Unified School District
SF ₆	sulfur hexafluoride
SHSZ	Seismic Hazards Studies Zone
SIP	State Implementation Plan
SISR	Secretary of the Interior's Standards for Rehabilitation
SMP	Streetscape Master Plan
SMARA	Surface Mining and Reclamation Act
SNRAMP	Significant Natural Resource Areas Management Plan
SO _x	sulfur oxides
SO ₂	sulfur dioxide
SoMa	South of Market
Sp	Serpentinite
SP	service population
SPCC	Spill Prevention Control and Countermeasures
Sq. ft.	Square feet
SR	State Route
SRA	State Responsibility Area
SRO	Single-resident Occupancy Hotels
SWIS	Solid Waste Facilities/Landfill Sites
SWOO	Southwest Ocean Outfall
SWPPP	Storm Water Pollution Prevention Plan
SWRCB	State Water Resources Control Board

TAC	toxic air contaminant
TCM	Transportation Control Measures
TDM	Transportation Demand Management
TEP	Transit Effectiveness Project
Tf	tidal flat
TMDL	Total Maximum Daily Loads
TRI	Toxic Release Inventory
TRP	Traffic Related Pollutants
TSCA	Toxic Substances Control Act
UBC	Uniform Building Code
UMBs	Unreinforced Masonry Buildings
US 101	United States Highway 101
USFWS	United States Fish and Wildlife Service
USGS	United States Geologic Survey
UST	Underground Storage Tank
UWMP	Urban Water Management Plan
V/C	volume to capacity ratio
VdB	velocity in decibels
VMT	vehicle miles traveled
VOC	volatile organic compounds
WHO	World Health Organization
WPD	Water Permits Division
WSA	Water Supply Assessment
WSAP	Water Shortage Allocation Plan

WSIP	Water System Improvement Plan
$\mu\text{g}/\text{m}^3$	micrograms per cubic meter of air

GLOSSARY

Alluvial: A loose deposit of gravel, sand, mud, etc., formed by flowing water.

Alquist-Priolo Earthquake Fault Zone: In 1972 the State of California began delineating special studies zones (called Earthquake Fault Zones since January 1994) around active and potentially active faults in the state. The zones are revised periodically, and extend 200 to 500 feet on either side of identified fault traces. No structures for human occupancy may be built across an identified active fault trace. An area of 50 feet on either side of an active fault trace is assumed to be underlain by the fault, unless proven otherwise. Proposed construction in the Earthquake Fault Zone is permitted only following the completion of a fault location report prepared by a California-registered professional Geologist.

Ambient: The lowest sound level repeating itself during a minimum 10-minute period as measured with a type 1, precision sound level meter, set on slow response and A-weighting.

Cancer Risk: Calculated approximation of the probability of an individual developing cancer as a result of exposure a cumulative dose of a potential carcinogen based on estimated or measured concentrations in soil, groundwater, or air and a potency factor specific to that carcinogen.

Carbon Monoxide: A colorless, odorless gas produced by the incomplete combustion of fuels.

Carcinogen: Cancer-causing.

Colluvial: A loose deposit of rock debris accumulated through the action of gravity at the base of a cliff or slope.

Combined Sewer Overflow (CSO): An overflow is a pipe that discharges flows that exceed the capacity of the combined sewer system during very heavy rain. Such discharges receive primary (flow-through) treatment in underground storage/transport boxes. Overflow events are relatively rare in San Francisco.

Densification: Increasing the density of soil.

Extremely hazardous substance: In the context of Public Resources Code Section 21151.4 pertaining to hazardous materials emissions near schools, this refers to a material included on lists compiled pursuant to Section 25532 of the California Health and Safety Code, which incorporates regulated toxic and flammable substances under Section 112(r) of the federal Clean Air Act Table 3 of Section 112(r) lists those regulated substances pursuant to Section 25532(g)(2) of California Health and Safety Code. Threshold quantities for listed toxic and flammable substances are specified in the tables.

Fault Creep: Movement along a fault that does not entail earthquake activity.

Fine Particulate Matter: Extremely small, suspended particles or droplets 2.5 microns or smaller in diameter.

Granular: Made up of very small grains.

Ground Acceleration: The speed at which soil or rock materials are displaced by seismic waves. It is measured as a percentage of the acceleration of gravity (0.5g = 50 percent of 32 feet per second squared, expressed as a vertical or horizontal force). Peak ground acceleration is the maximum acceleration expected from the characteristic earthquake predicted to affect a given area. Repeatable acceleration refers to the acceleration resulting from multiple seismic shocks. Sustained acceleration refers to the acceleration produced by continuous seismic shaking from a single, long-duration event.

Hazard: Any situation that has the potential to cause damage to human health or the environment.

Hazardous air emission: In the context of Public Resources Code Section 21151.4 pertaining to hazardous materials emissions near schools, this refers to a material included on the list of hazardous air emissions (toxic air contaminants) established by the California Air Resources Board per Section 44321 of the California Health and Safety Code.

Hazardous material: Any material that, because of its quantity, concentration, or physical, or chemical characteristics, poses a significant present or potential hazard to human health and safety or to the environment if released into the workplace or the environment. "Hazardous materials" include, but are not limited to, hazardous substances, hazardous waste, and any material which a handler or the administering agency has a reasonable basis for believing that it would be injurious to the health and safety of persons or harmful to the environment if released into the workplace or the environment (California Health and Safety Code, Section 25501).

Hazardous materials release site: Any area, location, or facility where a hazardous material has been released or threatens to be released to the environment (California Health and Safety Code, Section 25260(e)).

Hazardous substance: See —hazardous material.

Hazardous waste: Waste that, because of its quantity, concentration, or physical, chemical, or infectious characteristics, may either cause, or significantly contribute to an increase in mortality or an increase in serious illness, or pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, disposed of, or otherwise managed (California Health and Safety Code, Section 25117).

Lead: Occurs in the atmosphere as particulate matter. Sources of lead include the manufacturing and recycling of batteries, paint, ink, ceramics, ammunition, and secondary lead smelters.

Lithology: The physical character of a rock or rock formation.

Mélange: A *mélange* (French for —mixture) is a large body of rock characterized by a lack of bedding and includes rock fragments of all sizes contained in a fine-grained matrix. A *mélange* typically consists of a jumble of blocks of varied rock types.

Metamorphosed Rock: Metamorphosed rock is igneous or sedimentary rock that has been transformed, or ‘metamorphosed’, by intense heat and pressure (temperatures greater than 150 to 200 °C and pressures of 1500 bars) causing profound physical or chemical changes.

Modified Mercalli Intensity (MMI) Scale: A 12-point scale of earthquake intensity based on local effects experienced by people, structures, and earth materials. Each succeeding step on the scale describes a progressively greater amount of damage at a given point of observation. Effects range from those which are detectable only by seismicity recording instruments (I) to total destruction (XII). Most people will feel Intensity IV ground motion indoors and Intensity V outside. Intensity VII frightens most people, and Intensity IX causes alarm approaching panic. The scale was developed in 1902 by Giuseppe Mercalli for European conditions, adapted in 1931 by American seismologists Harry Wood and Frank Neumann for conditions in North America, and modified in 1958 by Dr. Charles F. Richter to accommodate modern structural design features.

Moment Magnitude (M): A logarithmic scale introduced by Hiroo Kanamori in 1977 that is used by modern seismologists to measure the total amount of energy released by an earthquake. For the purposes of describing this energy release (i.e., the —size of an earthquake on a particular fault segment for which seismic resistant construction must be designed) the moment magnitude (M) of the characteristic earthquake for that segment has replaced the concept of a maximum credible earthquake of a particular Richter magnitude. This has become necessary because the Richter scale “saturates” at the higher magnitudes; that is, the Richter scale has difficulty differentiating among the sizes of earthquakes above M 7.5. To correct for this effect, the formula used for the M scale incorporates parameters associated with the rock types at the seismic source and the area of the fault surface involved in the earthquake. Thus, the moment magnitude is related to the length and width of the fault rupture. It reflects the amount of “work” (in the sense of classical physics) done by the earthquake. The relationship between Richter and moment magnitudes is not linear (i.e., moment magnitude is not a set percentage of Richter magnitude): the two values are derived using different formulae. The four well-studied earthquakes listed below exemplify this relationship.

Location	Date	Richter Magnitude	Moment Magnitude
New Madrid MO	1812	8.7	8.1
San Francisco CA	1906	8.3	7.7
Anchorage AK	1964	8.4	9.2
Northridge CA	1994	6.4	6.7

Although some of the values shown on the M scale appear lower than those of the traditional Richter magnitudes, they convey more precise (and more useable) information to geologic and structural engineers.

Municipal Separate Storm Sewer System (MS4): An MS4 is a conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains) (i) designed or used for collecting or conveying storm water, (ii) that is not a combined sewer, and (iii) that is not part of a Publicly Owned Treatment Works. The term MS4 also refers to the jurisdiction that operates such a system.

North American and Pacific Plates: Tectonic plates that cover most of North America and the Pacific Ocean, respectively. These two plates have formed a transform boundary (where two plates grind past one another) on the western edge of California, along the San Andreas Fault system.

Offset Surface: Surfaces not in alignment, or offset, from each other that may have arisen from old landslides.

Orthents Soils: In USDA soil taxonomy, Orthents are defined as Entisols (soils that do not show any soil profile development) that lack horizon development due to either steep slopes or parent materials that contain no permanent weatherable minerals.

Outfall: An outfall is a pipe that discharges treated stormwater and wastewater flows into a receiving water body.

Overflow: A pipe that discharges flows that exceed the capacity of the combined sewer system during heavy rain.

Ozone: A gas that is formed when reactive organic gases (ROG) and nitrogen oxides (NOX)—both byproducts of internal combustion engine exhaust—undergo slow photochemical reactions in the presence of sunlight.

Powered Construction Equipment: Any tools, machinery, or equipment used in connection with construction operations which can be driven by energy in any form other than manpower, including all types of motor vehicles when used in the construction process of any construction site, regardless of whether such construction site be located on-highway or off-highway, and further including all helicopters or other aircraft when used in the construction process except as may be preempted for regulation by state or federal law.

Quaternary: The geologic time period after the Neogene period, approximately 1.8 million years ago to the present.

Reclaimed Complex Soils: Soils found on reclaimed land, such as tidal flats that were once part of San Francisco Bay.

Respirable Particulate Matter: Extremely small, suspended particles or droplets 10 microns or smaller in diameter.

Richter Magnitude Scale: The Richter Magnitude Scale is a logarithmic scale developed during 1935 and 1936 by Dr. Charles F. Richter and Dr. Beno Gutenberg to measure earthquake magnitude by the amount of energy released, as opposed to earthquake intensity as determined by local effects on people,

structures, and earth materials (as in the Modified Mercalli Intensity Scale). Each whole number on the Richter scale represents a 10-fold increase in amplitude of the waves recorded on a seismogram and about a 32-fold increase in the amount of energy released by the earthquake. Because the Richter scale tends to saturate above approximately M 7.5, it is being replaced in modern seismologic investigations by the moment magnitude (M) scale.

Serpentinite: A rock composed almost entirely of serpentine materials.

Shale Matrix: Shale, or mudstone, is a fine-grained sedimentary rock, usually formed from clay minerals compacted together by pressure. The matrix, or groundmass, is the fine-grained mass of material in which other larger grains are embedded within.

Shear Strength: Describes the maximum strength of soil at which point significant plastic deformation (yielding) occurs due to an applied shear stress.

Shear Zone: A wide zone of sheared rock, where intense foliation and deformation may occur. The zone may be associated with a fault, but it is often difficult to distinguish a fault plane in the zone.

Sulfur Dioxide: A colorless, extremely irritating gas or liquid.

Toxic: Concentration of a substance that would be lethal or produce other adverse responses detrimental to the health of an organism.

Urban Land: Per USDA soil taxonomy, Urban Land is soil that has been modified by disturbance of the natural layers with additions of fill material several feet thick to accommodate large industrial and housing installations.

Volatile Organic Compound (VOC): An organic chemical that readily evaporates at temperatures normally found at the ground surface and at shallow depths.

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II. EXECUTIVE SUMMARY

PROJECT SYNOPSIS

The subject of this Environmental Impact Report (EIR) is the proposed revision of the Housing Element of the San Francisco General Plan (General Plan). This EIR analyzes two projects: the 2004 Housing Element and the 2009 Housing Element. The Housing Element is a policy document that consists of goals and policies to guide the City and private developers in providing housing for existing and future residents to meet projected housing demand, as required under Government Code section 65580 et seq. (“State housing element law”). State law requires the housing element to be updated periodically, usually every five years. The most recent update of the housing element occurred in 2004, when the City adopted the 2004 Housing Element, an update to the 1990 Residence Element. Subsequent to adoption of the 2004 Housing Element, the California Court of Appeal determined the environmental document prepared for the 2004 Housing Element inadequate, and directed the City to prepare an EIR for the 2004 Housing Element. The City must also comply with state housing element law and prepare a periodic update (usually every five years) of the Housing Element. The City has undergone a comprehensive planning process and prepared the next update of the housing element, the 2009 Housing Element. This EIR will satisfy the City’s legal requirements for preparing an EIR on the 2004 Housing Element and will also analyze the environmental effects of the 2009 Housing Element.

San Francisco is a consolidated city and county. The City and County of San Francisco (the City) is located on the tip of the San Francisco Peninsula with the Golden Gate Strait to the north, San Francisco Bay to the east, San Mateo County to the south, and the Pacific Ocean to the west. Daly City and the City of Brisbane abut San Francisco to the south. San Francisco is approximately 49 square miles in size. Although it is relatively densely developed, there remain developable vacant parcels for new housing construction, as well as underused parcels available for increased development, in various locations throughout the City.

The Housing Element is one of the major sections of the San Francisco General Plan, which is required by the State of California for rational, comprehensive planning. State law requires that a City's General Plan and its elements be periodically updated in order to prepare for future growth and development; the State has specific requirements for the content and update schedule of Housing Elements.

PROJECT OBJECTIVES

The objectives of the proposed Housing Elements are to:

1. Provide a vision for the City’s housing and growth management through 2014;
2. Maintain the existing housing stock to serve housing needs;
3. Ensure capacity for the development of new housing to meet the RHNA at all income levels;

4. Encourage housing development where supported by existing or planned infrastructure, while maintaining existing neighborhood character;
5. Encourage, develop and maintain programs and policies to meet projected affordable housing needs;
6. Develop a vision for San Francisco that supports sustainable local, regional and state housing and environmental goals; and
7. Adopt a housing element that substantially complies with California housing element law as determined by the California Department of Housing and Community Development.

PROJECT APPROVALS

Following certification of this EIR, the City could re-adopt the entire 2004 Housing Element. In addition, certification of this EIR would also allow the City to adopt the proposed 2009 Housing Element. Under Planning Code Section 340, general plan amendments must be approved by the Planning Commission and the Board of Supervisors. In addition, in order to receive certain state funding or be eligible for certain state programs, the Housing Element must be certified as compliant with state housing element law by the California Department of Housing and Community Development (HCD).

AREAS OF CONTROVERSY AND ISSUES TO BE RESOLVED

This EIR has been prepared by the City (Planning Department) as the lead agency for the Project, in conformance with the substantive and procedural requirements of CEQA and the CEQA Guidelines (as amended through 2009),¹ Agency CEQA guidelines, Chapter 31 of the San Francisco Administrative Code, and Planning Department CEQA guidelines. In accordance with Public Resources Code Section 21002.1, the purpose of this EIR is to identify the significant environmental impacts of the proposed Housing Elements, to identify alternatives to the proposed Housing Elements, and to indicate the manner in which those significant effects could be mitigated or avoided.

In compliance with Section 15082 of the CEQA Guidelines, a Notice of Preparation (NOP) was prepared by the City and County of San Francisco and distributed to the State Clearinghouse, Office of Planning and Research, responsible agencies, and other interested parties on October 8, 2008.

Subsequent to the circulation of the NOP, a draft of the proposed 2009 Housing Element was completed. The scope of this EIR was therefore revised to include the 2004 Housing Element and the 2009 Housing Element. Therefore, the Planning Department reissued and recirculated an NOP on September 2, 2009 that solicited comments regarding the content of the proposed the proposed Housing Elements.

¹ California Environmental Quality Act, (Pub. Res. Code Sec. 21000 et seq.; CEQA) and the CEQA Guidelines (Cal. Code Regs. Sec. 15000 et seq.).

Both NOPs for the Draft EIR were circulated for 30 days in accordance with CEQA Guidelines Section 15082(b). This EIR addresses environmental issues that are known or were raised by agencies or interested parties during both NOP public review periods for the proposed Housing Elements. Eighteen responses to the first NOP were received and sixteen responses to the recirculated NOP were received. Appendices A-1 and A-2 include both NOPs and written responses to the NOPs, respectively. The issues raised in the NOP comment letters are summarized below:

- **Land Use and Land Use Planning:** Comments were received pertaining to the division of an established community, such as Parkmerced, conflicts with existing guidelines and plans, introduction of residential uses in industrial areas, changes to residential zoning, and suburban sprawl.
- **Aesthetics:** Comments were received pertaining to the potential effect of increased density with respect to scenic resources, light and glare, and neighborhood character.
- **Population and Housing:** Comments were received pertaining to rental property, housing affordability, secondary units, jobs-housing balance, displacement of people, and current vacancy rates.
- **Cultural and Paleontological Resources:** Comments were received pertaining to potential impacts to historic resources, specifically Parkmerced.
- **Transportation and Circulation:** Comments were received pertaining to state highway facilities, collisions involving trains, potential effect of increased density on transit, parking requirements, and alternative forms of transportation.
- **Noise:** Comments were received pertaining to the impact of densification and traffic on noise levels.
- **Air Quality:** Comments were received pertaining to carbon dioxide, provision of less parking and the potential for more vehicle emissions, and climate change.
- **Recreation:** Comments were received pertaining to the effect of increased population on parks, open space reduction, and removal of physical landscape.
- **Utilities and Service Systems:** Comments were received pertaining to the capacity of the infrastructure and resources of the San Francisco Public Utilities Commission, including the ability of the water system to provide a safe, reliable source of potable water. In addition, comments were received pertaining to sewer capacity and landfill capacity.
- **Public Services:** Comments were received pertaining to the effect of increased population on fire, police, schools, and emergency response times. Comments were also received pertaining to the City's evacuation plan.

- **Biological Resources:** Comments were received pertaining to sensitive habitat near Lake Merced and Parkmerced, regulations protecting trees, and migratory birds.
- **Geology and Soils:** Comments were received pertaining to the risk of development in areas where there is a known risk of liquefaction and erosion, such as Parkmerced, and safety issues related to seismic events.
- **Hydrology and Water Quality:** Comments were received pertaining to the acceleration of water runoff into Lake Merced and changes to existing drainage.
- **Alternatives:** Comments were received requesting that a range of alternatives be analyzed, including an alternative that would meet but not substantially exceed the applicable RHNA target and an alternative consisting of continuing to implement the 1990 Residence Element.

SUMMARY OF IMPACTS AND MITIGATION MEASURES

Table II-1 summarizes the following: (1) potential environmental impacts that would occur as a result of the proposed Housing Elements provided in the form of an impact statement; (2) the level of significance of the environmental impact prior to implementation of any applicable mitigation measures; (3) the recommended mitigation measures that avoid or reduce significant environmental impacts; and (4) the level of significance after mitigation measures are implemented.

The Draft EIR uses the following terms to describe the level of significance of impacts identified during the course of the environmental analysis:

Significant Impact (S)—A significant effect is defined by Section 15382 of the California Environmental Quality Act (CEQA) Guidelines as “a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic or aesthetic significance. An economic or social change by itself shall not be considered a significant effect on the environment ... [but] may be considered in determining whether the physical change is significant.” As defined in this EIR, a significant impact exceeds the defined significance criteria and will result in significant and unavoidable impacts, either with or without feasible mitigation.

Significant and Unavoidable Impact (SU)—Impact that exceeds the defined significance criteria and cannot be eliminated or reduced to a less-than-significant level through compliance with existing local, State, and federal laws and regulations and/or implementation of all feasible mitigation measures.

Significant and Unavoidable Impact with Mitigation (SU/M)— Impact that exceeds the defined significance criteria and can be reduced through compliance with existing local, State, and federal laws and regulations and/or implementation of all feasible mitigation measures, but cannot be reduced to a less than significant level.

Potentially Significant Impact (PS)—Impact that could exceed the defined significance criteria and, depending on circumstances, could be a significant impact.

Less Than Significant Impact (LTS)—Impact that does not exceed the defined significance criteria or would be eliminated or reduced to a less than significant level through compliance with existing local, State, and federal laws and regulations.

Less Than Significant Impact with Mitigation (LTS/M)—Impact that is reduced to a less than significant level through implementation of the identified mitigation measures. Project impacts are assessed in light of existing regulatory requirements that would serve to mitigate potential impacts. The effectiveness of existing regulations to mitigate potential impacts is often affected by discretionary requirements, site characteristics, and project features and design-level considerations that are not yet detailed. Because there is some discretion in how these regulations can be applied, for some impacts, these requirements are included as mitigation measures to outline the specific process by which the proposed Housing Elements will comply with these regulations.

No Impact (NI)—No adverse changes (or impacts) to the environment are expected.

SUMMARY OF PROJECT ALTERNATIVES

Three alternatives to the proposed Housing Elements have been evaluated. The alternatives considered include the following:

1. Alternative A: The No Project/Continuation of 1990 Residence Element Alternative: CEQA Guidelines Section 15126.6(e)(3)(A) provides that “when the project is the revision of an existing land use or regulatory plan, policy or ongoing operation, the ‘no project’ alternative will be the continuation of the existing plan, policy or operation into the future.” Under Alternative A: the No Project/Continuation of 1990 Residence Element Alternative, the 1990 Residence Element policies would remain in effect and neither the proposed 2004 Housing Element nor the 2009 Housing Element policies would be implemented. Housing development in the City would continue as encouraged under the 1990 Residence Element. However, this alternative would assume the adoption of the Data and Needs Analysis and the updated RHNA allocation because for the Alternative to meet the project objectives of having a housing element that substantially complies with state housing element law, the proposed Housing Elements must meet the most recent regional housing needs assessment. This discussion would allow the decision-makers to compare the impacts of approving either the 2004 and 2009 Housing Elements with the impacts of not approving either of the proposed Housing Elements.

This EIR concludes that Alternative A could result in a *significant and unavoidable* impact to the City’s transit network and to historic resources. The EIR also concludes that with respect to noise, Alternative A could result in a *significant impact* that can be mitigated to *less than significant* with implementation of M-NO-1.

2. Alternative B: 2004 Housing Element–Adjudicated: This alternative includes the objectives, policies and implementation measures of the 2004 Housing Element excepting policies that were stricken by the court in the appeal of the 2004 Housing Element. Similar to Alternative A, this alternative would use the most recently identified RHNA allocation² and an updated Data and Needs Analysis.

This EIR concludes that Alternative B could result in a *significant and unavoidable* impact to the City’s transit network. The EIR also concludes that with respect to noise, Alternative B could result in a *significant impact* that can be mitigated to *less than significant* with implementation of M-NO-1.

3. Alternative C: 2009 Housing Element–Intensified: This alternative includes concepts that more actively encourage housing development through zoning accommodations. These concepts were generated based on ideas and alternative concepts raised over the course of outreach for the 2009 Housing Element preparation process, but which were ultimately not included. These concepts are intended to encourage housing by: 1) allowing for limited expansion of allowable building envelope for developments meeting the City’s affordable housing requirement on site with units of two or more bedrooms; 2) requiring development to the full allowable building envelope in locations that are directly on Transportation Effectiveness Project (TEP) rapid transit network lines; 3) giving height and/or density bonuses for development that exceeds affordable housing requirements in locations that are directly on TEP rapid transit network lines; 4) allowing height and/or density bonus for 100 percent affordable housing in all areas of the City except in RH-1 and RH-2 zones; and 5) granting of administrative variances (i.e. over the counter) for reduced parking spaces if the development is: a) in an RH-2 zoning district (allows for greater residential density); b) in an area where additional curb cuts would restrict parking in areas with parking shortages; or c) on a Transit Preferential Street.³

This EIR concludes that Alternative C could result in a *significant and unavoidable* impact to the City’s transit network. The EIR also concludes that with respect to noise, Alternative C could result in a *significant impact* that can be mitigated to *less than significant* with implementation of M-NO-1.

² See above.

³ Transportation Element, San Francisco General Plan.

**Table II-1
Summary of Environmental Effects and Project Requirements/Mitigation Measures**

Impact(s)	Level of Significance Prior to Mitigation	Mitigation Measure(s) and/or Project Requirements	Level of Significance After Mitigation
Section V.B (Land Use and Land Use Planning)			
Impact LU-1: The proposed Housing Elements would not conflict with applicable land use plans, policy, or regulations.	LTS	No mitigation is required.	LTS
Impact LU-2: The proposed Housing Elements would not have a substantial impact upon the existing character of the vicinity.	LTS	No mitigation is required.	LTS
The proposed Housing Elements would not change allowable land uses already permitted by the City's Planning Code, therefore the proposed Housing Elements would not physically divide an established community.	NI	No mitigation is required.	NI
Section V.C (Aesthetics)			
Impact AE-1: The proposed Housing Elements would not have a substantial adverse effect on a scenic vista.	LTS	No mitigation is required.	LTS
Impact AE-2: The proposed Housing Elements would not substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and other features of the built or natural environment which contribute to a scenic public setting.	LTS	No mitigation is required.	LTS
Impact AE-3: The proposed Housing Elements would not substantially degrade the existing visual character or quality of the site and its surroundings.	LTS	No mitigation is required.	LTS
Impact AE-4: The proposed Housing Elements would not create a new source of substantial light or glare which would adversely affect day or nighttime views in the area or which would substantially impact other people or properties.	LTS	No mitigation is required.	LTS

**Table II-1
Summary of Environmental Effects and Project Requirements/Mitigation Measures**

Impact(s)	Level of Significance Prior to Mitigation	Mitigation Measure(s) and/or Project Requirements	Level of Significance After Mitigation
Section V.D (Population and Housing)			
Impact PH-1: The proposed Housing Elements would not induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure).	LTS	No mitigation is required.	LTS
Impact PH-2: The proposed Housing Elements would not displace substantial numbers of existing housing units or create demand for additional housing, necessitating the construction of replacement housing.	LTS	No mitigation is required.	LTS
Impact PH-3: The proposed Housing Elements would not displace substantial numbers of people, necessitating the construction of replacement housing elsewhere.	LTS	No mitigation is required.	LTS
Section V.E (Cultural and Paleontological Resources)			
Impact CP-1: The proposed Housing Elements would not cause a substantial adverse change in the significance of a historical resource as defined in §15064.5, including those resources listed in Article 10 or Article 11 of the San Francisco Planning Code.	LTS	No mitigation is required.	LTS
Impact CP-2: The proposed Housing Elements would not cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5.	LTS	No mitigation is required.	LTS
Impact CP-3: The proposed Housing Elements would not directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.	LTS	No mitigation is required.	LTS
Impact CP-4: The proposed Housing Elements would not disturb any human	LTS	No mitigation is required.	LTS

**Table II-1
Summary of Environmental Effects and Project Requirements/Mitigation Measures**

Impact(s)	Level of Significance Prior to Mitigation	Mitigation Measure(s) and/or Project Requirements	Level of Significance After Mitigation
remains, including those interred outside of formal cemeteries.			
Section V.F (Transportation and Circulation)			
Impact TR-1: The proposed Housing Elements would not result in significant impacts related to traffic, pedestrians, bicycles, loading, emergency access, or construction areas. The proposed Housing Elements would result in a significant transit impact.	SU	No feasible mitigation has been identified.	SU
Section V.G (Noise)			
Impact NO-1: The proposed Housing Elements would not result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels that would occur without the proposed Housing Elements.	LTS	No mitigation is required.	LTS
Impact NO-2: The proposed Housing Elements would not result in exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels.	LTS	No mitigation is required.	LTS
Impact NO-3: The proposed Housing Elements would not result in substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the proposed Housing Elements.	LTS	No mitigation is required.	LTS
Impact NO-4: The proposed Housing Elements would not result in exposure of persons to, or generation of noise levels in excess of, standards established in the local general plan or noise ordinance, or applicable standards of other agencies; nor would the proposed Housing Elements be substantially affected by existing noise levels.	SI	Mitigation Measure M-NO-1: Interior and Exterior Noise For new residential development located along streets with noise levels above 75 dBA L _{dn} , the Planning	LTS/M

**Table II-1
Summary of Environmental Effects and Project Requirements/Mitigation Measures**

Impact(s)	Level of Significance Prior to Mitigation	Mitigation Measure(s) and/or Project Requirements	Level of Significance After Mitigation
		<p>Department shall require the following:</p> <ol style="list-style-type: none"> The Planning Department shall require the preparation of an analysis that includes, at a minimum, a site survey to identify potential noise-generating uses within two blocks of the project site, and including at least one 24-hour noise measurement (with maximum noise level readings taken at least every 15 minutes), prior to completion of the environmental review. The analysis shall demonstrate with reasonable certainty that Title 24 standards, where applicable, can be met, and that there are no particular circumstances about the proposed project site that appear to warrant heightened concern about noise levels in the vicinity. Should such concerns be present, the Department may require the 	

**Table II-1
Summary of Environmental Effects and Project Requirements/Mitigation Measures**

Impact(s)	Level of Significance Prior to Mitigation	Mitigation Measure(s) and/or Project Requirements	Level of Significance After Mitigation
		<p>completion of a detailed noise assessment by person(s) qualified in acoustical analysis and/or engineering prior to the first project approval action, in order to demonstrate that acceptable interior noise levels consistent with those in the Title 24 standards can be attained; and</p> <p>2. To minimize effects on development in noisy areas, for new residential uses, the Planning Department shall, through its building permit review process, in conjunction with noise analysis required above, require that open space required under the Planning Code for such uses be protected, to the maximum feasible extent, from existing ambient noise levels that could prove annoying or disruptive to users of the open space. Implementation of this</p>	

**Table II-1
Summary of Environmental Effects and Project Requirements/Mitigation Measures**

Impact(s)	Level of Significance Prior to Mitigation	Mitigation Measure(s) and/or Project Requirements	Level of Significance After Mitigation
		measure could involve, among other things, site design that uses the building itself to shield on-site open space from the greatest noise sources, construction of noise barriers between noise sources and open space, and appropriate use of both common and private open space in multi-family dwellings, and implementation would also be undertaken consistent with other principles of urban design.	
The proposed Housing Elements would have no impact with respect to airport noise, or noise within the vicinity of a private airstrip.	NI	No mitigation is required.	NI
Section V.H (Air Quality)			
Impact AQ-1: The proposed Housing Elements would not conflict with the applicable air quality plan.	LTS	No mitigation is required.	LTS
Impact AQ-2: The proposed Housing Elements would not violate an air quality standard or contribute substantially to an existing or projected air quality violation.	LTS	No mitigation is required.	LTS
Impact AQ-3: The proposed Housing Elements would not expose sensitive	LTS	No mitigation is required.	LTS

**Table II-1
Summary of Environmental Effects and Project Requirements/Mitigation Measures**

Impact(s)	Level of Significance Prior to Mitigation	Mitigation Measure(s) and/or Project Requirements	Level of Significance After Mitigation
receptors to substantial pollutants.			
Impact AQ-4: The proposed Housing Elements would not create objectionable odors.	LTS	No mitigation is required.	LTS
The proposed Housing Elements would not result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal, state, or regional ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors).	NI	No mitigation is required.	NI
Section V.I (Greenhouse Gas Emissions)			
Impact GH-1: The proposed Housing Elements would not generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment and would not conflict with any applicable plan, policy or regulation adopted for the purpose of reducing the emissions of GHGs.	LTS	No mitigation is required.	LTS
Section V.J (Wind and Shadows)			
Impact WS-1: The proposed Housing Elements would not alter wind in a manner that substantially affects public areas.	LTS	No mitigation is required.	LTS
Impact WS-2: The proposed Housing Elements would not create new shadow in a manner that substantially affects outdoor recreation facilities or other public areas.	LTS	No mitigation is required.	LTS
Section V.K (Recreation)			
Impact RE-1: The proposed Housing Elements would not result in substantial adverse physical impacts associated with the provision of, or the need for, new or physically altered park or recreational facilities, the	LTS	No mitigation is required.	LTS

**Table II-1
Summary of Environmental Effects and Project Requirements/Mitigation Measures**

Impact(s)	Level of Significance Prior to Mitigation	Mitigation Measure(s) and/or Project Requirements	Level of Significance After Mitigation
construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios or other performance objectives.			
Impact RE-2: The proposed Housing Elements would not physically degrade existing recreational resources.	LTS	No mitigation is required.	LTS
Section V.L (Utilities and Service Systems)			
Impact UT-1: The proposed Housing Elements would not exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board.	LTS	No mitigation is required.	LTS
Impact UT-2: The proposed Housing Elements would not require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects, and would result in a determination by the wastewater treatment provider that serves the project that it has adequate capacity to serve the project's projected demand.	LTS	No mitigation is required.	LTS
Impact UT-3: The proposed Housing Elements would not require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.	LTS	No mitigation is required.	LTS
Impact UT-4: The proposed Housing Elements would have sufficient water supply available to serve the project from existing entitlements and resources and would not require new or expanded water supply resources or entitlements.	LTS	No mitigation is required.	LTS
Impact UT-5: The proposed Housing Elements would not be served by a landfill without sufficient permitted capacity to accommodate the project's	LTS	No mitigation is required.	LTS

**Table II-1
Summary of Environmental Effects and Project Requirements/Mitigation Measures**

Impact(s)	Level of Significance Prior to Mitigation	Mitigation Measure(s) and/or Project Requirements	Level of Significance After Mitigation
solid waste disposal needs.			
The proposed Housing Elements would not result in a determination by the wastewater treatment provider that would serve the project that it has inadequate capacity to serve the project's projected demand in addition to the provider's existing commitments.	NI	No mitigation is required.	NI
The proposed Housing Elements would comply with federal, state, and local statutes and regulations related to solid waste.	NI	No mitigation is required.	NI
Section V.M (Public Services)			
Impact PS-1: The proposed Housing Elements would not result in substantial adverse physical impacts associated with the provision of, or the need for, new or physically altered fire protection facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for fire protection.	LTS	No mitigation is required.	LTS
Impact PS-2: The proposed Housing Elements would not result in substantial adverse physical impacts associated with the provision of, or the need for, new or physically altered police facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for police protection.	LTS	No mitigation is required.	LTS
Impact PS-3: The proposed Housing Elements would not result in substantial adverse physical impacts associated with the provision of, or the need for, new or physically altered school facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable	LTS	No mitigation is required.	LTS

**Table II-1
Summary of Environmental Effects and Project Requirements/Mitigation Measures**

Impact(s)	Level of Significance Prior to Mitigation	Mitigation Measure(s) and/or Project Requirements	Level of Significance After Mitigation
service ratios or other performance objectives for schools.			
Impact PS-4: The proposed Housing Elements would not result in substantial adverse physical impacts associated with the provision of, or the need for, new or physically altered library facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios or other performance objectives for libraries.	LTS	No mitigation is required.	LTS
Impact PS-5: The proposed Housing Elements would not result in substantial adverse physical impacts associated with the provision of, or the need for, new or physically altered public health facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios or other performance objectives for any public health facilities.	LTS	No mitigation is required.	LTS
Section V.N (Biological Resources)			
Impact BI-1: The proposed Housing Elements would not have a substantial adverse effect on any candidate, sensitive, or special-status species; riparian habitat or other sensitive natural communities; federally protected wetlands; or interfere with the movement of species.	LTS	No mitigation is required.	LTS
Impact BI-2: The proposed Housing Elements would not conflict with any local policies or ordinances protecting biological resources nor would the proposed Housing Elements conflict with the provisions an adopted habitat conservation plan.	NI	No mitigation is required.	NI
The proposed Housing Elements would not have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish	NI	No mitigation is required.	NI

**Table II-1
Summary of Environmental Effects and Project Requirements/Mitigation Measures**

Impact(s)	Level of Significance Prior to Mitigation	Mitigation Measure(s) and/or Project Requirements	Level of Significance After Mitigation
and Game or U.S. Fish and Wildlife Service.			
The proposed Housing Elements would not have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.	NI	No mitigation is required.	NI
The proposed Housing Elements would not interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites.	NI	No mitigation is required.	NI
Section V.O (Geology and Soils)			
Impact GE-1: The proposed Housing Elements would not expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault, strong seismic ground shaking, seismic-related ground failure, including liquefaction, or landslides.	LTS	No mitigation is required.	LTS
Impact GE-2: The proposed Housing Elements would not result in substantial soil erosion or the loss of topsoil.	LTS	No mitigation is required.	LTS
Impact GE-3: The proposed Housing Elements would not locate housing on geologic unit or soil that is unstable, or that would become unstable as a result of the proposed Housing Elements, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse.	LTS	No mitigation is required.	LTS
Impact GE-4: The proposed Housing Elements would not locate housing on expansive soil, as defined in Table 18-1-B of the Uniform Building Code, creating substantial risks to life or property.	LTS	No mitigation is required.	LTS

**Table II-1
Summary of Environmental Effects and Project Requirements/Mitigation Measures**

Impact(s)	Level of Significance Prior to Mitigation	Mitigation Measure(s) and/or Project Requirements	Level of Significance After Mitigation
Impact GE-5: The proposed Housing Elements would not substantially change the topography or any unique geologic or physical features of the site.	LTS	No mitigation is required.	LTS
The proposed Housing Elements would not locate housing on soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater.	NI	No mitigation is required.	NI
Section V.P (Hydrology and Water Quality)			
Impact HY-1: The proposed Housing Elements would not violate any water quality standards, waste discharge requirements, or otherwise substantially degrade water quality.	LTS	No mitigation is required.	LTS
Impact HY-2: The proposed Housing Elements would not substantially deplete groundwater supplies or interfere substantially with groundwater recharge.	LTS	No mitigation is required.	LTS
Impact HY-3: The proposed Housing Elements would not substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner that would result in substantial erosion or siltation on- or off-site, or substantially increase the rate or amount of surface runoff in a manner that would result in flooding on- or offsite.	LTS	No mitigation is required.	LTS
Impact HY-4: The proposed Housing Elements would not create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff.	LTS	No mitigation is required.	LTS
Impact HY-5: The proposed Housing Elements could direct housing that	LTS	No mitigation is required.	LTS

**Table II-1
Summary of Environmental Effects and Project Requirements/Mitigation Measures**

Impact(s)	Level of Significance Prior to Mitigation	Mitigation Measure(s) and/or Project Requirements	Level of Significance After Mitigation
could be located within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other authoritative flood hazard delineation map or place within a 100-year flood hazard area structures that would impede or redirect flood flows.			
Impact HY-6: The proposed Housing Elements would not expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam.	LTS	No mitigation is required.	LTS
Impact HY-7: The proposed Housing Elements would not expose people or structures to a significant risk of loss, injury or death involving inundation by seiche, tsunami, or mudflow.	LTS	No mitigation is required.	LTS
Section V.Q (Hazards and Hazardous Materials)			
Impact HZ-1: The proposed Housing Elements would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.	LTS	No mitigation is required.	LTS
Impact HZ-2: The proposed Housing Elements would not create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment.	LTS	No mitigation is required.	LTS
Impact HZ-3: The proposed Housing Elements would not emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school.	LTS	No mitigation is required.	LTS
Impact HZ-4: The proposed Housing Elements would not direct housing that could be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and,	LTS	No mitigation is required.	LTS

**Table II-1
Summary of Environmental Effects and Project Requirements/Mitigation Measures**

Impact(s)	Level of Significance Prior to Mitigation	Mitigation Measure(s) and/or Project Requirements	Level of Significance After Mitigation
as a result, they would not create a significant hazard to the public or the environment.			
Impact HZ-5: The proposed Housing Elements would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.	LTS	No mitigation is required.	LTS
Impact HZ-6: The proposed Housing Elements would not expose people or structures to a significant risk of loss, injury or death involving fires.	LTS	No mitigation is required.	LTS
The City is neither within an airport land use plan area, nor within two miles of a public airport or public use airport, nor within the vicinity of a private airstrip. Therefore, the proposed Housing Elements would have no impact with respect to air traffic safety.	NI	No mitigation is required.	NI
Section V.R (Mineral and Energy Resources)			
Impact ME-1: The proposed Housing Elements would not encourage activities which result in the use of large amounts of fuel, water, or energy, or use these in a wasteful manner.	LTS	No mitigation is required.	LTS
The proposed Housing Elements would not result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state.	NI	No mitigation is required.	NI
The proposed Housing Elements would not result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan.	NI	No mitigation is required.	NI
Section V.S (Agricultural and Forest Resources)			
Impact AG-1: The proposed Housing Elements would not conflict with	LTS	No mitigation is required.	LTS

**Table II-1
Summary of Environmental Effects and Project Requirements/Mitigation Measures**

Impact(s)	Level of Significance Prior to Mitigation	Mitigation Measure(s) and/or Project Requirements	Level of Significance After Mitigation
existing zoning for agricultural use.			
The proposed Housing Elements would not conflict with a Williamson Act contract.	NI	No mitigation is required.	NI
The proposed Housing Elements would not convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance, as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use.	NI	No mitigation is required.	NI
The proposed Housing Elements would not conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)) or timberland (as defined by Public Resources Code Section 4526).	NI	No mitigation is required.	NI
The proposed Housing Elements would not result in the loss of forest land or conversion of forest land to non-forest use.	NI	No mitigation is required.	NI
The proposed Housing Elements would not involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or forest land to non-forest use.	NI	No mitigation is required.	NI

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III. INTRODUCTION

TYPE, PURPOSE, AND FUNCTION OF THE EIR

This Draft Environmental Impact Report (Draft EIR) has been prepared by the San Francisco Planning Department, the Lead Agency for the proposed Project, in conformance with the provisions of the California Environmental Quality Act (CEQA) Guidelines as amended. The lead agency is the public agency that has the principal responsibility for carrying out or approving a project. This Draft EIR was prepared in accordance with Section 15151 of the CEQA Guidelines, which defines the standards for EIR adequacy:

An EIR should be prepared with a sufficient degree of analysis to provide decision makers with information which enables them to make a decision which intelligently takes account of environmental consequences. An evaluation of the environmental effects of a Project need not be exhaustive, but the sufficiency of an EIR is to be reviewed in the light of what is reasonably feasible. Disagreement among experts does not make an EIR inadequate, but the EIR should summarize the main points of disagreement among the experts. The courts have looked not for perfection but for adequacy, completeness, and a good faith effort at full disclosure.

As stated in the CEQA Guidelines, an EIR is an “informational document” intended to inform public agency decision makers and the public of the significant environmental effects of a project, identify possible ways to minimize the significant effects, and describe reasonable alternatives to the project. Although this EIR does not control the ultimate decision on the proposed Housing Elements, the City must consider the information in this EIR and respond to each significant effect identified in this EIR. The City will use the certified EIR, along with other information and public processes, to determine whether to approve, modify, or disapprove the proposed project, and to specify any applicable environmental conditions as part of project approvals. The purpose of this EIR is to provide the City, public agencies and the public in general with detailed information about the environmental effects of implementing the proposed project, to examine and institute methods of mitigating any adverse environmental impacts should the project be approved, and to consider alternatives to the project as proposed. CEQA provides that public agencies should not approve projects until all feasible means available have been employed to substantially lessen the significant environmental effects of such projects. “Feasible” means capable of being accomplished in a successful manner within a reasonable period of time taking into account economic, environmental, social, and technological factors.

Scope of the Environmental Analysis

The purpose of the analyses contained in this Draft EIR is not to assess the success of the Housing Element’s policies, but rather to measure potential environmental impacts resulting from implementation of such policies. For the purposes of this Draft EIR, the most feasible way to present growth under the Housing Element update is to disclose the possible areas and means by which development could take place. It will be assumed that future projects that are subject to City policies identified by the adopted

Housing Element update would be required to adhere to the applicable regulations and undergo the appropriate environmental review. Residential development in the City would occur regardless of the proposed Housing Elements. The proposed Housing Elements are policy documents that provide direction for how and where new housing, driven by population growth, should be developed.

Purpose of the EIR

The City has commissioned this EIR for the following purposes:

- To satisfy CEQA requirements.
- To inform the general public, the local community, and responsible, trustee, and state and federal agencies of the nature of the proposed Housing Elements, any potentially significant environmental effects that are associated with adoption and implementation of these documents, feasible policies and mitigation measures to reduce those effects, and reasonable and feasible alternatives.
- To enable the City to consider the environmental consequences of approving the proposed Housing Elements.
- To allow for consideration by responsible agencies in issuing permits and approvals for the proposed Housing Elements.
- To satisfy legal requirements regarding the 2004 Housing Element.

As described in Sections 15121(a) and 15362 of the CEQA Guidelines, an EIR is an informational document that will inform public agency decision makers and the public of the significant environmental effects of a project, identify possible ways to minimize the significant effects, and describe reasonable alternatives to a project. The purpose of EIR, therefore, is to focus on the potentially significant environmental effects that could result from the proposed Housing Elements, as determined by the Lead Agency. In addition, EIR identifies the feasible alternatives and mitigation measures, as applicable, that could reduce significant impacts to less-than-significant levels.

The Lead Agency is required to consider the information in the EIR, along with any other relevant information, in making its decision on the proposed Housing Elements. Although the EIR does not determine the ultimate decision that will be made regarding approval or implementation of the proposed Housing Elements, CEQA requires the City to consider the information in the EIR and make findings regarding each significant effect of the proposed Housing Elements.

This Draft EIR was prepared in accordance with Section 15151 of the CEQA Guidelines, which defines the standards for EIR adequacy:

An EIR should be prepared with a sufficient degree of analysis to provide decision makers with information which enables them to make a decision which intelligently takes account of

environmental consequences. An evaluation of the environmental effects of a proposed project need not be exhaustive, but the sufficiency of an EIR is to be reviewed in the light of what is reasonably feasible. Disagreement among experts does not make an EIR inadequate, but the EIR should summarize the main points of disagreement among the experts. The courts have looked not for perfection; but for adequacy, completeness, and a good faith effort at full disclosure.

PROPOSED PROJECT

The subject of this EIR is the proposed revision of the Housing Element of the San Francisco General Plan (General Plan). The Housing Element is a policy document that consists of goals and policies to guide the City and private and non-profit developers in providing housing for existing and future residents to meet projected housing demand, as required under Government Code section 65580 *et seq.* (State housing element law). State law requires the housing element to be updated periodically, usually every five years. The most recent update of the housing element occurred in 2004, when the City adopted the 2004 Housing Element, an update to the 1990 Residence Element. Subsequent to adoption of the 2004 Housing Element, the California Court of Appeal determined the Negative Declaration prepared for the 2004 Housing Element inadequate, and directed the City to prepare an EIR for the 2004 Housing Element. The City must also comply with state housing element law and prepare an update of the Housing Element. The City has undergone a comprehensive planning process and prepared the next update of the housing element, the 2009 Housing Element. This EIR will satisfy the City's legal requirements for preparing an EIR on the 2004 Housing Element and will also analyze the environmental effects of the 2009 Housing Element.

ENVIRONMENTAL REVIEW PROCESS

Notice of Preparation and Public Scoping Meeting

In compliance with Section 15082 of the CEQA Guidelines, a Notice of Preparation (NOP) was prepared by the City and County of San Francisco and distributed to the State Clearinghouse, Office of Planning and Research, responsible agencies, and other interested parties on October 8, 2008.

Subsequent to the circulation of the NOP, a draft of the proposed 2009 Housing Element was completed. The scope of this EIR was therefore revised to include the 2004 Housing Element and the 2009 Housing Element. Therefore, the Planning Department reissued and recirculated an NOP on September 2, 2009 that solicited comments regarding the content of the proposed the proposed Housing Elements.

Both NOPs for the Draft EIR were circulated for 30 days in accordance with CEQA Guidelines Section 15082(b). Eighteen responses to the first NOP were received and sixteen responses to the recirculated NOP were received. Known areas of controversy associated with the proposed project include population and housing, land use and land use planning, transportation, aesthetics, air quality, biological resources, cultural resources, geology and soils, hazards and hazardous materials, hydrology and water quality, noise, public services and utilities, and recreation. Appendices A-1 and A-2 include both NOPs and

written responses to the NOPs, respectively. The EIR will address each of the areas of controversy in the corresponding topic under Section V (Environmental Setting & Impacts).

This EIR analyzes the environmental topics listed below, in accordance with Appendix G of the CEQA Checklist. For each checklist item, this EIR addresses the potential impacts of the 2004 Housing Element policies followed by the potential impacts of the 2009 Housing Element policies. Where possible, the impacts of the 2004 Housing Element and 2009 Housing Element are analyzed concurrently to avoid redundancy:

- Plans and Policies
- Land Use and Land Use Planning
- Aesthetics
- Population and Housing
- Cultural and Paleontological Resources
- Transportation and Circulation
- Noise
- Air Quality
- Greenhouse Gas Emissions
- Wind and Shadow
- Recreation
- Utilities and Service Systems
- Public Services
- Biological Resources
- Geology and Soils
- Hydrology and Water Quality
- Hazards/Hazardous Materials
- Mineral and Energy Resources
- Agricultural and Forest Resources

Draft EIR and Final EIR

Pursuant to CEQA Guidelines Section 15205(b)(2), the Draft EIR will be submitted to the State Clearinghouse for distribution to state agencies. Submittal of the Draft EIR to the State Clearinghouse will also commence the 45-day public review period. This Draft EIR and Notice of Availability is being circulated for review and comment to the public and other interested parties, agencies, and organizations for a 45-day review period, which begins on June 30, 2010 and ends on August 16, 2010. Comments on the Draft EIR must be reviewed by 5:00 P.M. on August 5, 2010. During the review period, copies of the Draft EIR and documents referenced in the Draft EIR will be available for review at the following locations:

City and County of San Francisco Planning Department
1660 Mission Street, 1st Floor Planning Information Counter
San Francisco, CA 94103

Written comments on the Draft EIR may be addressed to:

Bill Wycko
San Francisco Housing Element EIR
City and County of San Francisco Planning Department
1650 Mission Street, Suite 400
San Francisco, CA 94103

A public hearing at the Planning Commission on the Draft EIR will be held during the review period. Notice of the time and location are included on the cover letter of this Draft EIR.

Following public circulation of the Draft EIR, a Comments and Responses (C&R) document will be prepared. The C&R document will contain responses to comments received during the public review period regarding the potential environmental effects of the project. The C&R document may also contain corrections and additions to the Draft EIR and other information relevant to the environmental issues associated with the project. A public hearing will be held before the Planning Commission for certification of the EIR. Following the EIR certification hearing, a Final EIR will be prepared. The Final EIR technically consists of the Draft EIR plus the C&R document.

A Mitigation Monitoring and Reporting Program (MMRP) will be prepared. The MMRP will include all mitigation and improvement measures described in the Draft EIR. The MMRP shall be finalized concurrent with preparation of the Final EIR, EIR findings, and statement of overriding considerations, as required, in order that this MMRP can be adopted with certification of the Final EIR, adoption of the EIR findings and statement of overriding considerations, as required.

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IV. PROJECT DESCRIPTION

A. INTRODUCTION

The subject of this EIR is the proposed update to the Housing Element of the San Francisco General Plan (General Plan). This EIR evaluates the environmental impacts of adoption of the 2004 Housing Element and the proposed 2009 Housing Element (collectively, “the proposed Housing Elements”).

This section is organized into the following seven subsections:

- A. Introduction: This subsection provides a discussion of housing element law, the project location, type of EIR being prepared, and the purpose of this EIR.
- B. Regulatory Setting: This subsection describes the state mandated requirements of a housing element, the regional housing need, and the Court of Appeal decision and trial court writ of mandate regarding the environmental review previously prepared for the 2004 Housing Element.
- C. Background: This subsection briefly describes the population and employment trends and projections that constitute the technical data used in developing the proposed 2009 Housing Element objectives, policies and implementation measures.
- D. Project Objectives: This subsection provides a list of the project objectives.
- E. Approach: This subsection briefly details the three housing element options to be analyzed in this EIR. In addition, existing capacity and pipeline projects are described.
- F. Project Characteristics: This subsection describes each housing element and how they differ from the 1990 Residence Element.¹
- G. Public Scoping: This subsection summarizes the project’s public scoping process and public scoping comments.

The housing element is a public policy document that comprehensively addresses issues relating to housing needs for San Francisco residents and households. The housing element is prepared in response to California’s housing element law, Government Code Sections 65580 *et seq.*, which, since 1969, has required local jurisdictions to adequately plan for and address the housing needs of all segments of its population, such that all communities contribute to the attainment of the state housing goals.

The housing element allows the City to plan for its housing goals and needs as its community changes, and to consider the economic, environmental, and fiscal factors that affect the City’s ability to meet those

¹ 1990 Residence Element is Case No. 90.87E with the Planning Department.

goals. State certification of the housing element provides the City with a number of benefits, including a legally adequate General Plan, the ability to adopt and implement redevelopment activities under California Community Redevelopment Law, greater protection from potential legal challenges to the housing element, and priority access to State housing funds.

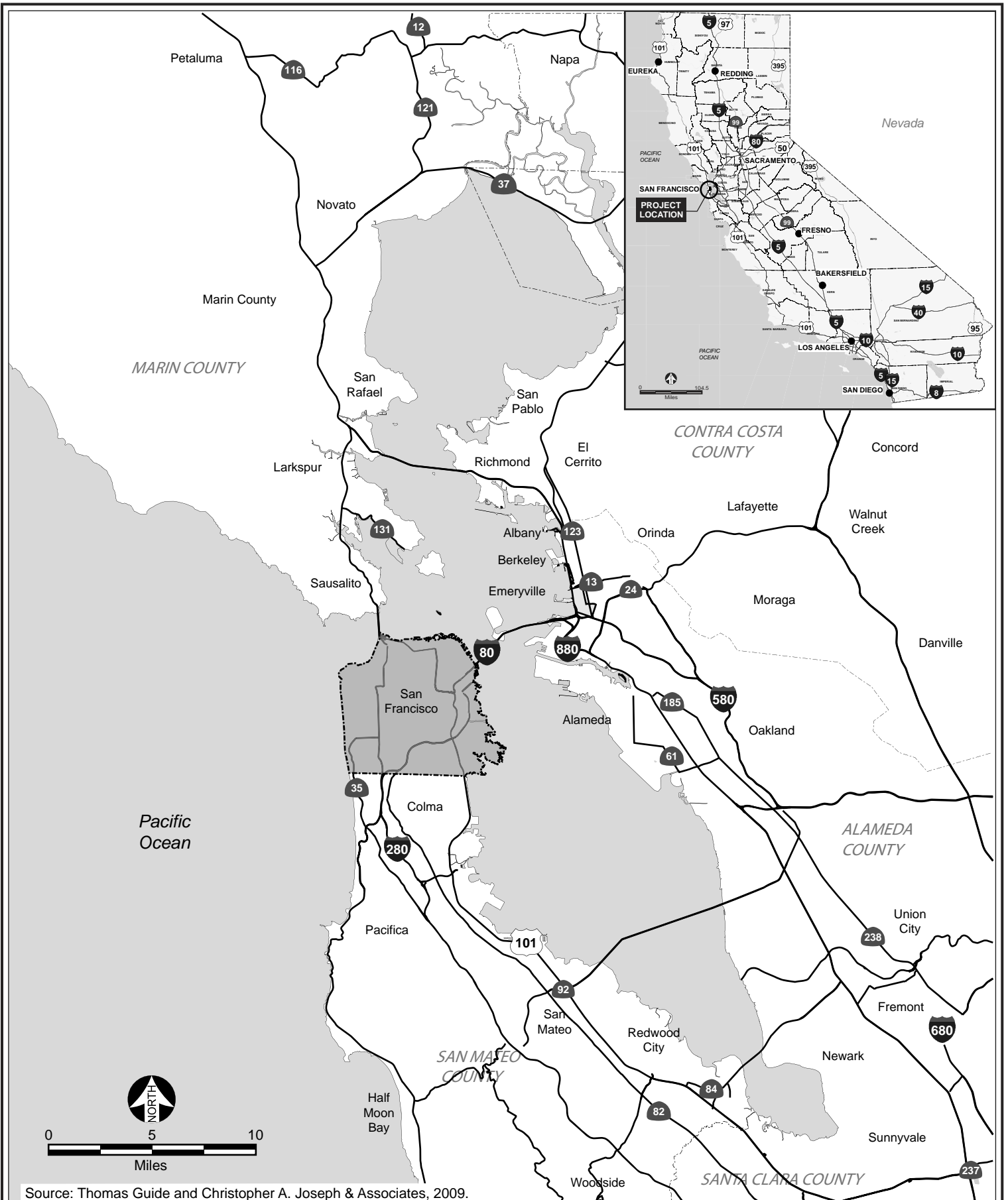
Without a certified housing element, the City risks ineligibility for state housing and infrastructure funds; loss of state and federal housing assistance funding; the inability to adopt new Redevelopment Areas; litigation, including payment of litigants' attorney fees; and lastly, sanctions imposed by the Courts, including building permit moratoria (where no permits may be issued) and moratoria on local land use authority (thus taking away local control of land use decisions).

State housing element law requires that each city and county develop local housing programs designed to meet its "fair share" of housing needs for all income groups. The "fair share" allocation of regional housing needs are determined by regional planning agencies and seeks to ensure that each jurisdiction accepts responsibility for the housing that represents the number of additional dwelling units that would be required to accommodate the anticipated growth in households, replace expected demolitions and conversions of housing units to non-housing uses, and achieve a future vacancy rate that allows for the healthy functioning of the housing market.

State law requires the housing element to be updated periodically, usually every five years. The most recent update of the housing element occurred in 2004, when the City adopted the 2004 Housing Element, an update to the 1990 Residence Element. Subsequent to adoption of the 2004 Housing Element, the California Court of Appeal determined the environmental document prepared for the 2004 Housing Element inadequate, and directed the City to prepare an EIR for the 2004 Housing Element (per *San Franciscans for Livable Neighborhoods v. City and County of San Francisco* [June 22, 2007, A112987] [unpublished opinion]). The City must also comply with state housing element law and prepare a periodic update of the housing element. The City has undergone a comprehensive planning process and prepared the next update of the housing element, the proposed 2009 Housing Element. This EIR satisfies the City's legal requirements for preparing an EIR on the 2004 Housing Element and analyzes the environmental effects of the 2009 Housing Element.

Location

San Francisco is a consolidated city and county. As illustrated in Figure IV-1, the City and County of San Francisco (the City) is located on the tip of the San Francisco Peninsula with the Golden Gate Strait to the north, San Francisco Bay to the east, San Mateo County to the south, and the Pacific Ocean to the west. The City is one of nine counties adjacent to San Francisco and San Pablo Bays. Daly City and the City of Brisbane abut San Francisco to the south. San Francisco is approximately 49 square miles in size. As illustrated in Figure IV-2, the City is made up several distinct planning districts and plan areas (areas which have undergone, or are in the process of, a comprehensive community planning effort). Although San Francisco is densely developed, there remain developable vacant parcels for new housing construction, as well as underused parcels available for increased development, in various locations throughout the City.



Source: Thomas Guide and Christopher A. Joseph & Associates, 2009.

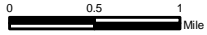
Figure IV-1
City and County of San Francisco
Regional Map

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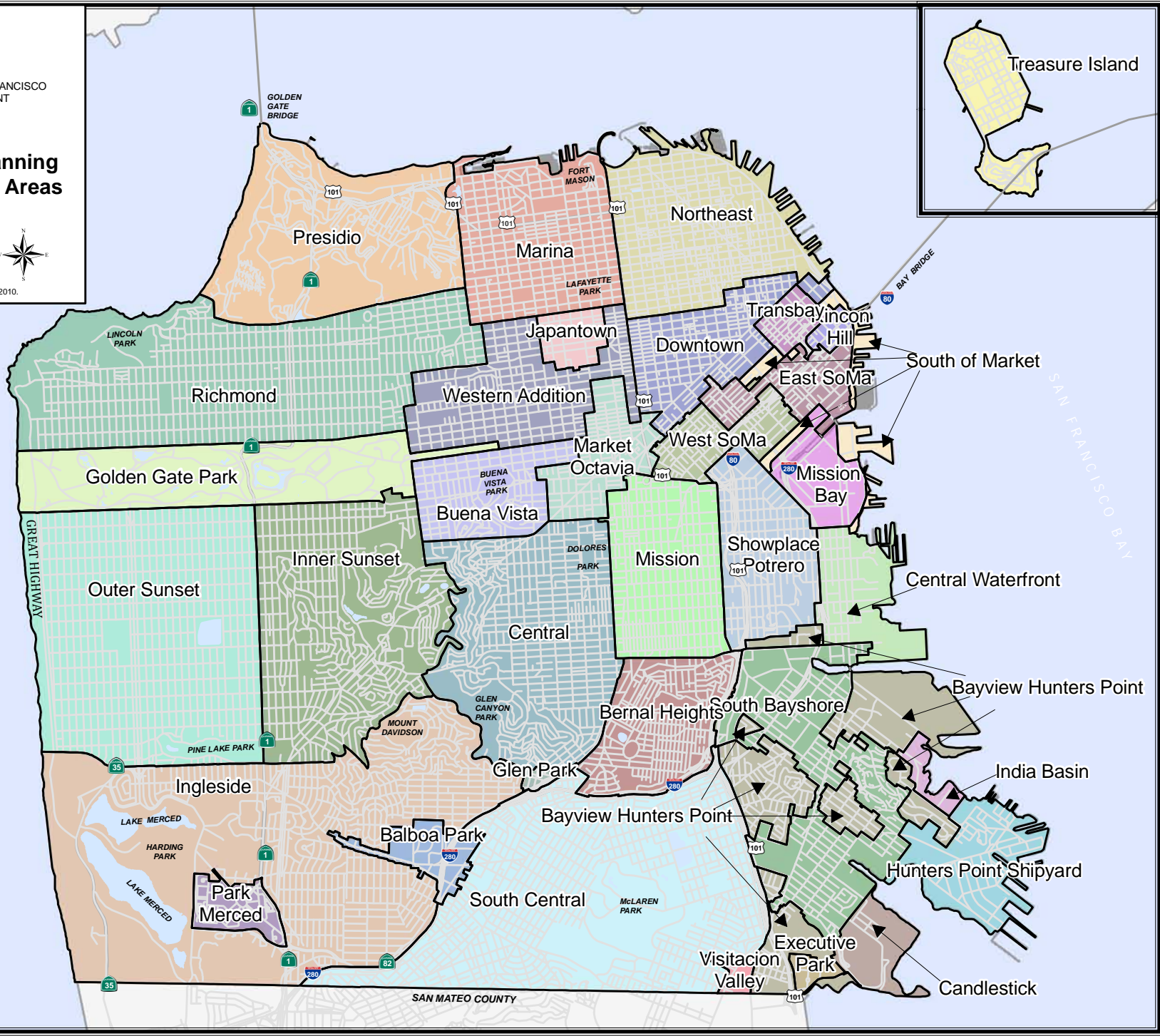
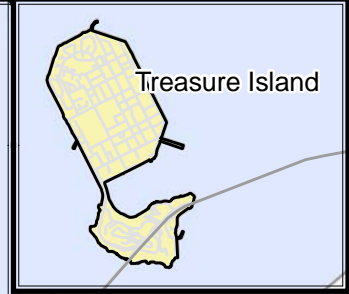


CITY AND COUNTY OF SAN FRANCISCO
PLANNING DEPARTMENT

Figure IV-2 San Francisco Planning Districts and Plan Areas



Source: CCSF Planning Department, May 2010.



PACIFIC OCEAN

SAN FRANCISCO BAY

SAN MATEO COUNTY

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Type of EIR

The City has determined that the appropriate process for analyzing the proposed Housing Elements' environmental effects is the preparation of a "Program EIR". Program EIRs are prepared for programs composed of a series of actions related (1) geographically; (2) as logical parts in a chain of contemplated actions; (3) in connection with issuance of rules, regulations, plans, or other general criteria to govern the conduct of a continuing program; or (4) as individual activities carried out under the same authorizing statutory or regulatory authority and having generally similar environmental effects which can be mitigated in similar ways. This Draft EIR constitutes a "Program EIR" under Section 15168 of the CEQA Guidelines. Based on the definition of a "project" under the CEQA (Section 15378 of the CEQA Guidelines) and case law interpreting CEQA, environmental review of an amendment to a General Plan or General Plan element need only analyze *changes* from a previously adopted plan or element. Thus, this EIR addresses the changes of the proposed Housing Elements from the 1990 Residence Element.

Under CEQA, the Lead Agency (City and County of San Francisco Planning Department) is the public agency with authority to certify this EIR. The Board of Supervisors then has the decision to approve or deny the proposed Housing Elements.

B. PROJECT APPROVALS

Following certification of this EIR, the City could re-adopt the entire 2004 Housing Element. In addition, certification of this EIR would also allow the City to adopt the proposed 2009 Housing Element. Under Planning Code Section 340, general plan amendments must be approved by the Planning Commission and the Board of Supervisors. In addition, in order to receive certain state funding or be eligible for certain state programs, the Housing Element must be certified as compliant with state housing element law by the California Department of Housing and Community Development (HCD).

C. PROJECT OBJECTIVES

The objectives of the proposed Housing Elements are to:

1. Provide a vision for the City's housing and growth management through 2014;
2. Maintain the existing housing stock to serve housing needs;
3. Ensure capacity for the development of new housing to meet the RHNA at all income levels;
4. Encourage housing development where supported by existing or planned infrastructure, while maintaining existing neighborhood character;
5. Encourage, develop and maintain programs and policies to meet projected affordable housing needs;
6. Develop a vision for San Francisco that supports sustainable local, regional and state housing and environmental goals; and

7. Adopt a housing element that substantially complies with California housing element law as determined by the California Department of Housing and Community Development.

D. REGULATORY SETTING

This subsection includes a discussion of the legal requirements for compliance with state housing element law and provides an overview of the Court of Appeal decision to require preparation of an EIR for the 2004 Housing Element.

State Mandated Housing Element Requirements

The housing element is one of the seven required elements in a general plan, and its required contents are set forth in Government Code Section 65583. Housing element law requires local governments to adequately plan to meet their existing and projected housing needs including their share of the “regional housing need,” described below. The law recognizes that in order for the private sector to adequately address housing needs and demand, local governments must adopt land use plans and regulatory schemes that provide opportunities for, and do not unduly constrain, housing development. Specifically, Section 65583 states that the housing element shall consist of “[...] an identification and analysis of existing and projected housing needs and a statement of goals, policies, quantified objectives, financial resources and scheduled programs for the preservation, improvement, and development of housing.” The housing element must also contain a schedule of actions that the local government is undertaking to implement the goals, objectives, and quantified objectives (i.e., the City’s required contribution to the provision of housing for the region) described in the housing element. As discussed above, state law requires that the housing element be updated periodically, usually every five years and is subject to detailed statutory requirements and mandatory review by the HCD.

Under state law, HCD is required to allocate the region’s share of the projected statewide housing need to Councils of Government based on the Department of Finance population projections and regional population forecasts. The Association of Bay Area Governments (ABAG) is the regional authority charged with preparing the Regional Housing Needs Allocation (RHNA), quantifying the housing need for local jurisdictions in the San Francisco Bay Area. HCD recognizes that while land-use planning is fundamentally a local issue, the availability of housing is a matter of statewide importance. Therefore, State housing element law requires local housing elements to meet regional housing projections to balance the need for growth, including the need for additional housing, against competing local interests. Government Code Section 65583 requires that the housing element include the following components:

- I. **Housing Needs Assessment.** The Housing Needs Assessment must address both the existing and projected housing needs as defined below.²

² State of California Business, Transportation and Housing Agency, Department of Housing and Community Development, Division of Housing Policy Development. Memorandum: State Housing Element Law. This

- a. *Existing Needs*: the number of households overpaying for housing, living in overcrowded conditions, or with special housing needs; the number of housing units that need rehabilitation; and assisted affordable units at-risk of converting to market-rate.
 - b. *Projected Needs*: The City and County's share of the regional housing need, as established in the RHNA prepared by ABAG, to accommodate expected population growth over the planning period of the housing element (five years). The RHNA provides a benchmark for evaluating the adequacy of local zoning and regulatory actions to ensure each local government is sufficiently designating land and providing opportunities for housing development to address population growth and job generation.
- II. **Sites Inventory and Analysis.** The housing element must include a detailed land inventory and analysis, including a site specific inventory listing properties, zoning and general plan designation, size and existing uses; a general analysis of the environmental constraints and the availability of infrastructure; and evaluation of the suitability, availability and realistic development capacity of sites to accommodate the jurisdiction's share of the RHNA projections by income level. If the analysis does not demonstrate adequate sites, appropriately zoned to meet RHNA projections, by income level, the element must include a program to provide the needed sites including providing zoning that allows owner-occupied and rental multi-family uses "by-right" with minimum densities and development standards that allow at least 16 units per site at a density of at least 20 units per acre for sites needed to address the housing need for lower-income households.³
- III. **Housing Constraints Analysis.** The housing element must include an analysis of housing constraints including land-use controls, fees and exactions, on- and off-site improvement requirements, building codes and their enforcement, permit and processing procedures, and potential constraints on the development or improvement of housing for persons with disabilities.⁴
- IV. **Housing Programs.** Programs identifying adequate sites to accommodate the locality's share of the RHNA, assist in the development of housing for low- and moderate-income households; remove or mitigate governmental constraints; conserve and improve the existing affordable housing stock; promote equal housing opportunity; and preserve the at-risk units identified.⁵

document is available at the State of California Department of Housing and Community Development website: <http://housing.hcd.ca.gov/hpd/hrc/plan/he/heoverview.pdf>. Accessed 06/24/2008.

³ Ibid.

⁴ Ibid.

⁵ Ibid.

- V. **Quantified Objectives.** Estimates of the maximum number of units, by income level, to be constructed, rehabilitated, and conserved over the planning period of the element.⁶

The proposed Housing Elements are each organized into two main parts. Part I of each Housing Element consists of the Data and Needs Analysis section, which provides a statistical baseline for determining appropriate housing objectives, policies and implementation strategies. This section includes San Francisco population and employment trends, housing data, and inventories of land available for increased housing development. Part I also functions to provide a foundation for the proposed changes to the objectives and policies contained in Part II of each Housing Element. In order to have an adequate housing element, the document must contain an updated Data and Needs Analysis (Part I). Therefore, all housing element proposals analyzed in this EIR will include the most recent Data and Needs Analysis conducted for the 2009 Housing Element update.

Regional Housing Need

As discussed above, the ABAG, in coordination with the HCD, determined the Bay Area's regional housing need based on regional trends, projected population job growth, and existing needs. The City's fair share of regional housing need is calculated for each established planning horizon. The housing needs determination effort seeks to alleviate a tight housing market stemming from forecasted household and employment growth as well as to allocate regional household and employment growth to jurisdictions with established or planned transit infrastructures. The RHNA determination includes production targets for housing to serve various household income categories. For more information on ABAG's calculation of the RHNA, see the ABAG website at www.abag.ca.gov.

San Francisco's fair share of the regional housing need for January 1999 through June 2006, the planning period for the 2004 Housing Element, was calculated as 20,372 units, or 2,717 units per year. The RHNA for the 2004 Housing Element is presented in Table IV-1. The 1996 through 2006 RHNA is not the basis for this EIR.

Table IV-1
2004 Housing Element Regional Housing Needs Allocation

Household Income Category	Percentage of Area Median Income (AMI)	No. of Units	Percentage
Very Low	< 50%	5,244	25.7%
Low	50 – 79%	2,126	10.4%
Moderate	80 – 120%	5,639	27.7%
Above Moderate	> 120%	7,363	36.1%
Total	--	20,372	100%

Source: City and County of San Francisco, Planning Department, Housing Element, May 2004, at page 80.

⁶ Ibid.

The proposed 2009 Housing Element presents an updated calculation of San Francisco's fair share of the regional housing need. This updated calculation of San Francisco's share of the regional housing need is for January 2007 through June 2014 and shows a need for 31,193 housing units, or 4,159 units per year. The RHNA for the 2009 Housing Element is presented in Table IV-2.

**Table IV-2
2009 Housing Element Regional Housing Needs Allocation**

Household Income Category	Percentage of AMI	No. of Units	Percentage
Extremely Low	< 30%	3,294	10.5%
Very Low	31 – 50%	3,295	10.6%
Low	51 – 80%	5,535	17.7%
Moderate	81 – 120%	6,754	21.7%
Above Moderate	> 120%	12,315	39.5%
Total	--	31,193	100%

Source: City and County of San Francisco, Planning Department, Part I: Data and Needs Analysis, June 2010, at page 41.

2004 Housing Element Court of Appeal Decision

Prior to 2004, the City last updated its Housing Element in 1990, when it adopted the 1990 Residence Element. The EIR prepared to evaluate the 1990 Residence Element concluded that reaching the housing goals in the 1990 Residence Element could be achieved without any significant adverse effects to the environment. According to the EIR, meeting the housing goals in the 1990 Residence Element would reduce traffic congestion and thus improve air quality because people who work in the City would have shorter commutes.

The City's 2004 Housing Element was adopted on May 13, 2004, and deemed in compliance with state housing element law by the HCD. The San Francisco Planning Department prepared an Initial Study for the 2004 Housing Element, which examined several new policies that were proposed for addition to the 2004 Housing Element. The Initial Study concluded that although proposed revisions were meant to promote increased housing production, no environmental impacts would result from the adoption of the 2004 Housing Element because the element did not specify any development, rezoning, or area plans. The Initial Study stated that any environmental impact analysis would be conducted in connection with the approval of any future development projects, area plans, or rezoning. The Planning Department then prepared a Negative Declaration, which concluded that revisions to the Housing Element would not have a significant effect on the environment.

Subsequent to adoption of the 2004 Housing Element, the California Court of Appeal found the Negative Declaration prepared for the 2004 Housing Element by the City to be inadequate and determined that an EIR should be prepared (per *San Franciscans for Livable Neighborhoods v. City and County of San Francisco* [June 22, 2007, A112987] [unpublished opinion]). In response to this directive, the Planning Department has prepared this EIR assessing the environmental impacts of the changes from the 1990 Residence Element to the 2004 Housing Element.

After the Court of Appeal's determination, the San Francisco Superior Court ordered the City to refrain from enforcing, relying upon, approving or implementing policies and objectives identified as changes from the 1990 Residence Element, together with their accompanying interpreting text and implementation actions until an EIR is prepared and certified for the 2004 Housing Element.⁷ One of the alternatives evaluated in Section VII (Alternatives) of this Draft EIR, the 2004 Housing Element-Adjudicated, is a truncated version of the original 2004 Housing Element.

E. BACKGROUND

This subsection briefly discusses the population and employment trends and projections for the City and County of San Francisco.

Demographics

As mentioned above, Part I of the 2004 Housing Element and proposed 2009 Housing Element contains a description and analysis of the City's population and employment trends, existing housing characteristics, overall housing need, and capacity for new housing based on land supply. The discussion below provides a summary of the demographic information presented in Part I: Data and Needs Analysis of the 2009 Housing Element.

Table IV-3 presents population and household trends between 2000 and 2030. The City is projected to experience continued population growth through 2025, for a total of 411,514 housing units, which equates to an overall household population increase of approximately 85,350 between 2009 and 2025.

Table IV-3
San Francisco Household Trends and Projections

	2000	2005	2009	2010	2015	2020	2025	2030
Housing Units	347,053	359,451	369,864	372,467	385,483	398,498	411,514	424,518
Household	329,700	341,478	351,370	353,843	366,208	378,573	390,938	403,292
Household Population	756,976	783,441	804,779	810,113	836,785	863,457	890,129	916,800
Persons per Household	2.30	2.29	2.29	2.29	2.28	2.28	2.28	2.27

Note: The projections for 2009, 2010, 2015, 2020, and 2025 were calculated using linear regression.

Source: John Rahaim, Director of Planning, San Francisco Planning Department, correspondence with Michael P. Carlin, Deputy General Manager at the San Francisco Public Utilities Commission, July 9, 2009. (See Appendix I).

The City's population experienced a slight shift in ethnic composition since the 2000 Census. The percentage of residents claiming white racial affiliation increased 6 percent, totaling nearly 55 percent of the City's population according to the 2008 American Community Survey (ACS), while the African-American population continued to decline, dropping from 11 percent in 2000 to 6.2 percent in 2008. Residents of Chinese origin grew slightly, while the portion of residents identifying with Hispanic origins (any race) remained stable.

⁷ See Order Concerning Writ and Related Motions, filed April 6, 2009, as amended June 1, 2009, in San Franciscans for Livable Neighborhoods v. CCSF, San Francisco Superior Court Case No. 04-504-780.

In 2000, almost 70 percent of all households in the City were comprised of one or two people and household sizes are expected to remain proportionally the same as previous decades; however, the proportion of single person households is growing. The 2008 ACS estimates the median household income at just under \$73,798 or about a 34 percent increase since 2000.

Table IV-4 presents employment growth in the City between 2000 and 2030. The number of jobs in the City decreased by 89,410 between 2000 and 2005 and approximately 195,010 jobs are expected between 2005 and 2030.

Table IV-4
San Francisco Employment Trends and Projections, 2000-2030

	2000	2005	2030
Jobs	642,500	553,090	748,100
<i>Source: John Rahaim, Director of Planning, San Francisco Planning Department, correspondence with Michael P. Carlin, Deputy General Manager at the San Francisco Public Utilities Commission, July 9, 2009.</i>			

The median age within the City was estimated to be 40.4 years old in 2008, an increase from the median age of 36.5 in 2000. In 2000, residents 14 years and younger constituted only 12 percent of the City's population. The number of these residents is expected to grow, almost doubling to 184,700 in 2010 and making up 23 percent of the total population.

F. APPROACH

As discussed above, the Court of Appeal mandated that the City prepare an EIR for the 2004 Housing Element. Since preparation for the 2004 Housing Element EIR began, the City also completed the proposed 2009 Housing Element, as required by state housing element law. Because the proposed 2009 Housing Element must also undergo environmental review under CEQA, this EIR evaluates both the 2004 and the proposed 2009 Housing Element in the same EIR. This subsection outlines the proposed Housing Elements that are evaluated in this EIR. This approach facilitates a streamlined process in which the potential environmental impacts of implementing both housing element options are analyzed at similar levels of detail, meeting the requirements of CEQA and the Planning Department's responsibilities under the court's decision.

Proposed Housing Elements Analyzed in this EIR

As previously discussed, in order to be in compliance with state housing element law, a housing element must include an updated Data and Needs Analysis; therefore, each proposed Housing Element utilizes the most recent data on citywide housing found in the Draft 2009 Housing Element Part I Data and Needs Analysis. Further, in order to meet the project objectives of having a housing element that substantially complies with state housing element law, the proposed Housing Elements must meet the most recent regional housing needs assessment. Therefore, both project options will be analyzed for their ability to meet the 2007-2014 RHNA. This EIR analyzes the following two Housing Element proposals:

1. 2004 Housing Element: This option includes the objectives, policies, and implementation programs of the 2004 Housing Element. For purposes of this EIR analysis however, the 2004 Housing Element utilizes the updated Data and Needs Analysis (Part I) of the 2009 Housing Element and an updated RHNA.
2. 2009 Housing Element: This option includes the objectives, policies, implementation measures, strategies for further review and RHNA of the proposed 2009 Housing Element.

Existing Capacity

Housing element law requires local governments to prepare an inventory of land suitable for residential development to help identify sites that can be developed for housing within the housing element planning period. Using various data sources, the Planning Department has taken an inventory of land on which new residential development could occur under existing zoning. This was done to satisfy the HCD requirement to identify the supply of land still available to help the City meet its share of the regional housing need as projected by the RHNA.

Existing Zoning

Generally, the highest housing densities in the City exist in the Downtown area, at an average density of up to 283 dwelling units per acre, while lower densities (as low as 14 dwelling units per acre) exist in the western and southern areas in the City. Figure IV-3 shows a generalized zoning map of the City. As shown, most areas in the City allow residential uses and the eastern portion of the City is also comprised of commercial, mixed-use, and industrial uses. Figure IV-4 shows a generalized height map of the City. As shown, the tallest height districts occur in the Downtown and South of Market (SoMa), neighborhoods.

Figure IV-5 and Table IV-5 display the housing potential in undeveloped and underdeveloped sites. As shown, approximately 60,995 new housing units could be accommodated under existing zoning. There are approximately 1,649 parcels totaling 366 acres that are classified as vacant or near vacant (sites that are developed to less than five percent of their maximum potential) where approximately 20,543 new housing units could potentially be constructed. Another 4,111 lots are also seen as underdeveloped and could be redeveloped for residential uses, which could possibly yield another 40,452 new units. Underdeveloped sites are generally classified as soft sites, sites with development potential, or opportunity sites. The City identifies two levels of soft sites, sites that are built to only 30 percent of their maximum potential, and sites that are built to only five percent of their maximum potential, as determined by the zoning for that parcel. These units represent the allowable number of new housing units that could be accommodated under existing zoning. The City is also in the process of updating zoning controls for many of San Francisco's neighborhoods. These rezoning efforts will increase the existing capacity in those neighborhoods, allowing for the development of additional housing units above and beyond what is shown in Figure IV-5 and Table IV-5.

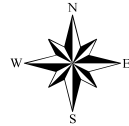


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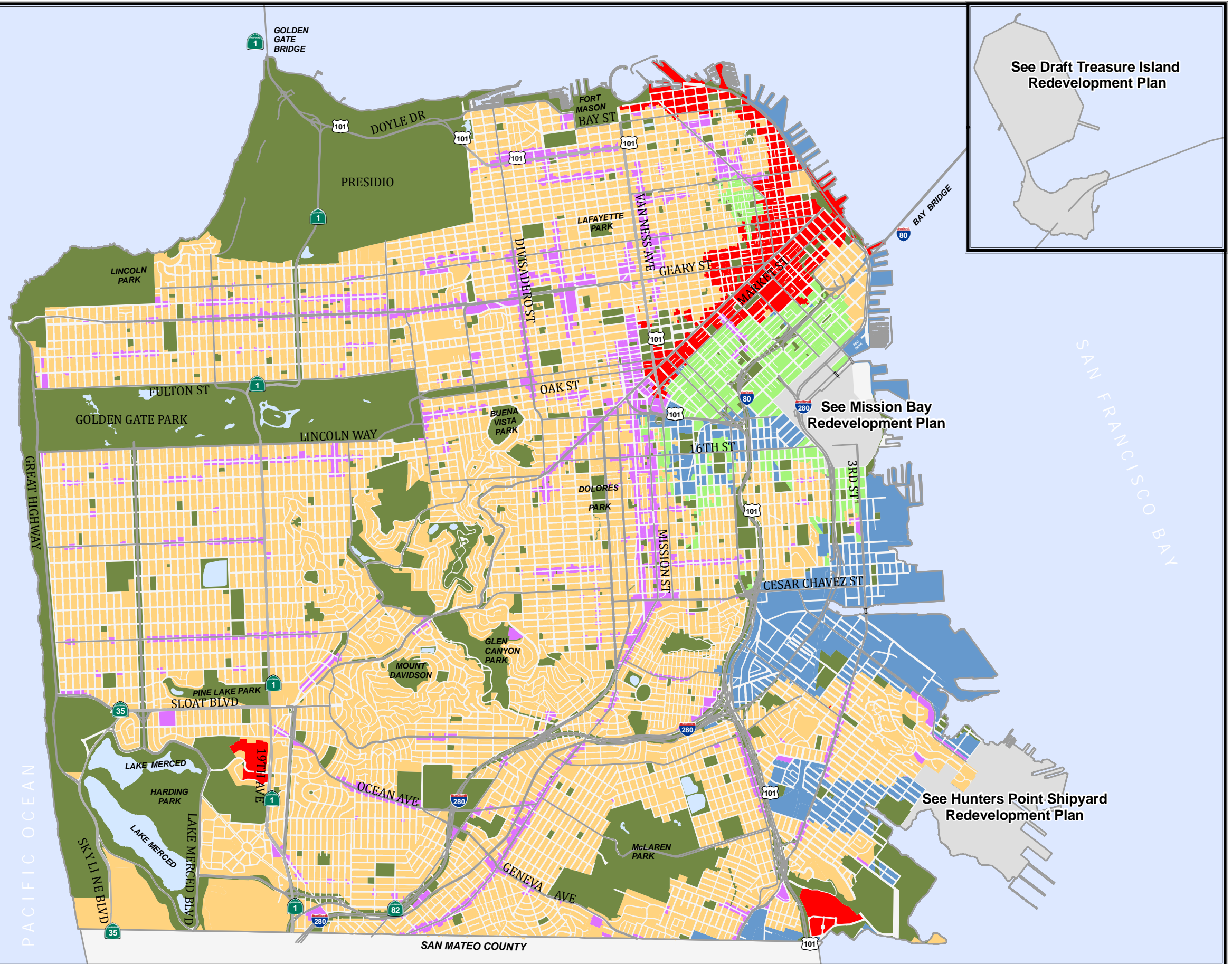
Figure IV-3 Generalized Citywide Zoning Map

- Public (including parks, openspace and publicly owned buildings)
- Residential
- Neighborhood Commercial
- Mixed Use (Residential/Commercial, Residential/Industrial)
- Commercial
- Industrial & Production, Distribution and Repair
- Water
- See Redevelopment Plan

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Mile



Source: CCSF Planning Code, May 2010



See Mission Bay
Redevelopment Plan

See Hunters Point Shipyard
Redevelopment Plan

PACIFIC OCEAN

SAN FRANCISCO BAY

SAN MATEO COUNTY

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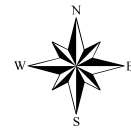
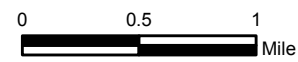
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Figure IV-4 Generalized Citywide Height Map

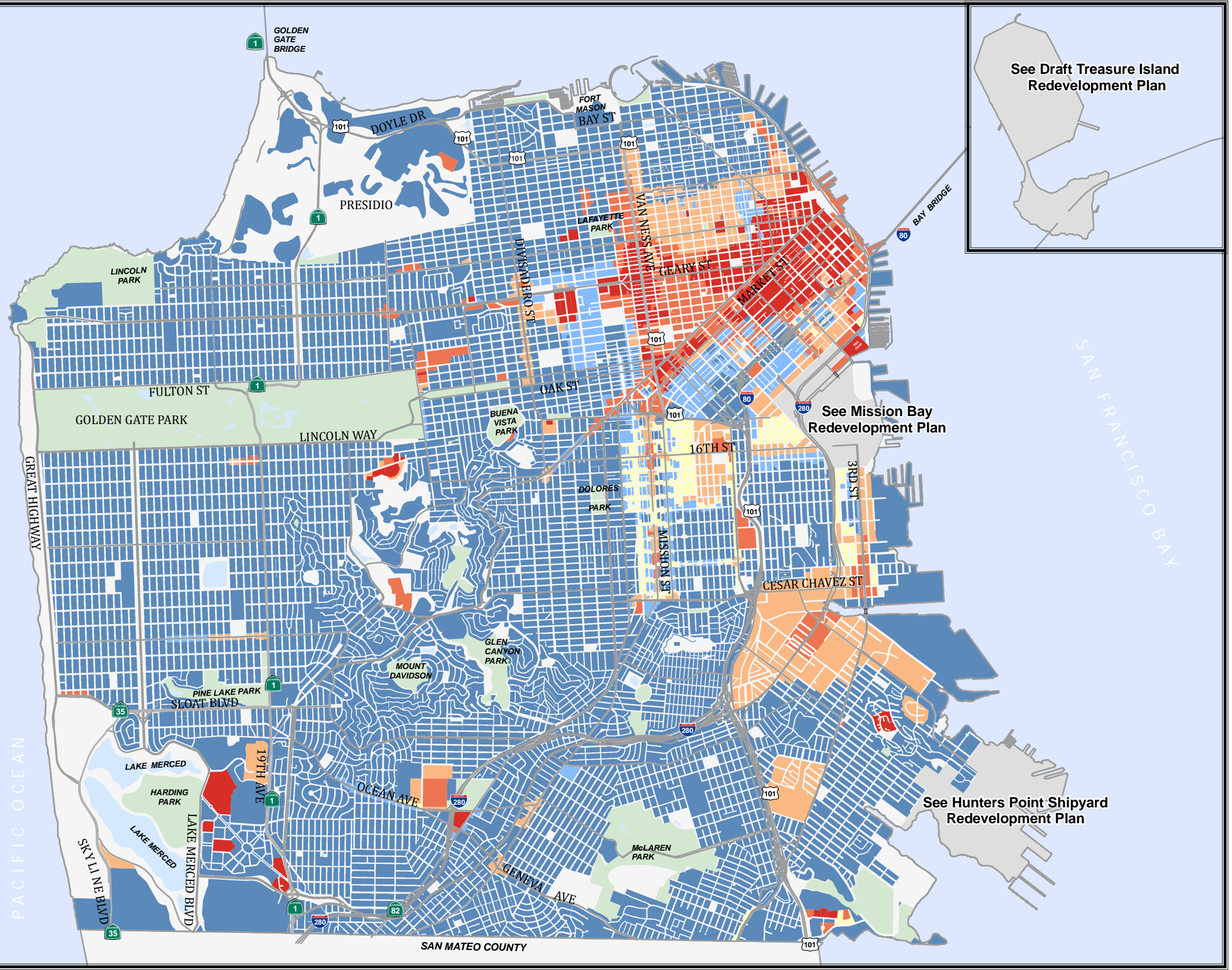
Height Districts

- ≤ 40 ft
- 41 - 50 ft
- 51 - 60 ft
- 61 - 68 ft
- 69 - 120 ft
- 121 - 550 ft

- Parks
- Water
- See Redevelopment Plan



Source: CCSF Planning Code, May 2010.



See Mission Bay Redevelopment Plan

See Hunters Point Shipyard Redevelopment Plan

SAN FRANCISCO BAY

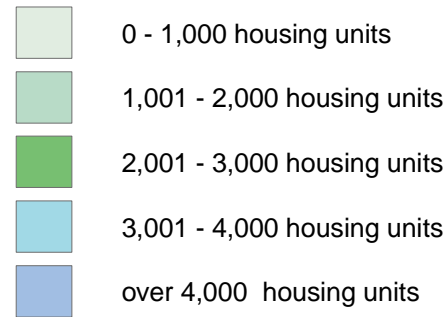
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Figure IV-5 Potential Residential Unit Capacity

Housing Units on Vacant or Underutilized Sites

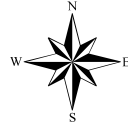
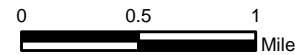


Notes:

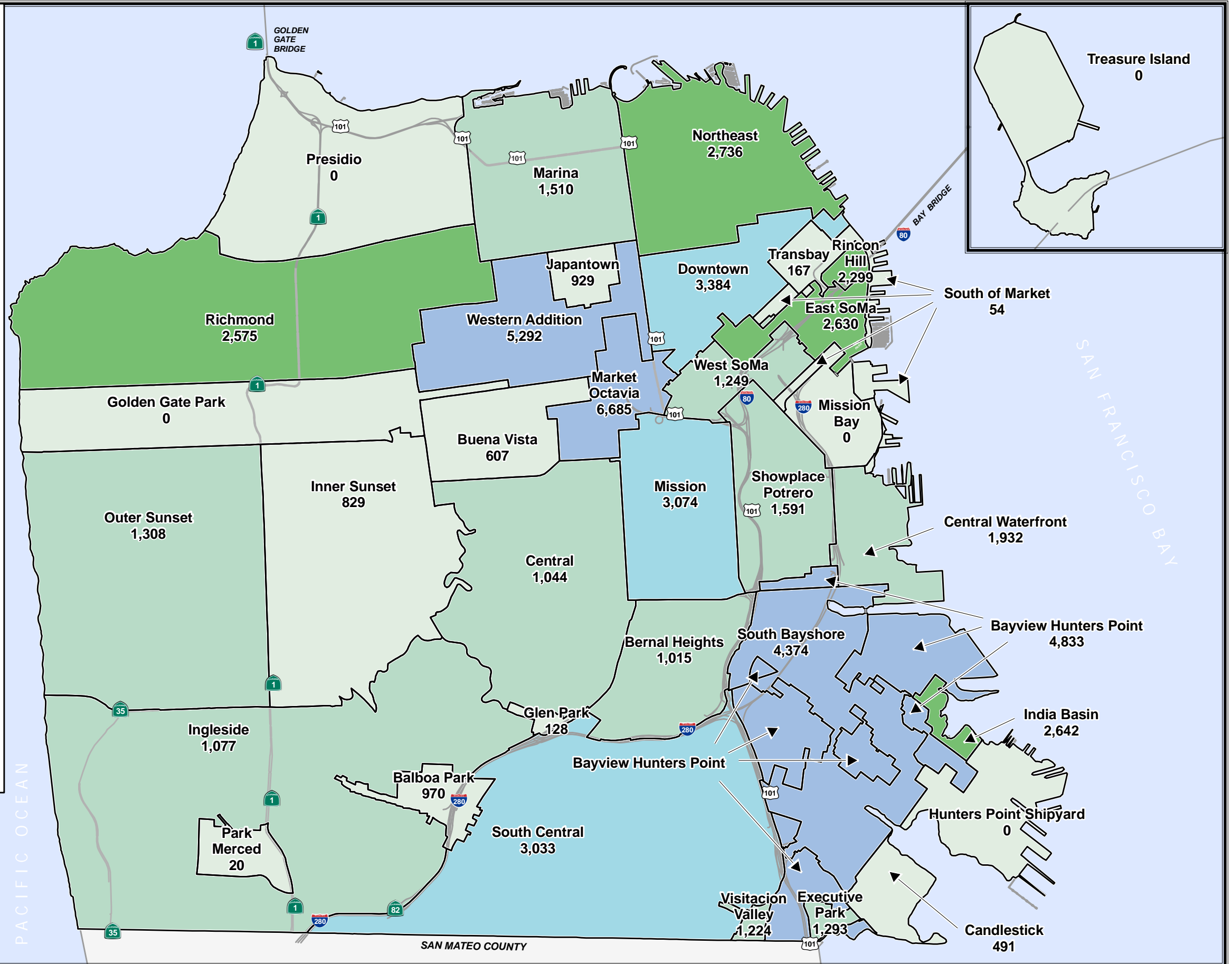
1. Numerical values represent the potential housing unit capacity for each planning districts and area plans.

2. The following planning districts and area plans have, or are in the process of, rezoning efforts which would update the allowable uses and, in part, the capacity for those districts to develop new housing:

- Mission Bay
- Treasures Island
- Candlestick Point
- Hunters Point
- Park Merced
- Visitacion Valley



Source: CCSF Planning Department, Q1 2009.



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Table IV-5
Estimated New Housing Potential in Undeveloped and Underdeveloped Sites by Zoning District

Zoning Groups That Allow Housing	Vacant or Near Vacant Sites			Underdeveloped Sites			Total No. of Parcels	Total Net Units	Total Acres
	No. of Parcels	Net Units	Acres	No. of Parcels	Net Units	Acres			
Residential ¹	923	4,491	102.7	1,156	8,423	148.94	2,079	12,914	251.21
Neighborhood Commercial ²	282	4,292	86.30	1,846	14,901	232.02	2,128	19,193	318.22
Mixed Use Districts ³	194	2,975	34.10	485	7,876	95.11	679	10,851	129.21
Downtown Commercial ⁴	63	1,745	33.92	183	1,125	43.54	246	2,870	77.46
Downtown Residential ⁵	14	787	2.63	18	1,728	4.87	32	2,515	7.50
Industrial ⁶	173	6,253	107.02	423	6,399	112.42	596	12,652	219.45
Totals	1,649	20,543	491.27	4,111	40,452	636.90	5,760	60,995	1,003.15

Source: City and County of San Francisco, Planning Department, March 2010.

¹ Zoning group includes the following zoning districts: RH, RM, and RTO.

² Zoning group includes the following zoning districts: NCD, NC, NCTD, NCT, and SoMa NCT.

³ Zoning group includes the following zoning districts: CCB, CRNC, CVR, India Basin SUD, MUG, MUO, MUR, RC-3, RC-4, RED, RSD, SLI, SPD, UMU, SLR, and SSO.

⁴ Zoning group includes the following zoning districts: C-2, C-3, and C-M.

⁵ Zoning group includes the following zoning districts: SB-DTR, VNMDRSUD, and RH DTR.

⁶ Zoning group includes the following zoning districts: M-1 and M-2.

Updated Zoning Controls

The City Planning Department has recently updated zoning controls for the following neighborhoods: Market/Octavia, Mission, East SoMa, Showplace Square/Potrero Hill, Central Waterfront, and Balboa Park. These planning efforts have developed updated zoning, heights, bulks, and densities in balance with infrastructure. A number of other planning efforts are currently underway including, but not limited to the Transit Center District Plan, Treasure Island, and West SoMa, which could result in increased residential development potential in those areas. Under existing zoning capacity, these planning areas could accommodate 3,669 net new housing units, representing approximately six percent of the total citywide existing capacity of 60,995 units as described previously. The additional potential capacity with rezoning initiatives currently underway is approximately 28,844 units (see Table IV-6). Should these rezoning initiatives be adopted and implemented, the City would be able to accommodate 89,839 net new housing units, which, if developed, would represent a 25 percent increase in the City's housing stock.⁸

Table IV-6
Estimated New Housing Construction Potential under Area Plans in Process

Area	Under Current Zoning			With Proposed Rezoning	
	Undeveloped	Underdeveloped	Total Estimate	Total New Estimate	Additional Potential Units with Rezoning
Executive Park	114	97	211	1,600	1,389
Glen Park	5	6	11	100	89
Japantown ¹	99	514	613	To be determined	
Park Merced	3	0	3	5,600	5,597
Transit Center District	44	78	122	1,200	1,078
Western SoMa	466	743	1,209	2,700	1,491
India Basin				1,200	1,200
Hunters Point Shipyard			1,500	4,000	2,500
Candlestick Point				7,500	7,500
Treasure Island				8,000 ²	8,000
Total³	731	1,438	3,669	31,900⁴	28,844

Source: City and County of San Francisco, Planning Department, Draft Housing Element, Part I: Data and Needs Analysis, June 2010, at page 92.

¹ Planning efforts for Japantown are currently underway, but are at an early stage of the development process and the estimated number of new housing units that could be accommodated with rezoning initiated as part of this area plan is currently unknown.

² This figure varies from that in Part I: Data and Needs Analysis, June 2010, page 92 because Treasure Island is now proposing 8,000 units instead of 7,000 units, therefore the totals have also been increased by 1,000 to reflect these new proposed units.

³ The totals may differ from totals in Part I: Data and Needs Analysis due to rounding.

Pipeline Projects

As of the first quarter of 2009, there were approximately 360 projects under construction or with approved building permits in the City that could add up to 9,628 new housing units (see Table IV-7 and

⁸ City and County of San Francisco, Planning Department, Draft Housing Element, Part I: Data and Needs Analysis, June 2010, at page 24. The existing housing stock is estimated at 363,662 housing units Citywide.

Figure IV-6). An additional 625 projects have been approved by the Planning Department, filed for Planning approval, or filed for a building permit. These projects could result in an additional 46,807 new residential units. Collectively, these 56,435 new units represent San Francisco's pipeline projects. Pipeline projects include projects currently under construction, projects which have approved building permits, projects which have building department applications on file, projects which have been approved by the Planning Department, and projects which have Planning Department applications on file. It is possible that some of these projects may not go forward due to shifts in economic and legislative conditions. Three major projects, i.e., Candlestick Point-Hunters Point Shipyard, Treasure Island, and Park Merced, comprise approximately half of the pipeline project units and could be completed by approximately 2020. Production trends over the last decade show that approximately 65 to 70 percent of pipeline project units are completed within five to seven years.⁹ This production trend is applicable to the pipeline project units that are not associated with the three major projects listed above.

Table IV-7
New Housing Construction Pipeline (1st Quarter of 2009)

Type of Activity	No. of Projects	No. of Units
Under Construction	172	6,776
Building Permit Approved/Issued	188	2,852
Building Permit Application Filed	347	4,588
Planning Department Approved	124	6,200
Planning Department Filed	154	36,019
Total Pipeline	985	56,435

Source: City and County of San Francisco, Planning Department, March 2010.

G. PROJECT CHARACTERISTICS

State law mandates that cities and counties have a housing element as part of their general plan. In addition, state housing element law requires cities and counties to update their housing elements periodically, usually every five years, based on the RHNA provided by ABAG. Because an updated housing element is a mandatory obligation under state law, this EIR will assume that the City will update Part I – the Data and Needs Analysis – under any housing element alternative ultimately chosen for adoption. Part I, which was discussed previously under the “Regulatory Setting” and “Background” subheadings, provides background demographics and regional housing need information, but does not include objectives or policies. Part II of each housing element sets forth the objectives, policies, and implementing strategies intended to address the City's housing needs. Part II of each option analyzed in this EIR is discussed below. Table IV-8 lists the policies of the 2004 Housing Element and the proposed 2009 Housing Element that could potentially result in physical environmental impacts, together with the corresponding objectives or policies of the 1990 Residence Element (if any), the environmental impacts of which were addressed in a previously prepared EIR. For reference, the 1990 Residence Element objectives and policies are included as Appendix B-1 to this EIR.

⁹ City and County of San Francisco, Planning Department, March 2010.

2004 Housing Element

The purpose of the revisions in the 2004 update of the City's Housing Element was to reorganize, clarify, and update the 1990 Residence Element in order to guide the City in addressing its housing production. The update was one component of a comprehensive planning effort called the Citywide Action Plan (CAP) being undertaken by the Planning Department. As part of the CAP, the Housing Element was updated in a manner intended to articulate a common policy basis for more specific planning efforts, including the Better Neighborhoods Program; the Eastern Neighborhoods Community Plans for the Mission, Central Waterfront, East SoMa, and Showplace Square/Potrero Hill districts; and the Downtown Neighborhoods Community Plans for the C-3-O and Rincon Hill districts. The 2004 Housing Element update did not include any specific proposals for future development, but was rather a set of policies intended to guide the City's consideration of future development plans and proposals with regard to housing.

The objectives and policies in the 2004 Housing Element were revised in the following ways: (1) Part II was reorganized; (2) 52 policies and nine objectives also included in the 1990 Residence Element were at least partially re-worded; (3) five policies and three objectives found in the 1990 Residence Element were removed; (4) seven new policies were added; and (5) a series of Implementation Measures were added to serve as a tool for implementing the policies and objectives. In general, the policies contained in the 2004 Housing Element were intended to encourage increased residential density, especially in areas well served by transit, improve the livability of existing neighborhoods, protect the affordability of housing, streamline the housing production process, create mixed-income communities, provide more family housing, and manage homelessness. The 2004 Housing Element also identified areas for potential housing development throughout the City. The 2004 Housing Element objectives and policies are included in Appendix B-2 to this EIR.

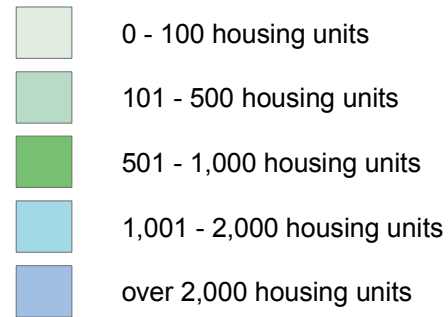
The 2004 Housing Element focused on the following themes: housing supply; housing retention; housing condition; housing affordability; housing choice; homelessness; housing density, design, and quality of life; and regional and state housing needs. Some objectives, policies, and implementation measures, such as those focused on housing affordability, would not result in physical environmental impacts. Other policies, such as those which could result in increased density, could result in physical environmental impacts to transit, transportation, and cultural resources (depending on the site). Policies, such as those that encourage modification of physical controls, such as height and bulk, could impact neighborhood character and aesthetics. Those objectives, policies, and implementation measures that could result in significant physical environment impacts are the subject of this EIR.



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Figure IV-6 Pipeline Units

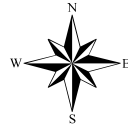
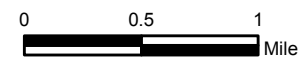
Number of Housing Units Proposed, Approved
or Under Construction, Q1 2009



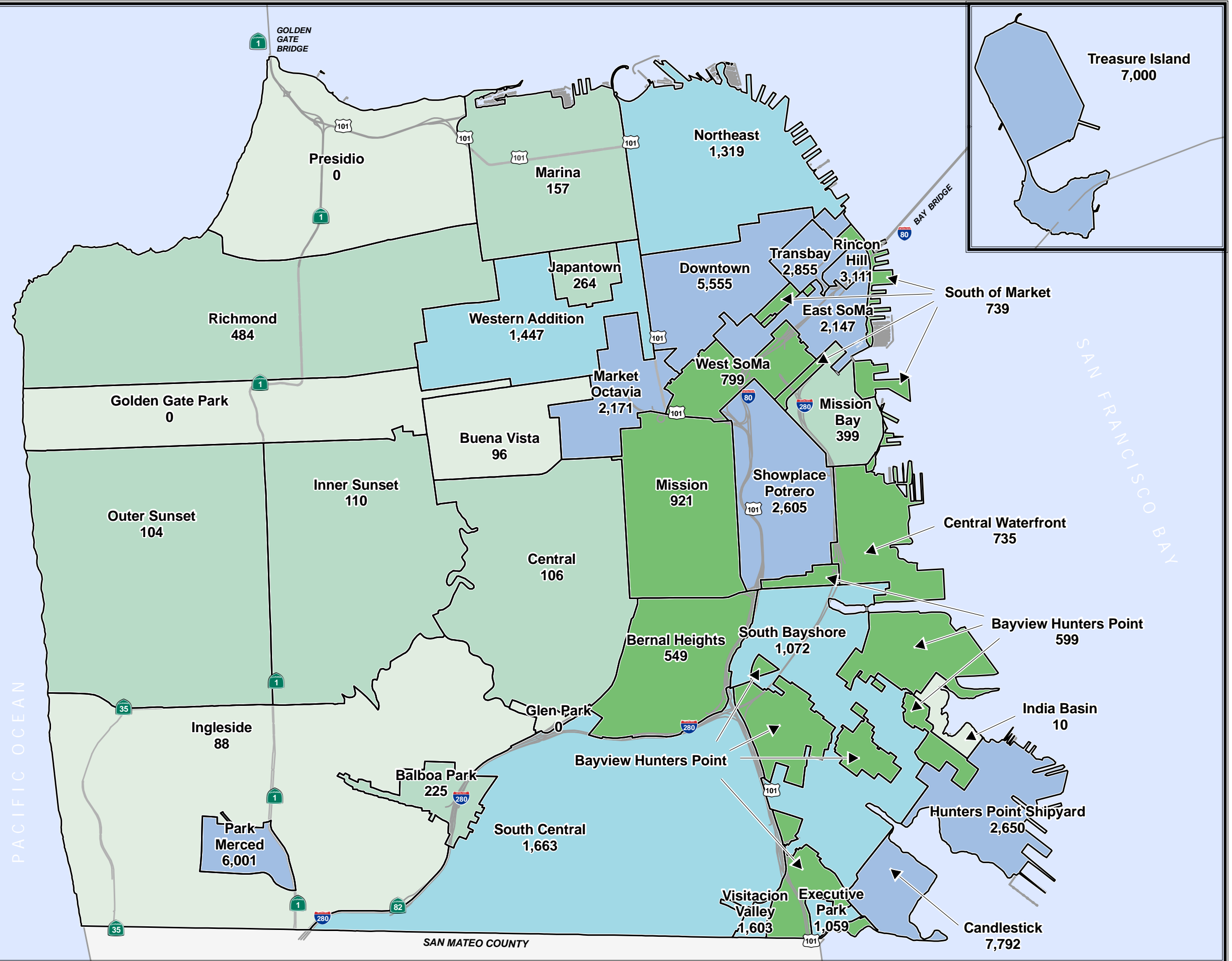
Notes:

1. Numerical values represent the number of housing units proposed within the City's current pipeline.

2. For the City's ongoing area plans and redevelopment plans, it is possible for the number of pipeline units to exceed potential unit capacity because these plans include site rezoning, which could accommodate more housing units than current zoning.



Source: CCSF Planning Department, Q1 2009.



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The five policies from the 1990 Residence Element that were removed in the 2004 Housing Element are as follows¹⁰:

- Policy 1.6: Discourage development of new housing in areas unsuitable for residential occupancy, or on sites containing existing housing worthy of retention.
- Policy 2.4: Adopt specific zoning districts which conform to a generalized residential land use and density plan and the Master Plan.
- Policy 4.1: Build new replacement housing to compensate for the affordable housing rendered uninhabitable by the October 1989 earthquake.
- Policy 9.3: Establish affordable housing priorities which emphasize the needs for very low income housing.
- Policy 12.6: Modify proposed developments which have substantial adverse environmental impacts or otherwise conflict with the Master Plan.

The seven new policies included in the 2004 Housing Element are as follows:

- Policy 1.2: Encourage housing development, particularly affordable housing, in neighborhood commercial areas without displacing existing jobs, particularly blue-collar jobs or discouraging new employment opportunities.
- Policy 1.7: Encourage and support the construction of quality, new family housing.
- Policy 6.5: Monitor and enforce the affordability of units provided as a condition of approval of housing projects.
- Policy 11.1: Use new housing development as a means to enhance neighborhood vitality and diversity.
- Policy 11.7: Where there is neighborhood support, reduce or remove minimum parking requirements for housing, increasing the amount of lot area available for housing units.
- Policy 11.8: Strongly encourage project sponsors to take full advantage of allowable building densities in their housing developments while remaining consistent with neighborhood character.
- Policy 12.4: Foster educational programs across the region that increase public understanding of the need for affordable housing and generate support for quality housing projects.

¹⁰ The following list of policies includes the deletions from the 1990 Residence Element and the additions to the 2004 Housing Element. The list is provided as a general overview of the types of modifications to the 2004 Housing Element policies and is not intended to be exhaustive.

2009 Housing Element

Part II of the proposed 2009 Housing Element sets forth the objectives, policies, and implementing strategies intended to address the City's housing needs based on the RHNA provided by ABAG in 2007.

The objectives and policies are revised from the 1990 Residence Element in the following ways: (1) Part II is reorganized by grouping policies under different broad themes and objectives (see Table IV-8); (2) 18 policies and one objective found in the 1990 Residence Element are removed; (3) 16 policies and one objective not found in the 1990 Residence Element are added; and (4) a series of Implementation Measures are added to serve as a tool for implementing the policies and objectives of the proposed 2009 Housing Element. In general, the policies contained in the proposed 2009 Housing Element are intended to prioritize the creation of permanently affordable housing; recognize and preserve neighborhood character; integrate planning of housing, jobs, transportation and infrastructure; and maintain the City as a sustainable model of development. The 2009 Housing Element also identifies where development capacity exists under existing zoning (or soft sites, as discussed above) for future potential housing throughout the City. A complete list of the policies and objectives in the 2009 Housing Element are presented in Appendix B-3 to this EIR. Additional information on the proposed 2009 Housing Element can be found at <http://housingelement2009.sfplanning.org/>.

The proposed 2009 Housing Element also includes a series of "Strategies for Further Review." These strategies are ideas which were raised over the course of development and outreach for the 2009 Housing Element. Most of the strategies require further examination, and potentially long-term study, before they can be directly implemented with further study. In some instances, the strategies are more concrete and could potentially become implementation measures.

The 2009 Housing Element focuses on themes such as adequate housing sites; conservation and improvement of existing housing stock; equal housing opportunities; affordable housing; removing constraints to the construction and rehabilitation of housing; maintaining the character of neighborhoods; and balancing construction and infrastructure. Some objectives, policies, and implementation measures focused on such issues as affordable housing would not result in physical environmental impacts. Other policies, such as those related to balancing development with infrastructure, could result in physical environmental impacts. Those objectives, policies, and implementation measures that could result in significant physical environmental impacts are the subject of this EIR.

Table IV-8 groups the 2009 Housing Element policies that could potentially result in physical environmental impacts.

The 18 policies from the 1990 Residence Element that were removed in the proposed 2009 Housing Element are as follows¹¹:

- Policy 1.2: Facilitate the conversion of underused industrial and commercial areas to residential use, giving preference to permanently affordable housing sites.
- Policy 2.1: Set allowable densities in established residential areas at levels which will promote compatibility with prevailing neighborhood scale and character.
- Policy 2.2: Encourage higher residential density in areas adjacent to downtown, in underutilized commercial and industrial areas proposed for conversion to housing, and in neighborhood commercial districts where higher density will not have harmful effects, especially if the higher density provides a significant number of units that are permanently affordable to lower income households.
- Policy 2.3: Allow flexibility in the number and size of units within permitted volumes of larger multi unit structures, especially if the flexibility results in creation of significant number of dwelling units that are permanently affordable to lower income households.
- Policy 2.4: Adopt specific zoning districts which conform to a generalized residential land use and density plan and the Master Plan.
- Policy 12.5: Relate land use controls to the appropriate scale for new and existing residential areas.
- Policy 3.3: Consider legalization of existing illegal secondary units where there is neighborhood support and the units can conform to minimum Code standards of safety and livability and the permanent affordability of the units is assured.
- Policy 3.6: Restrict the conversion of housing in commercial and industrial areas.
- Policy 4.1: Build new replacement housing to compensate for the affordable housing rendered uninhabitable by the October 1989 earthquake.
- Policy 4.2: Reduce seismic hazard in unreinforced masonry buildings without reducing the supply of affordable housing.
- Policy 7.2: Include affordable units in larger housing projects.
- Policy 9.1: Employ uniform definitions of permanently affordable.

¹¹ The following list of policies includes the deletions from the 1990 Residence Element and the additions to the 2009 Housing Element. The list is provided as a general overview of the types of modifications to the 2009 Housing Element policies and is not intended to be exhaustive.

- Policy 9.3: Establish affordable housing priorities which emphasize the needs for very low income housing.
- Policy 10.4: Safeguard tenants from excessive rent increases while assuring landlords fair and adequate rents.
- Policy 12.5: Modify proposed developments which have substantial adverse environmental impacts or otherwise conflict with the Master Plan.
- Policy 14.2: Permit displaced households the right of first refusal to occupy replacement housing units of comparable size, location, cost and rent control protection.
- Policy 15.4: Facilitate childcare and education for children of homeless families.
- Policy 16.4: Encourage the State of California to develop and implement an affordable housing plan.

The 16 new policies included in the proposed 2009 Housing Element and not included in the 1990 Residence Element are as follows:

- Policy 1.1: Focus housing growth – and the infrastructure necessary to support that growth – according to community plans. Complete planning underway in key opportunity areas such as Treasure Island, Candlestick Park and Hunter’s Point Shipyard.
- Policy 1.4: Ensure changes to land use controls are proposed through neighborhood-supported community planning processes.
- Policy 1.5: Consider secondary units in community plans where there is neighborhood support and when other neighborhood goals can be achieved, especially if that housing is made permanently affordable to lower-income households.
- Policy 2.3: Prevent the destruction or reduction of housing for parking.
- Policy 5.1: Ensure all residents of the City of San Francisco have access to subsidized housing units.
- Policy 5.2: Increase access to housing, particularly for those who might not be aware of their housing choices.
- Policy 5.4: Provide a range of unit types for all segments of need, and work to move residents between unit types as their needs change.
- Policy 6.2: Prioritize the highest incidences of homelessness, as well as those most in need, including families and immigrants.

- Policy 7.3: Recognize the importance of funds for operation, maintenance and services to the success of affordable housing programs.
- Policy 7.6: Acquire and rehabilitate existing housing to maximize effective use of affordable housing resources.
- Policy 8.2: Encourage employers located within San Francisco to work together to develop and advocate for housing appropriate for employees.
- Policy 9.2: Continue prioritization of affordable preservation as the most effective means of providing affordable housing.
- Policy 10.3: Support state legislation and programs that promote environmentally favorable projects.
- Policy 11.3: Ensure growth is accommodated without significantly impacting existing residential neighborhood character
- Policy 11.8: Foster development that strengthens local culture, sense of place, and history.
- Policy 13.3: Promote sustainable land use patterns that integrate housing with transportation via transit, pedestrian and bicycle modes.

H. PUBLIC SCOPING

The Planning Department printed and circulated a Notice of Preparation (NOP) on October 8, 2008 that solicited comments regarding the content of the proposed EIR for the 2004 Housing Element. The NOP for the Draft EIR was circulated for 30 days in accordance with CEQA Guidelines Section 15082(b). During the NOP circulation period, a public scoping meeting was held on November 6, 2008.

Subsequent to the circulation of the NOP, a draft of the proposed 2009 Housing Element was completed. The scope of this EIR was therefore revised to include the 2004 Housing Element and the 2009 Housing Element. Therefore, the Planning Department printed and recirculated an NOP on September 2, 2009 that solicited comments regarding the content of the EIR for the proposed Housing Elements. During the NOP circulation period, a public scoping meeting was held on September 30, 2009.

Comments submitted during the scoping process addressed a variety of topics. Commenters requested that the EIR analyze specific issues related to the following impact categories: population and housing, land use and planning, transportation, aesthetics, air quality, biological resources, cultural resources, geology and soils, hazards and hazardous materials, hydrology and water quality, noise, public services and utilities, and recreation.

The City has considered the comments made by the public in preparing the Draft EIR for the proposed Housing Elements. The original and revised NOPs are included as Appendix A-1 to this EIR. Public comments received during the NOP circulation periods are included as Appendix A-2 to this EIR.

**Table IV-8
Policies With Potential for Physical Environmental Impacts¹**

Corresponding 1990 Residence Element Policy	2004 Housing Element	2009 Housing Element
Policies that Direct Growth to Certain Areas of the City		
Policy 2.1: Set allowable densities in established residential areas at levels which will promote compatibility with prevailing neighborhood character	Policy 1.1: Encourage higher residential density in areas adjacent to downtown, in underutilized commercial and industrial areas proposed for conversion to housing and in neighborhood commercial districts where higher density will not have harmful effects, especially if the higher density provides a significant number of units that are affordable to lower income households. Set allowable densities in established residential areas at levels which will promote compatibility with prevailing neighborhood scale and character where there is neighborhood support.	Policy 1.1: Focus housing growth- and the infrastructure necessary to support that growth- according to community plans. Complete planning underway in key opportunity areas such as Treasure Island, Candlestick Park and Hunter’s Point Shipyard.
Policy 2.2: Encourage higher residential density in areas adjacent to downtown, in underutilized commercial and industrial areas proposed for conversion to housing and in neighborhood commercial districts where higher density will not have harmful effects, especially if the higher density provides a significant number of units that are permanently affordable to lower income households.	Policy 1.2: Encourage housing development, particularly affordable housing, in neighborhood commercial areas without displacing existing jobs, particularly blue-collar jobs or discouraging new employment opportunities.	Policy 1.3: Work proactively to identify and secure opportunity sites for permanently affordable housing
Policy 1.2: Facilitate the conversion of underused industrial and commercial areas to residential use, giving preference to permanently affordable housing uses.	Policy 1.3: Identify opportunities for housing and mixed-use districts near downtown and former industrial portions of the City.	Policy 1.6: Consider greater flexibility in the number and size of units within established building envelopes in community plan areas, especially if it can increase the number of affordable units in multi-family structures.
Policy 1.4: Locate in-fill housing on appropriate sites in established neighborhoods.	Policy 1.4: Locate in-fill housing on appropriate sites in established residential neighborhoods.	Policy 1.7: Consider public health objectives when designating and promoting housing development sites.
12.5: Relate land use controls to the appropriate scale for new and existing residential areas.	Policy 1.6: Create incentives for the inclusion of housing, particularly permanently affordable housing, in new commercial development projects.	Policy 1.8: Promote mixed use development, and include housing, particularly permanently affordable housing, in new commercial, institutional or other single use development projects.
	Policy 11.6: Employ flexible land use controls in residential areas that can regulate inappropriately sized development in new neighborhoods, in downtown	Policy 4.6: Encourage an equitable distribution of growth according to infrastructure and site capacity.

**Table IV-8
Policies With Potential for Physical Environmental Impacts¹**

Corresponding 1990 Residence Element Policy	2004 Housing Element	2009 Housing Element
	areas and in other areas through a Better Neighborhoods type planning process while maximizing the opportunity for housing near transit.	
		Policy 10.3: Support state legislation and programs that promote environmentally favorable projects.
		Policy 12.1: Encourage new housing that relies on transit use and environmentally sustainable patterns of movement.
		Policy 12.2: Consider the proximity of quality of life elements, such as open space, child care and neighborhood serves, when development new housing units.
		Policy 13.1: Support “smart” regional growth that locates new housing close to jobs and transit.
		Policy 13.3: Promote sustainable land use patterns that integrate housing with transportation via transit, pedestrian, and bicycle modes.
Policies that Promote Increased Density-Related Development Standards		
Policy 2.1: Set allowable densities in established residential areas at levels which will promote compatibility with prevailing neighborhood character.	Policy 1.1: Encourage higher residential density in areas adjacent to downtown, in underutilized commercial and industrial areas proposed for conversion to housing and in neighborhood commercial districts where higher density will not have harmful effects, especially if the higher density provides a significant number of units that are affordable to lower income households. Set allowable densities in established residential areas at levels which will promote compatibility with prevailing neighborhood scale and character where there is neighborhood support.	Policy 1.4: Ensure changes to land use controls are proposed through neighborhood-supported community planning processes.
Policy 2.2: Encourage higher residential density in areas adjacent to downtown, in underutilized commercial and industrial areas proposed for conversion to housing and in neighborhood commercial districts where higher	Policy 1.6: Create incentives for the inclusion of housing, particularly permanently affordable housing, in new commercial development projects.	Policy 1.5: Consider secondary units in community plans where there is neighborhood support and when other neighborhood goals can be achieved, especially if that housing is made permanently affordable to lower-income

**Table IV-8
Policies With Potential for Physical Environmental Impacts¹**

Corresponding 1990 Residence Element Policy	2004 Housing Element	2009 Housing Element
density will not have harmful effects, especially if the higher density provides a significant number of units that are permanently affordable to lower income households.		households.
Policy 1.3: Create incentives for the inclusion of housing, particularly permanently affordable housing, in new commercial development projects.	Policy 1.7: Encourage and support the construction of quality, new family housing.	Policy 1.6: Consider greater flexibility in number and size of units within established building envelopes in community plan areas, especially if it can increase the number of affordable units in multi-family structures
Policy 1.5: Allow new secondary units in areas where their effects can be dealt with and there is neighborhood support, especially if that housing is made permanently affordable to lower income households.	Policy 1.8: Allow new secondary units in areas where their effects can be dealt with and there is neighborhood support, especially if that housing is made permanently affordable to lower income households.	Policy 7.5: Encourage the production of affordable housing through process and zoning accommodations, and prioritize affordable housing in the review and approval processes.
Policy 7.3: Grant density bonuses for construction of affordable or senior housing.	Policy 4.4: Consider granting density bonuses and parking requirement exemptions for the construction of affordable housing or senior housing.	Policy 11.4: Maintain allowable densities in established residential areas at levels which promote compatibility with prevailing neighborhood character.
Policy 2.3: Allow flexibility in the number and size of units within permitted volumes of larger multi unit structures, especially if the flexibility results in creation of a significant number of dwelling units that are permanently affordable to lower income households.	Policy 4.5: Allow greater flexibility in the number and size of units within established building envelopes, potentially increasing the number of affordable units in multi-family structures.	
Policy 12.5 Relate land use controls to the appropriate scale for new and existing residential areas.	Policy 11.6: Employ flexible land use controls in residential areas that can regulate inappropriately sized development in new neighborhoods, in downtown areas, and in other areas through a Better Neighborhoods type planning process while maximizing the opportunity for housing near transit.	
Policy 2.1: Set allowable densities in established residential areas at levels which will promote compatibility with prevailing neighborhood character.	Policy 11.7: Where there is neighborhood support, reduce or remove minimum parking requirements for housing, increasing the amount of lot area available for housing units.	
	Policy 11.8: Strongly encourage project sponsors to take full advantage of allowable building densities in their housing developments while remaining consistent with neighborhood character.	

Table IV-8
Policies With Potential for Physical Environmental Impacts¹

Corresponding 1990 Residence Element Policy	2004 Housing Element	2009 Housing Element
	Policy 11.9: Set allowable densities and parking standards in residential areas at levels that promote the City's overall housing objectives while respecting neighborhood scale and character.	
<p>¹ The intent of this list is to list all policies of Housing Element Alternatives A, B, and C with the potential to have physical impacts on the environment. Any policies not listed here that also may have physical impacts on the environment are likely to have substantially the same impacts as the policies included herein.</p> <p>² The Housing Elements contain additional themes beyond what is presented in this table. However, those themes, which include (but are not limited to) Homelessness, Housing Condition, Seismic Safety, and Displacement, do not have associated policies that would result in potential environmental impacts.</p>		

V. ENVIRONMENTAL SETTING AND IMPACTS

V.A PLANS AND POLICIES

INTRODUCTION

This section describes the major land use and development objectives, policies, and regulations embodied in the San Francisco General Plan and San Francisco Planning Code that pertain to the adoption of the proposed 2004 Housing Element and 2009 Housing Element. It includes a discussion of how the proposed new or modified policies and objectives relate to existing plans and policies. The relationship of the proposed Housing Elements to applicable Redevelopment Area Plans in the City is also discussed. For informational purposes, this section also describes citywide planning initiatives and programs that shape the Housing Element's underlying objectives, policies and implementation measures. Regional plans pertaining to air quality are discussed in Section V.H (Air Quality).

Planning and regulatory land use control over the City is governed by the San Francisco Planning Department and the San Francisco Redevelopment Agency. Development in the City is generally covered by the San Francisco General Plan, but the San Francisco Redevelopment Agency (SFRA) exercises control over the 13 designated redevelopment areas located within the City: Bayview Hunters Point, Federal Office Building, Golden Gateway, Hunters Point Shipyard, Hunters Point, India Basin Industrial Park, Mission Bay, Rincon Point - South Beach, South of Market, Transbay, Western Addition A-1, Western Addition A-2, and Yerba Buena Center. Planning Districts, and specific area plans/redevelopment plans within those planning districts are shown on Figure V.A-1, but for purposes of the EIR these areas have been consolidated into one basemap, with the intent of reconciling the available housing capacity and pipeline projects within the Planning Districts and Area Plans.

PLANS AND POLICIES

San Francisco General Plan

The General Plan, adopted by the Planning Commission and the Board of Supervisors, is both a strategic and long-term document, broad in scope and specific in nature. The General Plan is the embodiment of the City's collective vision for the future of San Francisco, and is comprised of a series of elements, each of which deal with a particular topic, that applies citywide. The General Plan contains the following elements: Housing, Commerce and Industry, Recreation and Open Space, Community Facilities, Transportation, Community Safety, Air Quality, Environmental Protection, Urban Design and Arts. The General Plan also contains Area Plans that identify specific localized goals and objectives for a neighborhood or district of the City. The City has adopted 15 specific Area Plans.

The policies contained in the 2004 Housing Element are intended to encourage increased residential capacity, especially in areas well served by transit, improve the livability of existing neighborhoods, protect the affordability of housing, improve the housing production process, create mixed-income communities, provide family housing, and manage homelessness. The policies contained in the proposed 2009 Housing Element are intended to prioritize permanently affordable housing; recognize and preserve

neighborhood character; integrate the planning of housing, jobs, transportation and infrastructure; and maintain the City as a sustainable model of development. In general, the policies of the 2004 Housing Element and the 2009 Housing Element are founded upon the policy direction of the General Plan. The General Plan is intended to be an integrated, internally consistent and compatible statement of objectives and policies.

The following discussion evaluates the consistency of the proposed Housing Elements with the General Plan elements and policies.

Air Quality Element

The General Plan's Air Quality Element promotes the goal of clean air through objectives and policies aimed at adherence to air quality regulations and encouraging a land use pattern that focuses development near transit services and transportation programs that advocate alternatives to the private automobile. In the Bay Area, motor vehicles generate the majority of reactive organic gas (ROG), nitrogen oxide (NO_x), and carbon monoxide (CO) emissions. The Air Quality Element contains the following objectives and policies relevant to the proposed Housing Elements.

Objective 3: Decrease the air quality impacts of development by coordination of land use and transportation decisions.

Policy 3.1: Take advantage of the high density development in San Francisco to improve the transit infrastructure and also encourage high density and compact development where an extensive transportation infrastructure exists.

Policy 3.2: Encourage mixed land use development near transit lines and provide retail and other types of service oriented uses within walking distance to minimize automobile dependent development.

Policy 3.4: Continue past efforts and existing policies to promote new residential development in and close to the downtown area and other centers of employment, to reduce the number of auto commute trips to the city and to improve the housing/job balance within the city.



Policy 3.6: Link land use decision making policies to the availability of transit and consider the impacts of these policies on the local and regional transportation system.

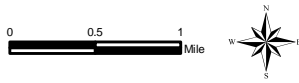
The 2004 Housing Element encourages new housing in Downtown and in underutilized commercial and industrial areas. The 2004 Housing Element also encourages increased housing in neighborhood commercial districts and mixed use districts near Downtown. The 2009 Housing Element encourages housing in all new commercial or institutional projects, near major transit lines, and through community



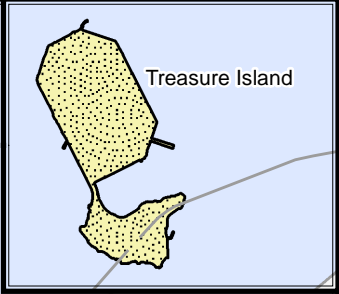
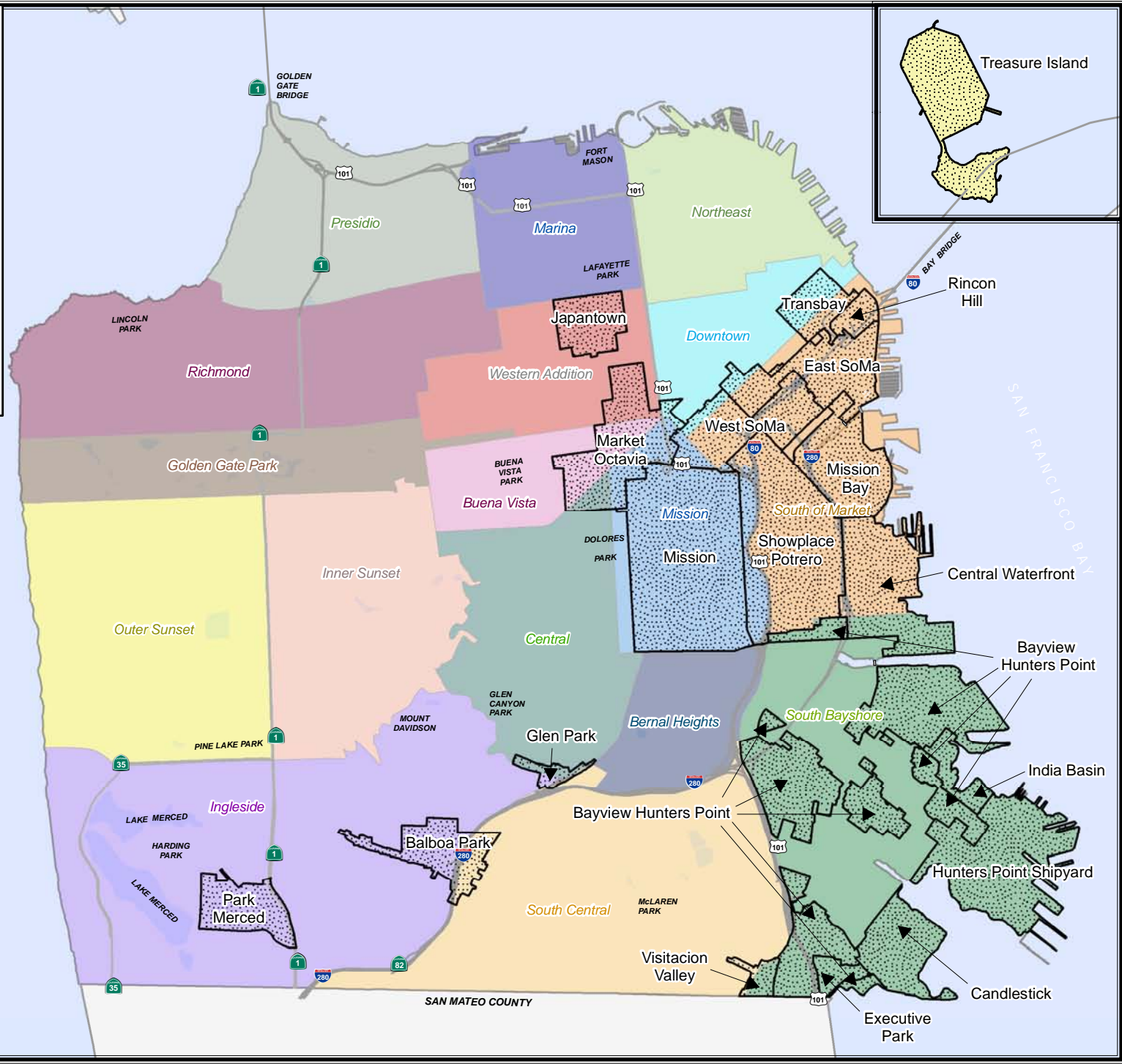
CITY AND COUNTY OF SAN FRANCISCO
PLANNING DEPARTMENT

Figure V.A-1 Combined San Francisco Planning Districts and Plan Areas

-  Current Plan Areas / Redevelopment Areas
-  Planning Districts



Source: CCSF Planning Department, May 2010.



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planning efforts. The development of housing units on infill sites within existing neighborhoods and in proximity to transit potentially reduces the number of personal vehicle trips and related vehicle emissions. The Air Quality Element policies/concepts relevant to the 2004 and 2009 Housing Elements are consistent with the Air Quality Element policies.

The Association of Bay Area Governments (ABAG) projects that population and household growth will continue in the City during the planning horizon. The proposed Housing Elements are policy documents that provide direction for accommodating the need for new housing driven by population and employment growth. As depicted in Figures IV-4 and IV-5 in Section IV (Project Description), the City has the greatest amount of available housing unit capacity and anticipated pipeline units in the eastern portion of the City. As such, the eastern area would likely absorb the majority of housing growth that would occur during the planning horizon. Because the majority of residential growth is likely to occur in the eastern area of the City, emissions increases within the City could be less than would result if the same amount of growth occurred in the outlying areas of the air basin (where trip lengths would be longer, and thus vehicle emissions would be greater on average). Residential growth in urban areas and near transit corridors would include infill development, thereby encouraging use of transit and alternative transportation modes. Both Housing Elements would also encourage housing in close proximity to jobs and developing housing in neighborhood commercial districts and mixed use districts near Downtown. These factors would be expected to help reduce trip lengths in the future and would also help minimize the potential air quality impacts of new housing.

As described in Section V.H (Air Quality), increased density and subsequent temporary increased construction periods would be less likely to generate emissions in fewer areas of the City than if housing is developed less densely and more expansively. Therefore, the 2004 Housing Element, which promotes density to a greater extent than the 1990 Residence Element, would potentially result in localized increases in construction emissions. Overall, the 1990 Residence Element promotes increased density on a broader, citywide, scale to a greater extent than the 2009 Housing Element. No inconsistencies between the proposed Housing Elements and the Air Quality Element have been identified.

Arts Element

The Arts Element of the General Plan acknowledges the arts as “a major industry in San Francisco,” which brings visitors and tourists and their associated visitor spending to the City. The Arts Element is intended to strengthen the arts in San Francisco, as an expression of culture, creativity and beauty, and to provide guiding principles for the City in its dealings with the arts community. The arts are recognized as a major economic force in the region and the adoption of formal policies to enhance the arts legitimizes their economic role and is intended to ensure the future health and vitality of the arts in San Francisco. The Arts Element contains no objectives or policies relevant to the proposed Housing Elements.

Commerce and Industry Element

The Commerce and Industry Element of the General Plan serves as a guide for the public and private sectors when making decisions related to economic growth and change in San Francisco. The three goals of the element – continued economic vitality, social equity (with respect to employment opportunities),

and environmental quality – address the citywide objectives, as well as objectives for each of the four major sectors of San Francisco’s economy, including neighborhood commercial retail.

The proposed Housing Elements encourage the creation of mixed-use neighborhoods and integrate planning concepts for housing, jobs, transportation, and infrastructure. Furthermore, specific policies, such as 2004 Housing Element Policy 11.3¹ and 2009 Housing Element Policy 1.8,² encourage neighborhood serving commercial activities near residential uses and would relate directly to the Commerce and Industry Element policies. No inconsistencies between the 2004 and 2009 Housing Elements and the Commerce and Industry Element have been identified.

Community Facilities

The Community Facilities Element of the General Plan addresses the need for various facilities, such as educational, police, fire, waste management and community facilities. Moreover, specific policies are set forth which govern the location, distribution, design and use of such facilities. The need for the Community Facilities Element was prompted by community requests for development of such facilities and by initiatives to ensure the equitable distribution of community resources throughout the City. The following Community Facilities Element policy may be potentially inconsistent with the proposed Housing Elements.

- Objective 1: Distribute, locate and design police facilities in a manner that will enhance the effective, efficient and responsive performance of police functions.
- Policy 1.1: Locate police functions that are best conducted on a centralized basis in a police headquarters building.
- Policy 1.2: Provide the number of district stations that balance service effectiveness with community desires for neighborhood police facilities.
- Policy 1.3: Enhance closer police/community interaction through the decentralization of police services that need not be centralized.
- Policy 1.4: Distribute, locate, and design police support facilities so as to maximize their effectiveness, use, and accessibility for police personnel.
- Policy 1.6: Design facilities to allow for flexibility, future expansion, full operation in the event of a seismic emergency, and security and safety for personnel, while still maintaining an inviting appearance that is in scale with neighborhood development.

¹ Policy 11.3: Encourage appropriate neighborhood-serving commercial activities in residential areas, without causing affordable housing displacement.

² Policy 1.8: Include housing, particularly permanently affordable housing, in new commercial, institutional or other single use development projects.

- Policy 1.7: Combine police facilities with other public uses whenever multi-use facilities support planning goals, fulfill neighborhood needs, and meet police service needs.
- Policy 2.1: Provide expanded police/community relations and police services through outreach programs, primarily utilizing existing facilities.
- Policy 2.2: Establish police district boundaries along natural neighborhood edges, and reinforce neighborhood identity by locating district stations near the centers of their service areas.
- Policy 2.3: Design police facilities to maximize opportunities for promoting community/police relations through dual use of facilities.
- Objective 5: Development of a system of firehouses which will meet the operating requirements of the Fire Department in providing fire protection services and which will be in harmony with related public service facilities and with all other features and facilities of land development and transportation provided for other sections of the General Plan.
- Objective 6: Development of a public library system in San Francisco which will make adequate and efficient library service freely available to everyone within the City, and which will be in harmony with related public service facilities and with all other features and facilities of land management and transportation provided for in other sections of the General Plan.
- Objective 7: Distribution throughout the City of District Public Health Centers to make the educational and preventative services of the Department of Public Health convenient to the people, thereby helping to achieve the goals of the public health program in San Francisco.
- Objective 8: Assure that public school facilities are distributed and located in a manner that will enhance their efficient and effective use.
- Objective 10: Locate wastewater facilities in a manner that will enhance the effective and efficient treatment of storm and wastewater.
- Objective 11: Locate solid waste facilities in a manner that will enhance the effective and efficient treatment of solid waste.

Community Safety Element

The Community Safety Element of the General Plan addresses the need to reduce future loss of life, injuries, property loss, environmental damage, and social and economic disruption from natural or technological disasters. The Community Safety Element contains the following policies relevant to the proposed Housing Elements.

- Policy 2.1: Assure that new construction meets current structural and life safety standards.

- Policy 2.5: Assess the risks presented by other types of potentially hazardous structures and reduce the risks to the extent possible.
- Policy 2.6: Reduce the earthquake and fire risks posed by older small wood-frame residential buildings.
- Policy 2.9: Consider information about geologic hazards whenever City decisions that will influence land use, building density, building configurations or infrastructure are made.
- Policy 2.12: Enforce state and local codes that regulate the use, storage and transportation of hazardous materials in order to prevent, contain and effectively respond to accidental releases.
- Policy 3.1: Promote greater public awareness of disaster risks, personal and business risk reduction, and personal and neighborhood emergency response.
- Policy 3.3: Maintain a local organization to provide of emergency services to meet the needs of San Francisco.
- Policy 3.4: Maintain a comprehensive, current Emergency Operations Plan, in compliance with applicable state and federal regulations, to guide the response to disasters. Conduct periodic exercises of the EOP.
- Policy 3.5: Maintain an adequate Emergency Command Center.
- Policy 3.7: Establish a system of emergency access routes for both emergency operations and evacuation.

The proposed Housing Elements would not adversely affect implementation of the above policies, the first four of which are generally implemented through the Department of Building Inspection's (DBI) enforcement of the Building Code. Community Safety Element Policy 2.8 is implemented jointly by the DBI and the Planning Department in review of projects affecting historical resources. Policy 2.9 is implemented by the Planning Commission and other decision-makers in the City and promotes the consideration of geologic hazards when decisions are made regarding residential density. Neither of the proposed Housing Elements would specifically direct planning or increased development to higher risk areas, such as seismic hazard zones or landslide areas. Furthermore, specific policies, such as 2004 Housing Element Policy 3.5 and 2009 Housing Element Policy 2.5, encourage seismic retrofitting of existing housing stock and relate directly to the Community Safety Element policies. The ability of new construction to withstand such hazards is adequately addressed at the project-level through the permit review process. During the permit review process, DBI would ensure that new buildings meet the standards for the protection of life and safety standards and all new development would be required to comply with these specifications. No significant inconsistencies between the proposed Housing Elements and the Community Safety Element have been identified.

Environmental Protection Element

The Environmental Protection Element of the General Plan addresses the impact of urbanization on the environment, including the use of oil and gas resources, hazardous waste management, transportation noise and energy use. The following Environmental Protection Element policies could be potentially inconsistent with the proposed Housing Elements.

Objective 2: Implement broad and effective management of natural resources.

Policy 2.1: Coordinate regional and local management of natural resources.

Objective 4: Assure that the ambient air of San Francisco and the Bay Region is clean, provides maximum visibility, and meets air quality standards.

Policy 4.2: Encourage the development and use of urban mass transportation systems in accordance with the objectives and policies of the Transportation Element.

Objective 5: Assure a permanent and adequate supply of fresh water to meet the present and future needs of San Francisco.

Policy 5.2: Exercise controls over development to correspond to the capabilities of the water supply and distribution system.

Objective 7: Assure that the land resources in San Francisco are used in ways that both respect and preserve the natural values of the land and serve the best interests of all the city's citizens.

Policy 7.5: Prohibit construction, as a general rule, on land subject to slide or erosion.

Objective 10: Minimize the impact of noise on affected areas.

Policy 10.1: Promote site planning, building orientation and design, and interior layout that will lessen noise intrusion.

Objective 11: Promote land uses that are compatible with various transportation noise levels.

Policy 11.1: Discourage new uses in areas in which the noise level exceeds the noise compatibility guidelines for that use.

Policy 11.2: Consider the relocation to more appropriate areas of those land uses which need more quiet and cannot be effectively insulated from noise in their present location, as well as those land uses which are noisy and are presently in noise-sensitive areas.

Policy 11.3: Locate new noise-generating development so that the noise impact is reduced.

Objective 13: Enhance the energy efficiency of housing in San Francisco.

Policy 13.1: Improve the energy efficiency of existing homes and apartment buildings.

- Policy 13.2: Strengthen enforcement of the state's residential energy conservation building standards.
- Policy 13.3: Expand the environmental review process to encourage the use of additional measures to save energy in new housing.
- Policy 13.4: Encourage the use of energy conserving appliances and lighting systems.
- Policy 13.5: Emphasize energy conservation in local government housing assistance programs.

The 2004 Housing Element encourages new housing in Downtown and in underutilized commercial and industrial areas. The 2004 Housing Element also encourages increased housing in neighborhood commercial districts and mixed use districts near Downtown. On the other hand, the 2009 Housing Element encourages housing in new commercial or institutional projects, near major transit lines, and through community planning efforts. The development of housing units on infill sites within existing neighborhoods and in proximity to transit potentially would encourage greater use of the City's transit system. The proposed Housing Elements would encourage the provision of higher density housing and directs housing to locations where residents could have reduced reliance on automobiles. Therefore, the policies in the 2004 and 2009 Housing Elements would further the aims of the abovementioned objectives and policies of the Environmental Protection Element. Furthermore, specific policies, such as 2004 Housing Element Policy 11.10 and 2009 Housing Element Policy 13.4, encourage energy efficient features in new residential development and "green" development, which are directly consistent with the Environmental Protection Element policies. No inconsistencies between the proposed Housing Elements and the Environmental Protection Element have been identified.

Recreation and Open Space Element

The Recreation and Open Space Element of the General Plan contains objectives and policies for maintaining, creating, and enhancing recreational and open space resources in the city. The Recreation and Open Space Element states that "access is a key factor in park utilization," and proclaims, "Every San Franciscan should be served by a park within walking distance of their home." The following Recreation and Open Space Element policies could be potentially inconsistent with the proposed Housing Elements.

- Objective 4: Provide opportunities for recreation and the enjoyment of open space in every San Francisco neighborhood.
- Policy 4.5: Require private usable outdoor open space in new residential development.
- Policy 4.6: Assure the provision of adequate public open space to serve new residential development.

The proposed Housing Elements would not adversely affect implementation of the above policies. Specific policies, such as 2004 Housing Element Implementation Measure 11.3.1, which states that based on the study of well-designed commercial neighborhoods, the City's Design Guidelines will be revised with special focus on open space. 2009 Housing Element Policy 12.2 promotes the consideration of the proximity of open space when constructing new housing units. However, 2009 Housing Element Policy 7.5 would give favorable conditions or exceptions for affordable housing projects, which is not part of

1990 Residence Element Policies 6.3 and 7.3, and would allow exceptions to the Planning Code as long as these exceptions would not affect neighborhood quality, including the availability of recreational resources. The text of the 2009 Housing Element related to Policy 7.5 specifies that variances would be granted where they do not impact existing open space. Therefore, no inconsistencies between the proposed Housing Elements and the Recreation and Open Space Element have been identified.

Transportation Element

The Transportation Element of the General Plan is composed of objectives and policies which relate to the nine aspects of the citywide transportation system: General, Regional Transportation, Congestion Management, Vehicle Circulation, Transit, Pedestrian, Bicycles, Citywide Parking and Goods Movement. The Transportation Element contains the following objectives and policies relevant to the proposed Housing Elements.

- Objective 1: Meet the needs of all residents and visitors for safe, convenient and inexpensive travel within San Francisco and between the city and other parts of the region while maintaining the high quality living environment in the Bay Area.
- Policy 1.3: Give priority to public transit and other alternatives to the private automobile as the means of meeting San Francisco's transportation needs, particularly those of commuters.
- Policy 1.6: Ensure choices among modes of travel and accommodate each mode when and where it is most appropriate.
- Objective 2: Use the transportation system as a means for guiding development and improving the environment.
- Policy 2.1: Use rapid transit and other transportation improvements in the city and region as the catalyst for desirable development, and coordinate new facilities with public and private development.
- Objective 11: Establish public transit as the primary mode of transportation in San Francisco and as a means through which to guide future development and improve regional mobility and air quality.
- Policy 11.3: Encourage development that efficiently coordinates land use with transit service, requiring that developers address transit concerns as well as mitigate traffic problems.
- Objective 14: Develop and implement a plan for operational changes and land use policies that will maintain mobility and safety despite a rise in travel demand that could otherwise result in system capacity deficiencies.
- Policy 14.8: Implement land use controls that will support a sustainable mode split, and encourage development that limits the intensification of automobile use.
- Objective 28: Provide secure and convenient parking facilities for bicycles.

- Policy 28.1: Provide secure bicycle parking in new governmental, commercial, and residential developments.
- Policy 28.2: Provide secure bicycle parking at existing city buildings and facilities and encourage it in existing commercial and residential buildings.
- Objective 34: Relate the amount of parking in residential areas and neighborhood commercial districts to the capacity of the city's street system and land use patterns.
- Policy 34.1: Regulate off-street parking in new housing so as to guarantee needed spaces without requiring excesses and to encourage low auto ownership in neighborhoods that are well served by transit and are convenient to neighborhood shopping.
- Policy 34.2: Use existing street space to increase residential parking where off-street facilities are inadequate.
- Policy 34.3: Permit minimal or reduced off-street parking supply for new buildings in residential and commercial areas adjacent to transit centers and along transit preferential streets.
- Policy 38.1: Improve the existing regional network of truck routes by making designed routes in San Francisco convenient for non-local freight trips with the aim of making the routes direct and connected to other routes.
- Policy 38.2: Reduce truck trips through San Francisco that have origins and destinations outside the City and the peninsula by promoting viable alternate truck routes and access across bay bridges that are not as subject to traffic congestion as the Bay Bridge and the Golden Gate Bridge.
- Policy 39.1: Establish and maintain advisory truck routes, with clear signage, between industrial areas and freeway interchanges to enhance truck access and to clearly and visibly attract truck traffic away from residential neighborhoods.
- Policy 39.2: Accommodate heavy vehicles with extra-legal loads on major truck routes by ensuring vertical clearances, appropriate intersection design for maneuvering and providing signal timing to allow smooth truck progression.
- Policy 39.3: Implement measures to reduce adverse affects from trucks/service vehicles and rail traffic by enforcing restrictions on certain routes, specific areas or times of day.

Transit First Policy

The City of San Francisco's Transit First policy, adopted by the Board of Supervisors in 1973, was developed in response to the damaging impacts over previous decades of freeways on the City's urban character. The policy is aimed at restoring balance to a transportation system long dominated by the automobile, and improving overall mobility for residents and visitors whose reliance chiefly on the automobile would result in severe transportation deficiencies. It encourages multi-modalism, the use of

transit and other alternatives to the single-occupant vehicle as modes of transportation, and gives priority to the maintenance and expansion of the local transit system and the improvement of regional transit coordination. The following ten principles constitute the City's Transit First policy:

1. To ensure quality of life and economic health in San Francisco, the primary objective of the transportation system must be the safe and efficient movement of people and goods.
2. Public transit, including taxis and vanpools, is an economically and environmentally sound alternative to transportation by individual automobiles. Within San Francisco, travel by public transit, by bicycle and on foot must be an attractive alternative to travel by private automobile.
3. Decisions regarding the use of limited public street and sidewalk space shall encourage the use of public rights of way by pedestrians, bicyclists, and public transit, and shall strive to reduce and improve public health and safety.
4. Transit policy improvements, such as designated transit lanes and streets and improved signalization, shall be made to expedite the movement of public transit vehicles (including taxis and vanpools) and to improve public safety.
5. Pedestrian areas shall be enhanced wherever possible to improve the safety and comfort of pedestrians and to encourage travel by foot.
6. Bicycling shall be promoted by encouraging safe streets for riding, convenient access to transit, bicycle lanes, and secure bicycle parking.
7. Parking policies for areas well served by public transit shall be designed to encourage travel by public transit and alternative transportation.
8. New transportation investment should be allocated to meet the demand for public transit generated by new public and private commercial and residential developments.
9. The ability of the City and County of San Francisco to reduce traffic congestion depends on the adequacy of regional public transportation. The City and County shall promote the use of regional mass transit and the continued development of an integrated, reliable, regional public transportation system.
10. The City and County shall encourage innovative solutions to meet public transportation needs wherever possible and where the provision of such service will not adversely affect the service provided by the Municipal Railway. (Added November 1999.)

The proposed Housing Element policies related to directing growth, parking provisions, and increased density and the impact to the City's transportation network are discussed further in Section IV.F, Transportation and Circulation. Policies that direct growth to industrial and commercial areas, and areas near the Downtown, promote residential uses in proximity to job cores and services. Locating residents near places of employment, such as within the Downtown or in commercial areas of the City, would

increase the likelihood that those individuals would utilize available public transit, or other alternatives modes of transportation (bicycle and walking) to work, decreasing the overall number of vehicle trips or vehicle miles traveled (VMTs) citywide. It also follows that housing in proximity to neighborhood services (such as along neighborhood commercial districts, mixed-use districts, or commercial areas) could reduce vehicle trips by shifting a portion of those trips to transit, bicycle or pedestrian trips. Proximity to neighborhood services could also result in lower VMT. For example, 2004 Housing Element Policies 1.2 and 1.9 and their corresponding implementation measures direct housing to commercial and educational areas more strongly than the 1990 Residence Element, which would reduce vehicle trips by locating housing in proximity to job cores and services. 2009 Housing Element Policies 12.1, 13.1, and 13.3 encourage housing near transit lines and existing transit infrastructure to a greater extent than their corresponding 1990 Residence Element policies. Therefore, no inconsistencies between the proposed Housing Elements and the Transportation Element have been identified.

Urban Design Element

The Urban Design Element is concerned with the physical character and environment of the City with respect to development and preservation. The following Urban Design Element policies may be potentially inconsistent with the proposed Housing Elements.

- Objective 3: Moderation of major new development to complement the City pattern, the resources to be conserved and the neighborhood environment.
- Policy 3.3: Promote efforts to achieve high quality of design for buildings to be constructed at prominent locations.
- Policy 3.4: Promote building forms that will respect and improve the integrity of open spaces and other public areas.
- Policy 3.5: Relate the height of buildings to important attributes of the city pattern and to the height and character of existing development.
- Policy 3.6: Relate the bulk of buildings to the prevailing scale of development to avoid an overwhelming or dominating appearance in new construction.
- Policy 3.7: Recognize the special urban design problems posed in development of large properties.
- Policy 3.8: Discourage accumulation and development of large properties, unless such development is carefully designed with respect to its impact upon the surrounding area and upon the City.
- Policy 3.9: Encourage a continuing awareness of the long-term effects of growth upon the physical form of the city.
- Policy 4.1: Protect residential areas from the noise, pollution and physical danger of excessive traffic.

Policy 4.2: Provide buffering for residential properties when heavy traffic cannot be avoided.

The proposed Housing Elements would not adversely affect implementation of the above policies. Specifically, 2004 Housing Element Policies 11.1, 11.8, and 11.9 would use new housing to enhance neighborhood vitality and diversity and would ensure increased housing density would not conflict with existing neighborhood character. 2009 Housing Element Policies 11.1 and 11.7 encourage the preservation of neighborhood character. All of these policies would relate directly to the Urban Design Element policies. No inconsistencies between the proposed Housing Elements and the Urban Design Element have been identified.

Area Plans

The General Plan also includes several area (neighborhood) plans that serve to guide the nature of future development within specific districts of the City. The 2004 Housing Element and 2009 Housing Element do not include any changes to the land use objectives and policies in the City's Area Plans or Redevelopment Plans for certain areas in the City. However, the proposed Housing Elements promote specific neighborhood and area plans as part of the planning process. 2004 Housing Element Policy 11.6 calls for the completion of the Better Neighborhoods area plans and 2009 Housing Element Policy 1.1 calls for a community planning process to guide new housing growth. Applicable Area Plans or Redevelopment Plans would continue to guide future development in specific neighborhoods or districts. A number of other planning efforts are currently underway including, but not limited to the Transit Center District Plan, Treasure Island, and Western SoMa, which could result in increased residential development potential in those areas. The estimated new housing construction potential for each of these areas is provided in Table IV-6 in Section IV (Project Description).

The more general policies in the 2004 and 2009 Housing Elements are made more precise in the applicable area plans as they relate to certain parts of the City. 2004 Housing Element Policies 1.7, 4.4, 11.6, 11.7, and 11.8 and 2009 Housing Element Policies 2.1 and 7.5 would promote increased housing density by encouraging the construction of new housing and discouraging demolition of existing housing. 2004 Housing Element Policies 3.1, 3.3, 3.4, and 3.5 and 2009 Housing Element Policies 2.5 and 7.6 encourage the preservation of existing residential units through maintenance and upgrade activities. 2004 Housing Element Policy 11.3 and 2009 Housing Element Policies 8.1, 9.1, 9.2, 9.3 support the production, management, and preservation of affordable housing units in accordance with San Francisco's needs. 2004 Housing Element Policies 11.1, 11.8, and 11.9 and 2009 Housing Element Policies 11.1 and 11.7 would ensure new housing does not conflict with existing neighborhood character. 2004 Housing Element Policies 1.7 and 4.5 and 2009 Housing Element Policy 2.2 encourage family housing. Implementation of the policies in the proposed Housing Elements could also serve to increase energy efficiency of San Francisco's housing stock by directing housing to locations where residents could have reduced reliance on automobiles, such as mixed use neighborhoods and areas surrounding existing transportation infrastructure. The proposed Housing Element policies discussed above further the intent related to housing of the Area Plans discussed below. No inconsistencies between the proposed Housing Elements and specific area plans have been identified.

Bayview Hunters Point Area Plan

The Bayview/Hunters Point of San Francisco is covered by the Bayview Hunters Point Area Plan located in the southeastern portion of San Francisco, surrounded by the neighborhoods of Candlestick and Executive Park to the south, Visitacion Valley, Portola, and Bernal Heights to the west, the Central Waterfront and Showplace Square/Potrero Hill to the north, and San Francisco Bay to the east. The principal objectives for land use in Bayview Hunters Point are: achieve a favorable balance among residential, industrial, commercial and open space uses; stimulate development in underused and declining areas; enhance low scale physical character; and increase pedestrian-oriented neighborhood commercial and social activities. Approximately 599 units in the City's pipeline (two percent of the total pipeline units) are located within the Bayview Hunters Point neighborhood. The Area has the capacity for another 4,833 units (eight percent of the total capacity units).³

The objectives and policies of the Bayview Hunters Point Area Plan seek to preserve and enhance the existing housing stock and encourage the construction of new affordable and market rate housing in a way that enhances the residential quality of this area. Both of the proposed Housing Elements seek to encourage affordable housing to a greater extent than the 1990 Residence Element and they seek to preserve the City's existing housing stock by encouraging improvements, upgrades, and discouraging demolition to an extent similar to the 1990 Residence Element. Furthermore, both of the proposed Housing Elements include policies that promote the conservation of enhancement of neighborhood character. The proposed Housing Elements further the intent of the Bayview Hunters Point Area Plan. No inconsistencies between the proposed Housing Elements and the Bayview Hunters Point Area Plan have been identified.

Central Waterfront Area Plan

The geographic area covered by the Central Waterfront Plan is bounded by Mariposa Street on the north, San Francisco Bay on the east, Islais Creek on the south, and I-280 on the west. While the area has long contained residences, and even though the construction of a number of live/work buildings has altered the character of parts of the neighborhood to some degree, the Central Waterfront is nevertheless still overwhelmingly defined by the production, distribution, and repair (PDR) businesses found in the area's many one- and two-story, mostly large floor-plate structures. The neighborhood's sparse residential population has limited the number of neighborhood-serving businesses it can support. A small collection of such shops and services are found at 22nd Street, which serves as the commercial "heart" of Dogpatch (i.e., the specific center of the Central Waterfront). Esprit Park, recently transferred to city ownership, is the neighborhood's primary open space.

³ The boundaries of the Bayview Hunters Point neighborhood used for the calculation of the number of pipeline units and the capacity for new units, is similar, but not identical to the boundaries of the Bayview Hunters Point Plan. The number of pipeline units and potential capacity is provided to illustrate the neighborhoods potential for new housing growth within the general area.

Approximately 735 units in the City's pipeline (one percent of the total pipeline units) occur within the Central Waterfront neighborhood. The area has the capacity for another 1,932 units (three percent of the total capacity units).⁴

The policies in the Central Waterfront Area Plan are focused on providing housing to people with a wide variety of incomes, provision of affordable housing, retention and improvement of existing housing stock, preservation of rental units, revisions to residential parking requirements for permitted parking, simplifying the housing production process, considering public health when developing housing, promoting walkable communities, and green construction. Both of the proposed Housing Elements seek to prioritize affordable housing to a greater extent than the 1990 Residence Element. In addition, both Housing Elements seek to preserve the City's existing housing stock by encouraging improvements, upgrades, and discouraging demolition to an extent similar to the 1990 Residence Element. In addition, both the Housing Elements suggest changes to the City's parking programs and encourage development near transit, which is consistent with the Central Waterfront Area Plan's policies related to promoting walkable communities. The proposed Housing Elements would not interfere with the intent of the Central Waterfront Area Plan. No inconsistencies between the proposed Housing Elements and this Area Plan have been identified.

Chinatown Area Plan

The area covered by the Chinatown Area Plan includes 30 blocks in whole or in part on the eastern slopes of Nob Hill as well as portions of Russian Hill. The financial district lies to the east of Chinatown and just south is the Union Square retail area. Grant Avenue, Stockton Street and the hill side blocks that intersect them comprise the core of Chinatown. The district is one to three blocks in width and about ten blocks in length. The social and economic characteristics of Chinatown lead to concern about the standard of living space for the largely elderly or immigrant population, and the sustainability of resources including shopping and social agencies to continue to serve this population. Approximately 599 units in the City's pipeline (two percent of the total pipeline units) occur within the Northeast neighborhood. The Area has the capacity for another 2,736 units (five percent of the total capacity units).⁵

The policies in the Chinatown Area Plan are focused on conserving existing housing, increasing the housing supply, performing seismic upgrades, and protecting the neighborhood-serving character of the area. These policies are very similar to what is included in both of the Housing Elements, which specifically call out conservation of the City's housing stock, expanding housing where appropriate, and continuing to locate housing in areas with existing commercial uses. The proposed Housing Elements

⁴ The boundaries of the Central Waterfront neighborhood used for the calculation of the number of pipeline units and the capacity for new units, is similar, but not identical to the boundaries of the Central Waterfront Area Plan. The number of pipeline units and potential capacity is provided to illustrate the neighborhoods potential for new housing growth within the general area.

⁵ The boundaries of the Northeast neighborhood used for the calculation of the number of pipeline units and the capacity for new units, is similar, but not identical to the boundaries of the Chinatown Area Plan. The number of pipeline units and potential capacity is provided to illustrate the neighborhoods potential for new housing growth within the general area.

would not interfere with the intent of the Chinatown Area Plan. No inconsistencies between the proposed Housing Elements and this Area Plan have been identified.

Downtown Area Plan

The geographic area covered by the Downtown Area Plan is the area surrounding Market Street from the Embarcadero to Van Ness Avenue. The area is roughly bounded to the west by Franklin Street, to the north by Washington Street or Bush Street, and to the south by Folsom Street. The district is five to 18 blocks in width and about 15 blocks in length. The Downtown Plan grows out of an awareness of the public concern in recent years over the degree of change occurring downtown and of the often conflicting civic objectives between fostering a vital economy and retaining the urban patterns and structures which collectively form the physical essence of San Francisco. The Plan foresees a downtown known as a center of ideas, services and trade and as a place for stimulating experiences. Approximately 5,555 units in the City's pipeline (10 percent of the total pipeline units) occur within the Downtown neighborhood. The neighborhood has the capacity for another 3,384 units (6 percent of the total capacity units).⁶

The objectives and policies of the Downtown Area Plan seek to increase residential development in the Downtown area through the inclusion of housing in commercial developments, conversion of underused areas to residential use, and protecting existing residential development. The more general policies in the General Plan, specifically those related to housing, are made more precise in the Downtown Area Plan as they relate to this part of the City. The 2004 Housing Element encourages new housing in Downtown and in underutilized commercial and industrial areas. The 2004 Housing Element also encourages increased housing in neighborhood commercial districts and mixed use districts near Downtown. The 2009 Housing Element encourages housing in all new commercial or institutional projects, near major transit lines, and through community planning efforts. Implementation of the policies in the proposed Housing Elements would restrict the demolition of housing and would retain residential hotel units. The proposed Housing Elements further the intent of the Downtown Area Plan. No inconsistencies between the proposed Housing Elements and the Downtown Area Plan have been identified.

East SoMa (South of Market Area) Area Plan

The geographic area covered by the East SoMa Area Plan includes the area bounded roughly by the Embarcadero to the west, Mission Creek Channel to the south, 4th Street to the east, and Folsom Street to the north. The East SoMa area also includes the area bounded by 5th Street to the west, Harrison Street to the south, 7th Street to the east, and Mission Street to the north. The mass production of live/work units was the first of two waves of real estate development that changed the landscape of SoMa. The second wave came in the form of new office space. As a result of the growth in the area, the PDR businesses suffered.

⁶ The boundaries of the Downtown neighborhood used for the calculation of the number of pipeline units and the capacity for new units, is similar, but not identical to the boundaries of the Downtown Area Plan. The number of pipeline units and potential capacity is provided to illustrate the neighborhoods potential for new housing growth within the general area.

Approximately 2,147 units in the City's pipeline (four percent of the total pipeline units) occur within the East SoMa neighborhood. The Area has the capacity for another 2,630 units (four percent of the total capacity units).⁷

The policies in the East SoMa Area Plan are focused on providing affordable housing, continuing to allow SROs, ensuring zoning accommodating affordability, preservation of existing housing and rental units, creating family supportive services, simplifying the housing production process, considering public health when developing housing, promoting walkable communities, and green construction. The East SoMa area was part of the greater Eastern Neighborhoods Area Plan efforts and therefore this Area Plan contains similar policies to those in Central Waterfront, Mission, and Showplace Square/Potrero. There are minor differences in the policies in that East SoMa policies have additional affordable housing policies, and in that some policies target specific geographic locations. Similar to other Eastern Neighborhood Area Plans, the proposed Housing Elements would not interfere with the intent of the East SoMa Area Plan. No inconsistencies between the proposed Housing Elements and this Area Plan have been identified.

Market & Octavia Area Plan

The geographic area covered by the Market and Octavia Area Plan includes the area bounded roughly by 9th Street to the east, 16th Street to the south, Sanchez Street to the west, and Turk Street to the north. The Market and Octavia Area Plan grew out of the Market and Octavia Neighborhood Plan that in turn was the first plan to emerge from the Better Neighborhoods Program. With the removal of the Central Freeway and construction of the new Octavia Boulevard, the Market and Octavia Area Plan grew out of the opportunity to recreate Market and Octavia's potential as a vibrant urban place. Market and Octavia Area Plan encourages new mixed-use development, including a significant amount of new housing. It is the intent of the Market and Octavia Area Plan that the added vitality that new housing and other uses will bring, the area's established character as an urban place can be strengthened and enhanced.

Approximately 2,171 units in the City's pipeline (four percent of the total pipeline units) occur within the Market Octavia neighborhood. The Area has the capacity for another 6,685 units (11 percent of the total capacity units).⁸

The objectives and policies of the Market & Octavia Area Plan are focused on infill and mixed-use development, elimination of density maximums close to transit, changes to the parking programs, simplification of zoning, affordable housing, and encouraging rental units. The proposed Housing

⁷ The boundaries of the East SoMa neighborhood used for the calculation of the number of pipeline units and the capacity for new units, is similar, but not identical to the boundaries of the East SoMa Area Plan. The number of pipeline units and potential capacity is provided to illustrate the neighborhoods potential for new housing growth within the general area.

⁸ The boundaries of the Market Octavia neighborhood used for the calculation of the number of pipeline units and the capacity for new units, is similar, but not identical to the boundaries of the Market Octavia Area Plan. The number of pipeline units and potential capacity is provided to illustrate the neighborhoods potential for new housing growth within the general area.

Elements further the intent of the Market & Octavia Area Plan. No inconsistencies between the proposed Housing Elements and this Area Plan have been identified.

Mission Area Plan

The Mission is bounded by Guerrero Street to the west, Potrero Avenue to the east, Division Street to the north and Cesar Chavez Street to the south. Traditionally a reservoir of affordable housing relatively accessible to recent immigrants and artists, housing affordability in the Mission has significantly declined in the past decade as condominium conversions have removed affordable rental housing and evicted low-income residents and families. Moreover, new housing has been largely unaffordable to existing residents, and constructed on land formerly occupied by PDR businesses.

Approximately 921 units in the City's pipeline (two percent of the total pipeline units) occur within the Mission neighborhood. The Area has the capacity for another 3,074 units (five percent of the total capacity units).⁹

The policies in the Mission Area Plan are focused on providing affordable housing, continuing to allow SROs, ensuring zoning that accommodates affordability, preservation of existing housing and rental units, creating family supportive services, simplifying the housing production process, considering public health when developing housing, promoting walkable communities, and green construction. The Mission area was part of the greater Eastern Neighborhoods Area Plan efforts and therefore this Area Plan contains similar policies to those in Central Waterfront, East SoMa, and Showplace Square/Potrero Hill. There are no significant differences in policies between the Mission Area Plan and the three other Eastern Neighborhood Area Plans listed above. Similar to other Eastern Neighborhood Area Plans, the proposed Housing Elements would not interfere with the intent of the policies and goals in Mission Area Plan. No inconsistencies between the proposed Housing Elements and this Area Plan have been identified.

Showplace Square/Potrero Hill Area Plan

The geographic area covered by the Showplace Square/Potrero Hill Area Plan includes the area roughly bounded to the east by Interstate 280, to the south by 26th Street, to the west by Potrero Avenue, and to the north by Bryant Street. Recently, Potrero Hill has also felt some of the development pressure that is extending from SoMa and Showplace Square. Potrero Hill is even less transit-accessible than SoMa, where the concern about lack of transit coupled with the increasing office development is acute.

Approximately 2,605 units in the City's pipeline (five percent of the total pipeline units) occur within the Showplace Potrero neighborhood. The Area has the capacity for another 1,591 units (three percent of the total capacity units).¹⁰

⁹ The boundaries of the Mission neighborhood used for the calculation of the number of pipeline units and the capacity for new units, is similar, but not identical to the boundaries of the Mission Area Plan. The number of pipeline units and potential capacity is provided to illustrate the neighborhoods potential for new housing growth within the general area.

The policies in the Showplace Square/Potrero Hill Area Plan are focused on providing affordable housing, continuing to allow SROs, ensuring zoning that accommodates affordability, preservation of existing housing and rental units, creating family supportive services, simplifying the housing production process, considering public health when developing housing, promoting walkable communities, and green construction. The Showplace Square/Potrero Hill area was part of the greater Eastern Neighborhoods Area Plan efforts and therefore this Area Plan contains similar policies to those in Central Waterfront, East SoMa, and Mission. There are no significant differences in policies between the Showplace Square/Potrero Hill Area Plan and the three other Eastern Neighborhood Area Plans listed above. Similar to other Eastern Neighborhood Area Plans, the proposed Housing Elements would not interfere with the intent of the Showplace Square/Potrero Hill Area Plan. No inconsistencies between the proposed Housing Elements and this Area Plan have been identified.

Rincon Hill Area Plan

Rincon Hill is south of the Financial District and Transbay District, and north of the South Beach neighborhood. It is bounded generally by Folsom Street, the Embarcadero, Bryant Street, Beale Street, the Bay Bridge approach and Essex Street. The Rincon Hill Plan aims to transform Rincon Hill into a mixed-use downtown neighborhood with a significant housing presence, while providing the full range of services and amenities that support urban living. The Rincon Hill Area Plan sets forth a process by which presently underused industrial land now devoid of the intimate qualities of neighborhood life can be transformed into a desirable new place to live in San Francisco. The Rincon Hill Plan incorporates a strategy through which public policy can induce private capital to transform an unattractive and underused environment into an attractive, mixed-use residential neighborhood.

Approximately 3,111 units in the City's pipeline (six percent of the total pipeline units) occur within the Rincon Hill neighborhood. The Area has the capacity for another 2,299 units (four percent of the total capacity units).¹¹

The objectives and policies of the Rincon Hill Area Plan are focused on mixed-use development, walkable neighborhoods, increasing residential densities, provision of quality housing, provision of affordable housing, and encouraging family-sized housing. The policies in the proposed Housing Elements further the intent of the policies in the Rincon Hill Area Plan. No inconsistencies between the proposed Housing Elements and this Area Plan have been identified.

¹⁰ The boundaries of the Showplace Potrero neighborhood used for the calculation of the number of pipeline units and the capacity for new units, is similar, but not identical to the boundaries of the Showplace Square/Potrero Area Plan. The number of pipeline units and potential capacity is provided to illustrate the neighborhoods potential for new housing growth within the general area.

¹¹ The boundaries of the Rincon Hill neighborhood used for the calculation of the number of pipeline units and the capacity for new units, is similar, but not identical to the boundaries of the Rincon Hill Plan. The number of pipeline units and potential capacity is provided to illustrate the neighborhoods potential for new housing growth within the general area.

South of Market Area Plan

The geographic area covered by the South of Market Area Plan includes the area bordered roughly by 2nd Street to the east, Townsend Street to the south, 13th Street to the west, and Mission or Jackson Street to the north. The area generally does not include blocks north of Harrison Street and east of 4th Street. The Plan recognizes the need to provide a mixture of employment opportunities, especially for San Franciscans, while maintaining and facilitating the expansion of a very important segment of the City's overall economic base — the light industrial, home and business service industries. It is important to protect these business activities, and the types of spaces and transport systems they need, in order to maintain the City's economic diversity and to facilitate the kind of entrepreneurial spirit and inventive forces which create new technologies, new services and business opportunities which are essential to the sustained health and vitality of the city and region. The South of Market area (SoMa) is uniquely qualified to provide this creative environment because of the types of small, attractive and affordable commercial/industrial spaces available in the neighborhood and because of the rich diversity of peoples, cultures, fashion, art and business found within the SoMa and the strong sense of community. Finally, the Plan recognizes the need to preserve existing housing resources as the primary means of providing low- and moderate-income affordable rental housing units.

Approximately 739 units in the City's pipeline (one percent of the total pipeline units) occur within the South of Market neighborhood. The Area has the capacity for another 54 units (less than one percent of the total capacity units).¹²

The objectives and policies of the South of Market Area Plan are focused on preservation of existing housing, promoting affordable housing, promoting in-fill and mixed-use housing, and preserving the character of the area. The proposed Housing Elements further the intent of the South of Market Area Plan. No inconsistencies between the proposed Housing Elements and this Area Plan have been identified.

Van Ness Avenue Area Plan

Van Ness Avenue is situated in the valley between Nob and Russian Hills and Pacific Heights. The Van Ness Avenue area is encompassed by multiple neighborhoods (including the Downtown, Western Addition, Marina, and Northeast neighborhoods) and it is therefore not possible to provide an accurate estimate of the housing units in the City's pipeline or additional capacity for housing units that is available within the boundaries of the Van Ness Avenue Area Plan.

The objectives and policies of the Van Ness Avenue Area Plan are focused on development of high-density housing, maximizing number of housing units, maintaining the scale of the area, and infill development. The proposed policies and goals of the Housing Elements further the interest of the policies

¹² The boundaries of the South of Market neighborhood used for the calculation of the number of pipeline units and the capacity for new units, is similar, but not identical to the boundaries of the South of Market Area Plan. The number of pipeline units and potential capacity is provided to illustrate the neighborhoods potential for new housing growth within the general area.

and goals of the Van Ness Avenue Area Plan. No inconsistencies between the proposed Housing Elements and this Area Plan have been identified.

Western Shoreline Area Plan

The geographic area covered by the Western Shoreline Area Plan includes portions of: the Great Highway, Golden Gate Park, the Zoo, Lake Merced, Ocean Beach, Sutro Heights Park, Cliff House Sutro Baths, Fort Funston, Olympic Country Club, and Richmond and Sunset Residential neighborhoods. The conservation of the California coast has always been of interest and concern to San Francisco. From the early years of the City's history, the coastal beach and cliff areas have been an important recreational and natural resource to the people of San Francisco and the Bay Area. There has always been an intense interest among the City's citizens in maintaining the area for the use and enjoyment of the public.

The Western Shoreline area is encompassed by portions of multiple planning neighborhoods (including the Ingleside, Outer Sunset, and Richmond neighborhoods) and it is therefore not possible to provide an accurate estimate of the housing units in the City's pipeline or additional capacity for housing units that is available within the exact boundaries of the Western Shoreline Area Plan.

The objectives and policies of the Western Shoreline Area Plan are focused on preserving the scale of the area, developing new residential areas, enforcing the City's housing policies, and increasing housing units in the area. The proposed Housing Elements further the interest of the Western Shoreline Area Plan. No inconsistencies between the proposed Housing Elements and this Area Plan have been identified.

Civic Center Area Plan

The geographic area covered by the Civic Center Area Plan generally includes the area between Franklin Street, McAllister Street, Market Street, and Hayes Street. The Civic Center area is encompassed by multiple neighborhoods (including the Downtown and Western Addition neighborhoods) and it is therefore not possible to provide an accurate estimate of the housing units in the City's pipeline or additional capacity for housing units that is available within the boundaries of the Civic Center Area Plan. However, it is reasonable to assume that there are a limited number of housing units in the Civic Center Area due to the predominance of civic uses.

The Civic Center Area Plan seeks to preserve and enhance housing resources by protection affordable housing and encouraging infill housing. Both of the proposed Housing Elements seek to prioritize affordable housing to a greater extent than the 1990 Residence Element. In addition, both Housing Elements seek to preserve the City's existing housing stock by encouraging improvements, upgrades, and discouraging demolition of housing to an extent similar to the 1990 Residence Element. Both Housing Elements also encourage the provision of housing in commercial areas and near transit, exist in the Civic Center Area. The proposed Housing Elements would not interfere with the intent of the Civic Center Area Plan. No inconsistencies between the proposed Housing Elements and the Civic Center Area Plan have been identified.

Balboa Park Station Area Plan

The Balboa Park Station Area Plan comprises approximately 210 acres in the south central area of the City and includes the Ocean Avenue Campus of City College of San Francisco (CCSF), the Ocean Avenue Neighborhood Commercial District, Balboa Park, and the Balboa Park BART station. Approximately 225 units in the City's pipeline (less than one percent of the total pipeline units) occur within the South of Market neighborhood. The Area has the capacity for another 970 units (two percent of the total capacity units).¹³

In addition to new housing in the plan area, the Balboa Park Station Area Plan aims to provide increased affordable housing opportunities and to preserve and enhance the area's existing housing stock, resulting in a diverse housing mix that complements the surrounding neighborhoods, while supporting the services offered in the area. To this aim, both of the proposed Housing Elements seek to prioritize affordable housing to a greater extent than the 1990 Residence Element. In addition, both Housing Elements seek to preserve the City's existing housing stock by encouraging improvements, upgrades, and discouraging demolition to an extent similar to the 1990 Residence Element, which could prevent the demolition of affordable housing. The proposed Housing Elements would not interfere with the intent of the Balboa Park Station Area Plan. No inconsistencies between the proposed Housing Elements and the Balboa Park Station Area Plan have been identified.

Northeastern Waterfront Area Plan

The geographic area covered by the Northeastern Waterfront Area Plan includes four geographic subareas as well as the Embarcadero Corridor which links them: Fisherman's Wharf Subarea (which extends from the Municipal Pier at Van Ness Avenue through Pier 39); the Base of Telegraph Hill Subarea (Pier 35 through Pier 7); the Ferry Building Subarea (Pier 5 through Rincon Park); and the South Beach Subarea (Pier 22 through Pier 46B). The Northeastern Waterfront area is encompassed by multiple neighborhoods (including the Northeast and South of Market neighborhoods) and it is therefore not possible to provide an accurate estimate of the housing units in the City's pipeline or additional capacity for housing units that is available within the boundaries of the Northeastern Waterfront Area Plan.

The Northeastern Waterfront Plan recommends objectives and policies designed to contribute to the waterfront's environmental quality, enhance the economic vitality of the Port and the City, preserve the unique maritime character, and provide for the maximum feasible visual and physical access to and along the Bay. The proposed Housing Elements would not interfere with the intent of the Northeastern Waterfront Plan. No inconsistencies between the proposed Housing Elements and this Area Plan have been identified.

¹³ The boundaries of the Balboa Park neighborhood used for this the calculation of the number of pipeline units and the capacity for new units, is similar, but not identical to the boundaries of the Balboa Park Station Area Plan. The number of pipeline units and potential capacity is provided to illustrate the neighborhoods potential for new housing growth within the general area.

Redevelopment Plans

There are currently 13 redevelopment plan areas maintained under the authority of the San Francisco Redevelopment Agency (SFRA) within San Francisco. All future residential development in the Redevelopment Plan areas would continue to be subject to the policies in the applicable Area Plan or Redevelopment Plan. The proposed Housing Elements would direct housing to locations where residential growth is appropriate, promote the retention of existing housing, and encourage the provision of affordable housing in accordance with San Francisco's needs. The proposed Housing Elements would not change policies contained in these plans, and the encouragement of housing in appropriate areas would be, on balance, consistent with the housing related goals contained in these plans. The Housing Elements encourage the continued development and implementation of other area plans.

Bayview Hunters Point Redevelopment Plan

The Bayview-Hunters Point Neighborhood is bounded generally by U.S. 101, Cesar Chavez Street, Cargo Way, India Basin, Fitch Street and Earl Avenue, Candlestick Cove, and Jamestown Avenue. The Plan provides the implementation tools to carry out many of the goals of the Bayview Hunters Point Community Revitalization Concept Plan. The redevelopment programs of the Plan are focused on three key areas: economic development, affordable housing, and community enhancements. The Bayview Hunters Point Redevelopment Plan was adopted in 2006.

Golden Gateway Redevelopment Plan

The Golden Gateway is generally bounded by Front and Battery Streets on the west, Sacramento Street to the south (next to downtown), Broadway to the north, and the Embarcadero to the east. Implementation of the Golden Gateway Redevelopment Project began in the early 1960's and has generated 1,400 new housing units, the construction of the 3.5 million square foot Embarcadero Center complex of offices, shops, an 840-room hotel and some 12 acres of public plazas and open space. It was originally adopted in 1959 with amendments approved and adopted most recently on November 20, 1995.

Hunters Point Shipyard Redevelopment Plan

The 500-acre Hunters Point Shipyard Redevelopment Area is located on the eastern portion of the Hunters Point peninsula. The area is surrounded by the San Francisco Bay to the north, east and south, the western border abuts the Bayview district. The Mayor's Hunters Point Shipyard Citizens Advisory Committee (CAC) formulated the following guidelines: 1) create jobs for economic vitality; 2) support existing businesses and artists community; 3) create appropriate mix of new businesses; 4) balance development and environmental conservation; 5) facilitate appropriate immediate access; 6) integrate land uses; and 7) acknowledge history. The Hunters Point Shipyard Redevelopment Plan was adopted in 1997.

Hunters Point Redevelopment Plan

The Hunters Point Redevelopment Area is located immediately west of the Hunters Point peninsula. The area is surrounded by India Basin Industrial Park to the north and the Bay View Hunters Point Area to the east, south, and west. Prior to redevelopment, the 137-acre hill area was partly vacant land largely

occupied by temporary wartime housing built by the federal government during World War II. The Hunters Point Redevelopment Area has been developed as a new residential community with supporting community facilities and improved street patterns. Originally adopted and approved by the Board of Supervisors on January 20, 1969 with amendments approved and adopted most recently on December 12, 1994. The Plan expired in 2009 and authority over this Area has been transferred back to the City. Therefore the General Plan policies, including Housing element policies, would apply to Hunters Point.

India Basin Industrial Park Redevelopment Plan

The India Basin Industrial Park Area is located south of the Islais Creek Channel. The area is surrounded by Cargo Way, Jennings Street, Evans Avenue, Fairfax Avenue, Hudson Avenue, and 3rd Street. Prior to redevelopment, the area now known as India Basin Industrial Park was a one hundred twenty-six acre blighted area which included: 25 acres of automobile wrecking yards, 19 acres of general industrial uses, 7 acres of vacant land, 35 acres of unimproved streets and 16 acres devoted to remnants of “Old Butchertown’s” meat packing businesses operating in dilapidated and obsolete buildings. A principal objective of this redevelopment program was to draw labor intensive industries into the area to provide job opportunities for the unemployed and under employed residents of the Bayview Hunters Point community. Originally adopted and approved by the Board of Supervisors on January 20, 1969 with amendments approved and adopted most recently on December 12, 1994. The Plan expired on January 1, 2009 and authority over this Area has been transferred back to the City. Therefore the General Plan policies, including Housing element policies, would apply to India Basin Industrial Park.

Mission Bay Redevelopment Plan

Mission Bay is a 300-acre area located on the central Bay shore, roughly bounded by Townsend Street on the north, Third Street and San Francisco Bay on the east, Mariposa Street on the south, and 7th Street and Interstate 280 on the west. The maximum development program for Mission Bay includes: 6,000 housing units; 6 million square feet (sq. ft.) of office/life science/technology commercial space; a new UCSF research campus containing 2.65 million sq. ft. of building space; 800,000 sq. ft. of city and neighborhood-serving retail space; a 500-room hotel with up to 50,000 sq. ft. of retail entertainment uses; 49 acres of public open space plus 8 acres of open space within the UCSF campus; a new 500-student public school; and a new fire and police station. On October 26, 1998, the Board of Supervisors adopted an ordinance approving the Mission Bay North Redevelopment Plan.

Rincon Point - South Beach Redevelopment Plan

Rincon Point-South Beach is a 115-acre redevelopment project composed of two non-contiguous geographic areas along San Francisco’s northeastern waterfront. Key elements of the Redevelopment Plan include: 2,800 new units of mixed-income housing; rehabilitation and commercial reuse of five historic buildings; provision of two waterfront parks; development of a 700 berth marina, and the use of Pier 40 for marina-related commercial development and public access; development of a corporate headquarters office building (GAP, Inc.); development of a 41,000 seat ballpark at China Basin; reconstruction of the Embarcadero roadway into a boulevard which includes a new mass transit line using historic streetcars and light rail vehicles; various street surfacing, sidewalks, landscaping and utilities

servicing properties within the project area. Originally adopted and approved by the Board of Supervisors on January 5, 1981 with amendments approved and adopted most recently on May 8, 2007 and May 18, 2007, respectively.

South of Market Redevelopment Plan

The South of Market Redevelopment Area is roughly bounded by Fifth Street and Harrison Street and by Seventh Street and Stevenson Alley. The main objective of the South of Market Redevelopment Plan is to revitalize the community through improvements in five categories: Affordable Housing, Business and Jobs, Community Quality of Life, Transportation and Parking, and Neighborhood Development and Land Use. Much of the area was damaged in the 1989 Loma Prieta Earthquake and, in accordance with redevelopment objectives, the Plan involves “the maintenance, repair, restoration, removal, or replacement of facilities damaged or destroyed” as a result of the earthquake, as well as “the improvement of the living and working conditions within the project area”. Adopted on December 6, 2005, the South of Market Redevelopment Plan is effective until June 11, 2020.

Visitacion Valley Redevelopment Plan

Visitacion Valley is a neighborhood at the southeastern corner of the City bounded by Highway 101 to the east, McLaren Park to the northwest and the San Mateo County line to the south. Key elements of the Redevelopment Plan include: transit-oriented, mixed use development on the former Schlage Lock site and surrounding property involving up to 1,250 new housing units and up to 90,000 square feet of retail, including a grocery store; funds for economic development activities; programs for local job training and placement opportunities; affordable housing production program; new pedestrian scaled public streets; three new parks; and a community center at the Old Office Building. The Redevelopment Plan was approved by the Redevelopment Commission, Board of Supervisors and signed by the Mayor on May 8, 2009.

Western Addition A-1 Redevelopment Plan

The Western Addition neighborhood is situated between Van Ness Avenue, Golden Gate Park, the Upper and Lower Haight neighborhoods, and Pacific Heights. In addition to the U.S. Department of Housing and Urban Development (HUD) Grant and Loan contract that was executed to support the construction of housing units, owner participation agreements included the expansion of a full-care residential facility, new facilities at Jones Methodist Church, additional space at Kaiser’s San Francisco Medical Center, the Geary Boulevard Expressway and the Lower Fillmore Revitalization Program, the Japanese Cultural And Trade Center, and renovation of the Peace Plaza. The Plan was completed on March, 1973 and last amended May 3, 1985.

Western Addition A-2 Redevelopment Plan

The Western Addition (A-2) Redevelopment Area comprises a portion of the Western Addition Redevelopment Area which was designated and described as a blighted area, the redevelopment of which is necessary to effectuate the public purposes as set forth in the California Community Redevelopment Law. The Plan was originally adopted and approved by the Board of Supervisors on October 16, 1964

with amendments approved and adopted most recently on April 19, 2005. The project area expired on January 1, 2009 and authority over this Area has been transferred back to the City. Therefore the General Plan policies, including Housing element policies, would apply to Western Addition A-2.

Yerba Buena Center Redevelopment Plan

The Yerba Buena Center is located adjacent to the San Francisco downtown office and retail districts and includes the George Moscone Convention Center. It extends from Market Street on the north to Harrison Street on the south and from Second Street on the east to the west property line along Fourth Street. The project was intended to transform an area characterized by parking lots, dilapidated hotels, and commercial and industrial buildings to a vibrant center for arts and to provide much-needed housing. Key features of the project include: three major hotels; six acres of gardens; retail, entertainment, and cultural facilities; a five-acre children's center; the Moscone Convention Center and Sony Metreon; a public walkway from Market to Mission Street; a 257-unit SRO (single-room occupancy) housing development; a supermarket; and multiple other housing developments. The Plan was originally adopted and approved by the Board of Supervisors on April 25, 1966 with amendments approved and adopted most recently on August 12, 2003 and August 22, 2003, respectively. The effectiveness of the Yerba Buena Center Redevelopment Plan was recently extended to January 1, 2010 by Ordinance 1-05.

Better Neighborhoods Program

The Planning Department established the Better Neighborhoods 2002 program intended to help make San Francisco's urban neighborhoods the best places they can be for those who live in them.¹⁴ The Better Neighborhoods program embraces the benefits of change to build more balanced and livable places in San Francisco.

The Better Neighborhoods Program is two-tiered. Citywide, it aims to encourage housing where it makes sense and to strengthen neighborhoods. Locally, the program uses intensive community-based planning to refine citywide goals to the needs of the specific neighborhood. Above all, the program builds on the positive aspects of San Francisco's quality as an urban place. The Planning Department has prepared or is in the process of preparing the following neighborhood plans: Balboa Park Station (adopted), Central Waterfront (adopted), Glen Park (currently in the community planning process), Japantown (currently in the community planning process), and Market & Octavia (adopted).

The goal of the Better Neighborhoods Program is to create plans that improve the neighborhood where possible, while supporting what is already working well. The Better Neighborhoods Program identifies eight elements which define a great neighborhood.

1. Walk to Shops. Stores and shops that satisfy everyday needs within an easy walk from home (five to ten minutes).

¹⁴ San Francisco Planning Department, Better Neighborhoods 2002, website: <http://www.sf-planning.org/index.aspx?page=1699>, accessed February 3, 2010.

2. **Safe Streets.** Safe and friendly streets where residential streets feel public and more like open space than trafficways.
3. **Getting Around Easily.** Many choices that make it easy to move about on foot, by bicycle, transit and auto; cars are accommodated, but allow people to live easily without one.
4. **Housing Choices.** A mix of housing, flats and apartments of various sizes to meet different needs and preferences.
5. **Gathering Places.** Public gathering places include parks, plazas, sidewalks and shops.
6. **City Services.** Full range of public services for residents, including parks, schools, police and fire stations, libraries and other amenities.
7. **Special Character.** Neighborhood identity shaped by its physical setting, streets, buildings, open spaces, history, culture and its residents.
8. **Part of the Whole.** Neighborhoods stand on their own, but are part of the City's wider community.

There are currently seven neighborhood plans, three of which have been adopted, that are maintained under the authority of the San Francisco Planning Department. The four neighborhood plans still in the community planning process, as they relate to housing, are described below. (The remaining three Plans, Balboa Park, Central Market and Market & Octavia, have been previously discussed in this section.)

Glen Park

Glen Park is a small neighborhood located at the southern edge of the hills in the interior of the City, to the south of Diamond Heights and Noe Valley, west of Bernal Heights, and east of Glen Canyon Park. A key element contributing to the vitality and character of Glen Park is the wide variety of housing types found throughout. This fine grained collection of building and housing types invites the opportunity for many different members of the community to live in close proximity to one another, shops, restaurant, and services, public amenities and services, and many types of transit. According to the draft Plan, this pattern should continue. This draft Plan includes recommendations for housing in the commercial core and near the BART station. In "downtown" Glen Park, residential land uses including town homes, flats or senior housing may occur and are highly encouraged throughout the Plan area. The environmental review process for the Plan is currently underway.

Japantown

Japantown comprises about six square blocks in the Western Addition area of San Francisco. According to the draft Plan, new housing should be accommodated by reverting some of the single-use structures back to mixed-use structures with commercial and/or office at the ground level and residential above. Large parcels flanking Geary Boulevard (a major transit corridor) offer opportunities for new housing development. Careful attention to their design, including appropriate building design which enhances the

ground-level experience, residential towers at specific locations, and mid-block pedestrian connections within superblocks, are essential in creating a livable neighborhood. The planning process for the Plan is currently underway and the draft Plan was acknowledged by the Planning Commission in June 2009. At this time, the environmental review process has not yet begun and is contingent upon funding.

Ongoing Area Plans

Western SoMa Area Plan

The Western SoMa plan area is irregularly shaped and consists of two connected areas: one generally referred to as “north of Harrison Street,” roughly bounded by 13th Street to the east, Bryant Street to the south, Seventh Street to the west, and Minna Street (an alleyway between Mission and Howard Streets) to the north, and the second area, generally referred to as “south of Harrison Street,” roughly bounded by Townsend Street to the south, Fourth Street to the east, Harrison Street to the north and Seventh Street to the west. The Western SoMa Area Plan would amend the Western SoMa Special Use District (SUD) and would implement new planning policies and controls for land use, urban form, building height and design, street network and open space. In general, the goal of the Draft Plan is to maintain the mixed-use character of the proposed Plan area and preserve existing housing, while encouraging new residential and resident-serving uses within the proposed Residential Enclave Districts north of Harrison Street and targeting larger parcels south of Harrison Street for local- and region-serving, primarily commercial uses (such as office and technology-based uses) and large-scale (over 25,000 square feet) commercial developments. The second component of the proposed project is the rezoning of approximately 47 parcels in order to reconcile their use districts and height and bulk districts with those of the neighboring properties. The third component of the plan is a privately funded mixed-use residential, commercial, and light industrial/artist development proposed at 350 8th Street (Block 3756, Lots 3 and 15), within the proposed Plan area. The Western SoMa plan is currently undergoing environmental review, but is proposed to allow up to 2,700 new residential units.

Transit Center District Plan

The geographical boundaries of the of the study area for the Transit Center District Plan are roughly Market Street on the north, Steuart Street on the east, Folsom Street on the south, and mid-block between 3rd and New Montgomery Streets on the west. The draft Transit Center District Plan is a comprehensive plan for the southern portion of the downtown Financial District, roughly bounded by Market Street, the Embarcadero, Folsom Street, and Third Street (Plan Area). The area includes both private properties and properties owned or to be acquired by the Transbay Joint Powers Authority (TJPA) in and around the adopted Transbay Redevelopment Project Area (a plan for which was adopted in 2005) and Transbay Terminal. The draft Plan seeks to enhance its precepts, to build on its established patterns of land use, urban form, public space, and circulation, and to make adjustments based on today’s understanding of the future. The draft Plan presents planning policies and controls for land use, urban form, and building design of private properties and properties owned or to be owned by the Transbay Joint Powers Authority around the Transbay Transit Center, and for improvement and management of the District’s public realm and circulation system of streets, plazas, and parks. To help ensure that the Transbay Transit Center and other public amenities and infrastructure needed in the area are built, the draft Plan also proposes

mechanisms for directing necessary funding from increases in development opportunity to these purposes. The Transit Center District Plan is anticipated to accommodate approximately 1,200 new residential units. The environmental review process for the plan is currently underway.

Ongoing Redevelopment Plans

Treasure Island and Yerba Buena Island

Treasure Island and Yerba Buena Island (collectively, “the Islands”) are in San Francisco Bay, about halfway between the San Francisco mainland and Oakland. The area encompasses approximately 400 acres of land on Treasure Island, approximately 150 acres of land on Yerba Buena Island and about 550 acres of tidal and submerged lands adjacent to the Islands. The Islands are the site of the former Naval Station Treasure Island (“NSTI”), which was owned by the United States Navy. NSTI was closed on September 20, 1997 as part of the Base Realignment and Closure III program. The Islands also include a U.S. Coast Guard Station and land occupied by the San Francisco-Oakland Bay Bridge and tunnel structures. The Plan would provide the basis for redevelopment from a primarily low-density residential area with vacant and underutilized nonresidential structures to a new mixed-use community with a retail center, a variety of open space and recreation opportunities, on-site infrastructure, and public and community services. Specifically, the conversion of approximately 364 acres on Treasure Island and approximately 95 acres on Yerba Buena Island from a former military base to a dense mixed-use development of residential, commercial, cultural, hotel, and retail uses centered around an Intermodal Transit Hub, with supporting infrastructure, public services and utilities, and a substantial amount of open space.¹⁵ The Treasure Island Area Plan is an ongoing effort that could provide approximately 8,000 additional housing units.

Candlestick Point-Hunters Point Shipyard

Candlestick Point-Hunters Point is located on approximately 702 acres in the southeastern portion of San Francisco. The area is bordered by India Basin to the north, Executive Park area and San Mateo County line to the south, Bayview Hill, the Bayview neighborhood, Yosemite Slough, and Hunters Point Hill to the west, and San Francisco Bay on the north and east. The Plan includes a mixed-use community with a wide range of residential, retail, office, research and development, civic and community uses, and parks and recreational open space. A major component would be a new stadium for the San Francisco 49ers NFL team.¹⁶ The Hunters Point Shipyard Area Plan is an ongoing effort that could provide approximately 4,000 additional housing units within the South Bayshore Planning District. The Candlestick Point Area Plan is an ongoing effort that could provide approximately 7,500 additional housing units.

¹⁵ Treasure Island and Yerba Buena Island Notice of Preparation, website: <http://www.sf-planning.org/Modules/ShowDocument.aspx?documentid=264>, accessed June 22, 2010.

¹⁶ Candlestick Point-Hunter Point Notice of Availability, website: <http://www.sf-planning.org/Modules/ShowDocument.aspx?documentid=346>, accessed June 22, 2010.

Other Development Agreements

Executive Park

Executive Park is a 71-acre area located in southeastern San Francisco. It is bounded on the west by U.S. 101, on the east by the Candlestick Point Special Use District, on the north by Bayview Hill, and on the south by Candlestick State Park and the San Francisco Bay. Adjacent neighborhoods include the Bayview Hunters Point neighborhood to the north, and the Little Hollywood and Visitacion Valley neighborhoods to the northwest. Primary access to Executive Park is from Harney Way, Alana Way, Thomas Mellon Drive and Executive Park East Boulevard. Secondary access is provided via Blanken Avenue to the west, which connects Bayshore Boulevard with Executive Park West Boulevard, and Jamestown Avenue/Hunters Point Expressway to the east. Executive Park is now an office park with some housing on the far eastern end. The office buildings are surrounded by surface parking and the housing is internally focused and gated. The plan envisions a new San Francisco neighborhood: a mixed-used residential neighborhood with attractive public streets and open space connectivity.¹⁷ The Executive Park Area Plan is an ongoing effort that could provide approximately 1,600 additional housing units.

Park Merced

Park Merced is residential neighborhood on approximately 152 acres of land in the southwest portion of San Francisco adjacent to Lake Merced and generally bounded by Vidal Drive, Font Boulevard, Pinto Avenue, and Serrano Drive to the north, 19th Avenue and Junipero Serra Boulevard to the east, Brotherhood Way to the south, and Lake Merced Boulevard to the west. The Plan would increase residential density, provide a neighborhood core with new commercial and retail services, modify transit facilities, and improve utilities within the development site. The principal land use goals are to reduce automobile use by concentrating housing close to employment, increasing the supply of housing, and providing better integrated residential and neighborhood serving retail and office uses; to maximize opportunities to use pedestrian and bicycle pathways; to establish pedestrian-oriented nodes for the location of neighborhood services and amenities, open space, and community services; and to incorporate environmental factors such as sun, shade, and wind into the design and housing materials.¹⁸ The Parkmerced Area Plan is an ongoing effort that could provide approximately 5,600 additional housing units.

San Francisco Planning Code

The San Francisco Planning Code, which incorporates by reference the City's Zoning Maps, governs permitted uses, densities and the configuration of buildings in San Francisco. Permits to construct new buildings (or to alter or demolish existing ones) cannot be issued unless either the proposed action conforms to the Planning Code, or an exception is granted pursuant to provisions of the Planning Code, or

¹⁷ Executive Park Area Plan, revised draft, March 19, 2009, website: <http://www.sf-planning.org/Modules/ShowDocument.aspx?documentid=1545>, accessed June 22, 2010.

¹⁸ Park Merced EIR, Part 1 website: http://www.sf-planning.org/ftp/files/MEA/2008.0021E_Parkmerced_DEIR_VI-01.pdf, accessed June 22, 2010.

a reclassification of the site occurs. The following is a summary of Planning Code provisions related to controls on housing.

Existing Zoning (San Francisco Planning Code)

San Francisco utilizes a zoning system with two separate sets of districts: one that regulates land uses, and another that regulates the height and bulk of buildings. The existing use districts and height limits in the City are described below.

There are a total of 13 residential zoning districts in the City, reflecting a mix of land use. A summary of the planning code provisions for residential uses is provided in the San Francisco Planning Code Zoning Districts, Residential Districts Controls Summary, on the Planning Department's website.¹⁹ Residential zoning designations in the City range in density from RH-1 (D) (House-One Family, Detached Dwellings) to RTO (Residential Transit Oriented Development).

The City contains 25 separate height and bulk districts that range in height from 40 feet to 550 feet. The City is divided into classes of height and bulk districts as indicated on the zoning maps. Additional height limits are imposed for certain use districts, such as areas located within narrow streets or alleys. Section 263 of the Planning Code contains special exceptions to the height limits for certain uses within certain areas. Buildings and structures exceeding the prescribed height may be approved by the Planning Commission according to the procedures for conditional use approval in Section 303 of the Planning Code; provided, however, that such exceptions may be permitted only in the areas specified and only to the extent stated in each section. Some of the areas eligible for exceptions to the height limits include north and south of the Ferry Building, east and west of Chinese Playground, Chinatown corners and parapets, and north of Market residential special use districts, among others.

Planning Code Section 295

Section 295 of the Planning Code, the Sunlight Ordinance, was adopted through voter approval of Proposition K in November 1994 to protect certain public open spaces from shadowing by new structures. Section 295 prohibits the issuance of building permits for new construction or additions that would result in structures greater than 40 feet in height that would shade property under the jurisdiction of, or designated to be acquired by, the Recreation and Park Commission, during the period from one hour after sunrise to one hour before sunset on any day of the year. An exception is permitted if the Planning Commission, upon advice from the Recreation and Park Department general manager and the Recreation and Park Commission, determines that the shadow would have an insignificant impact on the use of such property. In practice, therefore, Section 295 acts as a kind of overlay that further limits heights and/or shapes of certain buildings around protected parks; the Section 295 limit is in addition to the height limits in the Height and Bulk districts.

¹⁹ San Francisco Planning Department, Zoning Districts, Residential Districts Controls Summary, website: http://www.sfgov.org/site/uploadedfiles/planning/projects_reports/Residential%20Standards%20Summary%20Table.pdf, accessed April 9, 2009.

All of the open spaces within the City that are under Recreation and Park Department control are protected by Section 295. Privately-owned open spaces, including any open spaces that are required under the Planning Code as part of an individual development proposal, are not subject to Section 295. Section 295 is applicable to the analysis of shadow impacts in Section V.I (Wind and Shade) of this Draft EIR.

Planning Code Section 147

Planning Code Section 147, applicable to the C-3, RSD, SLR, SLI, or SSO zoning districts, states that new buildings and additions to existing buildings where height limits are greater than 50 feet must be shaped to minimize shadow on public plazas or other publicly accessible open spaces other than those protected by Section 295, “in accordance with the guidelines of good design and without unduly restricting the development potential of the property.” The following factors must be taken into account in determining compliance with this criterion: the amount of area shadowed, the duration of the shadow, and the importance of sunlight to the type of open space being shadowed. Various areas within the City are zoned RSD, SLR, SLI, or SSO and hence subject to Section 147. Section 147 is applicable to the analysis of shadow impacts in Section IV.I (Wind and Shade) of this Draft EIR.

Planning Code Section 311 and Residential Design Guidelines

For construction of new residential buildings and alteration of existing residential buildings in R Districts, Section 311 of the Planning Code requires consistency with the design policies and guidelines of the General Plan and with the Residential Design Guidelines that are adopted for specific areas. Section 311 also states that the Director of Planning may require modifications to the exterior of a proposed residential building—including, but not limited to changes in siting, building envelope, scale, texture, detailing, openings, and landscaping—in order to bring it into conformity with the Residential Design Guidelines and the General Plan. The most recent set of Residential Design Guidelines was adopted in 2003. The guidelines apply to development in all RH and RM districts, and are intended to maintain cohesive neighborhood identity, preserve historic resources, and enhance the unique setting and character of the City and its residential neighborhoods.

The guidelines are based on the following design principles, which are also used to determine compliance with the guidelines:

- Ensure that the building’s scale is compatible with surrounding buildings.
- Ensure that the building respects the mid-block open space.
- Maintain light to adjacent properties by providing adequate setbacks.
- Provide architectural features that enhance the neighborhood’s character.
- Choose building materials that provide visual interest and texture to a building.
- Ensure that the character-defining features of an historic building are maintained.

Various areas within the City are zoned R and hence subject to Section 311 and the Residential Design Guidelines. Section 311 is applicable to the analysis of visual quality in Section V.C (Aesthetics) of this Draft EIR.

Other Controls

Reflective Glass (Planning Commission Resolution 9212)

Planning Commission Resolution No. 9212 (1981) established a pair of guidelines for reviewing and acting on proposed building projects. The first guideline states that clear, untinted glass should be used at and near the street level. The second guideline states that mirrored, highly reflective, or densely tinted glass should not be used except as an architectural or decorative element. By prohibiting mirrored or reflective glass, this resolution serves to limit glare. Resolution 9212 is applicable to the analysis of visual quality in Section V.C (Aesthetics) of this Draft EIR.

San Francisco Green Building Ordinance (SFGBO)

In 2008, the City adopted Chapter 13C (Green Building Requirements) into San Francisco Building Code. The purpose of the requirements is to promote the health, safety, and welfare of San Francisco residents, workers, and visitors by minimizing the use and waste of energy, water and other resources in the construction and operation of the buildings within the City and by providing a healthy indoor environment. The requirements are based on LEED®²⁰ or GreenPoints²¹ rating systems. Upon full implementation of the SFGBO in 2012, residential development will be required to achieve the following minimum standards:

1. Small residential (four or fewer units) – 75 GreenPoints;
2. Mid-sized residential (five or more units less than 75 feet in height) – 75 GreenPoints; or
3. High-rise large residential – 75 GreenPoints or LEED® Silver.

The ordinance requires compliance with the applicable LEED® performance standards or GreenPoint Rated checklists (which applies mostly to residential buildings) for New Construction, Version 2.2, LEED® criteria sustainable Sites (SS) 6.1 and SS6.2 for stormwater management, as well as the best management practices (BMPs) and Stormwater Design Guidelines of the SFPUC (1304C.0.3). Additionally, for high-rise residential buildings (1304C.1.3), new group B (Business) and M (Mercantile) occupancy buildings (1304C.2), and new large commercial buildings (1304C.2.2), water efficient landscaping (LEED® credit WE1.1) and water conservation are required (LEED® credit WE3.2).

²⁰ U.S. Green Building Council - LEED Rating Systems information website: <http://www.usgbc.org/DisplayPage.aspx?CMSPageID=222> accessed June 17, 2010.

²¹ Build It Green - GreenPoint ratings information website: <http://www.builditgreen.org/greenpoint-rated/> accessed June 17, 2010.

LEED® SS6.2 addresses stormwater management and has been adopted by the San Francisco Stormwater Design Guidelines for MS4s.²² The stormwater management program seeks to reduce impervious cover, promote infiltration, and capture and treat 90 percent of the runoff from an average annual rainfall event (for semi-arid watersheds; in San Francisco, treatment of 90 percent is interpreted as treating runoff produced by a rain event generating 0.75 inches) using acceptable BMPs. In addition, BMPs used to treat runoff must be capable of removing 80 percent of the average annual post development total suspended solid load contained in stormwater runoff. The BMPs are considered to meet these criteria if (1) they are designed in accordance with standards and specifications from a state or local program that has adopted these performance standards, or (2) there are filed performance monitoring data that demonstrate compliance with the criteria. LEED® WE1.1 addresses water efficient landscaping. New construction that is required to comply with this credit must submit documentation verifying a minimum of 50 percent reduction in use of potable water for landscaping (compared to the mid-summer baseline case). LEED® WE3.2 addresses water use reduction. Permit applicants must submit documentation demonstrating achievement of a minimum 20 percent reduction in the use of potable water. Effective January 1, 2011, the required reduction in use of water is 30 percent (compared to the water use baseline calculated for the building [not including irrigation] after meeting the US EPA Energy Policy Act of 1992 requirements).

Other Plans and Policies

Waterfront Land Use Plan (Port of San Francisco)

Approved in June 1997, the Waterfront Land Use Plan (“Waterfront Plan”) is a land use policy document governing property under the jurisdiction of the Port of San Francisco, generally from Fisherman’s Wharf to India Basin. The Waterfront Land Use Plan is intended to: 1) actively promote the continuation and expansion of industrial, commercial and recreational maritime activities; 2) support new and existing open space and public access; 3) recognize the structure of the Port for revenue-generating land uses to fund maritime activities, open space, and public activities along the waterfront; 4) adapt to fluctuating economic, social and political structures by identifying the range of acceptable uses for Port properties; 5) encourage efficient use of currently underutilized Port properties by allowing a range of interim uses; and 6) establish a framework for streamlining the entitlement process for new development. The Plan also calls for identification of City plans and policies in need of reassessment and modification to implement the plan.

The Waterfront Plan is guided by seven goals that together are intended to enable the Port to achieve the Waterfront Plan's overarching vision of reuniting the City with its waterfront.

The general land use policies of the Waterfront Land Use Plan listed below apply to new residential uses. In addition, more detailed development standards are identified for specific sites within the area covered by the Waterfront Land Use Plan. The policies in the Waterfront Land Use Plan are focused on permitting

²² An MS4 is a conveyance or system of conveyances that is owned by a state, city, town, village, or other public entity that discharges to waters of the U.S.; designed or used to collect or convey stormwater (including storm drains, pipes, ditches, etc.); not a combined sewer; and not part of a Publicly Owned Treatment Works (sewage treatment plant).

new residential units in certain areas, ensuring that appropriate design guidelines are adhered to, coordination with city departments and other relevant agencies. The proposed Housing Elements would not interfere with the intent of the Waterfront Land Use Plan. No inconsistencies between the proposed Housing Elements and this Plan have been identified.

Better Streets Plan

The City of San Francisco is currently developing a Better Streets Plan, with the aim of creating a unified set of standards, guidelines, and implementation strategies to govern how the City designs, builds, and maintains public streets and rights-of-way. The proposed Better Streets Plan would create a unified set of standards, guidelines, and implementation strategies to govern how the City designs, builds, and maintains its pedestrian environment. The proposed Better Streets Plan would seek to balance the needs of all street users, with a particular focus on the pedestrian environment and how streets can be used as public space. The plan would reflect the understanding that streets are about much more than just transportation – that streets serve a multitude of social, recreational and ecological needs that must be considered when deciding on the most appropriate design. The Better Streets Plan would carry out the intent of San Francisco's Better Streets Policy, adopted by the Board of Supervisors on February 6, 2006. Comments on the Draft Better Streets Plan were due September 5, 2008. The Better Streets Plan is currently undergoing environmental review pursuant to CEQA.

The Sustainability Plan for the City of San Francisco

In 1993, the San Francisco Board of Supervisors established the Commission on San Francisco's Environment, charged with, among other things, drafting and implementing a plan for San Francisco's long-term environmental sustainability. The notion of sustainability is based on the United Nations definition that "a sustainable society meets the needs of the present without sacrificing the ability of future generations and non-human forms of life to meet their own needs." The Sustainability Plan for the City of San Francisco was a result of community collaboration with the intent of establishing sustainable development as a fundamental goal of municipal public policy²³.

The Sustainability Plan is divided into 15 topic areas, 10 that address specific environmental issues (air quality; biodiversity; energy, climate change and ozone depletion; food and agriculture; hazardous materials; human health; parks, open spaces, and streetscapes; solid waste; transportation; and water and wastewater), and five that are broader in scope and cover many issues (economy and economic development, environmental justice, municipal expenditures, public information and education, and risk management). Additionally, the Sustainability Plan contains indicators designed to create a base of objective information on local conditions and to illustrate trends toward or away from sustainability. Although the Sustainability Plan became official City policy in July 1997, the Board of Supervisors has not committed the City to perform all of the actions addressed in the plan. The Sustainability Plan serves as a blueprint, with many of its individual proposals requiring further development and public comment.

²³ Sustainability Plan, The Department of the Environment, San Francisco, July 1997.

As discussed previously in this Section and throughout this EIR, the proposed Housing Elements would further the intent of the Sustainability Plan in many ways, including by encouraging housing near transit, promoting sustainable infrastructure, and including environmentally-friendly housing. Therefore, no inconsistencies are identified between the proposed Housing Elements and the Sustainability Plan.

The Climate Action Plan

In February 2002, the San Francisco Board of Supervisors passed the Greenhouse Gas Emissions Reduction Resolution (Number 158-02) committing the City and County of San Francisco to a greenhouse gas (GHG) emissions reductions goal of 20 percent below 1990 levels by the year 2012. The resolution also directs the San Francisco Department of the Environment, the San Francisco Public Utilities Commission (SFPUC), and other appropriate City agencies to complete and coordinate an analysis and planning of a local action plan targeting GHG emission reduction activities. In September 2004, the San Francisco Department of the Environment and the Public Utilities Commission published the Climate Action Plan for San Francisco: Local Actions to Reduce Greenhouse Emissions. The Climate Action Plan examines the causes of global climate change and human activities that contribute to global warming and provides projections of climate change impacts on California and San Francisco from recent scientific reports; presents estimates of San Francisco's baseline greenhouse gas emissions inventory and reduction targets; describes recommended emissions reduction actions in the key target sectors – transportation, energy efficiency, renewable energy, and solid waste management – to meet stated goals by 2012; and presents next steps required over the near term to implement the plan. Although the Board of Supervisors has not formally committed the City to perform the actions addressed in the plan, and many of the actions require further development and commitment of resources, the plan serves as a blueprint for GHG emission reductions, and several actions are now in progress. The GHG reduction goals were amended in 2008.

The Climate Action Plan is based on the notion that human behavior accelerates climate change. The release into the atmosphere of carbon dioxide from the burning of fossil fuels in power plants, buildings and vehicles, the loss of carbon “sinks” due to deforestation, and methane emitted from landfills are the chief human causes of climate change. These emissions are referred to collectively as “greenhouse gases” (GHGs).

The Climate Action Plan cites an array of potential environmental impacts to San Francisco, including rising sea-levels which could threaten coastal wetlands, infrastructure, and property; increased storm activity that could increase beach erosion and cliff undercutting; warmer temperatures that could result in more frequent El Niño storms causing more rain than snow to the Sierras, reducing snow pack that is an important source of the region's water supply; decreased summer runoff and warming ocean temperatures that could affect salinity, water circulation, and nutrients in the Bay, potentially altering Bay ecosystems; as well as other possible effects to food supply and the viability of the state's agricultural system; possible public health effects related to degraded air quality and changes in disease vectors; as well as other social and economic impacts.

The Plan presents estimates of San Francisco's baseline GHG emissions inventory and reduction targets. It states that burning fossil fuels in vehicles and for energy use in buildings and facilities are the major

contributors to San Francisco's GHG emissions. In response to the potential environmental effects, the Climate Action Plan seeks to reduce emissions by 20 percent from 1990 levels by targeting emission reductions from burning fossil fuels in cars, power plants and commercial buildings, developing renewable energy technologies like solar, wind, fuel cells and tidal power, and expanding residential and commercial recycling programs. According to the Plan, achieving these goals will require the cooperation of a number of different city agencies. However, no inconsistencies between the proposed Housing Elements and the San Francisco Climate Action Plan have been identified. An analysis of the proposed Housing Elements' potential effects on global warming and GHGs is presented in Section V.S (Greenhouse Gas Emissions) of this Draft EIR.

San Francisco Regional Water Quality Control Board Basin Plan

The San Francisco Bay Regional Water Quality Control Board (SFBRWQCB) regulates water quality in San Francisco Bay under the Porter-Cologne Water Quality Control Act through regulatory standards and objectives in the Water Quality Control Plan for the San Francisco Bay Basin (Basin Plan). The Basin Plan identifies existing and potential beneficial uses and provides numerical and narrative water quality objectives to protect those uses. The Basin Plan identifies the following existing beneficial uses for the San Francisco Bay: ocean, commercial and sport fishing; estuarine habitat; industrial service apply; fish migration; navigation; preservation of rare and endangered species; water contact recreation; non-contact water recreation; shellfish harvesting; and wildlife habitat. Pollutants that have been identified as causing impairments in San Francisco Bay include chlordane, DDT, diazinon, dieldrin, dioxin compounds, furan compounds, mercury, exotic species, and PCBs. The law requires the development of total maximum daily loads (TMDLs) to identify the maximum concentration of particular pollutants that will impair water quality and to identify pollution prevention, control, or restoration strategies. The SFBRWQCB has developed TMDL reports for pollutants including PCBs and mercury, and has proposed Basin Plan amendments regarding TMDL. An analysis of the proposed Housing Elements' potential effects on regional water quality is presented in Section V.O (Hydrology and Water Quality) of this Draft EIR. The proposed Housing Elements would not interfere with the intent of the Basin Plan. No inconsistencies between the proposed Housing Elements and this Plan have been identified.

The San Francisco Congestion Management Program

The California Government Code mandates the development of a Congestion Management Program (CMP) for each county in the state to manage the effects of land use decisions on the transportation system, and vice versa.²⁴ It requires that all elements of the CMP be monitored at least biennially by the designated Congestion Management Agency (CMA) to determine if the county and city governments, known as Member Agencies, conform to the CMP. The San Francisco County Transportation Authority (SFCTA) is the designated CMA for San Francisco County, and therefore is responsible for CMP

²⁴ San Francisco County Transportation Authority, Congestion Management Program, <http://www.sfcta.org/content/view/301/147/>, accessed March 26, 2009.

monitoring. The SFCTA Board approved the 2007 CMP Report on October 30, 2007. The 2007 San Francisco Congestion Management Program, prepared by the SFCTA is intended to:²⁵

- Comply with state law by adopting a biennial CMP and submitting the CMP to the Metropolitan Transportation Commission (MTC) for a conformance finding. Conformance ensures the City's eligibility for the state fuel tax revenues authorized by CMP legislation.
- Guide San Francisco agencies involved in congestion management.
- Outline the congestion management work program for fiscal years 2007/08 and 2008/09.
- Set forth policies and technical tools to implement the CMP work program.

Overall, the intent of the CMP, as described above, would not conflict with the proposed Housing Elements. No inconsistencies between the proposed Housing Elements and the CMP have been identified.

The Bay Area Air Quality Plan and 2005 Ozone Attainment Plan

The BAAQMD is the primary agency responsible for comprehensive air pollution control in the Bay Area. The BAAQMD develops rules and regulations, establishes permitting requirements for stationary sources of emissions of known air pollutants, inspects emission sources, and enforces such measures through educational programs or fines. The BAAQMD is also tasked with addressing the State's requirements established under the California Clean Air Act (e.g., bringing the San Francisco Bay Area into air quality attainment standards).

To bring the Bay Area into attainment for ozone (O₃) and particulate matter (PM), the BAAQMD has developed the 2000 Clean Air Plan (CAP), the 2005 Ozone Attainment Plan, and the Particulate Matter Implementation Schedule²⁶. The current Basin CAP, which was adopted by the BAAQMD Board of Directors on December 20, 2000, identifies the control measures that would be implemented through 2006 to reduce major sources of pollutants. The Bay Area 2005 Ozone Attainment Plan includes control measures for ozone precursors (reactive organic gases (ROGs) and oxides of nitrogen (NO_x)), whereas the Particulate Matter Implementation Schedule addresses a variety of pollutants (including direct emissions of PM and gases that are PM precursors). The BAAQMD is currently drafting the 2009 CAP, which will:

- update the Bay Area 2005 Ozone Strategy in accordance with the requirements of the CCAA to implement "all feasible measures" to reduce ozone;

²⁵ San Francisco County Transportation Authority, Congestion Management Program, Chapter 1 Background and Program Overview, <http://www.sfcta.org/images/stories/Planning/CongestionManagementPlan/chapter%2001%20-%20background.pdf>, accessed March 26, 2009.

²⁶ Particulate Matter Implementation Schedule, Bay Area Air Quality Management District Staff Report, November 5, 2009.

- consider the impacts of ozone control measures on particulate matter (PM), air toxics, and greenhouse gases in a single, integrated plan;
- review progress in improving air quality in recent years; and
- establish emission control measures to be adopted or implemented in the 2009-2012 timeframe

Overall, the intent of the CAP, as described above, would not conflict with the proposed Housing Elements. No inconsistencies between the proposed Housing Elements and the CAP have been identified

The San Francisco Bay Plan

The San Francisco Bay Plan was completed and adopted by the San Francisco Bay Conservation and Development Commission in 1968 and submitted to the California Legislature and Governor in January 1969. The Bay Plan was prepared by the Commission over a three-year period pursuant to the McAteer-Petris Act of 1965 which established the Commission as a temporary agency to prepare an enforceable plan to guide the future protection and use of San Francisco Bay and its shoreline. In 1969, the Legislature acted upon the Commission's recommendations in the Bay Plan and revised the McAteer-Petris Act by designating the Commission as the agency responsible for maintaining and carrying out the provisions of the Act and the Bay Plan for the protection of the Bay and its great natural resources and the development of the Bay and shoreline to their highest potential with a minimum of Bay fill. The Bay Plan is in the process of being updated. No inconsistencies between the proposed Housing Elements and this Plan have been identified.

Urban Forest Plan

Pursuant to Chapter 12 of the San Francisco Environment Code, the Urban Forestry Council advises City departments, including the Board of Supervisors and the mayor. Its tasks are to develop a comprehensive urban forest plan; educate the public; develop tree-care standards; identify funding needs, staffing needs, and opportunities for urban forest programs; secure adequate resources for urban forest programs; facilitate coordination of tree-management responsibilities among agencies; and report on the state of the urban forest. The Council's scope of authority is completely advisory and educational in nature. The Council has prepared an Urban Forest Plan, which reviews the creation of San Francisco's urban forest, analyzes the structure and functional benefits of the forests, and identifies the challenges that threaten its future, which could include impacts resulting from housing development. Designed to provide a road map for policy-makers and implementers, the Plan identifies goals that are critical to maximizing the value of the forest. Underlying these goals is the understanding that the urban forest is a living and evolving resource that is adapted to the unique and often challenging conditions of the urban environment. These goals are directed at the owners and managers of the trees that comprise the urban forest. No inconsistencies between the proposed Housing Elements and this Plan have been identified.

CONCLUSION

Overall, the proposed Housing Elements would not conflict with any of the goals of the plans and policies listed in this section. The potential of the proposed Housing Elements to conflict with applicable plans,

polices, or regulations is discussed in detail under Impact LU-1 in Section V.B (Land Use and Land Use Planning).

V. ENVIRONMENTAL SETTING AND IMPACTS

B. LAND USE AND LAND USE PLANNING

INTRODUCTION

This section addresses the potential impacts of the 2004 Housing Element and 2009 Housing Element policies related to physically established communities, and applicable land use plans, policies, and regulations. Section V.A (Plans and Policies) discusses relevant plans and codes with regard to land use.

ENVIRONMENTAL SETTING

Project Location

The proposed Housing Elements would be an update to the San Francisco General Plan. The General Plan is the embodiment of the City's collective vision for the future of San Francisco. Therefore, as described in Section IV (Project Description), the project location is the entirety of the City and County of San Francisco, a densely populated City on the northern tip of the San Francisco Peninsula. The City is comprised of many different neighborhoods with a wide range of characteristics, from industrial, commercial, and residential. Residential areas range from predominantly low density, single family homes, to high density, large apartment and condominium complexes, to sporadic residences located in mixed-use neighborhoods that also include industrial or commercial uses.

Existing Land Uses

The City includes a mix of land uses, including residential, neighborhood retail, institutional and cultural, commercial, industrial, and open space, which are predominantly dense and urban. These land uses are discussed by land use type in this section with an explanation of each use. As discussed in Section IV (Project Description), the City is almost fully developed. The City contains approximately 49 square miles or 31,360 acres.

Existing land uses in the City are classified into ten primary categories

- Production, Distribution and Repair (PDR);
- Residential Mixed-Use;
- Retail/Entertainment;
- Management, Information, and Professional Services (MIPS);
- Vacant Lands;
- Cultural, Institutional, Educational and Other Public Facilities (CIE);

- Mixed Uses (Non-residential);
- Residential;
- Visitor-Serving Retail; and
- Parks and Open Space.

Existing Zoning

There are a total of 13 residential zoning districts in the City, reflecting a mix of land use. A summary of the planning code provisions for residential uses is provided in the San Francisco Planning Code Zoning Districts, Residential Districts Controls Summary, on the Planning Department's website.¹ The Summary of the Planning Code Standards for Residential Districts provides the name of the zoning district and maximum dwelling unit density, as well as other land use controls. Residential zoning designations in the City include, but are not limited to RH-1 (D) (House-One Family, Detached Dwellings), RH-2 (House-Two Family), RM-1 (Mixed [Apartments and Houses], Low Density) to RM-4 (Mixed [Apartments and Houses], High Density), RC-3 (Residential-Commercial Combined, Medium Density), RED (Residential Enclave District) and RTO (Residential Transit Oriented Development). Generally, RH-1 zoning districts allow for one dwelling unit per lot. RH-1(S) zoning districts allow for an additional minor second unit. RH-2 zoning districts generally allow for two units per lot, with RH-3 zoning districts allowing three units per lot. Residential Mixed zoning districts can allow up to three dwelling units per lot (RM-1), or up to one unit per 200 square feet (sf) of lot area (RM-4). RC-3 districts allow up to three units per lot or one unit per 400 sf of lot area and RC-4 districts allow up to one unit per 200 sf of lot area. RED districts have similar density standards as RC-3 and RM-3 zoning districts, in that, RED districts allow for one dwelling unit per 400 sf of lot area. RTO zoning districts generally allow one dwelling unit per 600 sf of lot area, although these density limits may be exceeded for providing additional affordable housing units and other special uses.

Existing Height and Bulk Districts

The City contains 25 separate height and bulk districts that range in height from 40 feet to 400 feet. The different classes of height and bulk districts are indicated on the zoning maps. Additional height limits are imposed for certain use districts, such as areas located within narrow streets or alleys. Section 263 of the Planning Code contains special exceptions to the height limits for certain uses within certain areas. Buildings and structures exceeding the prescribed height may be approved by the Planning Commission according to the procedures for conditional use approval in Section 303 of the Planning Code; provided, however, that such exceptions may be permitted only in the areas specified and only to the extent stated in each section. Some of the areas eligible for exceptions to the height limits include north and south of the Ferry Building, east and west of Chinese Playground, Chinatown corners and parapets, and north of

¹ San Francisco Planning Department, Zoning Districts, Residential Districts Controls Summary, website: <http://www.sf-planning.org/Modules/ShowDocument.aspx?documentid=5358>, accessed April 9, 2009.

Market residential special use districts, among others. Figure IV-4, Generalized Citywide Height Map, shows that generally the western half of the City is dominated by 40-foot height limits. Moving east, towards the Downtown, heights increase along Van Ness Avenue and continue into the Downtown. Additional information on existing height limits is included in the following discussion of individual planning districts.

San Francisco Planning Districts

For purposes of this section of the EIR, the City is discussed with respect to each Planning District, as depicted in Figure V.A-1. The City is comprised of 18 Planning Districts. The following discussion provides a general overview of the existing land use character within each of the 18 Planning Districts. The existing land use character is described in terms of general land uses, height limits, preservation districts, and other characteristics that may pertain to a given planning district, including details of various planning efforts. Over the years, the San Francisco Planning Department has undergone a number of focused planning efforts, initiated by either the Planning Department or the Redevelopment Agency, to guide the development of various areas or neighborhoods within the City. These efforts have resulted in the preparation of Area Plans or Redevelopment Plans. Within each Planning District, applicable Area and Redevelopment plans are also discussed with respect to land use character. These Area and Redevelopment Plans are also discussed in Section V.A (Plans and Policies).

South Bayshore

The South Bayshore area of the City is bordered to the north by the South of Market and Mission Planning Districts, to the west by the Bernal Heights and South Central Planning Districts, and to the south by San Mateo County and the San Francisco Bay. The entire eastern border of this district fronts along the San Francisco Bay. Existing height limits north of Islas Creek are 40 feet, increasing to 80 and 85 foot height limits along Third Street. West of Third Street heights decrease to 65 feet. Heights south of Islas Creek are 40 feet along Pier 90 and 90, increasing to 85 feet along Third Street and 80 feet for parcels near Pier 88. Land uses north and south of Islas Creek are designated M-2 (Heavy Industrial), and further east, land uses are primarily PDR (Production, Distribution and Repair) zoning districts. PDR zoning districts allow for a variety of non-residential activities and are an important reservoir of space for San Francisco's new and evolving industry and unforeseen activity types. Business and activities allowed in PDR Districts generally share a need for flexible operating space that features large open interior spaces, high ceilings, freight loading docks and elevators, floors capable of bearing heavy loads, and large (often uncovered exterior) storage areas. These uses are often not ideally compatible with housing for operational reasons, including the need for significant trucking and delivery activities, 24-hour operation, and emission of noise, odors and vibrations. North and south of Islas Creek, a variety of PDR-related special use districts exists.

Industrial zoning districts (M-1 and M2 [Light Industrial]) extend south of Islas Creek, along the San Francisco shoreline, with 40 foot height limits. To the east of Hunter's Point Boulevard lies the India Basin shoreline park, which is designated as Open Space. RM-1 zoning districts are located southeast of Innes Avenue and abut the Hunter's Point Naval Shipyard. The Hunter's Point Naval Shipyard generally

extends from south of India Basin to South Basin. Further south of Hunter's Point Naval Shipyard is the Candlestick Point State Recreation Area, designated Public (P), with some residential uses extending south of Candlestick Point. Restricted Light Industrial Special Use Districts generally overlay the zoning districts in these areas where residential uses abut industrial uses, with the intent of restricting more intensive industrial activities in order to reduce conflict between uses adjacent or in close proximity to one another.

Approximately west of India Basin and east of Hunters Point Boulevard, land uses are predominately residential, with some neighborhood commercial uses along Hunter's Point Boulevard. Extending west of this neighborhood commercial district, allowable residential densities decrease from RM-1 zoning districts to RH-2 and RH-1 zoning districts, until reaching Third Street. Third Street, in this area is predominately neighborhood commercial, with RH-1 zoning districts extending west until reaching U.S. Highway 101 (US 101). The height limit for much of this area is approximately 40 feet.

South of Phelps Street and Williams Avenue, and north of Paul Avenue, land uses once again become more industrial in nature with M-1 and PDR zoning districts. Heights in this area increase to 65 feet. However, heights south of Paul Avenue and east of Third Street decrease to 40 feet once again. Land uses south of Paul Avenue are generally residential until reaching the Executive Park area, which is a designated commercial zone with various height limits, extending up to 200 feet.

No adopted preservation districts exist within the South Bayshore Planning District. However, there are four Planning Code Article 10 Landmarks within the South Bayshore Planning District: South Central Planning District: Albion Brewery, Dirck's Cottage, Sylvester House, Quinn House, and Bayview Opera House.² Additionally, as discussed below, a number of Area Plans and Redevelopment have been prepared or are underway within the South Bayshore Planning District. The planning documents prepared for those efforts may also identify the historic resources within the South Bayshore Planning District. The South Bayshore includes the Bayview/Hunters Point Area Plan, Bayview Hunters Point Redevelopment Plan, Hunters Point Shipyard Redevelopment Plan, and the Visitacion Valley Redevelopment Plan.

Bayview/Hunters Point Area Plan

Bayview/Hunters Point is a predominantly industrial and residential district in the southeast corner of the City, within the South Bayshore Planning District. Historically it has been the location of the City's heaviest industries, some of its residents with the lowest-incomes, and its greatest concentration of public housing.

Bayview/Hunters Point is surrounded by the neighborhoods of Candlestick and Executive Park to the south, Visitacion Valley, Portola, and Bernal Heights to the west, the Central Waterfront and Showplace

² The list of Planning Code Article 10 Landmarks for each Planning District was created using the Map of Locally Designated San Francisco Landmarks available at <http://www.noehill.com/sf/landmarks/default.aspx?content=&sequence=neighborhood>, Accessed June 23, 2010.

Square/Potrero Hill to the north, and San Francisco Bay to the east. Land uses in the Bayview Hunters Point area generally consist of maritime industrial, light and heavy industrial, residential, mixed use, heavy commercial and public facilities. These industrial, residential, and other buildings tend to have lower heights, rarely over three stories, which help to maintain definition of the district's natural topography. Many residential uses in this area are located directly adjacent to industrial uses, particularly in the following areas: the eastern edge of the South Basin industrial area, which abuts the Candlestick Point State Park and stadium; the Yosemite Slough; the Alice Griffith public housing project; and areas that experience a heavy circulation of industrial truck traffic through neighborhood residential and commercial districts. Also, on several blocks in the South Basin, housing and industry exist directly adjacent to each other. This proximity of industrial and residential uses has led to conflicts due to noise, air quality and other by-products of industrial businesses. Other major industrial areas, particularly India Basin and Hunters Point Shipyard tend to be physically insulated from residential areas.

Bayview Hunters Point Redevelopment Plan

The Bayview-Hunters Point Neighborhood is bounded generally by U.S. 101, César Chávez Street, Cargo Way, India Basin, Fitch Street and Earl Avenue, Candlestick Cove, and Jamestown Avenue. The Plan provides the implementation tools to carry out many of the goals of the Bayview Hunters Point Community Revitalization Concept Plan. The redevelopment programs of the Plan are focused on three key areas: economic development, affordable housing, and community enhancements. The Bayview Hunters Point Redevelopment Plan was adopted in 2006. The Bayview Hunters Point Redevelopment Plan Area includes some areas included in the Bayview Hunters Point Area Plan, but also includes areas to the south and east, adjacent to the Bay and Hunters Point Shipyard.

Hunters Point Shipyard Redevelopment Plan

The Hunters Point Shipyard Redevelopment Area is located on the eastern portion of the Hunters Point peninsula. The area is surrounded by the San Francisco Bay to the north, east and south, the western border abuts the Bayview district. The Redevelopment Plan provides guidelines aimed at transforming the area into one which would welcome diverse populations, provide a visual reference to the past, facilitate attraction of businesses, and offer attractive employment opportunities. The plan includes concepts for housing diversity, supportive amenities, neighborhood identity, and open space.

Visitacion Valley Redevelopment Plan

Visitacion Valley is a neighborhood at the southeastern corner of the City bounded by Highway 101 to the east, McLaren Park to the northwest and the San Mateo County line to the south. Planning of the area has focused on the vacant, former Schlage Lock property off Bayshore Boulevard and the surrounding vacant properties, formerly used for Southern Pacific railroad operations. This area consists of approximately 20 acres of formerly industrial properties adjacent to two transit stations of the Third Street Light Rail line and a CalTrain Commuter Rail Station. The area includes the Schlage Site and surrounding properties, four blocks of Leland Avenue, and a few blocks of properties on the west side of Bayshore Boulevard. The project involves the demolition of the majority of the existing vacant buildings

on the former Schlage Lock site, environmental remediation of the site, and the construction of a mixed-use residential, retail and office development.

In addition to the above referenced current Area Plans and Redevelopment Plans, the Executive Park Area Plan, India Basin, and the Hunters Point Shipyard/Candlestick Point are ongoing planning efforts (See Section V.A Plans and Policies). These three planning efforts could provide approximately 14,000 additional housing units within the South Bayshore Planning District. Lastly, two other Redevelopment Plans expired in 2009: India Basin Industrial Park and Hunters Point Redevelopment Plans. Land use authority for these Redevelopment Areas has transferred back to the City. These areas are discussed in detail in Section V.A (Plans and Policies).

South Central

The South Central area of the City is bordered to the north by Central and Bernal Heights Planning Districts, to the west by the Ingleside Planning District, and to the east by South Bayshore Planning District. The entire southern border of this district fronts along San Mateo County. Existing height limits within the Planning District are 40 feet. The majority of the Planning District is designated RH-1. Land uses in this area also include low density residential (one to three units per lot), small and moderate scale commercial, institutional uses, transit oriented commercial, shopping center commercial, and some small park and open space areas, including the Crocker Amazon Playground and McLaren Park in the south and southeast portion of this district. Land uses along Mission Street are designated NC-3 and NC-2 (Neighborhood Commercial).

No adopted preservation districts exist within the South Central Planning District. However, there are two Planning Code Article 10 Landmarks within the South Central Planning District: Balboa High School and Geneva Car Barn. Additionally, as discussed below, a number of Area Plans and Redevelopment have been prepared or are underway within the South Central Planning District. The planning documents prepared for those efforts may also identify the historic resources within the South Central Planning District. The South Central Planning District includes the Balboa Park Station Area Plan and the Visitacion Valley Redevelopment Plan

Balboa Park Station Area Plan

The Balboa Park Station Area Plan neighborhood is located in south central San Francisco, and consists primarily of the parcels fronting Ocean, Geneva and San Jose Avenues. The Balboa Park Station Area Plan was a Better Neighborhoods Program pilot project. The area provides a diverse range of uses including; institutional, recreational, retail, housing, and transportation. The City College of San Francisco is the largest single land use in the plan area. The Ocean Avenue Neighborhood Commercial District houses the primary commercial and retail uses in the plan area. It includes mostly neighborhood-serving shops and services. Balboa Park is the largest public open space in the area, and is used by locals and visitors from throughout the city.

Visitacion Valley Redevelopment Plan

The Visitacion Valley Redevelopment Plan was previously discussed under the description of the South Bayshore area.

In addition to the above referenced current Area Plans and Redevelopment Plans, the Executive Park Area Plan, India Basin, and the Hunters Point Shipyard/Candlestick Point are ongoing planning efforts (See Section V.A Plans and Policies). These three planning efforts could provide approximately 14,000 additional housing units within the South Bayshore Planning District. Lastly, two other Redevelopment Plans expired in 2009: India Basin Industrial Park and Hunters Point Redevelopment Plans. Land use authority for these Redevelopment Areas has transferred back to the City. These areas are discussed in detail in Section V.A (Plans and Policies).

Bernal Heights

The Bernal Heights area of the City is bordered to the north by the Mission Planning District, to the west by the Central Planning District, to the east by the South Bayshore Planning District, and to the south by South Central. The entire eastern border of the district fronts the 101 Freeway. Existing height limits within the Planning District are 40 feet. The majority of the Planning District is designated RH-1 (Residential, House, One-Family), RH-2 (Residential, House, Two-Family), and RH-3 (Residential, House, Three-Family). Throughout the Planning District are parks designated Public (P). Land uses along Mission Street are designated NC-3 and NC-2.

No adopted preservation districts exist within the Bernal Heights Planning District. There are no Planning Code Article 10 Landmarks within the Bernal Heights Planning District. There are no Area Plans or Redevelopment Plans in Bernal Heights. In addition, there are no other ongoing planning efforts in this district.

Central

The Central area of the City is bordered to the north by the Buena Vista Planning District, to the west by the Inner Sunset Planning District, to the east by Mission and Bernal Heights, and to the south by South Central and Ingleside Planning Districts. Existing height limits within the Planning District are 40 feet. Land uses in this area generally consist of low to medium density residential, a mixture of residential housing (single-family homes and apartments) transit-oriented residential uses, neighborhood-serving commercial uses, and parks and open space. The majority of the Central Planning District is designated RH-1 and RH-2. Throughout the Planning District are parks designated Public (P). These include Glen Canyon Park and Twin Peaks in the southern and western portion of the district, respectively. Major commercial corridors exist along Market Street, Castro Street, and 24th Street.

No adopted preservation districts exist within the Central Planning District. However, there are ten Planning Code Article 10 Landmarks within the Central Planning District, including Clarke Mansion, Mission Dolores, and Carnegie Library Noe Valley. Additionally, as discussed below, a number of Area Plans and Redevelopment have been prepared or are underway within the Central Planning District. The

planning documents prepared for those efforts may also identify the historic resources within the Central Planning District. The Central Planning District includes the Glen Park Area Plan and the Market/Octavia Area Plan.

Market/Octavia Area Plan

The Market and Octavia area is located in northeastern San Francisco, and sits at the junction of several different neighborhoods, including the Civic Center, Hayes Valley, Western Addition, South of Market; the Inner Mission, the Castro, Duboce Triangle, and Upper Market. Historically, the Market and Octavia area has not been defined as a distinct San Francisco neighborhood, but was designated as a plan area due to its location and common land use and transportation attributes, which became more apparent with demolition of the Central Freeway. Demolition commenced after the freeway was closed for rebuilding in 1996. The Market and Octavia area has a rich pattern of land uses that integrates a diversity of housing types, commercial activities, institutions, and open spaces within a close-knit physical fabric. Land uses in the area include residential, neighborhood retail, heavy commercial industrial, institutional and cultural, office, visitor serving-uses, and open space. From Van Ness Avenue to the east of the Market and Octavia area, Market Street is characterized by a mix of contemporary office buildings of varying heights. Hayes Valley is punctuated by a series of east-west alleys which result in small and narrow lots establishing a building size proportionate to the public street network. The South of Market Street portion of the Market and Octavia area is characterized by large-scale commercial buildings on Market Street and moderate-scale commercial building on Mission Street. Upper Market Street, near Castro Street, is characterized by three- to four-story commercial buildings with ground-floor retail uses.

In addition to the above referenced current Area Plan, the Glen Park Area Plan is an ongoing planning effort (See Section V.A Plans and Policies). This planning effort could provide approximately 100 additional housing units within the Central Planning District.

Ingleside

The Ingleside area of the City is bordered to the north by Outer Sunset and Inner Sunset Planning Districts, to the west by the Pacific Ocean, and to the east by Central and South Central Planning District. The entire southern border of this district fronts along San Mateo County and the South Central Planning District. The majority of the existing height limits within the district are 40 feet. Adjacent to the City College height ranges from 40 feet to 105 feet. The height limits for parcels associated with San Francisco State University generally range in height from 40 feet to 105 feet and a few areas in the southern portion of the district have a height of 130 feet. The majority of the Planning District is designated P and RH-1. The public uses include Harding Park, Lake Merced to the west, San Francisco State University and Mount Davidson to the north, and City College, Balboa Park to the south. Other specific land uses include C-2 (Commercial) to the north adjacent to Highway 1 and RM-1 located between the San Francisco Golf Club and the San Francisco State University. This district includes Parkmerced, a planned neighborhood of high-rise apartment towers and low-rise garden apartments in southwestern San Francisco for middle income tenants. Park Merced is located east of Lake Merced, south of San Francisco State University, west of 19th Avenue, and north of the Harding Park Golf Club. It

contains 3,221 residences (after the sale of 9 blocks to San Francisco State University) and over 9,000 residents, and is one of four remaining privately owned large scale garden apartment complexes in the United States.

No adopted preservation districts exist within the Ingleside Planning District. However, there are three Planning Code Article 10 Landmarks within the Ingleside Planning District: Leonard House, Mount Davidson Monument and Park, and Sunnyside Conservatory. Additionally, as discussed below, a number of Area Plans have been prepared or are underway within the Ingleside Planning District. The planning documents prepared for those efforts may also identify the historic resources within the Ingleside Planning District. The Ingleside Planning District includes the Balboa Park Station Area Plan.

Balboa Park Station Area Plan

The Balboa Park Station Area Plan was previously discussed under the description of the South Central Planning District.

In addition to the above referenced current Area Plan, the Glen Park Area Plan and Parkmerced Area Plan are ongoing planning efforts (See Section V.A Plans and Policies). These planning efforts could provide approximately 5,700 additional housing units, some or all of which could occur within the Ingleside Planning District.

Inner and Outer Sunset

The Inner and Outer Sunset Planning Districts are bordered to the north by the Golden Gate Park Planning District, to the west by the San Francisco Bay, to the south by the Ingleside Planning District, and to the east by the Central Planning District. The existing height limits for the Planning Districts range from 40 feet for residential uses to 220 feet for the UCSF Medical Center in the Inner Sunset Planning District. Land uses in this area generally consist of low density residential (including a large proportion of single-family detached houses) and small scale commercial uses. The majority of the Outer Sunset Planning District is zoned RH-1, RH-2, and RH-3 with portions of Noriega Street and Taraval Street designated NC. There are numerous portions of the Planning District zoned P with the entirety of the parcels fronting Sunset Boulevard zoned as such. Similarly, Ocean Beach at the western border of the district is designated Public. The western portion of the Inner Sunset Planning District is comprised mainly of RH-1 and RH-2 land uses with a strip of NC along Irving Street. The University of California at San Francisco Medical Center, Mount Sutro, Laguna Honda Hospital, and Twin Peaks dominate the central and eastern portions of the Planning District and are zoned P.

No adopted preservation districts exist within in the Inner and Outer Sunset Planning Districts. However, there are six Planning Code Article 10 Landmarks within the Inner and Outer Sunset Planning Districts: Doggie Diner Sign, Shriner's Hospital, Earthquake Refuge Shack, Carnegie Library Sunset, and Engine Company #22. Additionally, as discussed below, one Area Plan has prepared within the Outer Sunset Planning District. The planning document prepared for this effort may also identify the historic resources within the Outer Sunset Planning District. The Outer Sunset Planning District includes the Western Shoreline Area Plan.

Western Shoreline Area Plan

The area covered by the Western Shoreline Area Plan extends from the Cliff House/Sutro Baths in the northwest corner of the City to the San Francisco/San Mateo County border in the southwestern corner. Specific areas covered by the plan include the Great Highway, Golden Gate Park, the San Francisco Zoo, Lake Merced, Ocean Beach, Sutro Heights Park, Cliff House Sutro Baths, Fort Funston, Olympic Country Club, and portions of the Richmond and Sunset neighborhoods. Most of the San Francisco western shoreline is publicly owned. Golden Gate Park, the Zoo, and Lake Merced contain 60 percent of the 1,771 acres that comprise the Coastal Zone area, where development is overseen by the San Francisco Bay Conservation and Development Commission. The California Coastal Program was approved by the National Oceanic and Atmospheric Administration in 1978. The City's entire western shoreline is within California's Coastal Zone area. Another 25 percent of the Coastal Zone is within the Golden Gate National Recreation Area. Only 14 percent of the land is privately owned, and 9 percent of this land is within the Olympic Country Club area. The remaining 5 percent is private residential and commercial property which fronts or lies in close proximity to the seashore.

Buena Vista

The Buena Vista Planning district is bordered to the north by the Western Addition Planning District, to the west by the Richmond Planning District, to the south by the Central Planning District, and to the east by the Mission Planning District. The existing height limits in the Planning District range from 40 to 130 feet for residential uses and 40 to 80 feet for commercial uses in the area. Residential uses in the area are largely designated RH-2 and RH-3. Neighborhood Commercial uses are prominent fronting Market Street and along Octavia Boulevard in the southern and northeast portion of the district, respectively. Buena Vista Park, Corona Heights, and the Panhandle compose the majority of the public land uses in the area.

The Buena Vista Planning District contains one proposed historic district. The proposed Buena Vista North Historic District is a rectangular shaped district generally bound by Divisadero Street to the east, Oak Street to the north, Masonic Avenue to the west, and Haight Street to the south. There are 14 Planning Code Article 10 Landmarks within the Buena Vista Planning District, including the McCormick House, Hinkel House, and Dietle House. Additionally, as discussed below, one Area Plan has been prepared within the Buena Vista Planning District. The planning document prepared for this effort may also identify the historic resources within the Buena Vista Planning District. The Buena Vista Planning District includes the Market and Octavia Redevelopment Plan.

Market/Octavia Area Plan

The Market and Octavia Redevelopment Plan was previously discussed under the description of the Central Planning District.

Richmond

The Richmond Planning District is bordered to the north by the Presidio Planning District and the Pacific Ocean, to the west by the Pacific Ocean, to the south by the Golden Gate Park Planning District, and to

the east by the Marina and Western Addition Planning Districts. The height limit for much of this area is 40 feet with the exception of a few parcels near the intersection of Maple Street and California Street and Geary Boulevard and Arguello Boulevard where height limits are 80 feet. Land uses in the Richmond Planning District are mainly comprised of RH-1, RH-2, RM-1, and NC concentrated along Geary Boulevard, Balboa Street, and Clement Street. Park Presidio Boulevard (Highway 1) runs north to south through the district and adjacent parcels are zoned for public use. There are a number of playgrounds in the Richmond Planning District, including the Cabrillo Playground, Fulton Playground, Argonne Playground, and Richmond Playground. In the northwest portion of the district are the Veteran Affairs Medical Center, Lincoln Park, Lincoln Park Municipal Golf Course, and Sutro Heights Park.

No adopted preservation districts exist within in the Richmond Planning District. However, there are eight Planning Code Article 10 Landmarks within the Richmond Planning District, including the Hanson House, Columbarium, and Saint John's Presbyterian Church. Additionally, as discussed below, the Western Shoreline Area Plan has been prepared within the Richmond Planning District. The planning document prepared for this effort may also identify the historic resources within the Richmond Planning District.

Western Shoreline Area Plan

The Western Shoreline Area Plan was previously discussed under the description of the Inner and Outer Sunset area.

Golden Gate Park/Presidio

The Golden Gate Park Planning District is bordered to the north by the Richmond Planning District, to the west by the Pacific Ocean, to the south by the Outer Sunset and Inner Sunset Planning Districts, and to the east by the Buena Vista and Western Addition Planning Districts. The entirety of the district is zoned for public use. This district includes Golden Gate Park, De Young Museum, California Academy of Sciences, Conservatory of Flowers, and Golden Gate Park Golf Course.

The Presidio Planning District is bordered to the north and west by the San Francisco Bay, to the south by the Richmond Planning District, and to the east by the Marina Planning District. The majority of the existing height limits in the district are 40 feet, though a small portion of the eastern part of the district has a height limit of 80 feet. The entirety of the Presidio Planning District is zoned for public use. Residential uses are scattered throughout the district. The district includes the Golden Gate National Recreation Area, Crissy Field, Presidio Golf Course, Golden Gate Park, and the San Francisco National Cemetery. US 101 merges with Highway 1 within the Planning District.

No adopted preservation districts exist within in the Golden Gate Park/Presidio Planning Districts. However, there are two Planning Code Article 10 Landmarks within the Golden Gate Park/Presidio Planning Districts: Palace of Fine Arts and Golden Gate Park.

Marina

The Marina Planning District is bordered to the north by the San Francisco Bay, to the west by the Presidio Planning District, to the south by the Western Addition Planning District, and to the east by the Northeast Planning District. The majority of the existing height limits in the district are 40 feet for residential land uses with the maximum being 105 feet for a small portion of residential mixed land uses. Land use in the area is generally characterized by public lands and open space, low density, and two- to three-story residential buildings (including a large proportion of single-family homes), mixed residential, and moderate scale neighborhood commercial. Neighborhood Commercial land uses are located along Union Street, Fillmore Street, and Lombard Street. Public land uses are prominent along the northern border of the Planning District with Fort Mason, Marina Green, and the Aquatic Park bordering the San Francisco Bay.

The Marina Planning District contains two historic districts. The Blackstone Court Historic District is generally bound by Franklin Street to the east, Lombard Street to the north, Gough Street to the west, and Greenwich Street to the south. The Webster Street Historic District is an irregularly shaped district and is generally bounded by Webster Street to the east, Jackson Street to the north, a boundary approximately halfway between Webster and Fillmore Street to the west, and Clay Street to the south. In addition, there are 33 Planning Code Article 10 Landmarks within the Marina Planning District, including the Haas-Lilienthal House, Sprekels Mansion, and North End Police Station.

Western Addition

The Western Addition Planning District is bordered to the north by the Marina Planning District, to the west by the Richmond Planning District, to the south by the Buena Vista Planning District, and to the east by the Downtown Planning District. The existing height limits in the Planning District range from 40 feet for residential uses to 160 feet for neighborhood commercial uses. The Western Addition has a mix of residential uses including RH-2, RH-3, RM-1, and RM-2, RM-3, and RM-4. There are a series of Neighborhood Commercial land uses located along Fillmore Street and Divisadero Street. The University of San Francisco and Alamo Square are located in the western and southeastern portions of this district.

The Western Addition Planning District contains three historic districts. The Bush Street-Cottage Row Historic District is an irregularly shaped district that is generally bound by Webster Street to the east, by Bush Street to the north, by Fillmore Street to the west, and by Sutter Street to the south. The Civic Center Historic District is an irregularly shaped district generally bound to the east by the Downtown Planning District boundary, by Golden Gate Avenue to the north, by Franklin Street to the west, and by Fell Street and Hayes Street to the south. The Alamo Square Historic District is an irregularly shaped district generally bound by Webster Street and Steiner Street to the east, Fulton Street and Golden Gate Avenue to the north, Scott Street to the west, and Fell Street and Hayes Street to the south. There are approximately 22 Planning Code Article 10 Landmarks within the Western Addition Planning District, including the First Unitarian Church, Macedonia Baptist Church, and Westerfeld House. Additionally, as discussed below, a number of Area Plans have been prepared or are underway within the Western Addition Planning District. The planning documents prepared for those efforts may also identify the

historic resources within the Western Addition Planning District. The Western Addition Planning District includes the Civic Center Area Plan, Van Ness Area Plan, and the Market and Octavia Area Plan.

Civic Center Area Plan

The Civic Center Area Plan governs the area located on Van Ness Ave, north of Market Street, west of the Tenderloin, east of Western Addition and south of Pacific Heights and Nob Hill. The Civic Center area consists primarily of government, entertainment, cultural activity, and public uses. The core of the Civic Center is composed of classic Greek revival structures of exceptional quality that set the architectural character of the area. The symmetrical arrangement of buildings, uniform height, and application of common building lines and architectural features reinforce the unity of the formal composition.

Van Ness Area Plan

Van Ness Avenue is the central north-south roadway through the City and one of the widest streets in the City. Bounded by Civic Center on the north and the Bay on the north and characterized by excellent views, the Avenue defines and links many adjacent neighborhoods. In connecting Market Street to the Bay, Van Ness forms the western edge of the more densely developed downtown area and separates the Nob and Russian Hill neighborhoods from Pacific Heights. Van Ness Avenue also provides access between a number of focal points, including landmark buildings, cultural centers, important view corridors and the Bay. The juxtaposition on the Avenue of large monumental structures with fine-grain urban fabric to the east creates a contrast within the cityscape. The designation of Van Ness Avenue as Highway 101 led to the use of the Avenue as a primary vehicular thoroughfare and the concurrent re-orientation of businesses towards citywide and regional markets. Movie theaters and restaurants opened up alongside automobile showrooms. Since the late 1970's, automobile-oriented businesses have declined as some auto showrooms relocated to other areas within the City. Former auto showrooms have been converted to restaurants and offices, and some have been demolished for new mixed use residential developments, in keeping with the goals and policies of the Van Ness Area Plan. The Area Plan calls for development of residential uses over commercial buildings, which has led to an increase in the number of residential uses in the area.

Market/Octavia Area Plan

The Market and Octavia Redevelopment Plan was previously discussed under the description of the Central area.

In addition to the above referenced current Area Plans, the Japantown Area Plan is an ongoing planning effort (See Section V.A Plans and Policies). The estimated number of new housing units that could be accommodated within the Western Addition Planning District with rezoning initiated as part of this Area Plan is currently unknown. Lastly, one Redevelopment Plan expired in 2009: Western Addition A-2 Redevelopment Plan. Land use authority for this Redevelopment Area has transferred back to the City. This area is discussed in detail in Section V.A (Plans and Policies).

Northeast

The Northeast Planning District is bordered to the north and east by the San Francisco Bay, to the west by the Marina Planning District, and to the south by the Downtown Planning District. Existing height limits in the district range from 40 feet for residential mixed-uses to 300 feet for downtown commercial uses. The western portion of the Planning District is generally zoned RM-1, RM-2, and RM-3 with a portion of Neighborhood Commercial along California Street and Grant Avenue. Multiple Chinatown Mixed Use Districts dominate the central portion of the Planning District between Broadway and California Street. Fronting the Embarcadero are a number of C-2 land uses adjacent to a series of M-1 land uses along Piers 35 through 9 bordering the San Francisco Bay. In the northeast portion of the district, uses are predominately commercial north of Bay Street to the piers.

The Northeast Planning District has three historic districts. The Telegraph Hill Historic District is an irregularly shaped district generally bound by Sansome Street to east, by Greenwich Street to the north, by Montgomery Street to the west, and by Green Street to the south. The Northeast Waterfront Historic District is an irregularly shaped district bound by The Embarcadero to the east, by Union Street to the north, by a boundary approximately halfway between Sansome Street and Montgomery Street to the west, and by Broadway to the south. The Jackson Square Historic District is an irregularly shaped district bound by Sansome Street to the east, by a boundary approximately halfway between Pacific Avenue and Broadway Street the north, by Columbus Avenue and Kearny Street to the west, and by Washington Street to the south. There are approximately 35 Planning Code Article 10 Landmarks within the Northeast Planning District, including Coit Tower, Ghirardelli Square, and City Lights Bookstore. Additionally, as discussed below, the Chinatown Area Plan has been prepared within the Northeast Planning District. The planning document prepared for this effort may also identify the historic resources within the Northeast Planning District.

Chinatown Area Plan

The Chinatown Area Plan includes 30 blocks in whole or in part on the eastern slopes of Nob Hill as well as portions of Russian Hill. The financial district lies to the east of Chinatown and just south is the Union Square retail area. Grant Avenue, Stockton Street and the hillside blocks that intersect them comprise the core of Chinatown. The district is one to three blocks in width and about ten blocks in length. The Chinatown area is primarily composed of small-scale buildings. Most existing buildings are quite low and due to the pattern of the lots, many are relatively short in depth. The typical lot size is only 3,500 square feet. The few large buildings in the area intrude into this fine-scaled texture of development. Land uses in Chinatown generally consist of medium density residential, neighborhood commercial, community business, and visitor retail.

Downtown

The Downtown Planning District is bordered to the north by the Northeast Planning District, to the west by the Western Addition Planning District, to the south by the South of Market Planning District, and to the east by the San Francisco Bay. Existing height limits in the Planning District range from 40 feet for residential land uses to 450 feet for uses in the Financial District. The Downtown Planning District is

dominated by C-3 land uses along Market Street with a large segment of RC-4 land uses west of Taylor Street. A number of RM-4 (Residential Mixed, Apartments and House, High Density) are located along Mason Street, Taylor Street, and Jones Street in the Planning District. Union Square is also located in the Downtown Planning District and is zoned for public use. A portion of the Embarcadero Plaza and the entire Sue Bierman Park are located within this district.

The Downtown Planning District includes five conservation districts and a portion of one historic district. The Commercial-Leidesdorff Conservation District is an irregularly shaped district generally bound by Sansome Street to the east, by Clay Street to the north, by Montgomery Street to the west, and by Sacramento Street to the south. The Front-California Conservation District is an irregularly shaped district generally bound by a boundary approximately halfway between Front Street and Davis Street to the east, by Sacramento Street to the north, by Battery Street to the west, and by California Street to the south. The Pine-Sansome Conservation District is an irregularly shaped district generally bound by Sansome Street to the east, by a boundary approximately halfway between Pine Street and California Street to the north, by Montgomery Street to the west, and by a boundary approximately halfway between Pine Street and Bush Street to the south. The Kearny-Belden Conservation District is a roughly rectangular shaped district generally bound by Pine Street to the north, by Kearny Street the west, by Bush Street to the south, and by a boundary approximately halfway between Kearny Street and Montgomery Street and to the east. The Kearny-Market-Mason-Sutter Conservation District is an irregularly shaped district generally bound by Kearny Street to the east, by Pine Street and Bush Street to the north, to the west by a boundary halfway between Taylor Street and Jones Street until O'Farrell Street to the south where it is bound halfway between Powell Street and Mason Street, and to the south by Market Street. A portion of the Civic Center Historic District is located in the Downtown Planning District and is generally bound by 7th Street to the northeast, McAllister Street to the north, the Western Addition Planning District boundary to the west, and Market Street to the south. There are approximately 15 Planning Code Article 10 Landmarks within the Downtown Planning District, including City Hall, Orpheum Theater, and Cadillac Hotel. Additionally, as discussed below, a number of Area Plans and Redevelopment have been prepared or are underway within the Downtown Planning District. The planning documents prepared for those efforts may also identify the historic resources within the Downtown Planning District. The Downtown Planning District includes the Downtown Area Plan, Golden Gateway Redevelopment Plan, East SoMa Area Plan, Civic Center Area Plan, Van Ness Area Plan, and Market/Octavia Area Plan.

Downtown Area Plan

The Downtown Area Plan governs the area located north of the SoMa area, east of the Civic Center, south of Nob Hill and west of the Northeast Waterfront. Downtown San Francisco is an international center of commerce and services. The C-3 zoning districts in downtown San Francisco represent the largest concentration of commercial activity and employment in the Bay Region. There are four principal kinds of commercial uses downtown: office, retail, hotel, and support commercial. More than 60 million square feet of office space combine with about 40 million square feet of retail, hotel, housing, cultural, institutional, industrial and other related space in this area. This total of over 100 million square feet of space provides employment opportunities for more than 280,000 City and Bay Area residents. Buildings

of taller height are permitted in the core financial district: along Market Street from Spear to 2nd Street and in areas both to the north and south of Market Street (roughly bounded between Drumm and Kearny Streets and Spear and 2nd Streets to the south). Some housing is located in this area, primarily in the Golden Gateway area west of Downtown and in residential hotels concentrated in Chinatown, North of Market, and South of Market along Sixth Street.

Golden Gateway Redevelopment Plan

The Golden Gateway is generally bounded by Front and Battery Streets on the west, Sacramento Street to the south next to downtown, Broadway to the north, and the Embarcadero to the east. Golden Gateway is the former location of San Francisco's dilapidated, congested marketplace for wholesale produce. With the assistance of the Redevelopment Agency, most of the produce firms were re-established in a modern produce terminal built for them near Islais Creek. Implementation of the Golden Gateway Redevelopment Project began in the early 1960's and has generated 1,400 new housing units, the construction of the 3.5 million square foot Embarcadero Center complex of offices, shops, an 840-room hotel and some 12 acres of public plazas and open space.

East SoMa Area Plan

The East SoMa planning area is a sub planning area located within the larger South of Market Area Plan. East SoMa is home to a mix of land uses, including commerce, entertainment and residential. Most of the buildings that exist now are small office or PDR spaces that line the major streets, while housing units are located in primarily two to four story buildings that line the small alleys of the residential enclave districts. Recently, this area has seen a vast amount of change, especially in housing development. Between 2002 and 2006, approximately 1,550 new residential units were constructed, primarily as market-rate ownership and live/work lofts. At the same time, "dot com" businesses moved into the area, many of which displaced existing jobs and residences. On occasion conflicts have arisen between some of these new office or residential uses and previously existing industrial uses, due to noise or other by-products of industrial businesses. This area faces the challenge of addressing the need to retain space for existing businesses and residential uses, while allowing space for new development.

Civic Center Area Plan

The Civic Center Area Plan was previously discussed under the description of the Western Addition area.

Van Ness Area Plan

The Van Ness Area Plan was previously discussed under the description of the Western Addition area.

Market/Octavia Area Plan

The Market and Octavia Redevelopment Plan was previously discussed under the description of the Central area.

In addition to the above referenced current Area Plans, Western SoMa and Transit Center District Plan are an ongoing planning effort (See Section V.A Plans and Policies). These planning efforts could provide approximately 4,000 additional housing units, some of which could occur within the Downtown Planning District.

South of Market

The South of Market Planning District is bordered to the north by the Downtown Planning District, to the west by the Mission Planning District, to the south by the South Bayshore Planning District, and to the east by the San Francisco Bay. Existing height limits within the South of Market Planning District range from 40 feet for residential and industrial land uses, 85 feet for PDR, and 550 feet for C-3-O uses located along Mission Street between Beale Street and 2nd Street. The Planning District is composed largely of RH-1, RH-2, RH-3, and C-3 land uses along Market Street. Pockets of urban mixed use zones are scattered throughout the district, but generally occur adjacent to 17th Street and between Interstate 280 and Illinois Street north of 22nd Street. The University of California San Francisco Campus is located along 7th Street in an area zoned MB-RA (Redevelopment Agency). A series of heavy industrial land uses are located adjacent the San Francisco Bay along the Embarcadero and Illinois Street in the district. MUR (Mixed Use Residential) buildings are prominent near the intersection of Folsom and 5th Street.

The South of Market Planning District has one conservation district, two historic districts, and one preservation district. The New Montgomery-Second Street Conservation District is an irregularly shaped district generally bound by 2nd Street to the east, by Market Street to the north, by a boundary approximately halfway between New Montgomery Street and 3rd Street to the west, and by Howard Street to the south. A portion of the South of Market Extended Preservation District is located in the South of Market Planning District and is generally bound by 6th Street to the northeast, by Mission Street to the northwest, by the Mission Planning District boundary to the southwest, and by Howard Street to the southeast. The Southend Historic District is an irregularly shaped district generally bound by Delancey Street to the northeast, by Bryant Street to the northwest, by a boundary between 2nd Street and 3rd Street to the southwest, and by Townsend Street and King Street to the southeast. The Dogpatch Historic District is an irregularly shaped district generally bound by 3rd Street and Tennessee Street to the east, a boundary approximately halfway between 18th Street and Mariposa Street to the north, Minnesota Street and Indiana Street to the west, and Tubbs Street and 22nd Street to the south. There are approximately 19 Planning Code Article 10 Landmarks within the South of Market Planning District, including the Third Street Bridge, Fire Boat House, and Saint Patrick's Church. Additionally, as discussed below, a number of Area Plans and Redevelopment have been prepared or are underway within the South of Market Planning District. The planning documents prepared for those efforts may also identify the historic resources within the South of Market Planning District. The South of Market Planning District includes the South of Market Area Plan, Rincon Hill Area Plan, Rincon Point – South Beach Redevelopment Plan, Mission Bay Redevelopment Plan, Showplace Square/Potrero Hill Area Plan, South of Market Redevelopment Plan, Yerba Buena Center Redevelopment Plan, Golden Gateway Redevelopment Plan, Central Waterfront Area Plan, and East SoMa Area Plan.

South of Market Area Plan

The SoMa area is located in northeastern San Francisco and is surrounded by the West SoMa, East SoMa, Downtown, and Civic Center areas. SoMa has functioned as a light industrial area and a home to the city's service workers since it was first settled in the late 1840s. Despite the many changes since it was first settled, the SoMa area continues to function as an important element in maintaining the health and stability of the City's broader economic base and cultural diversity. There are over 2,700 businesses located within the industrially-zoned lands south of Folsom Street. Land uses in the SoMa area generally consist of residential, retail, light industrial, business service, entertainment and office uses. The SoMa business community is diverse. It is not uncommon, for example, to find artists, metal fabricators, bakeries, wholesale beauty suppliers, musical instrument repair shops, and restaurants sharing space in the same building. The SoMa area also remains home to large amounts of low-cost rental housing for many of the City's low-income immigrants, service workers, and unemployed and under-employed residents. Most of the area's housing consists of small individual units located in two to four story wood-frame apartment buildings or flats which line the narrow side streets bisecting many of the large SoMa blocks. Two-thirds of the units are small — comprised of studios or residential hotel rooms. SoMa units are generally smaller, without parking or rear yards. Less than 15 percent of the units have two or more bedrooms, the unit size generally considered suitable for family housing.

Rincon Hill Area Plan

The Rincon Hill area is geographically defined by the hill itself, which crests near First and Harrison Streets; the Bay Bridge, near the southern edge of the district between Harrison and Bryant Streets; and the waterfront, which curves around the base of the hill. This area forms a gateway to the City as seen from the Bay Bridge due to the height of the hill and is prominently located adjacent to downtown and the waterfront. The district currently houses many parking lots, older industrial lots, as well as several recently built residential buildings. Existing land uses in the area include residential, mixed-use, industrial, commercial, retail/entertainment, parking, and institutional uses.

Rincon Point – South Beach Redevelopment Plan

Rincon Point-South Beach is a 115-acre redevelopment project composed of two non-contiguous geographic areas along San Francisco's northeastern waterfront. Much of the area was formerly characterized by dilapidated warehouses, open cargo storage yards, abandoned or underutilized buildings, several piers in unsound condition and an extensive network of underutilized street rights-of-way. Since 1981, the area has been transformed into a new mixed-use development. It is located south of the Ferry Building and adjacent to both the Financial District and the City's waterfront. Land uses in the redevelopment area generally include mixed-income housing, commercial, parks and open space, office uses, and recreation.

Mission Bay Redevelopment Plan

Mission Bay is located on the central bay shore, roughly bounded by Townsend Street on the north, Third Street and San Francisco Bay on the east, Mariposa Street on the south, and 7th Street and Interstate 280

on the west. The Board of Supervisors established the Mission Bay North and South Redevelopment Project Areas in November 1998. Development is controlled through the Redevelopment Plans and Designs for Development, Owner Participation Agreements between the Redevelopment Agency and master developer/land owner Catellus Development Corporation and Interagency Cooperation Agreements, which commit all City departments to the Mission Bay Infrastructure Plans. Land uses in Mission Bay consist primarily of open space, residential (mixed use including neighborhood-serving retail), hotel, institutional facilities, commercial industrial (mixed use including retail), public facilities (school, police, and fire) and retail.

Showplace Square/Potrero Hill Area Plan

The Showplace Square/Potrero Hill area is bounded to the west by the Mission, to the south by Bayview Hunter's Point, to the east by the Central Waterfront, and the north by the West SoMa and Mission Bay areas. The area was originally developed as a warehouse and industrial district serving nearby port facilities. After World War II, maritime activity at the Port of San Francisco declined substantially, prompting the renovation of the warehouses to provide furniture showroom space. Since this change, Showplace Square has provided space for a well-defined cluster of furniture makers, designers and contractors. Office and home furniture showrooms, re-upholstery shops, retail stores and small shops occupy the Showplace Square area. There are well over one hundred furniture businesses and showrooms in Showplace Square, many of which are located in the San Francisco Design Center that carries products by over 2,000 manufacturers. The current land use in the area remains predominantly PDR.

South of Market Redevelopment Plan

The South of Market Redevelopment Project area is bordered by Mission Street to the north, Seventh Street to the west, Harrison Street to the south, and Fifth Street to the east. Following the 1989 Loma Prieta Earthquake, the Board of Supervisors of the City of San Francisco adopted the South of Market Earthquake Redevelopment Plan on June 11, 1990. In accordance with the Community Redevelopment Financial Assistance and Disaster Project provisions of California Redevelopment Law, the Earthquake Recovery Redevelopment Plan was adopted solely for the purposes of repairing, restoring and/or replacing buildings and physical infrastructure damaged by the earthquake, and to provide economic development assistance to neighborhood-serving businesses and related establishments. The South of Market Redevelopment Plan is an amendment to the South of Market Earthquake Recovery Redevelopment Plan. The Redevelopment Plan includes provisions for affordable housing, single room occupancy (SRO) housing, other residential development, business and job development, human and social services, crime prevention, safety, communications, and transportation and parking. The Redevelopment Plan applies the Planning Code as the development controls within the Redevelopment Project Area.

Yerba Buena Center Redevelopment Plan

Yerba Buena Center is an 87-acre project, formerly an area of dilapidated hotels, commercial and industrial buildings and open parking lots. The project is located adjacent to the San Francisco downtown office and retail districts and includes the George Moscone Convention Center. It extends from Market

Street on the north to Harrison Street on the south and from Second Street on the east to the west property line along Fourth Street. The redevelopment plan proposes to provide residences for people of all incomes including low, moderate and market-rate rental and condominium units. Uses in the area include hotels, open space (gardens), retail, recreation, entertainment, parking, cultural facilities, and a children's center.

Golden Gateway Redevelopment Plan

The Golden Gateway Redevelopment Plan was previously discussed under the description of the Downtown area.

Central Waterfront Area Plan

The Central Waterfront Area Plan was previously discussed under the description of the South Bayshore area.

East SoMa Area Plan

The East SoMa Area Plan was previously discussed under the description of the Downtown area.

In addition to the above referenced current Area Plans, the Western SoMa Area Plan and Transit Center District Area Plan are ongoing planning efforts (See Section V.A Plans and Policies). These planning efforts could provide approximately 4,000 additional housing units, some of which could occur within the South of Market Planning District.

Mission

The Mission Planning District is bordered to the north by the Downtown, South of Market, and Buena Vista Planning Districts, to the west by the Central Planning District, to the south by the Bernal Heights Planning District, and to the east by the South of Market Planning District. The entire eastern border of the district fronts the 101 Freeway. Existing height limits within the district range from 40 feet for residential land uses, 55 to 85 feet for neighborhood commercial land uses, to 320 feet for commercial land uses. The majority of the Planning District is designated RH-1, RH-2, and RH-3. Commercial corridors zoned NCT and NCD are located along 24th Street, Valencia Street, and Mission Street, and Market Street. Multiple parks are located throughout the district, including Franklin Square and Folsom Playground. A portion of the northeastern Mission Planning District is designated SLR (Service, Light Industrial, Residential).

The Mission Planning District contains one historic district and a portion of one preservation district. The South of Market Extended Preservation District is an irregularly shaped district generally bound by the South of Market Planning District to the northeast, Mission Street to the north, 10th Street and 9th Street to the West, and Howard Street to the south. The Liberty-Hill Historic District is an irregularly shaped district generally bound by San Carlos Street and Valencia Street to the east, 20th Street to the north, Dolores Street to the west, and 22nd Street and 21st Street to the south.

There are approximately 19 Planning Code Article 10 Landmarks within the Mission Planning District, including the Oakley Residence, El Capitan Theater and Hotel, and National Guard Armory. Additionally, as discussed below, a number of Area Plans and Redevelopment have been prepared or are underway within the Mission Planning District. The planning documents prepared for those efforts may also identify the historic resources within the Mission Planning District. The Mission Planning District includes the Market and Octavia Redevelopment Plan, Mission Area Plan, Showplace Square/Potrero Hill Area Plan, and Western SoMa Area Plan.

Mission Area Plan

The Mission area is bounded by Guerrero Boulevard to the west, Potrero Avenue to the east, Division Street to the north and César Chávez Street to the south. The Mission area has a well-developed neighborhood infrastructure in close proximity to shops and restaurants, an architecturally rich and varied housing stock, rich cultural resources, and excellent transit access. There are about 17,000 units of housing in the Mission mixed with commercial, industrial, retail and other uses. Land uses in the Mission generally consist of mixed residential, commercial (mostly retail), and industrial. Retail is the predominant business type in the Mission. Mission and 24th Streets in particular offer a variety of shops and services including many small grocery stores, beauty shops and restaurants that serve the local neighborhood and reflect the predominantly Latino population. There are about 900 stores and restaurants in the Mission, employing nearly 5,000 people. Retail however, does not employ as many people as PDR activities. PDR businesses, concentrated in the northeast Mission, provide jobs for about 12,000 people. These businesses support San Francisco's service industry and include furniture makers, sound and video recording studios, wholesale distributors, auto repair shops, plumbing supply stores, lumber yards, and photography studios, and large PG&E and Muni facilities.

Market/Octavia Area Plan

The Market and Octavia Area Plan was previously discussed under the description of the Central area.

Showplace Square/Potrero Hill Area Plan

The Showplace Square/Potrero Hill Area Plan was previously discussed under the description of the South of Market area.

In addition to the above referenced current area plans, the Western SoMa Area Plan is an ongoing planning effort (See Section V.A Plans and Policies). This planning effort could provide 2,700 housing units, some of which could occur within the Mission Planning District.

Treasure Island

The Treasure Island area of the City is located northwest of the City and is surrounded by the San Francisco Bay. Treasure Island and Yerba Buena Island (collectively, "the Islands") are in San Francisco Bay, about halfway between the San Francisco mainland and Oakland. The area encompasses approximately 400 acres of land on Treasure Island, approximately 150 acres of land on Yerba Buena

Island and about 550 acres of tidal and submerged lands adjacent to the Islands. The Islands are the site of the former Naval Station Treasure Island (“NSTI”), which was owned by the United States Navy. NSTI was closed on September 20, 1997 as part of the Base Realignment and Closure III program. The Islands also include a U.S. Coast Guard Station and land occupied by the San Francisco-Oakland Bay Bridge and tunnel structures. No adopted preservation districts exist within in the Treasure Island Planning District.

In addition to the above referenced current Area Plans, the Treasure Island Redevelopment Plan is an ongoing planning effort (See Section V.A Plans and Policies). The planning documents prepared for this effort may also identify the historic resources within the Treasure Island Planning District. This planning effort could provide approximately 8,000 additional housing units, some of which could occur within the Treasure Island Planning District.

Pending Development/Pipeline Projects

As discussed in Section IV (Project Description), there are approximately 324 residential projects under construction or with approved building permits in the City that could, if built as approved, add up to 9,360 new housing units. An additional 538 projects have been approved by the Planning Department, filed an application for Planning approval, or filed for a building permit, but are not yet fully permitted for construction. These projects could result in an additional 45,430 new residential units. Collectively, these 54,790 new units represent San Francisco’s pipeline projects. In other words, “pipeline projects” include projects currently under construction, projects which have approved building permits, projects which have building department applications on file, projects which have been approved by the Planning Department, and projects which have Planning Department applications on file. These pending projects have been considered in the analysis.

REGULATORY SETTING

The City is subject to the applicable policies and zoning requirements of federal, state, regional and local plans. Therefore, as noted above, in addition to the thresholds of significance outlined in Appendix G, Environmental Checklist Form, of the State *CEQA Guidelines*, the local policies and guidelines associated with land uses as defined by the State of California and the City will be utilized for this analysis.

Federal

Coastal Zone Management Act

Under the Coastal Zone Management Act of 1972 (16 U.S.C. 1451, et seq.), local projects that affect the Coastal Zone and use federal funding or require federal approval must, to the greatest extent practicable, be consistent with the San Francisco Bay Conservation and Development Commission’s management program. As previously described under the “Western Shoreline Area Plan” discussion above, the Golden Gate Park, the Zoo, and Lake Merced contain 60 percent of the 1,771 acres that comprise the Coastal Zone area. Another 25 percent of the Coastal Zone is within the Golden Gate National Recreation Area.

State

State Planning and Zoning Law

California Government Code Section 65300 et seq. establishes the obligation of cities and counties to adopt and implement general plans. A general plan is a comprehensive, long-term, and general document that describes plans for the physical development of a city or county and of any land outside its boundaries that, in the city's or county's judgment, bears relation to its planning. A general plan addresses a broad range of topics, including, at a minimum, land use, circulation, housing, conservation, open space, noise, and safety. In addressing, these topics, a general plan identifies the goals, objectives, policies, principles, standards, and plan proposals that support the city's or county's vision for the area. The general plan is a long-range document that typically addresses the physical character of an area over a 20-year period. Finally, although a general plan serves as a blueprint for future development and identifies the overall vision for the planning area, it remains general enough to allow for flexibility in the approach taken to achieve the plan's goals.

As noted in the Project Description, the State Legislature has mandated that a Housing Element be included in every General Plan since 1969. The Housing Element is one of the seven required elements in a General Plan. California Government Code sections 65589-65589.8 sets forth the legal requirements for a Housing Element and encourages the provision of affordable and decent housing in all communities to meet Statewide goals. Specifically, Section 65580 states the Housing Element shall consist of "[...] an identification and analysis of existing and projected housing needs and a statement of goals, policies, quantified objectives, financial resources and scheduled programs for the preservation, improvement, and development of housing." The Housing Element must also contain a five-year housing plan with quantified objectives for the implementation of the goals and objectives described in the Housing Element. State Law requires that the Housing Element be updated periodically, at a minimum every five years.

Government Code Section 65583 requires that the Housing Element include the following components:

- A review of the previous element's goals, policies, programs, and objectives to ascertain the effectiveness of each of these components, as well as the overall effectiveness of the Housing Element.
- An assessment of housing needs and an inventory of resources and constraints related to the meeting of these needs.
- An analysis and program for preserving assisted housing developments.
- A statement of community goals, quantified objectives, and policies relative to the preservation, improvement and development of housing.
- A program which sets forth a five-year schedule of actions that the City is undertaking or intends to undertake, in implementing the policies set forth in the Housing Element.

California's Housing Element law requires that each city and county develop local housing programs designed to meet its "fair share" of housing needs for all income groups. The "fair share" allocation seeks to ensure that each jurisdiction accepts responsibility for the housing that represents the number of additional dwelling units that would be required to accommodate the anticipated growth in households, replace expected demolitions and conversions of housing units to non-housing uses, and achieve a future vacancy rate that allows for the healthy functioning of the housing market.

The State Zoning Law (California Government Code Section 65800 et seq.) establishes that zoning ordinances, which are laws that define allowable land uses within a specific district, are required to be consistent with the general plan and any applicable specific plans. When amendments to a general plan are made, corresponding changes in the zoning ordinance may be required within a reasonable time to ensure the land uses designated in the general plan would also be allowable by the zoning ordinance (California Government Code Section 65860[c]). San Francisco Planning Code section 101.1(d) applies this state law to San Francisco.

Regional

Land Use Policy Framework for the San Francisco Bay Area

In 1990, the Association of Bay Area Governments (ABAG) established a policy framework for future land use decision-making in the Bay Area. The policies and objectives framework includes coverage of direct growth issues, development patterns, housing opportunities, transit corridors and growth boundaries. These directives are described below:

Smart Growth Strategy Regional Livability Footprint Project

In 1999, five regional agencies of the Bay Region – ABAG, Bay Area Air Quality Management District (BAAQMD), Bay Conservation and Development Commission (BCDC), Metropolitan Transportation Commission (MTC), and the San Francisco Bay Regional Water Quality Control Board (SFRWQCB) – along with the economic, environmental, and social equity caucuses of the Bay Area Alliance for Sustainable Communities, initiated what is now known as the Smart Growth Strategy Regional Livability Footprint Project.³ The City and County of San Francisco became a sponsor of the Footprint Project in 2001. The project's underlying objective was to determine how the Bay Area could maintain its economic vitality and conserve natural resources while allowing all segments of society to share in the region's economic and environmental assets. The goal of the project was to develop a preferred land use pattern, or "Vision," to minimize sprawl, provide adequate and affordable housing, improve mobility, protect environmental quality, and preserve open space. The Vision would establish a process for the Bay Area to grow smarter and become more sustainable over the next 20 to 25 years and to develop policy-based projections, to frame other project goals to identify and secure regulatory changes, and to develop fiscal incentives that promote smart growth.

³ Association of Bay Area Governments, Smart Growth Strategy Regional Livability Footprint Project, October 2002.

The resulting policies provide a framework for decision making on development patterns, housing, transportation, environment, infrastructure, governmental fiscal health, and social equity that are intended to guide development of vibrant neighborhoods, preservation of open space, clean air and water, and enhanced mobility choices, while enhancing the Bay Area's relationship with surrounding regions. The Footprint Project is advisory, and therefore, does not establish land use restrictions for the City. However, the Footprint Project provides policy guidance in the Bay Area region for long-term, regional land use and transportation planning. Existing land uses in the City and those proposed by the General Plan generally reflect the patterns, types and intensity of land uses reflected in the Footprint Project.

Regional Housing Needs Assessment

As discussed in Chapter IV (Project Description), San Francisco's Regional Housing Needs Assessment for January 1999 through June 2006, the planning period for the 2004 Housing Element, was calculated as 20,372 units, or 2,717 units per year. The proposed 2009 Housing Element presents an updated calculation of San Francisco's fair share of the regional housing need. This updated calculation of San Francisco's share of the regional housing need, as determined by ABAG, is for January 2007 through June 2014 and shows a need for 31,193 housing units, or 4,159 units per year.

Regional Transportation Plan

The Regional Transportation Plan, is a comprehensive blueprint for the development of mass transit, highway, airport, seaport, railroad, bicycle and pedestrian facilities. Adopted in February 2005, the most recent edition of this long-range plan, known as Transportation 2030, charts a new course for the agency, particularly with regard to promoting "smart growth" development patterns. This plan is prepared and adopted by the Metropolitan Transportation Commission, a state agency tasked with planning, coordinating and financing transportation projects in the San Francisco Bay Area.

San Francisco Bay Conservation and Development Commission (BCDC) Strategic Plan

BCDC is the federally-designated state coastal management agency for the San Francisco Bay (Bay) segment of the California coastal zone. This designation empowers BCDC to use the authority of the federal Coastal Zone Management Act to ensure that federal projects and activities are consistent with the policies of the Bay Plan and state law. BCDC is dedicated to the protection and enhancement of San Francisco Bay, as well as the Suisun Marsh, and to the encouragement of their responsible use.⁴ BCDC adopted a strategic plan that includes ongoing goals and short term objectives. In 2007, BCDC adopted an updated strategic plan containing objectives including maintaining an active enforcement program, supporting environmental justice, and recognizing the importance of the Bay in promoting the region's economy. BCDC's jurisdiction is limited to the San Francisco Bay and the Suisun Marsh. Approximately 1,771 acres in San Francisco are under the jurisdiction of BCDC, most of which is San Francisco Port property.

⁴ http://www.bcdc.ca.gov/reports/strategic_status_rpt.pdf, retrieved June 2010.

Local

San Francisco General Plan

San Francisco is governed by the San Francisco General Plan. Government Code Section 65302 provides that the required elements of a general plan may be combined if the county or city complies with all requirements regarding the content of general plan elements. In the San Francisco General Plan, land use policies and maps are contained in the Land Use Index, which contains various land use policies from various elements in the General Plan and area plans, and relates these policies and maps to the State law requirements regarding the content of land use elements.

In addition, various provisions for land use planning are covered in the Housing Element, Commerce and Industry Element, Recreation and Open Space Element, Community Facilities Element, and Community Safety Element. The Commerce and Industry Element also discusses the population density and building intensity standards as well as discusses the distribution, location, and use of land for business and industry. The Recreation and Open Space Element describes and indicates the location for land used for open space and recreation. These land use policies are also discussed throughout the various Area Plans. The Community Facilities Element provides coverage of land-use issues such as education, public buildings, and waste disposal facilities. The Community Safety Element identifies areas subject to groundshaking from seismic hazards, flooding, landslides and liquefaction.

San Francisco Planning Code

Development in the City is subject to the zoning provisions contained in the City and County of San Francisco Planning Code to ensure consistency with the General Plan policies related to density, land use, design and development, resource conservation, public safety, and other pertinent matters.

San Francisco Bicycle Plan

The San Francisco Bicycle Plan created in 1997 with the oversight of the Bicycle Advisory Committee (a body formed by the Board of Supervisors) presents a guideline for the City to provide the safe and attractive environment needed to promote bicycling as a transportation mode. The Plan presents a comprehensive review of the many aspects of the policies, procedures, practices, and physical infrastructure of the City that affect bicycling. It recommends ways to make bicycling safer and more convenient through a variety of efforts including street improvements, bicycle parking facilities, new city policies, education programs, promotional efforts and transit access. The Bicycle Plan was last updated in June 2009.

Better Streets Plan

The Better Streets Plan consists of a comprehensive set of guidelines to make San Francisco streets more useable, attractive and accessible, to make them safer and more welcoming to pedestrians, to improve their ecological functioning, and to make them a more central point of civic life. At the time of the preparation of this Draft EIR, the Better Streets Plan is currently undergoing environmental review.

Chapter 35 of the San Francisco Administrative Code

Chapter 35 of the San Francisco Administrative Code “Residential and Industrial Compatibility and Protection” is designed to protect existing and future industrial businesses from potentially incompatible adjacent and nearby development. The City encourages the use of best available control technologies and best management practices whenever possible to further reduce the potential for incompatibility with other uses, including residential. Another goal of this ordinance is to protect the future residents of industrial and mixed-use neighborhoods by providing a notification process so that residents are made aware of some of the possible consequences of moving to an industrial or mixed-use neighborhood and by encouraging and, if possible, requiring, features in any new residential construction designed to promote the compatibility of residential and adjacent or nearby industrial uses.

San Francisco Redevelopment Agency Plans

The San Francisco Redevelopment Agency, formed in 1948, was established for the purpose of improving the environment of San Francisco and creating better urban living conditions through the removal of blight. Authorized and organized under the provisions of the California Community Redevelopment Law, the Agency is an entity legally separate from the City and County of San Francisco, but existing solely to perform certain functions exclusively for and by authorization of the City and County of San Francisco. The Agency operates primarily in redevelopment project areas designated by the Board of Supervisors. Redevelopment Plans within the City are discussed above.

San Francisco County Countywide Transportation Plan

Pursuant to state law, in 1990, the San Francisco County Transportation Authority was designated the Congestion Management Agency for San Francisco. The Transportation Authority is responsible for setting transportation investment priorities for the city, developing and maintaining a computerized travel demand forecasting model and related databases, and programming state and federal funds for local transportation projects. The Authority is also responsible for preparing a long-range Countywide Transportation Plan. The Countywide Transportation Plan is the City’s blueprint to guide transportation system development and investment over the next thirty years. The Plan is consistent with the broader policy framework of San Francisco’s General Plan and particularly its Transportation Element. The Countywide Transportation Plan further develops and implements General Plan principles by identifying needed transportation system improvements.

IMPACTS

Significance Thresholds

The proposed Housing Elements would normally have a significant effect on the environment if they would:

- Physically divide an established community;

- Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect; or
- Have a substantial impact upon the existing character of the vicinity.

Impact Evaluation

Section V.A (Plans and Policies) of this Draft EIR describes the Area Plans of the General Plan and Redevelopment Plan Areas adopted by the San Francisco Redevelopment Agency that serve to guide the nature of future development in specific neighborhoods or districts in the City. The City's General Plan includes adopted Area Plans for the following areas: Bayview Hunters Point, Central Waterfront, Chinatown, Civic Center, Downtown, East SoMa, Market & Octavia, Mission, Northeastern Waterfront, Showplace Square/Potrero, Rincon Hill, South of Market, Van Ness Avenue, and Western Shoreline. The San Francisco Redevelopment Agency maintains redevelopment plans for the following areas: Bayview Hunters Point, Federal Office Building, Golden Gateway, Hunters Point Shipyard, Mission Bay, Rincon Point - South Beach, South of Market, Transbay, Visitacion Valley, Western Addition A-1, and Yerba Buena Center. Redevelopment Areas also serve to guide the nature of future development in specific areas, and either contain special zoning and land use controls or specify that the controls of the San Francisco Planning Code apply.

Implementation of the proposed Housing Elements would not directly result in changes to applicable height and bulk zoning districts or to allowable uses under the Planning Code. Additionally, the 2004 Housing Element and 2009 Housing Element do not include any changes to any of the land use objectives and policies in the City's Area Plans or Redevelopment Plans. While implementation of the proposed Housing Elements would not directly affect existing Area Plans or Redevelopment Plans, it would encourage new Area Plans with similar planning-related strategies that may be designed to accommodate growth. Applicable Area Plans or Redevelopment Plans would continue to guide future development in specific neighborhoods or districts.

As noted before, ABAG, in coordination with the State Department of Housing and Community Development (HCD), uses population and job growth projections from the State Department of Finance to determine the regional housing needs for the Bay Area and allocates housing to cities and counties within the Bay Area through the Regional Housing Needs Allocation (RHNA). In providing direction for meeting regional housing needs, ABAG's RHNA number focuses on both the amount of housing and the affordability of housing. Currently, the City is generally meeting ABAG's most recent household projections and is slightly exceeding ABAG's latest population estimates. A variety of local factors support growth projections for San Francisco. The desirability of San Francisco, with its wealth of natural and urban amenities, has always appealed strongly to consumers. This desirability has resulted in continued high demand for housing, as evidenced by high property values and a growing population. Therefore, it is expected that residential development in the City would occur regardless of the proposed Housing Elements, and housing element law ensures that local agencies, including San Francisco, plan for

the development of, and make land available for, new housing. To meet the City's share of the RHNA, including its income requirements, the proposed Housing Elements aim to do the following: 1) preserve and upgrade existing housing units to ensure they do not become dilapidated, abandoned, or unsound, and 2) provide direction for how and where new housing development in the City should occur. With respect to the latter, the 2004 Housing Element encourages new housing in Downtown and in underutilized commercial and industrial areas. The 2004 Housing Element also encourages increased housing in neighborhood commercial districts and mixed use districts near Downtown. The 2009 Housing Element encourages housing in new commercial or institutional projects, housing projects near major transit lines, and accommodating housing in appropriate locations and densities through community planning efforts.

Impacts related to land use could occur if the proposed Housing Elements resulted in new development, including infrastructure, which would divide an established community. The 2004 and 2009 Housing Elements encourage future housing development in infill areas or on individual parcels, and future housing development would be expected to take place in established neighborhoods as shown in Figure IV-5 in Section IV (Project Description). The proposed 2004 and 2009 Housing Elements would not change allowable land uses already permitted by the City's Planning Code, therefore the proposed Housing Elements would not physically divide an established community. Furthermore, none of the policies in the 2004 or 2009 Housing Elements would encourage the division of a community. In fact, most policies would encourage residential growth in established areas within an established land use plan. For example, Policies 1.1, 1.2, 1.3, 1.4, and 1.5 of the 2004 Housing Element encourage housing in appropriate geographic locations as well as encouraging higher density and in-fill development. Therefore, implementation of these policies would not result in the division of an established community. Similarly, Policies 1.1, 4.6, 12.1, 12.3, 13.1, and 13.3 of the 2009 Housing Element encourage the development of strategically located housing near existing infrastructure or transit. Therefore, implementation of these policies would not result in the division of an established community. In addition, the 2004 and 2009 Housing Elements do not include any extensions of roadways or other development features through a currently developed area that could physically divide an established community. Therefore, implementation of either of the 2004 or 2009 Housing Elements would have ***no impact*** resulting from the division of an established community.

Impact LU-1: The proposed Housing Elements would not conflict with applicable land use plans, policy, or regulations. (Less than Significant)

Implementation of the 2004 Housing Element and 2009 Housing Element could result in impacts related to conflicts with existing land use policy, plans, or regulations if the Housing Elements resulted in housing development that was not consistent with zoning and land use designations as outlined in governing land use plans and/or the City's Planning Code to the extent those regulations help to avoid or mitigate potential environmental impacts. For example, if a height limit in a particular area was designed to avoid impacting a view from a public vantage point, there could be an impact from a policy that increased the height limits. However, as discussed throughout this document, the proposed Housing Elements would not result in changes to allowable land uses or height and bulk designations.

The following includes a general consistency discussion between City land use and planning policy documents and both the 2004 Housing Element and 2009 Housing Element. As stated in the analysis

below, one of the overall objectives of the Housing Elements is to direct housing to locations where residential growth is appropriate. It should be noted that there are some differences in the two Housing Elements in terms of where growth is directed. For example, the 2004 Housing Element encourages increased housing in commercial districts and mixed-use districts near Downtown. On the other hand, the 2009 Housing Element encourages housing in new commercial, institutional, or single use projects, near jobs and major transit lines, and in concert with community planning efforts. The discussion below analyzes the Housing Elements for consistency with the above regulatory plans and policies. The discussion distinguishes between the two Housing Elements and is focused on those policies that are considered “as adopted for the purpose of avoiding or mitigating an environmental effect.” A consistency discussion of the Housing Element policies with other citywide and regional policies can be found in Chapter V.A (Plans and Policies).

Land Use Plans, Policies, and Regulations

Area Plans and Redevelopment Plans

All future residential development in the Area Plan and Redevelopment Plan areas would continue to be subject to the policies in the applicable Area Plan or Redevelopment Plan. The Housing Elements would direct housing to locations where residential growth is appropriate, promote the retention of existing housing, and encourage the provision of affordable housing in accordance with San Francisco’s needs. The Housing Elements would not change policies contained in these plans, and the encouragement of housing in appropriate areas would be, on balance, consistent with the housing related goals contained in these plans. The Housing Elements encourage the continued development and implementation of other area plans. For example, 2004 Housing Element Policy 11.6 calls for land use controls through a Better Neighborhoods type planning process and 2009 Housing Element Policies 1.1 and 1.4 call for continued community planning processes to regulate and plan for housing growth. These policies imply the development of future area plans. Overall, the proposed Housing Elements would be consistent with the City’s Area Plans and Redevelopment Plans, and would not conflict with those plans. Therefore, impacts related to land use conflicts are *less than significant*.

ABAG’s Land Use Policy Framework for the San Francisco Bay Area

As discussed above, the goals of the Regional Livability Footprint Project (a component of the larger Land Use Policy Framework) are to develop a preferred land use pattern, provision of adequate affordable housing, improved mobility, environmental protection, and open space preservation. The policies of the Housing Elements would not conflict with the fundamentals of this framework. In fact, many of the Housing Element policies would serve to encourage the mission of this plan (see individual policy discussion in this section) by placing housing near transit; as well as by encouraging affordable housing, sustainability, and infill development. The RHNA (determined by ABAG) is also part of the larger land use policy framework for the region. As discussed in Chapter IV (Project Description), the RHNA is the foundation upon which the housing element policies are developed. By establishing and planning for the RHNA and accommodating new growth consistent with housing element law, the RHNA is not only consistent with ABAG’s Land Use Policy Framework but is designed to further its goals. The purpose of a housing element is to illustrate the ability to achieve the RHNA allocation designated by ABAG.

Overall, the proposed Housing Elements would be consistent with the Land Use Policy Framework and impacts related to land use conflicts are *less than significant*.

Regional Transportation Plan

As discussed above, the Regional Transportation Plan is a blueprint for the development of mass transit, highway, airport, seaport, railroad, bicycle and pedestrian facilities. The Housing Elements would not affect transportation facilities as the policies therein primarily serve to direct housing to locations where residential growth is appropriate, promote the retention of existing housing, and encourage provision of affordable housing in accordance with San Francisco's needs. Several of the policies would also encourage residential development near transit, which is consistent with the Regional Transportation Plan. Overall, the proposed Housing Elements would be consistent with the Regional Transportation Plan and impacts related to land use conflicts are *less than significant*.

BCDC Strategic Plan

As discussed above, the Housing Elements would not directly result in new residential development nor would they result in changes to zoning or height and bulk districts. Future development subsequent to the adoption of the Housing Elements requires adherence to prevailing local plans, including the BCDC policies as they relate to development. Furthermore, there are no policies within the Housing Elements that would result in development that would cause degradation to bay waters. Overall, the proposed Housing Elements would be consistent with the BCDC Strategic Plan and impacts related to land use conflicts are *less than significant*.

San Francisco General Plan

The relevant elements from the various General Plan Elements relevant to housing are outlined in Section V.A (Plans and Policies). A comparison between those elements outlined in Section V.A and the Housing Element policies as presented in Section IV (Project Description), and no conflicts were identified. Overall, the proposed Housing Elements would be consistent with the City's General Plan and impacts related to land use conflicts are *less than significant*.

San Francisco Countywide Transportation Plan

The Countywide Transportation Plan serves to lay the foundation for long-range transportation planning by setting transportation investment priorities for the City, developing and maintaining a computerized travel demand forecasting model and related databases, and programming state and federal funds for local transportation projects. Some of the goals of the Countywide Transportation Plan include promoting transit, reducing demand for private automobile trips, optimizing existing transportation facilities, and minimizing needed parking. The Housing Elements do not include policies that would conflict with these goals and would generally be supportive by encouraging development near transit to reduce the demand for private automobile trips and encourage the use of transit. Overall, the proposed Housing Elements would be consistent with the Countywide Transportation Plan and impacts related to land use conflicts are *less than significant*.

San Francisco MTA Strategic Plan

The MTA Strategic Plan is a transportation planning and development strategy that discusses the MTA's goals related to customer service and focus, community relations, financial capacity, MTA workforce, and information technology. The goal of these strategies is to provide adequate public transit services and to reduce congestion in the City by attracting new transit users. The Housing Elements do not include policies that would conflict with these goals and would generally be supportive by encouraging development near transit. Overall, the proposed Housing Elements would be consistent with the San Francisco MTA Strategic Plan and impacts related to land use conflicts are *less than significant*.

San Francisco Bicycle Plan

Policies contained in the Housing Elements are not anticipated to directly affect bicycle facilities. Future residential development would be required to comply with bicycle parking requirements. In general terms, because the Housing Elements encourage infill residential development outlined in the Planning Code, the future residential projects following adoption of the proposed Housing Elements would likely support the goals of the Bicycle Plan, which include (generally) policies related to the City's bicycle routes and bicycle parking. Overall, the proposed Housing Elements would be consistent with the Bicycle Plan and impacts related to land use conflicts are *less than significant*.

Better Streets Plan

At the time of the preparation of this Draft EIR, the Better Streets Plan is currently undergoing environmental review. Nonetheless, the Housing Elements would not conflict with the Better Streets Plan. Future residential development would be required to conduct street upgrades or pay into fair-share traffic funds as appropriate. Policies in the Housing Elements would not directly affect the City's street network. Overall, the proposed Housing Elements would be consistent with the Better Streets Plan and impacts related to land use conflicts are *less than significant*.

Urban Forest Plan

The Housing Elements do not include changes to allowable land uses, zoning, or changes to height and bulk designations. As such, future development would not occur on any of the City's urban forest areas. Overall, the proposed Housing Elements would be consistent with the Urban Forest Plan and impacts related to land use conflicts are *less than significant*.

Overall, the Housing Elements would promote measures that would increase the housing supply in a manner that does not present conflicts with existing land use plans, policies, or regulations. No direct zoning changes or height and bulk designation changes would take place and future development would comply with the discussed regulations and would comply with the governing land use plan. The Housing Elements would have a *less than significant* impact with respect to conflicts with land use plans, policies and regulations.

Impact LU-2: The proposed Housing Elements would not have a substantial impact upon the existing character of the vicinity. (Less than Significant)

The City includes a mix of land uses, including residential, neighborhood retail, institutional and cultural, commercial, industrial, and open space areas. This mix of land uses varies throughout the City: some areas are predominately residential in nature, some predominately commercial, and other areas contain a variety of mixed uses (commercial strips surrounded by residential uses or commercial and industrial areas with small amounts of residential). These various types and mixtures of land uses contribute to the existing land use character throughout the City. The proximity of housing to these various land uses has shaped the development of San Francisco. As discussed throughout this EIR, varied land uses exist within relatively close proximity to residential uses, providing needed services as well as housing in proximity to job cores.

Figures V.B-1 and V.B-2 show the available housing unit capacity and pipeline units that are anticipated to be developed, or have the potential for residential development, outside existing Commercial Districts and within Downtown and Mixed-Use Districts, respectively. As shown in Figure V.B-1, approximately 17,587 units in the City's pipeline occur outside the service area of one of the City's Commercial Districts (calculated as more than 1/4 mile from a commercial district), with capacity for additional 498 units. The areas of the City with the most pipeline or capacity units not served by a Commercial District include Park Merced, Hunters Point Shipyard, and Candlestick neighborhoods. Planning efforts are underway in these areas, and the intent of these efforts is to develop commercial uses to support the new residential development. As shown in Figure V.B-2, approximately 3,134 units in the City's pipeline occur within Downtown and Mixed Use Districts, with capacity for another 8,692 units in these areas. According to the land use inventory prepared by the City, the areas with the greatest potential for development near Downtown and Mixed Use Districts include Rincon Hill, East SoMa, and Mission. These figures reflect the trends that much of San Francisco's residential neighborhoods are located in relatively close proximity to a variety of land uses. The following discusses the potential for the 2004 and 2009 Housing Element policies to affect land use character.

2004 Housing Element Analysis

Implementation of the 2004 Housing Element Housing Element could result in impacts related to land use character if new housing is substantially out of scale with development in an existing neighborhood, or if new development is so different than existing development that the new development would change the existing character of an area. The following 2004 Housing Element policies promote residential development in certain areas of the City and promote increased residential densities. A substantial increase of residential uses in an area that has been traditionally dominated by non-residential uses could result in changes to land use character. Similarly, substantial increases in residential densities in traditionally low-density neighborhoods could result in changes to land use character. The potential for the 2004 Housing Element policies to affect land use character is addressed below.

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CITY AND COUNTY OF SAN FRANCISCO
PLANNING DEPARTMENT

Figure V.B-1 Potential Housing Units: Capacity and Pipeline Units within Areas Not Served by a Commercial District

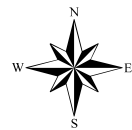
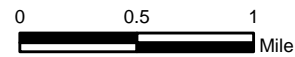
- Not within 1/2 Mile of a Neighborhood Commercial District or C-3 District
- Parks
- Water

Notes:

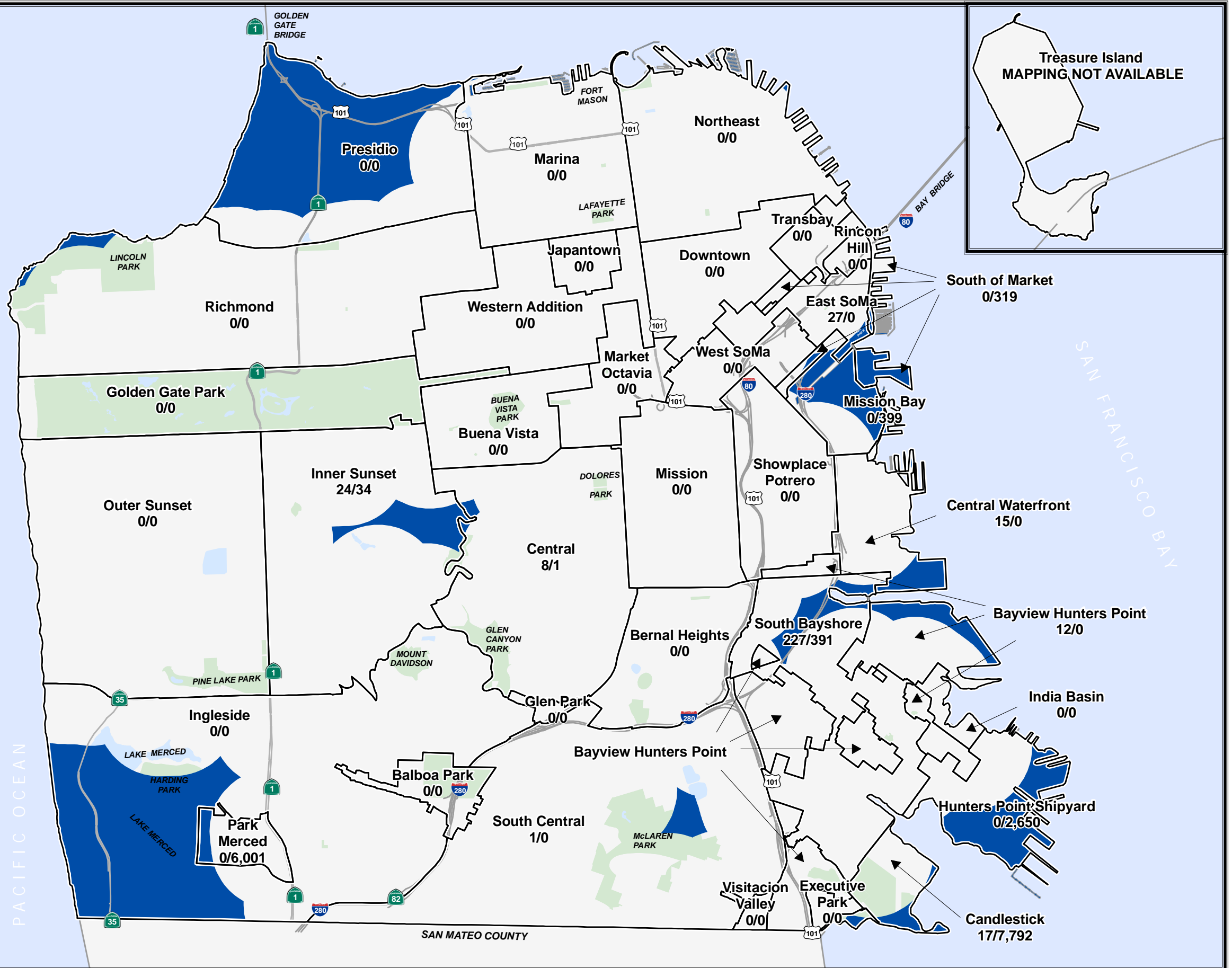
1. Numerical values represent housing capacity within areas not serviced by a commercial district followed by net pipeline units within these areas (Housing Unit Capacity/ Pipeline Units), except as noted below.

2. Within the Mission Bay, Hunters Point, Candlestick Point, Visitation Valley, and Treasure Island Redevelopment Areas, as well as the Park Merced area plan, the specific locations of housing units are unknown, therefore total net units anticipated under those plans are indicated.

3. C-3 districts allow for a variety of commercial uses, many of which serve neighborhood residents and therefore this zoning district was added to the map.



Sources:
Capacity and Pipeline: CCSF Planning Department, Q1 2009.
Areas Not Served by Commercial Districts: San Francisco General Plan, Commerce and Industry Element, Map 4, May 2010.



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CITY AND COUNTY OF SAN FRANCISCO
PLANNING DEPARTMENT

**Figure V.B-2
Potential Housing Units:
Capacity and Pipeline within
Downtown and
Mixed Use Districts**

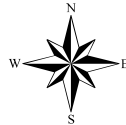
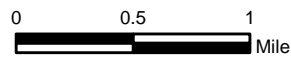
- Downtown and Mixed Use Districts
- Parks
- Water

Notes:

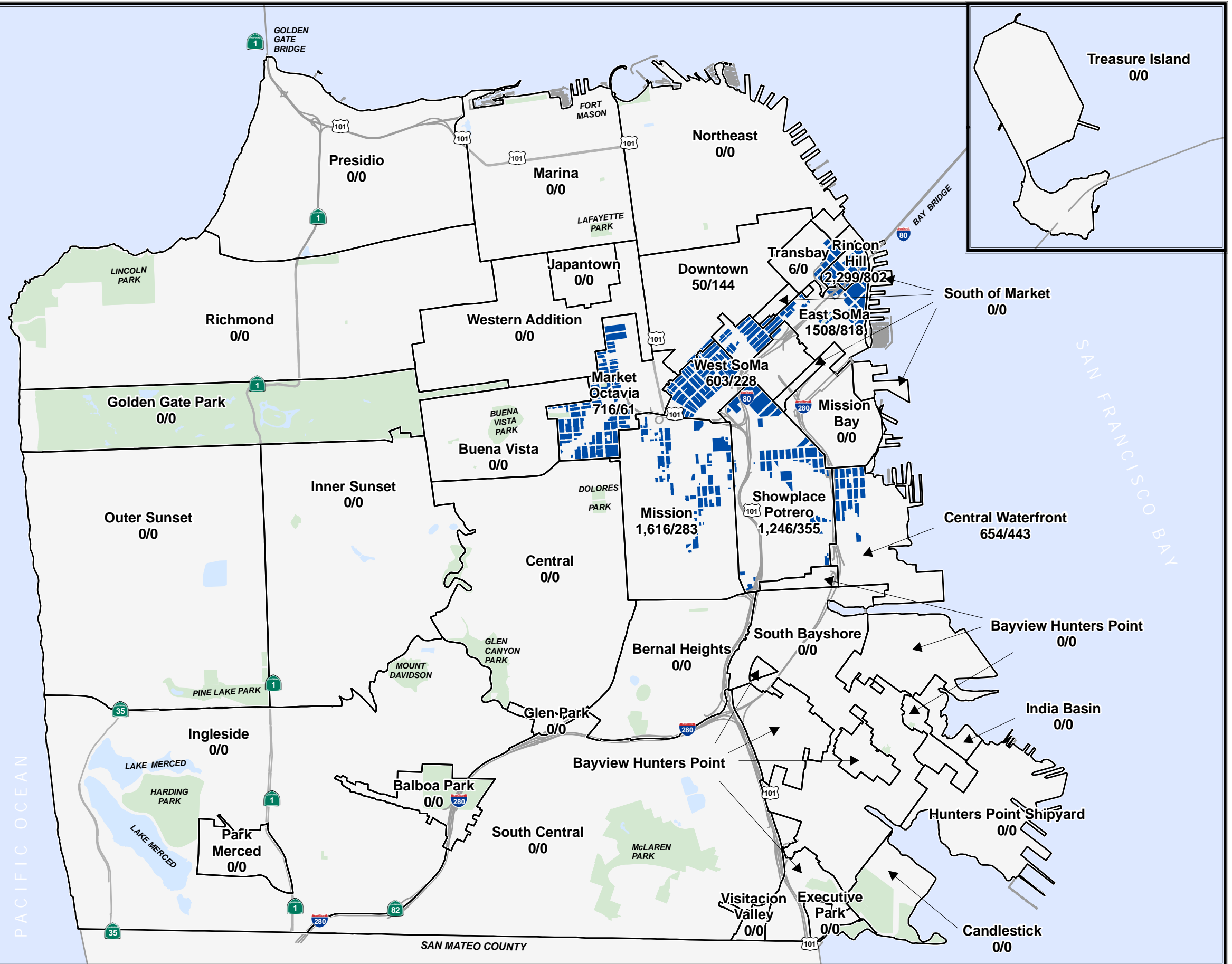
1. Numerical values represent housing capacity within the downtown and mixed use districts followed by net pipeline units within these districts (Housing Unit Capacity/ Pipeline Units), except as noted below.

2. Within the Mission Bay, Hunters Point, Candlestick Point, Visitacion Valley, and Treasure Island Redevelopment Areas, as well as the Park Merced area plan, the specific locations of housing units are unknown, therefore total net units anticipated under those plans are indicated.

3. For purposes of geographical representation Downtown and Mixed Use Districts are comprised of the following Zoning Districts: MUR, UMU, SPD, RED, RSD, SLR, RTO, RH-DTR, TB-DTR, SB-DTR.



Sources:
Capacity and Pipeline: CCSF Planning Department, Q1 2009.
Downtown and Mixed Use Districts: CCSF Planning Code, May 2010.



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Impact	2004 Housing Element	Corresponding 1990 Residence Element Policy
<p>Direct growth to certain areas of the City.</p>	<p>Policy 1.1: Encourage higher residential density in areas adjacent to downtown, in underutilized commercial and industrial areas proposed for conversion to housing and in neighborhood commercial districts where higher density will not have harmful effects, especially if the higher density provides a significant number of units that are affordable to lower income households. Set allowable densities in established residential areas at levels which will promote compatibility with prevailing neighborhood scale and character where there is neighborhood support.</p>	<p>Policy 2.1: Set allowable densities in established residential areas at levels which will promote compatibility with prevailing neighborhood character.</p> <p>Policy 2.2: Encourage higher residential density in areas adjacent to downtown, in underutilized commercial and industrial areas proposed for conversion to housing and in neighborhood commercial districts where higher density will not have harmful effects, especially if the higher density provides a significant number of units that are permanently affordable to lower income households.</p>
	<p>Implementation Measure 1.1.1: A Citywide action plan (CAP) should provide a comprehensive framework for the allocation of higher density, mixed-use residential development in transit-rich areas with stable urban amenities in place. In these areas, specific CAP strategies should include: higher densities and reduced parking requirements in downtown areas or through a Better Neighborhoods type planning process; pedestrian-oriented improvements to enhance the attractiveness and use of transit.</p>	
	<p>Policy 1.2: Encourage housing development, particularly affordable housing, in neighborhood commercial areas without displacing existing jobs, particularly blue-collar jobs or discouraging new employment opportunities.</p>	

Impact	2004 Housing Element	Corresponding 1990 Residence Element Policy
	<p>Implementation Measure 1.2.1: The Planning Department will develop proposals in neighborhood commercial districts (NCDs) well served by transit to strengthen their functions as a traditional “town center” for the surrounding residential districts.</p>	
	<p>Policy 1.3: Identify opportunities for housing and mixed-use districts near downtown and former industrial portions of the City.</p>	<p>Policy 1.2: Facilitate the conversion of underused industrial and commercial areas to residential use, giving preference to permanently affordable housing uses.</p>
	<p>Implementation Measure 1.3.1: Downtown areas and areas subject to a Better Neighborhoods type planning process will be expected to absorb major office and residential developments over the next decade. Planning and zoning code changes should include floor-to-area ratio exemptions. These development bonuses would be conferred only in cases where in return the development will provide major public benefits to the community.</p>	<p>Implementation Measure 1.1.3: Inclusion of housing in Downtown.</p>
	<p>Implementation Measure 1.3.2: The Planning Department will introduce zoning changes in the traditionally industrial eastern parts of the City. The areas under study are: Mission, South of Market, Showplace Square/Potrero Hill, Bayview Hunter’s Point, and Visitacion Valley. Housing, especially affordable housing, will be encouraged in former industrial areas where residential neighborhoods are established and urban amenities are in place or feasible.</p>	
	<p>Policy 1.4: Locate in-fill housing on appropriate sites in established residential neighborhoods.</p>	<p>Policy 1.4: Locate in-fill housing on appropriate sites in established neighborhoods.</p>

Impact	2004 Housing Element	Corresponding 1990 Residence Element Policy
	<p>Policy 1.6: Create incentives for the inclusion of housing, particularly permanently affordable housing, in new commercial development projects.</p>	
	<p>Implementation Measure 1.6.2: The Planning Department and the Redevelopment Agency will propose increasing height limits, eliminating density requirements and modifying off-street parking requirements in the Transbay/Rincon Hill Redevelopment survey areas. The Mid-Market redevelopment survey area will be rezoning to include mixed-use residential areas and reduced residential parking requirements.</p>	
	<p>Implementation Measure 1.6.4: The Planning Department will update the Land Use Element to define areas for mixed-use development focused along transit corridors that are determined to be served by sufficient and reliable transit.</p>	
	<p>Implementation Measure 1.8.1: The Board of Supervisors has introduced Planning Code amendments to allow secondary units in new buildings that are in close proximity to neighborhood commercial districts and public transit.</p>	
	<p>Implementation Measure 2.4.2: As part of the Planning Department's current citywide action plan, planning efforts in the eastern neighborhoods of the City, where housing exists in commercial and industrially zoned districts, should address housing retention as new policies and zoning are established. Mixed use should be encouraged where appropriate.</p>	

Impact	2004 Housing Element	Corresponding 1990 Residence Element Policy
	<p>Implementation Measure 4.1.4: The City will work to identify underutilized, vacant, and Brownfield sites that are publicly or privately owned and suitable for affordable housing development. TH City will work with for profit and non-profit housing developers to acquire these sites for permanently affordable housing.</p>	<p>Implementation Measure 1.1.1: Aggressive pursuit of development opportunities [on] underused public sites.</p> <p>Implementation Measure 1.1.4: In-fill housing on vacant or underused sites.</p>
	<p>Implementation Measure 4.1.6: Permanently affordable housing sites will be especially sought out in places where transportation and existing amenities are in place.</p>	
	<p>Policy 11.6: Employ flexible land use controls in residential areas that can regulate inappropriately sized development in new neighborhoods, in downtown areas and in other areas through a Better Neighborhoods type planning process while maximizing the opportunity for housing near transit.</p>	<p>Policy 12.5: Relate land use controls to the appropriate scale for new and existing residential areas.</p>
	<p>Implementation Measure 11.6.1: The City will continue to promote increased residential densities in areas well served by transit and neighborhood compatible development with the support and input from local neighborhoods.</p>	

Impact	2004 Housing Element	Corresponding 1990 Residence Element Policy
<p>Promote increased density-related development standards</p>	<p>Policy 1.1: Encourage higher residential density in areas adjacent to downtown, in underutilized commercial and industrial areas proposed for conversion to housing and in neighborhood commercial districts where higher density will not have harmful effects, especially if the higher density provides a significant number of units that are affordable to lower income households. Set allowable densities in established residential areas at levels which will promote compatibility with prevailing neighborhood scale and character where there is neighborhood support.</p>	<p>Policy 2.1: Set allowable densities in established residential areas at levels which will promote compatibility with prevailing neighborhood character.</p> <p>Policy 2.2: Encourage higher residential density in areas adjacent to downtown, in underutilized commercial and industrial areas proposed for conversion to housing and in neighborhood commercial districts where higher density will not have harmful effects, especially if the higher density provides a significant number of units that are permanently affordable to lower income households.</p>
	<p>Implementation Measure 1.1.1: A Citywide action plan (CAP) should provide a comprehensive framework for the allocation of higher density, mixed-use residential development in transit-rich areas with stable urban amenities in place. In these areas, specific CAP strategies should include: higher densities and reduced parking requirements in downtown areas or through a Better Neighborhoods type planning process; pedestrian-oriented improvements to enhance the attractiveness and use of transit.</p>	
	<p>Implementation Measure 1.3.1: Downtown areas and areas subject to a Better Neighborhoods type planning process will be expected to absorb major office and residential developments over the next decade. Planning and zoning code changes should include floor-to-area ratio exemptions. These development bonuses would be conferred only in cases where in return the development will provide major public benefits to the community.</p>	<p>Implementation Measure 1.1.3: Inclusion of housing in Downtown (allowing housing to exceed permitted Floor-Area-Ratios [FARs] in C-3-G and C-3-S Districts).</p>

Impact	2004 Housing Element	Corresponding 1990 Residence Element Policy
	<p>Policy 1.6: Create incentives for the inclusion of housing, particularly permanently affordable housing, in new commercial development projects.</p>	<p>Policy 1.3: Create incentives for the inclusion of housing, particularly permanently affordable housing, in new commercial development projects.</p>
	<p>Implementation Measure 1.6.2: The Planning Department and the Redevelopment Agency will propose increasing height limits, eliminating density requirements and modifying off-street parking requirements in the Transbay/Rincon Hill Redevelopment survey areas. The Mid-Market redevelopment survey area will be rezoning to include mixed-use residential areas and reduced residential parking requirements.</p>	
	<p>Policy 1.7: Encourage and support the construction of quality, new family housing.</p>	
	<p>Implementation Measure 1.7.1: In response to the increasing number of families in San Francisco, the Planning Department will develop zoning amendments to require a minimum percentage of larger family units ranging from two to four bedrooms, in new major residential projects. The Planning Department will also propose eliminating density requirements within permitted building envelopes in downtown areas and areas subject to a Better Neighborhoods type planning process to maximize family units constructed.</p>	

Impact	2004 Housing Element	Corresponding 1990 Residence Element Policy
	<p>Policy 1.8: Allow new secondary units in areas where their effects can be dealt with and there is neighborhood support, especially if that housing is made permanently affordable to lower income households.</p>	<p>Policy 1.5: Allow new secondary units in areas where their effects can be dealt with and there is neighborhood support, especially if that housing is made permanently affordable to lower income households.</p>
	<p>Implementation Measure 1.8.1: The Board of Supervisors has introduced Planning Code amendments to allow secondary units in new buildings that are in close proximity to neighborhood commercial districts and public transit.</p>	
	<p>Implementation Measure 1.8.3: On-going planning will propose Planning Code amendments to encourage secondary units where appropriate.</p>	
	<p>Policy 4.4: Consider granting density bonuses and parking requirement exemptions for the construction of affordable housing or senior housing.</p>	<p>Policy 7.3: Grant density bonuses for construction of affordable or senior housing.</p>
	<p>Implementation Measure 4.4.1: The Planning Department will look at establishing uniform density bonus standards and equal requirements for affordable and senior housing development. Until then, affordable and senior housing will continue to be granted density bonuses and reduced parking requirements on a case-by-case basis.</p>	
	<p>Policy 4.5: Allow greater flexibility in the number and size of units within established building envelopes, potentially increasing the number of affordable units in multi-family structures.</p>	<p>Policy 2.3: Allow flexibility in the number and size of units within permitted volumes of larger multi unit structures, especially if the flexibility results in creation of a significant number of dwelling units that are permanently affordable to lower income households.</p>

Impact	2004 Housing Element	Corresponding 1990 Residence Element Policy
	<p>Policy 11.6: Employ flexible land use controls in residential areas that can regulate inappropriately sized development in new neighborhoods, in downtown areas, and in other areas through a Better Neighborhoods type planning process while maximizing the opportunity for housing near transit.</p>	<p>Policy 12.5 Relate land use controls to the appropriate scale for new and existing residential areas.</p>
	<p>Implementation Measure 11.6.1: The City will continue to promote increased residential densities in areas well served by transit and neighborhood compatible development with the support and input from local neighborhoods.</p>	
	<p>Policy 11.7: Where there is neighborhood support, reduce or remove minimum parking requirements for housing, increasing the amount of lot area available for housing units.</p>	
	<p>Implementation Measure 11.7.1: The Planning Department will work to reduce parking in older neighborhoods through a Better Neighborhoods type planning process with the support and input from local neighborhoods.</p>	
	<p>Policy 11.8: Strongly encourage project sponsors to take full advantage of allowable building densities in their housing developments while remaining consistent with neighborhood character.</p>	
	<p>Policy 11.9: Set allowable densities and parking standards in residential areas at levels that promote the City’s overall housing objectives while respecting neighborhood scale and character.</p>	<p>Policy 2.1: Set allowable densities in established residential areas at levels which will promote compatibility with prevailing neighborhood character.</p>

As shown above, the 2004 Housing Element promotes housing in commercial (Policies 1.1, 1.6) and industrial (Policies 1.1, 1.3) areas, neighborhood commercial districts (Policy 1.2 and Implementation Measure 1.2.1), housing near the Downtown (Policies 1.1, 1.3 and Implementation Measure 1.3.1) and along transit corridors (Policies 1.6, 11.6 and Implementation Measures 1.1.1, 1.6.4, 1.8.1, 4.1.6, and 11.6.1). The 2004 Housing Element also encourages new housing through on-going and future community planning processes (Policies 1.1, 11.6 and Implementation Measures 1.3.1, 1.3.2, 1.6.2, and 2.4.2) and on underutilized, vacant, surplus lands and on Brownfield sites (Implementation Measure 4.1.4). Current housing development in the City has been guided under the 1990 Residence Element, which in turn has contributed to the existing character of the City. Policies that direct growth to certain areas of the City could increase the amount of new housing occurring in those areas, thereby resulting in a shift in land use character. For example, the 2004 Housing Element promotes housing in commercial and underutilized industrial areas, and potentially increases residential uses in neighborhoods that are predominately characterized by non-residential uses. Similarly, 2004 Housing Element Implementation Measure 1.3.2 specifies individual areas where study of the interface between residential and industrial uses would be appropriate. For the most part, the areas mentioned in 2004 Housing Element Implementation Measure 1.3.2 comprise the Eastern Neighborhoods portion of the City. The potential for the 2004 Housing Element to introduce land uses that are inconsistent with the existing land use character is further addressed below.

The 2004 Housing Element promotes increased density in certain areas of the City (Policy 1.1 and Implementation Measure 1.1.1, 1.8.1 and 11.6.1) and promotes density bonuses (Policy 4.4 and Implementation Measures 1.3.1 and 4.4.1) and the elimination of density requirements (Policy 1.6 and Implementation Measures 1.6.2 and 1.7.1). The 2004 Housing Element also encourages increased density by promoting reduced parking requirements (Policies 4.4, 11.7, 11.9 and Implementation Measures 1.1.1, 1.6.2, 4.4.1, 11.7.1), support for secondary units (Policy 1.8 and Implementation Measures 1.8.1 and 1.8.3) and flexible building envelopes (Policies 4.5 and 11.6). Increased density standards could result in more units within a given building envelope. Density bonuses and elimination of density requirements altogether could result in larger building masses as well, also resulting in changes to land use character. 2004 Housing Element Policies 1.1, 1.3, 4.4, and Implementation Measures 1.3.2 and 2.4.2 could increase development by encouraging density bonuses, identifying and encouraging higher residential density in underutilized commercial and industrial areas, granting parking requirement exemptions, and increasing buildable area. This increase in development standards could potentially result in impacts to the character of existing areas by introducing higher density development areas of the City that are traditionally dominated by lower densities.

Although the 2004 Housing Element could direct residential growth to certain areas of the City that are dominated by other land uses and could incrementally increase allowable residential densities, the 2004 Housing Element would not change allowable land uses or increase allowable building height and bulk. Furthermore, the following 2004 Housing Element policies could reduce potential impacts to land use character by ensuring new residential development is consistent with the existing neighborhood character and directly encouraging the preservation of neighborhood character. This could serve to reduce conflicts

between new development and existing land use character by encouraging compatible development and infill housing.

Impact	2004 Housing Element	Corresponding 1990 Residence Element Policy
Ensures that new residential development is located in existing residential areas.	Policy 1.4: Locate in-fill housing on appropriate sites in established residential neighborhoods.	Policy 1.4: Locate infill housing on appropriate sites in established neighborhoods.
Ensures that new housing makes a positive contribution to neighborhood vitality.	Policy 11.2: Ensure housing is provided with adequate public improvements, services, and amenities.	Policy 12.1: Assure housing is provided with adequate public improvements, services and amenities.
Ensures housing is consistent with existing neighborhood character.	Policy 11.8: Strongly encourage project sponsors to take full advantage of allowable building densities in their housing developments while remaining consistent with character.	
	Policy 11.9: Set allowable densities and parking standards in residential areas at levels that promote the City's overall housing objectives while respecting neighborhood scale and character.	Policy 2.1: Set allowable densities in established residential areas at levels which will promote compatibility with prevailing neighborhood character.
Reduce conflicts with the San Francisco Planning Code.	Policy 2.6: Consider legalization of existing illegal secondary units where there is neighborhood support and the units can conform to minimum Code standards of safety and livability and the permanent affordability of the units is assured.	Policy 3.3: Consider legalization of existing illegal secondary units where there is neighborhood support and the units can conform to minimum Code standards of safety and livability and the permanent affordability of the units is assured.
Allow flexibility in land use controls.	Policy 11.6: Employ flexible land use controls in residential areas that can regulate inappropriately sized development in new neighborhoods, in downtown areas and in other areas through a Better Neighborhoods type planning process while maximizing the opportunity for housing near transit.	Policy 12.5: Relate land use controls to the appropriate scale for new and existing residential areas.

Development under the 1990 Residence Element recognized the need to maintain compatible land uses and preserve existing neighborhood character. Neighborhood character is distinguished from land use character in that land use character is generally concerned with the physical environment and considers

such factors as land use compatibility, heights and bulk of existing structures. As the 2004 Housing Element would not change allowable land uses or building height and bulk, development potential under the 2004 Housing Element would not be substantially greater than that under the 1990 Residence Element policies.

Overall, the 2004 Housing Element seeks to use new housing development as a means to enhance neighborhood vitality and diversity by identifying appropriate mixed-use infill sites and encouraging neighborhood services and amenities. Thus, even though the concept of enhancing neighborhood vitality and diversity could be viewed as having a greater potential to change existing neighborhood character than the concept of conserving character, mixed use infill development would be reviewed for appropriateness and any resulting changes in land use character would be not be substantial.

As shown in Figures V.B-1 and V.B-2, housing currently exists within commercial and mixed-use neighborhoods in San Francisco and there is additional capacity to accommodate new housing within these areas. Therefore, promoting residential uses in these areas would not substantially change the existing land use character. Furthermore, the 2004 Housing Element encourages residential uses in areas that can adequately serve new residents, such as areas near commercial districts and/or in close proximity to existing transit. Although incremental increases of residential uses and density in non-residential areas or in lower density neighborhoods could introduce increase the amount of residential uses in that area, overall additional residential uses would not result in substantial changes to land use character because those uses are existing and allowable uses. Additionally, new construction is required to be developed in accordance with existing area plans, zoning, and other land use controls, and these regulations would ensure consistency among land use character.

The 2004 Housing Element Implementation Measure 1.3.2 identifies individual areas where the study of interface between residential and industrial uses would be appropriate. The zoning changes have been or will be evaluated in the appropriate environmental reviews that are required. For the most part, the areas mentioned in 2004 Housing Element Implementation Measure 1.3.2 comprise the Eastern Neighborhoods portion of the City. As outlined in the Eastern Neighborhoods EIR, future development built in accordance with the Eastern Neighborhood area plans would result in more cohesive neighborhood subareas that would exhibit greater consistency in land use and building types and would include more clearly defined residential neighborhoods and commercial corridors. 2004 Housing Element Implementation Measure 2.4.2 addresses the retention of residential uses in industrial areas. Similar to Implementation Measure 1.3.2, this issue has been fully analyzed in the Eastern Neighborhoods EIR and was found to have a less than significant impact on land use character.

Additionally, while 2004 Housing Element Policies 11.9 and 11.8 allow for changes to parking standards in residential areas, these policies also require that those changes be set at levels that respect neighborhood character. Furthermore, 2004 Housing Element Policy 11.6 calls for adoption of flexible land use controls which could increase housing opportunities near transit, but this policy also calls for the protection of neighborhood character. Thus, some policies of the 2004 Housing Element could reduce potential impacts to neighborhood character that may result from incremental increases in density.

Overall, the 2004 Housing Element includes policies that would maintain consistency with existing neighborhood and land use character through the encouragement of in-fill development in a manner that does not present conflicts with the existing character of the vicinity. Furthermore, the 2004 Housing Element would not directly result in changes to zoning or height and bulk designations. New housing would be required to comply with the previously discussed regulations, the governing land use plan, the City's Residential Design Guidelines, and the Urban Design Element of the General Plan, which is concerned with the physical character and environment of the City with respect to development and preservation. Finally, Chapter 35 of the City's Administrative Code further reduces incompatibilities between residential and industrial uses. Therefore, the 2004 Housing Element would have a *less than significant* impact with respect to conflicts with existing land use character.

2009 Housing Element Analysis

Implementation of the 2009 Housing Element could result in impacts related to existing character if new housing is out of scale with development in an existing neighborhood or if new development is so different it would change the existing character of an area. The following 2009 Housing Element policies promote residential development in certain areas of the City and promote increased residential densities. The potential for these policies to affect land use character is addressed below.

Impact	2009 Housing Element	Corresponding 1990 Residence Element Policy
Direct growth to certain areas of the City.	Policy 1.1: Focus housing growth- and the infrastructure necessary to support that growth- according to community plans. Complete planning underway in key opportunity areas such as Treasure Island, Candlestick Park and Hunters Point Shipyard.	Implementation Measure 1.1.2: Pursuit of housing development opportunities in neighborhood and area plans.
	Policy 1.3: Work proactively to identify and secure opportunity sites for permanently affordable housing.	Policy 1.1: Promote development of permanently affordable housing on surplus, underused and vacant public lands.
	Policy 1.6: Consider greater flexibility in the number and size of units within established building envelopes in community plan areas, especially if it can increase the number of affordable units in multi-family structures.	2.5: Allow flexibility in the number and size of units within permitted volumes of larger multi-unit structures, especially if the flexibility results in creation of a significant number of dwelling units that are permanently affordable to lower income households.

Impact	2009 Housing Element	Corresponding 1990 Residence Element Policy
	Policy 1.7: Consider public health objectives when designating and promoting housing development sites.	Policy 12.1: Assure housing is provided with adequate public improvements, services and amenities.
	Policy 1.8: Promote mixed use development, and include housing, particularly permanently affordable housing, in new commercial, institutional or other single use development projects.	Policy 1.3: Create incentives for the inclusion of housing, including permanently affordable housing in commercial developments.
	Policy 4.6: Encourage an equitable distribution of growth according to infrastructure and site capacity.	Policy 12.1: Assure housing is provided with adequate public improvements, services and amenities.
	Policy 10.3: Support state legislation and programs that promote environmentally favorable projects.	
	Policy 12.1: Encourage new housing that relies on transit use and environmentally sustainable patterns of movement.	
	Policy 12.2: Consider the proximity of quality of life elements, such as open space, child care and neighborhood services, when development new housing units.	
	Policy 13.1: Support “smart” regional growth that locates new housing close to jobs and transit.	
	Policy 13.3: Promote sustainable land use patterns that integrate housing with transportation via transit, pedestrian, and bicycle modes.	
	Implementation Measure 3: Consistent with the SFMTA’s Climate Action Plan, MOH shall work with MTA to identify Muni sites that can serve as potential housing sites.	

Impact	2009 Housing Element	Corresponding 1990 Residence Element Policy
	<p>Implementation Measure 4: The Mayor’s Office of Housing (MOH) shall continue to actively pursue surplus or underused publicly-owned land for housing potential, working with agencies not subject to the Surplus Property Ordinance such as the San Francisco Public Utilities Commission, SFUSD and the Municipal Transportation Agency to identify site opportunities. City agencies shall continue to survey their properties for affordable housing opportunities or joint use potential.</p>	<p>Implementation Measure 1.1.1: Aggressive pursuit of development opportunities [in] underused public sites.</p> <p>Implementation Measure 1.1.4: In-fill housing on vacant or underused sites.</p>
	<p>Implementation Measure 6: To further smaller scale TOD opportunities, Planning and MTA shall evaluate smaller surplus MTA-owned sites (typically surface parking lots) and identify barriers towards their redevelopment, such as Planning Code issues, neighborhood parking needs and communities sentiment.</p>	
	<p>Implementation Measure 8: Planning, Redevelopment and Mayor’s Office of Economic and Workforce Development (MOEWD) should complete long range planning processes already underway: Japantown, Glen Park, the Northeast Embarcadero Study, the Bayview Hunters Point Plan, Candlestick/ Hunters Pont, India Basin shoreline community planning process, Treasure Island, and Hunters Point.</p>	

Impact	2009 Housing Element	Corresponding 1990 Residence Element Policy
	<p>Implementation Measure 14: Planning staff shall prioritize support for projects which are located within a reasonable walking distance of stops along major transit lines, including BART, Muni rail lines and “Muni’s 24-hour Rapid Network.”</p>	
	<p>Implementation Measure 74: The City shall coordinate with regional entities to complete the necessary planning document for SB 375, including a “Sustainable Community Strategy” which promotes sustainable growth; and corresponding updates to the Housing, Recreation and Open Space, and Land Use Elements of the General Plan.</p>	
	<p>Implementation Measure 80: In development of new community plans, Planning shall include mixed-use design standards for both residential and commercial buildings.</p>	
	<p>Implementation Measure 85: Planning shall ensure community plans for growth are accompanied by capital plans and programs to support both the “hard” and “soft” elements of infrastructure needed by new housing.</p>	<p>Implementation Measure 7.7.1: Acquisition and improvement of open space; facilities and public environmental improvements in six neighborhood strategy areas; street improvements; parking facilities in neighborhoods; transit and street improvements.</p>
	<p>Implementation Measure 90: Planning and SFMTA should coordinate housing development with the ongoing Transit Effectiveness Project.</p>	

Impact	2009 Housing Element	Corresponding 1990 Residence Element Policy
	<p>Implementation Measure 94: Regional planning entities such as ABAG shall continue to prioritize regional transportation decisions and funding to “smart” local land use policies that link housing, jobs and other land uses, including focusing on VMT reduction. The City shall encourage formalization of state policy that similarly prioritizes transportation and infrastructure dollars for “smart growth” areas such as San Francisco, rather than geographic allocation.</p>	
	<p>Implementation Measure 97: On a local level, the City shall prioritize planned growth areas such as Better Neighborhoods, other Area Plans or Redevelopment Areas for regional, state, and federal bond and grants, especially for discretionary funding application processes such as the State’s Prop 1C.</p>	
<p>Promote increased density-related development standards</p>	<p>Policy 1.4: Ensure changes to land use controls are proposed through neighborhood-supported community planning processes.</p>	<p>Policy 2.1: Set allowable densities in established residential areas at levels which will promote compatibility with prevailing neighborhood character.</p> <p>Policy 2.2: Encourage higher residential density in areas adjacent to downtown, in underutilized commercial and industrial areas proposed for conversion to housing and in neighborhood commercial districts where higher density will not have harmful effects, especially if the higher density provides a significant number of units that are permanently affordable to lower income households.</p>

Impact	2009 Housing Element	Corresponding 1990 Residence Element Policy
	Policy 1.5: Consider secondary units in community plans where there is neighborhood support and when other neighborhood goals can be achieved, especially if that housing is made permanently affordable to lower-income households.	Policy 1.5: Allow new secondary units in areas where their effects can be dealt with and there is neighborhood support, especially if that housing is made permanently affordable to lower income households.
	Policy 1.6: Consider greater flexibility in number and size of units within established building envelopes in community plan areas, especially if it can increase the number of affordable units in multi-family structures.	Implementation Measure 1.1.3: Inclusion of housing in Downtown (allowing housing to exceed permitted Floor-Area-Ratios [FARs] in C-3-G and C-3-S Districts).
	Policy 7.5: Encourage the production of affordable housing through process and zoning accommodations, and prioritize affordable housing in the review and approval processes.	Policy 7.3: Grant density bonuses for construction of affordable or senior housing.
	Policy 11.4: Maintain allowable densities in established residential areas at levels which promote compatibility with prevailing neighborhood character.	Policy 2.1: Set allowable densities in established residential areas at levels which will promote compatibility with prevailing neighborhood scale and character.
	Implementation Measure 12: Planning shall require integration of new technologies that reduce the space required for non-housing functions, such as parking, and shall consider requiring parking lifts to be supplied in all new housing developments seeking approval for parking at a ratio of 1:1 or above.	

Impact	2009 Housing Element	Corresponding 1990 Residence Element Policy
	<p>Implementation Measure 13: When considering legalization of secondary units within community planning processes, Planning shall develop a Design Manual that illustrates how secondary units can be developed to be sensitive to the surrounding neighborhood, to ensure neighborhood character is maintained.</p>	
	<p>Implementation Measure 36: Planning shall continue to implement Planning Code Section 209, which allows a density bonus of twice the number of dwelling units otherwise permitted as a principal use in the district, when the housing is specifically designed for and occupied by senior citizens, physically or mentally disabled persons.</p>	<p>Policy 7.3: Grant density bonuses for construction of affordable or senior housing.</p>
	<p>Strategy for further review: MOH and Planning should continue to consider, within the context of a community planning process, zoning categories which require a higher proportion of affordable housing where increased density or other benefits are granted. Options include Affordable Housing Only Zones (SLI); Affordable Housing Priority Zones (UMU) or Special Use District Opportunities.</p>	
	<p>Implementation Measure 64: Planning staff shall support affordable housing projects in the development review process, including allowing sponsors of permanently affordable housing to take advantage of allowable densities provided their projects are consistent with neighborhood character.</p>	

Impact	2009 Housing Element	Corresponding 1990 Residence Element Policy
	Implementation Measure 79. Planning staff shall continue to use community planning processes to develop policies, zoning and standards that are tailored to neighborhood character.	Implementation Measure 2.2.1: Densities compatible with neighborhood character.

As shown above, the 2009 Housing Element promotes housing through community planning processes (Policies 1.1, 1.6, and Implementation Measures 8, 80 and 97), near transit and other infrastructure (Policies 1.8, 4.6, 10.3, 12.1, 13.1 and Implementation Measures 6, 14, 74, 90, and 94), and in proximity to neighborhood services (Policies 1.7, 12.2, 13.1 and Implementation Measure 85). The 2009 Housing Element also promotes housing on underused, vacant and surplus lands (Policy 1.3 and Implementation Measures 3 and 4), and housing within mixed-use areas (Policy 1.8 and Implementation Measure 80).

The 2009 Housing Element generally promotes increased density through community planning processes (Policies 1.4, 1.5, 1.6, and Implementation Measures 13 and 79) and for affordable housing (Policy 7.5 and Implementation Measures 36 and 64). The 2009 Housing Element also includes a strategy designed to reduce the amount of space required for non-housing functions (Implementation Measure 12). While the 2009 Housing Element contains a policy that advocates for family-sized housing units (Policy 4.1 and Implementation Measure 32), overall density increases from such policy would be speculative as less units would be accommodated within a given building envelope.

Current housing development in the City has been guided under the 1990 Residence Element, which in turn has contributed to the existing character of the City. Promoting new housing in areas of the City that are traditionally dominated by non-residential land uses could result in changes to land use character. However, the 2009 Housing Element would not change allowable land uses or increase allowable building height and bulk. Overall, the 2009 Housing Element does not promote increased density in the City to a same extent as the 1990 Residence Element. The 2009 Housing Element promotes increased density for affordable housing projects and as a strategy to be pursued during community planning processes. Additionally, the 2009 Housing Element assumes that most growth would occur in adopted plan areas where capacity for residential uses has been identified, and assumes that new planning processes would be located in areas that are adequately served by existing infrastructure.

Although the 2009 Housing Element could direct residential growth to certain areas of the City that are dominated by other land uses, potentially affecting land use character, the following 2009 Housing Element also contains policies that promote infill development and support the preservation of neighborhood character, further reducing the potential for the 2009 Housing Element to result in changes to land use character.

Impact	2009 Housing Element	Corresponding 1990 Residence Element Policy
Promote housing that fits within existing neighborhood character.	Policy 11.1: Promote the construction and rehabilitation of well-designed housing that emphasizes beauty, flexibility, and innovative design, respects existing neighborhood character.	Policy 12.4: Promote construction of well designed housing that conserves existing neighborhood character.
	Policy 11.3: Ensure growth is accommodated without significantly impacting existing residential neighborhood character.	Policy 12.4: Promote construction of well designed housing that conserves neighborhood character.
	Policy 11.4: Maintain allowable densities in established residential areas at levels which promote compatibility with prevailing neighborhood character.	Policy 12.5: Relate land use controls to the appropriate scale for new and existing residential areas.
	Policy 11.7: Consider a neighborhood’s character with integrating new uses, and minimize disruption caused by expansion of institutions into residential areas.	Policy 12.3: Minimize disruption caused by expansion of institutions into residential areas.
Reduce land use conflicts through support of the long-range planning process.	Implementation Measure 8: Planning, Redevelopment and MOWED should complete long range planning processes already underway: Japantown, Glen Park, the Northeast Embarcadero Study, the Bayview Hunter’s Point Plan, Candlestick/Hunters Point, India Basin Shoreline Community Planning Process, Treasure Island and Hunter’s Point.	

The 2009 Housing Element recognizes the diversity in architectural structures throughout the City. 2009 Housing Element Policy 11.1 would ensure that future development would be consistent with existing neighborhood character. The 2009 Housing Element advocates for housing to be incorporated into new commercial and institutional development, but notes that housing development in areas of commercial and institutional development should be determined based through a community planning process. Additionally, Implementation Measure 8 calls for the City to complete long range planning processes already underway for many areas of the City. These planning processes have identified locations where the City has determined that new residential development would be appropriate, and where the City has engaged the surrounding communities in a community planning process. The specific environmental

review conducted for those planning efforts will address the compatibility of those plans with the existing land use character.

As discussed previously, the 2009 Housing Element does not, overall citywide, promote increased residential densities more so than the 1990 Residence Element. The 2009 Housing Element promotes increased densities mostly as a strategy to be pursued during community planning processes. Any such community planning process would be required to undergo a separate environmental review pursuant to CEQA, and would be required to address the potential for the proposed land use controls of that community planning effort affect land use character. Furthermore, incremental increases in residential density in those areas that permit residential uses would not substantially change the existing land use character. Additionally, new residential uses would be required to be developed in accordance with the residential design guidelines or other applicable design guidelines, as well as Planning Code density requirements.

Although the 2009 Housing Element promotes housing in certain areas of the City, including within commercial developments and near transit, the proposed 2009 Housing Element would not change allowable land uses. As shown in Figures V.B-1 and V.B-2, much of the City is located in proximity to a variety of land uses including commercial districts and mixed use districts. Therefore, policies that promote additional residential development within mixed-use areas would not result in substantial changes to land use character.

Furthermore, new housing would need to comply with the previously discussed regulations, the governing land use plan, and the Urban Design Element of the General Plan. Finally, compliance with Chapter 35 of the City's Administrative Code further reduces any potential incompatibilities between residential and industrial uses. In addition, the following 2009 Housing Element policies could reduce any potential impacts to character by directly or indirectly encouraging the preservation of neighborhood character.

Similar to the 2004 Housing Element discussed above, overall, the 2009 Housing Element contains policies and measures that would increase the City's housing supply in a manner that does not present conflicts with existing land use character. The 2009 Housing Element would not result in changes to allowable land uses or height and bulk designations and future development would be required to comply with the previously discussed land use regulations. Therefore, the 2009 Housing Element would have a *less than significant* impact with respect to conflicts with existing land use character.

Cumulative Impacts

The geographic context for the cumulative impacts associated with land use issues is the City and County of San Francisco. Cumulative impacts occur when impacts from a proposed project that are significant or less than significant combine with similar impacts from other past, present, or reasonably foreseeable projects in a similar geographic area. Changes to the existing land use environment in the area could occur through the conversion of vacant land and low density uses to higher density uses, or through conversion of existing land use (e.g., from commercial to residential). However, it is assumed that future development would be consistent with policies in the adopted General Plan as well as zoning

requirements. Any new development is also anticipated to require CEQA review and design review, as well as other state and local regulations such as San Francisco Administrative Code Chapter 35, which would reduce potential land use conflicts. For this reason, cumulative impacts to land uses as a result of incompatible uses and changes to land use character would be *less than significant*. The contribution of the Housing Elements to such cumulative land use impacts is less than significant and is thus not cumulatively considerable because overall the Housing Elements promote compatibility with the surrounding land uses. This cumulative impact would be *less than significant*.

It is also anticipated that any new development will be reviewed for consistency with adopted land use plans and policies by the City, such as CEQA, the Planning Code, and the California Subdivision Map Act, all of which require findings of plan and policy consistency prior to approval of entitlements for development. For this reason, cumulative impacts associated with inconsistencies of future development with adopted plans and policies would be *less than significant*. In addition, the contribution of the Housing Elements to such cumulative impacts would be *less than significant*. As a result, the proposed Housing Elements would not contribute to any impacts associated with plan or policy inconsistency. This is considered to be a *less than significant* cumulative impact.

MITIGATION AND IMPROVEMENT MEASURES

Mitigation Measures

No mitigation measures are warranted by the proposed Housing Elements.

Improvement Measures

No improvement measures are warranted by the proposed Housing Elements.

V. ENVIRONMENTAL SETTING AND IMPACTS

C. AESTHETICS

INTRODUCTION

This section addresses the potential impacts of the 2004 Housing Element and 2009 Housing Element policies related to scenic vistas, scenic resources, visual character or quality of surrounding area, and potential new sources of light and glare.

ENVIRONMENTAL SETTING

Visual Character

The visual setting of the City is varied, reflecting the unique visual characteristics of the City's topography, street grids, public open spaces, and distinct neighborhoods. San Francisco's skyline may be characterized by a general pattern of densely clustered high-rise commercial development in the downtown core that tapers off to low-rise development at its periphery. This compact urban form signifies the downtown as the center of commerce and activity and produces a downtown "mound," distinctive from the City's numerous hills. Although distinctive, this form is neither smooth nor uniform. A range of building heights in the downtown creates gaps, peaks, dips and inconsistencies within this pattern, allowing taller buildings and building tops to stand out in profile against the sky. The tension between conformity and variety in the skyline results in a readable and recognizable image for San Francisco, with notable landmarks such as the Transamerica Pyramid, sitting apart from the "mound."

Outside of the highly commercial and built-up downtown area, much of the City is characterized by unique residential neighborhoods, which each exhibit their own distinctive visual character. Neighborhoods within the City can vary greatly in terms of density, scale, architectural style, and general design pattern. Most neighborhoods have a traditional neighborhood commercial district with a main street which provides goods and services to residents in the vicinity. Commercial storefront buildings usually contain businesses on the first floor and residential units above. This type of development creates a village-like appearance, common throughout much of San Francisco's neighborhoods and districts.

Section V.B (Land Use and Land Use Planning) discusses the land use character of the 18 Planning Districts within the City, as depicted on Figure V.A-1, and describes existing height limits and land uses within each of the Planning Districts, including descriptions of neighborhood commercial areas.

Open Space

Public open spaces often give a neighborhood its identity, a visual focus, a center for activity and provide a counterpoint to often dense mixed-use residential and commercial neighborhoods by providing visual relief from the built environment. Open spaces in the City include playgrounds, civic spaces, regional parks, and neighborhood parks. Refer to Section V.J (Recreation) for more information about parks and open spaces.

Visual Resources

Buildings and structures can also be considered visual resources within the City. They can reflect the character of districts and centers for activity, provide reference points for orientation, and add to topography and views. Buildings in the City exhibit a range of principal architectural periods, including the Victorian (1860 - 1900), Edwardian (1901 - 1910), Late Nineteenth and Early Twentieth Century Revivals (1890 - 1940), and Modernistic (1920 - 1940). Within these four architectural periods fall a number of architectural styles, including the Italianate and Queen Anne styles within the Victorian Period, Classical Revival and Mission/Spanish Revival within the Late Nineteenth and Early Twentieth Century Revival Period, as well as Art Deco/Art Moderne, within the Modernistic Period.

San Francisco historic landmarks offer a range of architectural styles as well as building types, which are simultaneously unique visual and historic architectural resources. Per Appendix A of Article 10 of the Municipal Code, there are 260 landmarks in the City, including:¹

- Mission Dolores (320 Dolores Street);
- City Hall (400 Van Ness Avenue);
- Ferry Building (Embarcadero at Market Street);
- Coit Tower (1 Telegraph Hill Boulevard);
- Ghirardelli Building (Block bounded by North Point, Larkin, Beach and Polk Streets);
- Castro Theater (429 Castro Street); and
- Golden Gate Bridge (At the Presidio, U.S. Highway 101 and California Highway 1).

Most of the City's landmarks are located in the northeastern quadrant of the City, primarily north of Market Street.² Historical resources in the City are discussed in detail in Section V.E (Cultural and Paleontological Resources).

Views

Viewshed refers to the visual qualities of a geographical area that are defined by the horizon, topography, and other natural features that give an area its visual boundary and context, or by development that has

¹ San Francisco Planning Department, Historic Preservation, Article 10 Landmarks, website: http://www.sfgov.org/site/uploadedfiles/planning/Article10_AppendixA_Landmarks.pdf, accessed April 7, 2009.

² San Francisco Planning Department, San Francisco Article 10 Landmarks and Historic Districts, October 2008, website http://www.sfgov.org/site/uploadedfiles/planning/Landmarks_October_2008_compressed.pdf, accessed April 7, 2009.

become a prominent visual component of the area. Sensitive viewing points within the City include parks, historic properties, publicly accessible buildings, and sidewalks that offer a view of the urban and natural landscapes making up the viewshed.

Known for its abundance of natural beauty and panoramic views, San Francisco is surrounded on three sides by water and featured by parks, lakes, and vistas. The Pacific Ocean, San Francisco Bay and their respective shorelines are considered to be the most important natural resource in San Francisco, offering significant opportunities for scenic views.³ In addition, the City's natural hills and ridges help to define neighborhoods and provide contrast to the spacious setting provided by the bay and ocean waters. Twin Peaks, the hills located centrally in the City, serve to visually divide the City into quadrants.⁴ Various other dramatic inclines include Telegraph Hill, Sunset Heights and Potrero Hill. In between, the various valleys and plains provide for their own unique neighborhood settings and contrasts. The City contains many open spaces and landscaped areas whose rich green colors help to further define and identify hills, districts, and places for recreation. These areas include the Presidio, Lake Merced and Golden Gate parks as well as smaller but prominent locations such as Alta Plaza and Lombard Street Hill. These varied resources results in scenic viewpoints available at numerous locations from within the City and from approaches to the City.

The City contains many prominent viewsheds. The several roadways approaching and within the City provide views of the cityscape, the Golden Gate and Bay bridges, urban forests such as the Presidio and Golden Gate Park, and important historic or architectural landmarks such as the Palace of Fine Arts, Grace Cathedral, and the Ferry Building. Aside from the waters of the Bay, easterly views in the City are generally urban in character, with high-rise buildings visible at the Civic Center, and in downtown along Market Street. The western areas of the City, including the Richmond and Sunset neighborhoods, are characterized by a variety of building styles and massings, ranging from traditional to modern and from early twentieth century to contemporary styles. Most of this area of the City is relatively flat, but some locations enjoy views of most of the City's visual resources, such as the Bay, the Ocean, downtown, and the bridges. However, looking east from Bush, Geary, and Masonic streets provides dramatic views overlooking the downtown, Bay, and Bay Bridge. Visual resources in level areas generally consist of urban relief provided by parks and open spaces, and views of surrounding hills and ridges.

The areas of the City within the elevated topography of Twin Peaks including Mt. Sutro, Mt. Davidson, Mt. Olympus, Glen Canyon, Buena Vista, and Forest Hill are typically provided with panoramic views of the City. Residents at the top of these inclines enjoy 360 degree views, which include the Bay, the downtown sky line, the Pacific Ocean, the Golden Gate and Bay bridges, and several other San Francisco landmarks and visual resources. Due to the presence of the proximity to the ocean and increased existence of parks and open spaces, westerly views of the City generally appear more natural than those of the east.

³ City and County of San Francisco, Recreation and Open Space Element of the General Plan, Adopted May 25, 2005, website: http://www.sfgov.org/site/planning_index.asp?id=41414, accessed February 26, 2009.

⁴ City and County of San Francisco, Urban Design Element of the General Plan, Adopted May 25, 2005 website: http://www.sfgov.org/site/planning_index.asp?id=41416, accessed February 26, 2009.

Low lying areas and valleys in the City, such as Noe Valley, the Castro, Hayes Valley, and Cole Valley benefit from views of surrounding topography as the hills and ridges themselves provide aesthetically pleasing features. Historical and intricate architectural features combined with well-maintained landscaping, common on the hill tops, provide the surrounding valleys and plains with additional scenic views. Sutro Tower, located southeast of Mt. Sutro, is a dominant part of the sky line in the central part of the City.

Merced Heights and Ocean View take in views of the Pacific Ocean, Lake Merced and Harding Park to the West, and the northern slope of San Bruno Mountain to the south. The San Francisco Bay, Treasure Island, and the Bay Bridge can be seen from the elevated areas of Bernal Heights, Bayview Hill, and Visitacion Valley.

In addition, Figure V.C-1 identifies street areas important to the perception of the City and streets important for their quality of views, as defined by the Urban Design Element of the General Plan. As shown, portions of streets that define the City form in the western half of the City include the Great Highway, Sunset Boulevard, Sloat Boulevard, Portola Drive, Park Presidio Boulevard, Seventh Avenue, Laguna Honda Boulevard, Woodside Avenue, and O'Shaughnessy Boulevard. The City form is defined by portions of 3rd Street, Cortland Avenue, Market Street, Dolores Street, Van Ness Avenue, Columbus Avenue, and Cervantes Boulevard in the eastern half of the City. Streets with excellent quality views are located throughout the City. The most concentrated groupings are located in the following districts: Richmond, Outer Sunset, Ingleside, South Central, Central, Showplace/Potrero Hill, Downtown, Northeast, and the Marina.

Figure V.C-2 illustrates important vistas to be protected in the City according to the Urban Design Element of the General Plan. The vistas are located throughout the City in areas of higher elevation or adjacent to the ocean or bay in areas including Buena Vista Park, Portero Hill, Grand View Park, Bayview Park, and Alta Plaza. As stated above, these parks and open spaces provide urban relief and views of the surrounding topography.

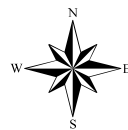


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PLANNING DEPARTMENT

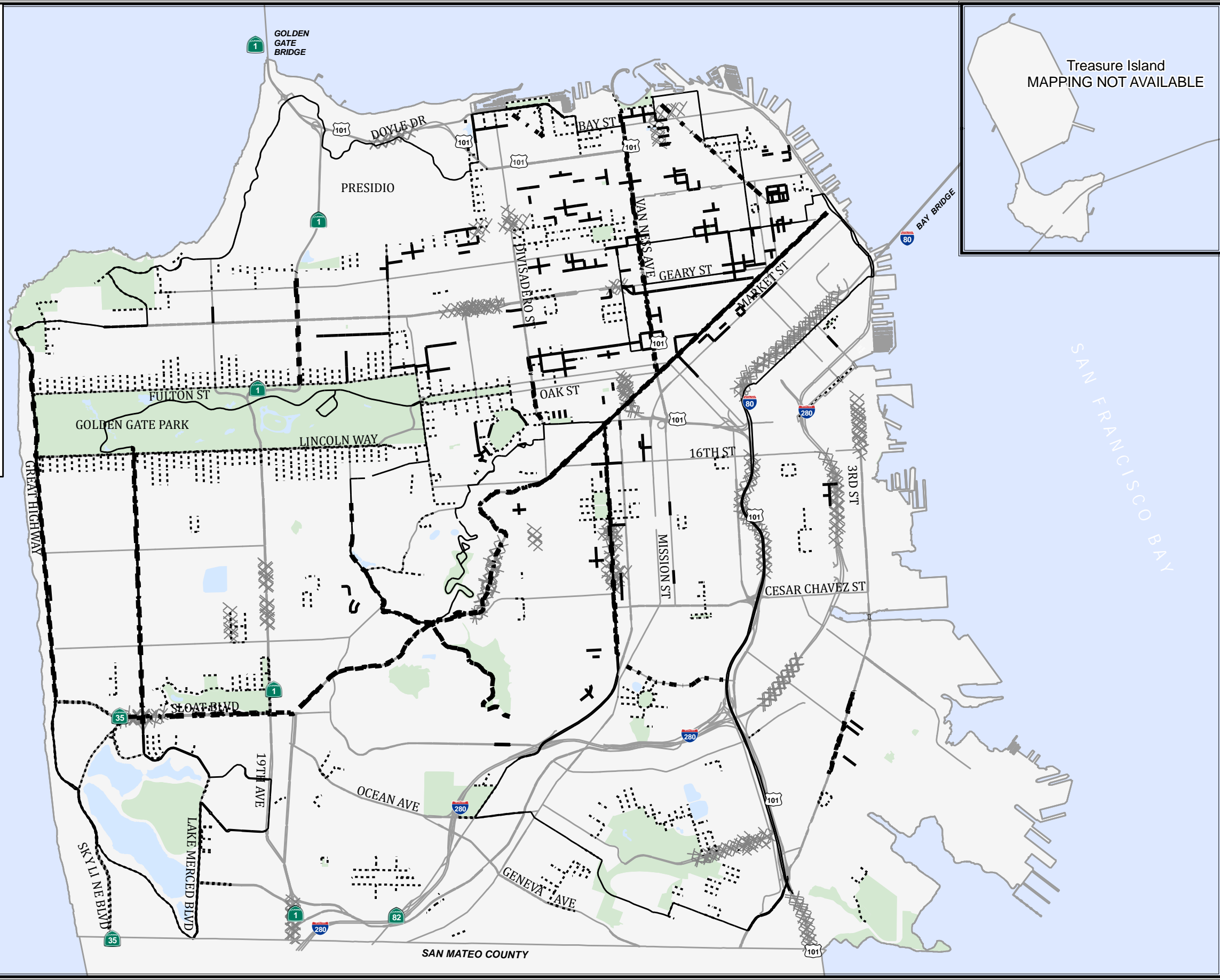
Figure V.C-1 Street Areas Important to the Perception of the City

- Route of Forty-Nine Mile Scenic Drive
- Street View of Important Building
- Streets that Extend the Effect of Public Open Space
- Streets that Define City Form
- XXXX Important Street View for Orientation
- Parks
- Water

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Mile



Source: San Francisco General Plan, Urban Design Element, Map 4, May 2010.



PACIFIC OCEAN

SAN FRANCISCO BAY





SAN MATEO COUNTY

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CITY AND COUNTY OF SAN FRANCISCO
PLANNING DEPARTMENT

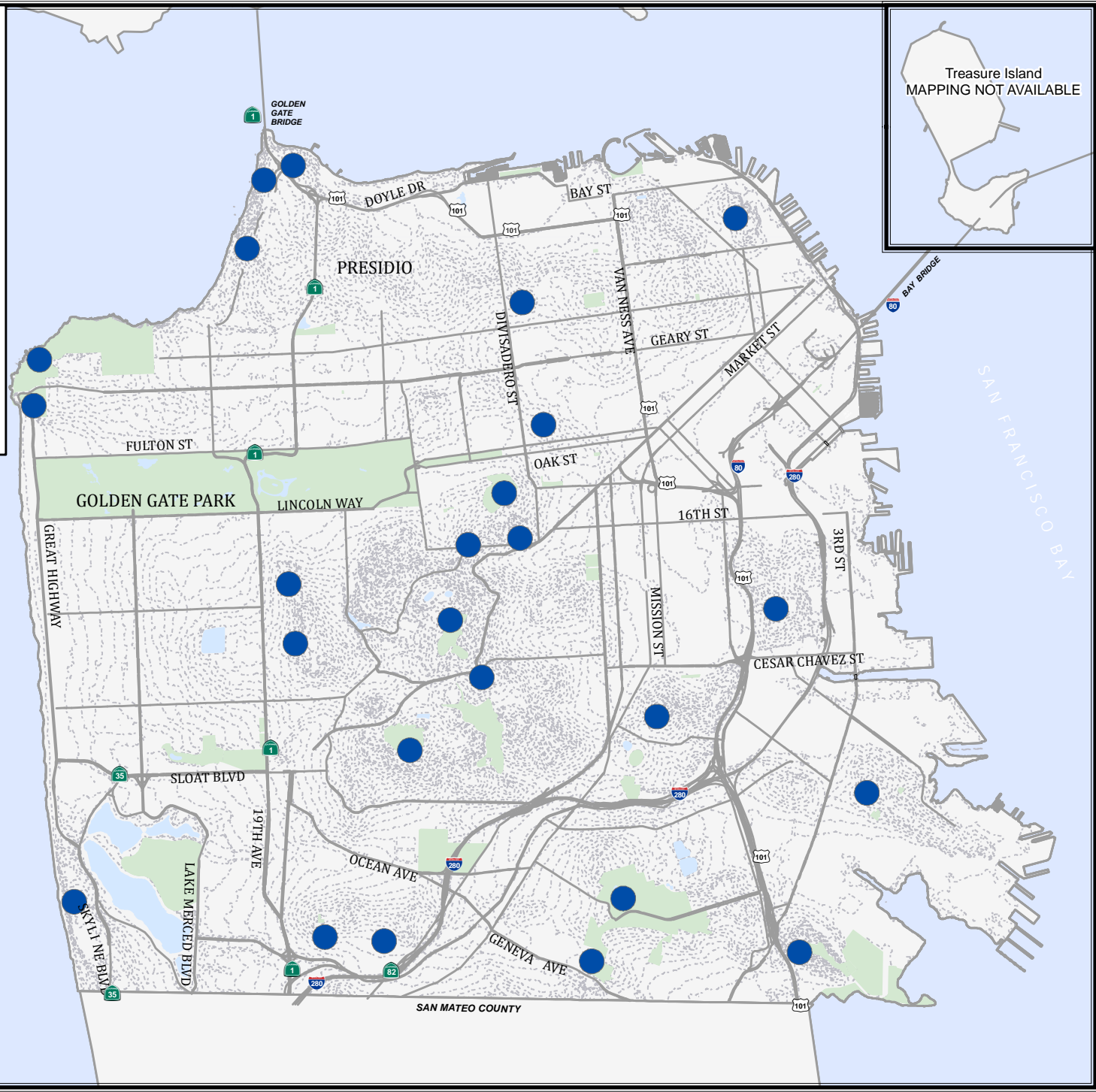
Figure V.C-2 Important Vista Points to be Protected

-  Important Vista Points to be Protected
-  Parks
-  Water
-  Elevation Contours

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Source: San Francisco General Plan, Urban Design Element,
Map 1, May 2010.



PACIFIC OCEAN

SAN FRANCISCO BAY

SAN MATEO COUNTY

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Scenic Highways

Scenic highways are highways that traverse land with unique or outstanding scenic quality or provide access to regionally significant scenic and recreational areas. Portions of State Route 1, Interstate 80, and Interstate 280 within the City are eligible for scenic highway designation under the State's Scenic Highway Program.⁵

Light and Glare

Sources of light and glare in the City generally include interior and exterior lights of buildings and parking lots, lighting visible through windows, and street and vehicle lights. Additional light sources include the Candlestick Park, Kezar Stadium, other lighted outdoor recreation areas, and the "necklace of lights" on the Bay Bridge.

REGULATORY SETTING

Federal/State

No federal or state plans, policies, regulations or laws related to aesthetics are applicable to the proposed Housing Elements.

Local

San Francisco General Plan

The Urban Design Element of the General Plan is concerned with the physical character and environment of the City with respect to housing development and preservation. General Plan policies are discussed in Section V.A (Plans and Policies) of this Draft EIR. In addition, the General Plan recognizes the importance of views and viewsheds created by topography and street views as shown in Figure V.C-1. General Plan objectives and policies discussed in this Section are as follows:

Urban Design Element

- Objective 3: Moderation of major new development to complement the City pattern, the resources to be conserved and the neighborhood environment.
- Policy 3.3: Promote efforts to achieve high quality of design for buildings to be constructed at prominent locations.
- Policy 3.4: Promote building forms that will respect and improve the integrity of open spaces and other public areas.

⁵ California Department of Transportation, California Scenic Highway Program, website: http://www.dot.ca.gov/hq/LandArch/scenic_highways/scenic_hwy.htm, accessed February 26, 2009.

- Policy 3.5: Relate the height of buildings to important attributes of the city pattern and to the height and character of existing development.
- Policy 3.6: Relate the bulk of buildings to the prevailing scale of development to avoid an overwhelming or dominating appearance in new construction.
- Policy 3.7: Recognize the special urban design problems posed in development of large properties.
- Policy 3.8: Discourage accumulation and development of large properties, unless such development is carefully designed with respect to its impact upon the surrounding area and upon the City.
- Policy 3.9: Encourage a continuing awareness of the long-term effects of growth upon the physical form of the city.

San Francisco Planning Code – Height and Bulk Districts

San Francisco utilizes a zoning system with two separate sets of districts: one that regulates land uses, and another that regulates height and bulk. There are 111 different height and bulk districts within the City. The Housing Element does not propose any changes to existing height and bulk limits. Existing height limits are described in Section V.A (Plans and Policies). Refer to Figure IV-4 in Section IV (Project Description) for the Generalized Citywide Height Map.

San Francisco Planning Code

The San Francisco Planning Code contains a number of provisions to reduce or prevent light and glare in the City. This includes Section 311 and the Residential Design Guidelines, Section 312 and the Neighborhood Commercial Design Guidelines, as well as the Industrial Area Design Guidelines and the Planning Commission prohibition on reflective glass (discussed below).

Planning Commission Resolution 9212

Planning Commission Resolution 9212, as well as the Industrial Area Design Guidelines mentioned above, generally prohibit the use of mirrored or reflective glass in new buildings.

San Francisco Department of Public Works Code

Ordinance 0017-06 establishes protections for the City's trees. The two categories receiving the highest protection are the City's Protected and Landmark Trees. The City currently considers Protected Trees as street trees, significant trees and landmark trees. Removal of any of these trees requires a permit. Landmark Trees have the highest level of protection in the City. These are trees that meet criteria for age, size, shape, species, location, historical association, visual quality, or other contribution to the City's character and have been found worthy of Landmark status after public hearings at both the Urban Forestry Council and the Board of Supervisors. Temporary landmark status is also afforded to nominated trees currently undergoing the public hearing process.

IMPACTS

Significance Thresholds

The proposed Housing Elements would normally have a significant effect on the environment if they would:

- Have a substantial adverse effect on a scenic vista;
- Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and other features of the built or natural environment which contribute to a scenic public setting;
- Substantially degrade the existing visual character or quality of the site and its surroundings; or
- Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area or which would substantially impact other people or properties.

Impact Evaluation

As discussed previously, the 2004 Housing Element and 2009 Housing Elements would not change the land use objectives and policies in the City's area and redevelopment plans. According to Part I of the 2009 Housing Element (Data and Needs Analysis), the City has available capacity to meet the RHNA. Therefore, the rezoning of land uses is not required. To meet the City's share of the RHNA, the proposed Housing Elements aim to do the following: 1) preserve and upgrade existing housing units to ensure they do not become dilapidated, abandoned, or unsound, and 2) provide direction for how new housing development in the City should occur. With respect to the latter, the 2004 Housing Element encourages new housing in Downtown and in underutilized commercial and industrial areas. The 2004 Housing Element also encourages increased housing in neighborhood commercial districts and mixed-use districts near Downtown. The 2009 Housing Element encourages housing in new commercial or institutional projects and accommodating housing through existing community planning processes.

Impact AE-1: The proposed Housing Elements would not have a substantial adverse effect on a scenic vista. (Less than Significant)

New residential housing could result in an impact related to scenic vistas if it would be developed in a manner that obstructs views from a scenic vista from a public area or introduces a visual element that would dominate or upset the quality of a view. The proposed Housing Elements do not change the allowable development in the City. However, the Housing Elements may promote increased density (as described below) which could result in greater bulk and mass of buildings thereby potentially affecting scenic vistas.

As shown in Figure V.C-2, important vistas are primarily viewed from public parks or open space, which would not be at risk for conversion to housing uses. New housing could also encroach into a scenic vista and alter the appearance of the vista. As discussed previously, Telegraph Hill, Russian Hill, Pacific Heights, Buena Vista, and Dolores Heights are areas with outstanding visual features that are unique to

San Francisco. These areas comprise approximately four percent of the City's pipeline housing units and approximately 13 percent of the overall capacity for new housing within the City.⁶ The development of new housing would not substantially alter views as a whole, but could increase the overall scale of buildings and result in the loss of vegetation, which could adversely alter views.

In addition, approximately ten percent of the City's pipeline housing units are expected to be constructed in the Downtown neighborhood⁷, with the capacity for approximately six percent of the City's total housing unit capacity. New housing in this area could potentially block views by placing new construction on infill sites, potentially resulting in increased building mass, degraded views, and removal of existing vegetation. New housing could also change the view of a site from nearby residences and businesses. Although some reduced private views would be an unavoidable consequence of the new housing and would be an undesirable change for those individuals affected, the change in views would not exceed that commonly expected in a dense urban setting.

2004 Housing Element Analysis

The following 2004 Housing Element policies and implementation measures promote increased densities and could therefore result in development to the maximum allowable height and bulk limits, resulting in taller and bulkier buildings that could result in an adverse effect on a scenic vista.

⁶ This calculation used the entire Northeast District to represent the Telegraph Hill and Russian Hill areas, the entire Marina District to represent the Pacific Heights area, and the entire Mission District to represent the Dolores Heights area. The aforementioned areas do not encompass the entire Northeast, Marina, or Mission Districts. Therefore, the percentage of pipeline housing units and overall capacity that are in areas with scenic vistas are likely overstated.

⁷ These pipeline projects have already been proposed and therefore, any density increases as a result of the proposed Housing Elements would not be expected to affect these proposals.

Impact	2004 Housing Element	Corresponding 1990 Residence Element Policy
<p>Promote increased density-related development standards</p>	<p>Policy 1.1: Encourage higher residential density in areas adjacent to downtown, in underutilized commercial and industrial areas proposed for conversion to housing and in neighborhood commercial districts where higher density will not have harmful effects, especially if the higher density provides a significant number of units that are affordable to lower income households. Set allowable densities in established residential areas at levels which will promote compatibility with prevailing neighborhood scale and character where there is neighborhood support.</p>	<p>Policy 2.1: Set allowable densities in established residential areas at levels which will promote compatibility with prevailing neighborhood character.</p> <p>Policy 2.2: Encourage higher residential density in areas adjacent to downtown, in underutilized commercial and industrial areas proposed for conversion to housing and in neighborhood commercial districts where higher density will not have harmful effects, especially if the higher density provides a significant number of units that are permanently affordable to lower income households.</p>
	<p>Implementation Measure 1.1.1: A Citywide action plan (CAP) should provide a comprehensive framework for the allocation of higher density, mixed-use residential development in transit-rich areas with stable urban amenities in place. In these areas, specific CAP strategies should include: higher densities and reduced parking requirements in downtown areas or through a Better Neighborhoods type planning process; pedestrian-oriented improvements to enhance the attractiveness and use of transit.</p>	
	<p>Implementation Measure 1.3.1: Downtown areas and areas subject to a Better Neighborhoods type planning process will be expected to absorb major office and residential developments over the next decade. Planning and zoning code changes should include floor-to-area ratio exemptions. These development bonuses would be conferred only in cases where in return the development will provide major public benefits to the community.</p>	<p>Implementation Measure 1.1.3: Inclusion of housing in Downtown (allowing housing to exceed permitted Floor-Area-Ratios [FARs] in C-3-G and C-3-S Districts).</p>

Impact	2004 Housing Element	Corresponding 1990 Residence Element Policy
	<p>Policy 1.6: Create incentives for the inclusion of housing, particularly permanently affordable housing, in new commercial development projects.</p>	<p>Policy 1.3: Create incentives for the inclusion of housing, particularly permanently affordable housing, in new commercial development projects.</p>
	<p>Implementation Measure 1.6.2: The Planning Department and the Redevelopment Agency will propose increasing height limits, eliminating density requirements and modifying off-street parking requirements in the Transbay/Rincon Hill Redevelopment survey areas. The Mid-Market redevelopment survey area will be rezoning to include mixed-use residential areas and reduced residential parking requirements.</p>	
	<p>Policy 1.7: Encourage and support the construction of quality, new family housing.</p>	
	<p>Implementation Measure 1.7.1: In response to the increasing number of families in San Francisco, the Planning Department will develop zoning amendments to require a minimum percentage of larger family units ranging from two to four bedrooms, in new major residential projects. The Planning Department will also propose eliminating density requirements within permitted building envelopes in downtown areas and areas subject to a Better Neighborhoods type planning process to maximize family units constructed.</p>	
	<p>Policy 1.8: Allow new secondary units in areas where their effects can be dealt with and there is neighborhood support, especially if that housing is made permanently affordable to lower income households.</p>	<p>Policy 1.5: Allow new secondary units in areas where their effects can be dealt with and there is neighborhood support, especially if that housing is made permanently affordable to lower income households.</p>

Impact	2004 Housing Element	Corresponding 1990 Residence Element Policy
	Implementation Measure 1.8.1: The Board of Supervisors has introduced Planning Code amendments to allow secondary units in new buildings that are in close proximity to neighborhood commercial districts and public transit.	
	Implementation Measure 1.8.3: On-going planning will propose Planning Code amendments to encourage secondary units where appropriate.	
	Policy 4.4: Consider granting density bonuses and parking requirement exemptions for the construction of affordable housing or senior housing.	Policy 7.3: Grant density bonuses for construction of affordable or senior housing.
	Implementation Measure 4.4.1: The Planning Department will look at establishing uniform density bonus standards and equal requirements for affordable and senior housing development. Until then, affordable and senior housing will continue to be granted density bonuses and reduced parking requirements on a case-by-case basis.	
	Policy 4.5: Allow greater flexibility in the number and size of units within established building envelopes, potentially increasing the number of affordable units in multi-family structures.	Policy 2.3: Allow flexibility in the number and size of units within permitted volumes of larger multi unit structures, especially if the flexibility results in creation of a significant number of dwelling units that are permanently affordable to lower income households.
	Policy 11.6: Employ flexible land use controls in residential areas that can regulate inappropriately sized development in new neighborhoods, in downtown areas, and in other areas through a Better Neighborhoods type planning process while maximizing the opportunity for housing near transit.	Policy 12.5 Relate land use controls to the appropriate scale for new and existing residential areas.

Impact	2004 Housing Element	Corresponding 1990 Residence Element Policy
	Implementation Measure 11.6.1: The City will continue to promote increased residential densities in areas well served by transit and neighborhood compatible development with the support and input from local neighborhoods.	
	Policy 11.7: Where there is neighborhood support, reduce or remove minimum parking requirements for housing, increasing the amount of lot area available for housing units.	
	Implementation Measure 11.7.1: The Planning Department will work to reduce parking in older neighborhoods through a Better Neighborhoods type planning process with the support and input from local neighborhoods.	
	Policy 11.8: Strongly encourage project sponsors to take full advantage of allowable building densities in their housing developments while remaining consistent with neighborhood character.	
	Policy 11.9: Set allowable densities and parking standards in residential areas at levels that promote the City's overall housing objectives while respecting neighborhood scale and character.	Policy 2.1: Set allowable densities in established residential areas at levels which will promote compatibility with prevailing neighborhood character.

As shown above, the 2004 Housing Element promotes increased building densities more so than the 1990 Residence Element. The 2004 Housing Element promotes increased density in certain areas of the City (Policy 1.1 and Implementation Measure 1.1.1, 1.8.1 and 11.6.1) and promotes density bonuses (Policy 4.4 and Implementation Measures 1.3.1 and 4.4.1) and the elimination of density requirements (Policy 1.6 and Implementation Measures 1.6.2 and 1.7.1). The 2004 Housing Element also encourages increased density by promoting reduced parking requirements (Policies 4.4, 11.7, 11.9 and Implementation Measures 1.1.1, 1.6.2, 4.4.1, 11.7.1), support for secondary units (Policy 1.8 and Implementation Measures 1.8.1 and 1.8.3) and flexible building envelopes (Policies 4.5 and 11.6). Density bonuses and elimination of density requirements altogether could result in taller buildings and larger building masses. Taller and bulkier buildings would have a greater potential to affect a scenic vista.

Generally, allowable height and bulks, as established in the San Francisco Planning Code are intended to reflect the City's topography and take advantage of the City's scenic vistas. However, individual development projects could have the potential to affect scenic vistas; this issue is appropriately considered in the project-specific environmental review of proposed new development. Additionally, in some circumstances, modified controls such as increased height limits could result in reductions to building bulk and preservation of views that might otherwise be blocked by a more massive structure. For example, the EIRs for Transbay Terminal⁸ and Rincon Hill⁹ areas identified this relative difference in the effect of building heights and massing and the respective EIRs for these projects appropriately evaluated increases in building heights. However, it is possible that changes in density standards and encouraging development to maximum allowable heights could indirectly result in taller and bulkier buildings that may potentially affect a scenic vista.

The following 2004 Housing Element policies could counteract the 2004 Housing Element's potential to result in an adverse effect on a scenic vista by preserving existing housing, which would reduce the need for new construction, and the potential for the construction of taller or bulkier buildings. Additionally, policies that promote the preservation of housing within the existing neighborhood scale could be expected to reduce the potential for new development that could affect a scenic vista.

Impact	2004 Housing Element	Corresponding 1990 Residence Element Policy
Retain existing housing, which could reduce demand for construction of new housing, potentially avoiding adverse impacts on scenic vistas.	Policy 2.1: Discourage the demolition of sound existing housing.	3.1: Discourage the demolition of sound existing housing.
	Policy 2.4: Retain sound existing housing in commercial and industrial areas.	3.6: Restrict the conversion of housing in commercial and industrial areas.
Retain existing neighborhood scale	Policy 1.1: Encourage higher residential density in areas adjacent to downtown, in underutilized commercial and industrial areas proposed for conversion to housing and in neighborhood commercial districts where higher density will not have harmful effects, especially if the higher density provides a significant number of units that are affordable to lower income households. Set allowable densities in established	Policy 2.1: Set allowable densities in established residential areas at levels which will promote compatibility with prevailing neighborhood character.

⁸ As discussed in Section 5.15 (Visual and Aesthetics) of the Transbay Terminal/Caltrain Downtown Extension/Redevelopment Project Final EIS/EIR, March 2004.

⁹ As discussed in Section III.B (Visual Quality) of the Rincon Hill Plan Final EIR, Certified May 5, 2005.

Impact	2004 Housing Element	Corresponding 1990 Residence Element Policy
	residential areas at levels which will promote compatibility with prevailing neighborhood scale and character where there is neighborhood support.	
	Policy 11.8: Strongly encourage project sponsors to take full advantage of allowable building densities in their housing developments while remaining consistent with neighborhood character.	Policy 12.5: Relate land use controls to the appropriate scale for new and existing residential area.

As shown above, 2004 Housing Element Policy 2.1 and corresponding 1990 Residence Policy 3.1 are the same. 2004 Policy 2.4 clarifies that sound existing housing should be retained in commercial and industrial areas, while 1990 Residence Element Policy 3.6 generally states that conversion of housing should be restricted. Preserving existing housing units is a strategy to ensure that the City meets its housing needs, and therefore reduces development pressure which might otherwise result in new construction that could potentially affect a scenic vista. Furthermore, the 2004 Housing Element includes policies that advocate for residential development that maintains existing neighborhood scale and character and would be expected to also reduce the potential for new construction that is substantially larger than the existing neighborhood scale; thereby reducing the potential for such new construction to affect a scenic vista.

As discussed above, the existing land use plan for the City that includes allowable height and bulk districts is intended to reflect the City's scenic vistas and are meant to accommodate development at the maximum height and bulk limits without adversely affecting the scenic vista points identified in the General Plan and depicted in Figure V.C-2. Given that the proposed 2004 Housing Element would not modify allowable building height and bulk, the 2004 Housing Element policies would not directly or indirectly result in new development that could affect a scenic vista. Furthermore, new development would be required to comply with the Urban Design Element of the San Francisco General Plan, including policies 3.3, 3.4, 3.5, 3.6, 3.7, 3.8, and 3.9, as listed in the beginning of this section. These policies are designed to guide new development such that it minimizes impacts on the City's environment, including potential impacts to scenic resources. Additionally, new development would be required to comply with City's Planning Code requirements for height and bulk of buildings as well as the Residential Design Guidelines. Overall, the 2004 Housing Element would have a *less than significant* impact with respect to an adverse effect on a scenic vista because it would not change allowable height and bulk designations which are intended to accommodate maximum development without adversely affecting the City's scenic vistas, as identified in General Plan.

2009 Housing Element Analysis

Overall, the 1990 Residence Element promotes increased density on a broader, citywide, scale to a greater extent than the 2009 Housing Element. However, there are two areas under which the 2009 Housing Element promotes greater density. These include the following themes: increased density for affordable housing projects; and increased density as a strategy to be pursued through the community planning process. These density-related policies of the 2009 Housing Element could encourage the construction of buildings that are developed to the maximum height and bulk limits, potentially affecting a scenic vista.

The following 2009 Housing Element policies could result in an adverse effect on a scenic vista by encouraging development of properties in emphasized locations to maximum building envelopes.

Impact	2009 Housing Element	Corresponding 1990 Residence Element Policy
Promote increased density-related development standards.	Policy 1.4: Ensure changes to land use controls are proposed through neighborhood-supported community planning processes.	<p>Policy 2.1: Set allowable densities in established residential areas at levels which will promote compatibility with prevailing neighborhood character.</p> <p>Policy 2.2: Encourage higher residential density in areas adjacent to downtown, in underutilized commercial and industrial areas proposed for conversion to housing and in neighborhood commercial districts where higher density will not have harmful effects, especially if the higher density provides a significant number of units that are permanently affordable to lower income households.</p>
	Policy 1.5: Consider secondary units in community plans where there is neighborhood support and when other neighborhood goals can be achieved, especially if that housing is made permanently affordable to lower-income households.	Policy 1.5: Allow new secondary units in areas where their effects can be dealt with and there is neighborhood support, especially if that housing is made permanently affordable to lower income households.
	Policy 1.6: Consider greater flexibility in number and size of units within established building envelopes in community plan areas, especially if it can increase the number of affordable units in multi-family structures.	Implementation Measure 1.1.3: Inclusion of housing in Downtown (allowing housing to exceed permitted Floor-Area-Ratios [FARs] in C-3-G and C-3-S Districts).
	Policy 7.5: Encourage the production of affordable housing through process and zoning	Policy 7.3: Grant density bonuses for construction of affordable or senior

Impact	2009 Housing Element	Corresponding 1990 Residence Element Policy
	accommodations, and prioritize affordable housing in the review and approval processes.	housing.
	Policy 11.4: Maintain allowable densities in established residential areas at levels which promote compatibility with prevailing neighborhood character.	Policy 2.1 Set allowable densities in established residential areas at levels which will promote compatibility with prevailing neighborhood scale and character.
	Implementation Measure 12: Planning shall require integration of new technologies that reduce the space required for non-housing functions, such as parking, and shall consider requiring parking lifts to be supplied in all new housing developments seeking approval for parking at a ratio of 1:1 or above.	
	Implementation Measure 13: When considering legalization of secondary units within community planning processes, Planning shall develop a Design Manual that illustrates how secondary units can be developed to be sensitive to the surrounding neighborhood, to ensure neighborhood character is maintained.	
	Implementation Measure 36: Planning shall continue to implement Planning Code Section 209, which allows a density bonus of twice the number of dwelling units otherwise permitted as a principal use in the district, when the housing is specifically designed for and occupied by senior citizens, physically or mentally disabled persons.	Policy 7.3: Grant density bonuses for construction of affordable or senior housing.
	Strategy for further review: MOH and Planning should continue to consider, within the context of a	
	community planning process, zoning categories which require a	

Impact	2009 Housing Element	Corresponding 1990 Residence Element Policy
	housing where increased density or other benefits are granted. Options include Affordable Housing Only Zones (SLI); Affordable Housing Priority Zones (UMU) or Special Use District Opportunities.	
	Implementation Measure 64: Planning staff shall support affordable housing projects in the development review process, including allowing sponsors of permanently affordable housing to take advantage of allowable densities provided their projects are consistent with neighborhood character.	
	Implementation Measure 79. Planning staff shall continue to use community planning processes to develop policies, zoning and standards that are tailored to neighborhood character.	Implementation Measure 2.2.1: Densities compatible with neighborhood character.

As shown above, the 2009 Housing Element generally promotes increased density through community planning processes (Policies 1.4, 1.5, 1.6, and Implementation Measures 13 and 79) and for affordable housing (Policy 7.5 and Implementation Measures 36 and 64). The 2009 Housing Element also includes a strategy designed to reduce the amount of space required for non-housing functions (Implementation Measure 12). Overall, the 1990 Residence Element promotes increased density on a broader scale to a greater extent than the 2009 Housing Element, which generally limits increased density as a strategy to be pursued in community planning processes. Therefore, the 2009 Housing Element policies would not be anticipated to promote development to the maximum building envelope, when compared with the 1990 Residence Element.

Furthermore, the following 2009 Housing Element policies could reduce the potential for new development to affect a scenic vista by preserving existing housing units and promoting retention of existing neighborhood scale.

Impact	2009 Housing Element	Corresponding 1990 Residence Element Policy
Retain existing housing, which could reduce demand for construction of new housing, potentially avoiding adverse impacts on scenic vistas.	Policy 2.2: Retain existing housing by controlling the merger of residential units, except where a merger clearly creates new family housing.	3.1: Discourage the demolition of sound existing housing. 3.2: Control the merger of residential units.
	Policy 2.4: Promote improvements and continued maintenance to existing units to ensure their long term habitation and safety.	Objective 5: To maintain and improve the physical condition of housing while maintaining existing affordability levels. 5.1: Assure that existing housing is maintained in decent, safe sanitary condition at existing affordability levels. 5.2: Promote and support voluntary housing rehabilitation which does not result in the displacement of lower income occupants.
	Policy 2.5: Encourage and support the seismic retrofitting of the existing housing stock.	Objective 4: To reduce the risk of bodily harm and loss of housing in an earthquake 4.3: Improve the seismic stability of existing housing.
	Policy 11.6: Respect San Francisco's historic fabric, by preserving landmark buildings and ensuring consistency with historic districts.	5.5: Preserve landmark and historic residential buildings.
Encourage preservation of historic resources, which could reduce construction of new housing, potentially avoiding adverse impacts on scenic vistas.	Implementation Measure 37: Planning and OEWD shall promote the use of Historic Rehabilitation Tax Credits to help subsidize rental projects, and continue to provide information about such preservation incentives to repair, restore, or rehabilitate historic resources towards rental housing in lieu of demolition.	
Retain existing neighborhood scale	Policy 11.1: Promote the construction and rehabilitation of well-designed housing that emphasizes beauty, flexibility, and innovative design and respects existing neighborhood character.	Policy 12.4: Promote construction of well designed housing that conserves existing neighborhood character.

Impact	2009 Housing Element	Corresponding 1990 Residence Element Policy
	Policy 11.3: Ensure growth is provided without significantly impacting existing residential neighborhood character.	
	Policy 11.4: Maintain allowable densities in established residential areas at levels which promote compatibility with prevailing neighborhood character.	Policy 2.1: Set allowable densities in established residential areas at levels which will promote compatibility with prevailing neighborhood character.

As shown above, both the 1990 Residence Element and the 2009 Housing Element recognize the need for the preservation of existing housing. 2009 Housing Element Policy 2.2 would, overall, encourage retention of existing housing. Compared to 1990 Residence Element Policies 3.1 and 3.2, 2009 Housing Element Policy 2.2 provides a stipulation that unit merging can occur in cases where the merger supports the need for family housing. 2009 Housing Element Policy 2.4 advocates for continued maintenance of units occupied by those who cannot afford regular maintenance, seniors, and for those properties neglected or abandoned. This policy further ensures that existing housing is retained. However, this policy does not represent a substantial policy shift from 1990 Residence Element Objective 5 and Policies 5.1 and 5.2. 2009 Housing Element Policy 2.5 encourages the improved seismic stability of the existing housing stock. This policy does not represent a substantial policy shift from 1990 Residence Element Objective 4 and Policy 4.3. The 2009 Housing Element also includes policies similar to the 1990 Residence Element that would ensure that new development fits within the existing neighborhood character. Neighborhood character can consist of many factors, including overall scale of the neighborhood. Overall, the 2009 Housing Element does not promote increased density more so than the 1990 Residence Element.

The existing land use plan for the City that includes allowable height and bulk districts is intended to reflect the City's scenic vistas and are meant to accommodate development at the maximum height and bulk limits without adversely affecting the scenic vista points identified in the General Plan. Given that the proposed 2009 Housing Element would not modify allowable building height and bulk, the 2009 Housing Element policies would not directly or indirectly result in new development that could affect a scenic vista. Furthermore, new development would be required to comply with the Urban Design Element of the San Francisco General Plan, including policies 3.3, 3.4, 3.5, 3.6, 3.7, 3.8, and 3.9, as listed in the beginning of this section. These policies are designed to guide new development such that it minimizes impacts on the City's environment, including potential impacts to scenic vistas. Additionally, new development would be required to comply with City's Planning Code requirements for height and bulk of buildings as well as the Residential Design Guidelines. Therefore, the 2009 Housing Element would have a *less than significant* impact with respect to adverse affects to scenic vistas.

Impact AE-2: The proposed Housing Elements would not substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and other features of the built or natural environment which contribute to a scenic public setting. (Less than Significant)

New construction could result in impacts related to damaging scenic resources if new housing would directly affect environmental features, such as topographic features, landscaping, or a built landmark that contributes to a scenic public setting. Figure V.K-1 in section V.K (Recreation) depicts San Francisco's open spaces. These open spaces contain the majority of the City's natural scenic resources. As shown in this map, much of San Francisco's larger tracts of open spaces are located on the west side of the City, with some larger open spaces also located along the southern edges of the City. San Francisco's landmark buildings are shown on Figure V.E-1 in section V.E (Cultural and Paleontological Resources). The majority of San Francisco's landmarks are confined to the northeastern portion of the City. The following addresses the potential for the 2004 and 2009 Housing Element policies to substantially damage scenic resources.

2004 Housing Element Analysis

The 2004 Housing Element includes policies that promote development of vacant and/or underutilized lands (2004 Housing Element Implementation Measure 4.1.4) to a similar degree as the 1990 Residence Element (Policy 1.1). Additionally, as discussed under Impact V.AE-1, the 2004 Housing Element promotes increased residential density more so when compared to the 1990 Residence Element policies. Promoting increased residential densities in tandem with the development or redevelopment of vacant and underutilized lands could result in potential impacts related to scenic resources. For example, new development that could occur on vacant or undeveloped parcels or redevelopment of underutilized parcels could affect existing natural features that would have otherwise remained without the emphasis to develop/redevelop a particular site. Although some 2004 Housing Element policies could increase the potential for development of underutilized and/or vacant lands that may potentially contain scenic resources, 2004 Housing Element Policies 2.1 and 2.4 could reduce the potential for this impact by promoting housing retention and discouraging demolition. Discouraging demolition of existing structures and retaining existing housing units would help ensure that redevelopment of sites would not result in substantial changes to the overall building footprint, thereby reducing the potential to affect any existing scenic resources. Regardless, development of sites with scenic resources could occur, however any impacts to scenic resources under such circumstances would be development specific and appropriately addressed during the environmental analysis prepared for the specific project.

New development would be required to comply with the previously discussed regulations, including the Residential Design Guidelines, Section 311 of the San Francisco Planning Code and the Urban Design Element of the San Francisco General Plan. Additionally, street trees (and other trees including Landmark trees) that may be considered a scenic resource are protected under the City's tree ordinance (as described above), and therefore the 2004 Housing Element policies would not be anticipated to substantially affect the City's street trees. Furthermore, the majority of the City's scenic resources are confined to open spaces designated as public land and under the jurisdiction of the Recreation and Parks Department and other state and federal agencies and therefore are not expected to be converted to residential uses. Therefore, the 2004 Housing Element would not directly or indirectly damage scenic resources, and the

2004 Housing Element would have a *less than significant* impact with respect to substantially damaging scenic resources.

2009 Housing Element Analysis

As discussed under Impact AE-1, the 1990 Residence Element promotes increased density on a broader, citywide, scale to a greater extent than the 2009 Housing Element. Some policies in the 2009 Housing Element could promote density for affordable housing projects and as a strategy to be pursued during community planning processes. The 2009 Housing Element also promotes development of underused and surplus public lands (Implementation Measure 4). As discussed in the analysis for the 2004 Housing Element policies that promote increased residential densities in tandem with the redevelopment of underutilized lands could result in potential impacts related to scenic resources by increasing the development potential of the site, thereby incentivizing the redevelopment of underused sites. Nonetheless, the 2009 Housing Element, when compared to the 1990 Residence Element, does not aggressively promote density more so than the 1990 Residence Element. When taken as a whole, the 2009 Housing Element would promote density to a lesser extent than the 1990 Residence Element, which could potentially result less development incentive for underused sites. Regardless, development of sites with scenic resources could occur, however any impacts to scenic resources under such circumstances would be development specific and appropriately addressed during the environmental analysis prepared for the specific project. New development would be required to comply with the previously discussed regulations, including the Residential Design Guidelines, Section 311 of the San Francisco Planning Code, the Urban Design Element of the San Francisco General Plan, and the City's tree protection ordinance.

Furthermore, 2009 Housing Element Policies 2.2 through 2.5 and Implementation Measure 37 could reduce this impact for similar reasons as discussed above under the 2004 Housing Element analysis. In addition, 2009 Housing Element Policy 11.6 preserves landmark buildings, some of which could be considered a scenic resource of the built environment. Additionally, the majority of the City's scenic resources are confined to open spaces designated as public land and under the jurisdiction of the Recreation and Parks Department and other state and federal agencies and therefore are not expected to be converted to residential uses. Also, as discussed above, the policies noted would not directly result in new residential development and would, thus, not directly or indirectly damage scenic resources. Therefore, the 2009 Housing Element would not directly or indirectly damage scenic resources, and the 2009 Housing Element would have a *less than significant* impact with respect to substantially damaging scenic resources.

Impact AE-3: The proposed Housing Elements would not substantially degrade the existing visual character or quality of the site and its surroundings. (Less than Significant)

New construction could result in impacts related to visual character if new housing would be developed with greater densities or heights than surrounding land uses or introduce incompatible uses in such a way as to substantially degrade the character or quality of the site. The existing visual characteristics throughout the City, similar to the land uses, are varied and reflect the change in the development patterns, land uses, and architectural styles in the City. Telegraph Hill, Russian Hill, Pacific Heights,

Buena Vista and Upper Market, and Dolores Heights are identified in the City's General Plan as outstanding and unique areas within the City. These areas comprise approximately five percent of the City's pipeline housing units and approximately 13 percent of the overall capacity for new housing within the City.¹⁰

2004 Housing Element Analysis

As discussed under Impact AE-1, 2004 Housing Element Policies 1.7, 4.4, 11.6, 11.7, and 11.8 and Implementation Measures 1.1.1, 1.6.2, and 11.9.1 could promote increased density compared to the 1990 Residence Element policies. Promoting increased density could result in taller and bulkier buildings, thereby affecting the overall visual character of the area. Section V.A (Land Use and Land Use Planning) addresses the potential for the 2004 Housing Element to introduce land uses that could result in changes to land use character. The analysis in this section found that the 2004 Housing Element policies that direct growth to certain areas of the City (including predominately commercial and industrial areas) would have a less than significant impact on land use character because the 2004 Housing Element would not change allowable land uses or increase allowable building height and bulk. Similarly, as the 2004 Housing Element would not result in changes to the physical land use controls or to allowable uses, the 2004 Housing Element would not be expected to result in substantial changes to the City's existing visual character. Furthermore, the following 2004 Housing Element policies could reduce the 2004 Housing Element's potential to degrade existing visual character by encouraging consistency among land uses and neighborhood character, which would take into account visual character as applicable.

Impact	2004 Housing Element	Corresponding 1990 Residence Element Policy
Ensure that new residential development is located in existing residential areas.	Policy 1.4: Locate in-fill housing on appropriate sites in established residential neighborhoods.	Policy 1.4: Locate infill housing on appropriate sites in established neighborhoods.
Ensure that projects contribute to neighborhood character.	Policy 11.1: Use new housing development as a means to enhance neighborhood vitality and diversity.	Policy 12.4: Promote construction of well designed housing that conserves existing neighborhood character.
	Policy 11.8: Strongly encourage project sponsors to take full advantage of allowable building densities in their housing developments while remaining consistent with character.	

¹⁰ This calculation used the entire Northeast District to represent the Telegraph Hill and Russian Hill areas, the entire Marina District to represent the Pacific Heights area, the entire Mission District to represent the Dolores Heights area. The aforementioned areas do not encompass the entire Northeast, Marina, or Mission Districts. Therefore, the percentage of pipeline housing units and overall capacity that are located near outstanding and unique areas are likely overstated.

Impact	2004 Housing Element	Corresponding 1990 Residence Element Policy
	Policy 11.9: Set allowable densities and parking standards in residential areas at levels that promote the City's overall housing objectives while respecting neighborhood scale and character.	Policy 2.1: Set allowable densities in established residential areas at levels which will promote compatibility with prevailing neighborhood character.

As shown above, the 2004 Housing Element and the 1990 Residence Element both promote infill housing in established residential neighborhoods, promoting residential development that is compatible with surround land uses. The 2004 Housing Element policies 11.1, 11.8, and 11.9 address new housing with respect to neighborhood scale and character, reflecting the desire for new development contributes positively to existing neighborhood character.

Although the 2004 Housing Element includes policies that promote increased density for new development which could result in taller and bulkier buildings that may affect visual character, the 2004 Housing Element also promotes consistency with neighborhood character and encourages infill residential development. In order to result in a significant impact on visual character, the project would need to result in a substantial, demonstrable adverse effect. Visual character and design issues are, for the most part, subjective. The 2004 Housing Element does not contain policies that would directly or indirectly result in a demonstrable adverse impact. New residential development would be required to comply with the previously discussed regulations, including height and bulk regulation in the Planning Code and Section 311 of the San Francisco Planning Code, the Residential Design Guidelines, and the Urban Design Element of the San Francisco General Plan. Therefore, the 2004 Housing Element would have a *less than significant* impact with respect to degradation of existing visual character.

2009 Housing Element Analysis

As discussed under Impact AE-1, the 1990 Residence Element promotes increased density on a broader, citywide, scale to a greater extent than the 2009 Housing Element. Some policies in the 2009 Housing Element could promote density near for affordable housing projects and as a strategy to be pursued through community planning processes. Promoting increased density could result in taller and bulkier buildings, thereby affecting the overall visual character of the area. Nonetheless, the 2009 Housing Element, when compared to the 1990 Residence Element, does not aggressively promote density more so than the 1990 Residence Element. Therefore, when taken as a whole, the 2009 Housing Element would have less of a potential to result in impacts related to neighborhood character as a result of promoting increased density for new development.

Section V.A (Land Use and Land Use Planning) addresses the potential for the 2009 Housing Element to introduce land uses that could result in changes to land use character. The analysis in this section found that the 2009 Housing Element policies that direct growth to certain areas of the City (including predominately commercial and industrial areas) would have a less than significant impact on land use

character because the 2009 Housing Element would not change allowable land uses or increase allowable building height and bulk. Similarly, as the 2009 Housing Element would not result in changes to the physical land use controls or to allowable uses, the 2009 Housing Element would not be expected to result in substantial changes to the City's existing visual character. Additionally, the following 2009 Housing Element policy would further consider neighborhood character when developing new housing, thereby reducing the potential for new development to degrade the existing visual character.

Impact	2009 Housing Element	Corresponding 1990 Residence Element Policy
Respect existing neighborhood character.	Policy 11.1: Promote the construction and rehabilitation of well-designed housing that emphasizes beauty, flexibility, and innovative design, and respects existing neighborhood character.	Policy 12.4: Promote construction of well designed housing that conserves existing neighborhood character.

As shown above, the differences between 2009 Housing Element Policy 11.1 and 1990 Residence Element Policy 12.4 are not significant and would not represent a shift in policy. 1990 Residence Element Policy 12.4 provides guidelines for development that are intended to preserve neighborhood character. The 2009 Housing Element recognizes the diversity in architectural styles throughout the City. 2009 Housing Element Policy 11.1 would ensure that future development would be consistent with existing neighborhood character. Moreover, as with the 2004 Housing Element, there would be no direct or indirect substantial adverse change to visual character attributable to the 2009 Housing Element policies.

Overall, the 2009 Housing Element would promote measures that would increase the housing supply in a manner that does not present conflicts with existing visual character. Development associated with new residential units would be required to comply with the previously discussed regulations and requirements. Therefore, the 2009 Housing Element would have a *less than significant* impact with respect to degradation of existing visual character.

Impact AE-4: The proposed Housing Elements would not create a new source of substantial light or glare which would adversely affect day or nighttime views in the area or which would substantially impact other people or properties. (Less than Significant)

Implementation of the 2004 Housing Element and 2009 Housing Element could result in impacts related to light and glare if new housing would introduce new sources of light or glare that are unusual for an urban area. New housing could introduce new sources of light and glare if reflective glass or if bright, decorative or security lighting is used. However, for infill development that would replace open parking lots or yards, softer lighting that generates less glare than the present security lighting would typically be used. Additionally, residential exterior lighting tends to be focused on specific areas, rather than lighting a wide area such as a surface parking lot or undeveloped parcels. City Resolution 9212 prohibits the use of highly reflective or mirrored glass in new construction. New development would be required to comply

with this resolution; thus, impacts related to glare would be *less than significant* under both the 2004 and 2009 Housing Elements.

Cumulative Impacts

The geographic context for cumulative aesthetic impacts is the entire City of San Francisco. Cumulative impacts occur when impacts that are significant or less than significant from a proposed project combine with similar impacts from other past, present, or reasonably foreseeable projects in a similar geographic area. This would include the demolition of existing structures or new construction in the project area or immediately adjacent to the project boundaries resulting from past, present and reasonably foreseeable future projects combining with similar impacts from the 2004 Housing Element and 2009 Housing Element. The cumulative effect of development within the City could contribute to impacts related to aesthetics. As discussed throughout this Draft EIR, growth would occur regardless of implementation of the proposed Housing Elements. Furthermore, any new development within the City would be subject, on a project-by-project basis, to independent CEQA review as well as policies in the San Francisco General Plan, governing area plans, design guidelines, planning codes and zoning maps (including development standards), and other applicable land use plans that are intended to reduce impacts to aesthetics. The 2004 Housing Element and 2009 Housing Element policies would not directly or indirectly affect aesthetics. New development could affect such resources, but would be evaluated on a project-by-project basis. In addition, the 2004 Housing Element and 2009 Housing Element are public policy documents and would not result in direct significant impacts.

Changes to the existing visual environment in the City could occur through an increase in residential density and building heights proposed by new housing construction. New construction encouraged to be developed to maximum allowable densities and to the full building envelope, could result in increases to the height of the building that previously occupied the lot, or in the case of a vacant lot, add new elements to the site. New housing could block or obstruct views, damage scenic resources, degrade visual character, or introduce light and glare. However, it is assumed that future housing development would be consistent with the relevant sections of the San Francisco Planning Code, Urban Design Element of the San Francisco General Plan, and Planning Commission Resolution 9212. For this reason, cumulative impacts on aesthetics would be *less than significant*. The Housing Elements would not contribute to cumulative aesthetics impacts because they would not directly result in new construction; therefore, cumulative impacts would be *less than significant*.

MITIGATION AND IMPROVEMENT MEASURES

Mitigation Measures

No mitigation measures are warranted by the proposed Housing Elements.

Improvement Measures

No improvement measures are warranted by the proposed Housing Elements.

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V. ENVIRONMENTAL SETTING AND IMPACTS

D. POPULATION AND HOUSING

INTRODUCTION

This section addresses the potential impacts of the 2004 Housing Element and 2009 Housing Element policies related to population growth, housing displacement, and displacement of people.

ENVIRONMENTAL SETTING

Every two years the Association of Bay Area Governments (ABAG) makes long-term forecasts of population, households, and employment within the Bay Area, which is designed to be a realistic assessment of growth in the region. The ABAG population projections differ slightly from the estimates by the California Department of Finance (DOF). The analysis in this EIR reflects the historic trends and future population numbers from the ABAG Projections 2009 because they were included in Part I of the 2009 Housing Element. The analysis in this EIR also reflects the historic trends and future household numbers prepared by the Planning Department to satisfy the mandates of the San Francisco Public Utilities Commission in connection with assessing water supply and demand in the years to come. The Planning Department completed a Citywide projection capturing growth expectations by 2030 designed to closely match the recently adopted ABAG Projections 2009 target and taking into account the development pipeline.

Population

Table V.D-1 compares ABAG trends for 1990 and 2000 and ABAG population projections for 2010 through 2030 in San Francisco. The provisional population estimate for San Francisco as of July 1, 2009, was 851,485.¹ According to the projections, San Francisco is expected to reach a population of approximately 900,500 by 2025. ABAG projected a four percent population growth rate between 2000 and 2010. As of July 1, 2009, the growth rate since 2000 was almost ten percent, which exceeds ABAG's projections.

Table V.D-1
San Francisco Population Trends and Projections

	1990 ^a	2000 ^a	2005 ^b	2010 ^a	2015 ^b	2020 ^a	2025 ^b	2030 ^a
Population	723,959	776,733	795,800	810,000	837,500	867,100	900,500	934,800
<i>Sources:</i>								
^a City and County of San Francisco, Planning Department, Part I: Data and Needs Analysis, June 2010, at page 4.								
^b ABAG, Projections 2009.								

¹ State of California, Department of Finance, California County Population Estimates and Components of Change by Year, July 1, 2000-2009. Sacramento, California, December 2009, website: <http://www.dof.ca.gov/research/demographic/reports/estimates/e-2/2000-09/>, Accessed April 16, 2010.

Housing and Households

Table V.D-2 presents population and household trends between 2000 and 2030. The City is projected to experience continued population growth through 2025, for a total of 411,514 housing units, which equates to an overall household population increase of approximately 85,350 between 2009 and 2025. According to the DOF, San Francisco had approximately 347,916 occupied housing units as of January 1, 2009².

Table V.D-2
San Francisco Household Trends and Projections

	2000	2005	2009	2010	2015	2020	2025	2030
Housing Units	347,053	359,451	369,864	372,467	385,483	398,498	411,514	424,518
Household	329,700	341,478	351,370	353,843	366,208	378,573	390,938	403,292
Household Population	756,976	783,441	804,779	810,113	836,785	863,457	890,129	916,800
Persons per Household	2.30	2.29	2.29	2.29	2.28	2.28	2.28	2.27

Note: The projections for 2009, 2010, 2015, 2020, and 2025 were calculated using linear regression.

Source: John Rahaim, Director of Planning, San Francisco Planning Department, correspondence with Michael P. Carlin, Deputy General Manager at the San Francisco Public Utilities Commission, July 9, 2009. (See Appendix I).

Housing

San Francisco's current housing stock totals approximately 365,050 units.³ Table V.D-3 compares the structure type, unit size, and age of housing in San Francisco for 2000 and 2007. In 2000, San Francisco had approximately 346,500 housing units that consisted of roughly equal proportions of low-density (e.g., single-family units) and high-density structures (e.g., structures with 20 or more units). This did not change dramatically between 2000 and 2007. Dwelling units in San Francisco are generally small in size. The 2000 Census showed that 76 percent of all units had two bedrooms or less. Over 53 percent of San Francisco's housing stock was built prior to 1940.

Table V.D-3
San Francisco Housing Characteristics

Characteristic	All Units	
	2000	2007
Structure Type		
Single Family	32.1%	34.4%
2-4 Units	23.3%	20.4%
5-9 Units	11.3%	10.4%
10-19 Units	10.1%	10.2%
20+ Units	22.9%	24.5%
Other	0.2%	0.1%
Total	100.0%	100.0%

² California Department of Finance, E-5 Population and Housing Estimates for Cities, Counties and the State, 2001-2009, with 2000 Benchmark. Sacramento, California, May 2009, website: <http://www.dof.ca.gov/research/demographic/reports/estimates/e-5/2009/>, accessed June 22, 2010.

³ Ibid.

**Table V.D-3
San Francisco Housing Characteristics**

Characteristic	All Units	
	2000	2007
Unit Size		
No Bedroom	18.0%	14.1%
1 Bedroom	28.0%	28.2%
2 Bedrooms	29.8%	30.4%
3 Bedrooms	17.3%	18.5%
5 Bedrooms	5.3%	6.3%
5+ Bedrooms	1.7%	2.5%
Total	100.0%	100.0%
Age of Housing by Year Built		
2000 and later		3.7%
1980 – 1999	8.8%	8.5%
1960 – 1979	18.8%	14.6%
1940 – 1959	24.0%	20.0%
1939 or earlier	48.5%	53.3%
Total	100.0%	100.0%
<i>Source: City and County of San Francisco, Planning Department, Part I: Data and Needs Analysis, June 2010, at page 22.</i>		

The overall housing vacancy rate in San Francisco is indicative of an enduring tight market. Table V.D-4 depicts the fluctuating vacancy rate in San Francisco. The unusually high total vacancy rate of 10.2 percent in 2008 suggests an increase in second homes, time-shares, and corporate homes used for employee housing.

**Table V.D-4
Vacancy Rates by Vacancy Status**

Vacancy Status	1970	1980	1990	2000	2008
Vacant	4.89%	5.58%	6.97%	4.86%	10.2%
For Rent Vacant	3.17%	2.68%	3.71%	2.50%	5.4%
For Sale Vacant			0.56%	0.80%	2.0%
<i>Source: City and County of San Francisco, Planning Department, Draft Housing Element, Part I: Data and Needs Analysis, June 2010, at page 37.</i>					

Housing affordability is a major issue for the Bay Area and especially for San Francisco. According to ABAG, in 2007 only 15 percent of Bay Area households could afford a median-priced home in the Bay Area at large, while in San Francisco, only 10 percent of households could afford a median-priced home.⁴

⁴ ABAG, San Francisco Bay Area Housing Needs Plan 2007-2014, Adopted June 2008, at page 5, website: <http://www.abag.ca.gov/planning/pdfs/SFHousingNeedsPlan.pdf>, accessed November 9, 2009.

Regional Housing Need Allocation

New housing need is determined, at a minimum, through a Regional Housing Needs Allocation (RHNA) process. ABAG, in coordination with the California Department of Housing and Community Development (HCD), determined the Bay Area's regional housing need based on regional trends, projected job growth, and existing needs. The housing needs determination effort seeks to alleviate a tight housing market stemming from forecasted household and employment growth as well as to allocate regional household and employment growth to jurisdictions with established or planned transit infrastructures. The RHNA determination includes production targets for housing to serve various household income categories. The RHNA provides a benchmark for evaluating the adequacy of local zoning and regulatory actions to ensure each local government is sufficiently designating land and providing opportunities for housing development to address population growth and job generation. According to housing element law, the proposed Housing Elements are required to demonstrate adequate capacity to accommodate the RHNA.

The 2004 Housing Element accommodated San Francisco's share of the regional housing need for January 1999 through June 2006, which was calculated as 20,374 units, or 2,717 units per year.⁵ Although San Francisco fell short of meeting the state mandated fair share housing targets, over 17,470 new housing units were built from 1999-2006, or almost 86 percent of its housing production targets.⁶ The City met almost 83 percent of the target for very-low income housing, but only 52 percent of the low-income housing production target was produced. The City also exceeded the market-rate housing target by over 53 percent. The greatest deficiency for the reporting period was in the production of moderate-income housing, where the City produced just 13 percent of its target. This unmet need is carried over in the 2009 Housing Element targets.

The 2009 Housing Element presents an updated calculation of San Francisco's fair share of the regional housing need. Table V.D-5 shows the amount of housing need allocated to the City for 2007 to 2014 (as identified in the Part I of the 2009 Housing Element). This updated calculation of San Francisco's share of the regional housing need is for January 2007 through June 2014 and shows a need for 31,193 housing units, or 4,159 units per year.

⁵ City and County of San Francisco, Planning Department, Housing Element, Part I: Data and Needs Analysis, Adopted May 13, 2004, at page 65.

⁶ City and County of San Francisco, Planning Department, Draft Housing Element, Part I: Data and Needs Analysis, June 2010, at page 98.

**Table V.D-5
2009 Housing Element Regional Housing Needs Allocation**

Household Income Category	Percentage of Area Median Income (AMI)^a	No. of Units	Percentage
Extremely Low	< 30%	3,294	10.5%
Very Low	31 – 50%	3,295	10.6%
Low	51 – 80%	5,535	17.7%
Moderate	81 – 120%	6,754	21.7%
Above Moderate	> 120%	12,315	39.5%
Total	--	31,193	100%

Note: The Department of Housing and Urban Development determines the AMI for the San Francisco Primary Metropolitan Area, which includes the counties of San Francisco, Marin and San Mateo. For 2008, the area median income for a single person household was over \$66,000 and \$94,300 for a household of four people.

Source: City and County of San Francisco, Planning Department, Part I: Data and Needs Analysis, June 2010, at page 41.

Employment

The median household income in San Francisco in 2008 was \$73,798, and the median family household income was \$91,812.⁷ Approximately 18 percent of families were under the poverty level in 2008.⁸ As of 2008, of the City's residents over age 25, 30.9 percent hold a bachelor's degree and 19.4 percent hold a graduate or professional degree.⁹ With respect to occupational sectors, 50.9 percent of employment is in management and professional work, and 38.4 percent of employment is in service, sales, and office work.¹⁰ In addition to the difference between median family income and median non-family income, disparities exist between home-owning households and renters, and amongst ethnic groups.¹¹ This array of income, as well as household type, affects housing demand and affordability. For example, the family median income is not enough to afford the average 2008 rent for a two-bedroom apartment at \$2,650. And while the median family income is somewhat higher than that of a non-family household, it is spread among more people in the household and would have to pay for larger housing to accommodate the larger average family household size. There is thus a need for larger units affordable to families in San Francisco and an on-going need for affordable housing for the population in general.

Employment growth in San Francisco and the region directly affects the demand for housing as new jobs attract new residents. Table V.D-6 presents data relating to employment trends. The crash of "dot com" ventures and the subsequent recovery show a net job loss in the years between 2000 and 2005 to be

⁷ Id. at page 15.

⁸ Id. at page 54.

⁹ Bay Area Census, San Francisco City and County, website: <http://www.bayareacensus.ca.gov/counties/SanFranciscoCounty.htm>, accessed June 22, 2010.

¹⁰ Id.

¹¹ City and County of San Francisco, Planning Department, Draft Housing Element, Part I: Data and Needs Analysis, June 2010, at page 15.

approximately 89,410. By 2030, the number of jobs in the City is expected to increase by 105,600 compared to 2000.

**Table V.D-6
San Francisco Employment Trends and Projections, 2000-2030**

	2000	2005	2030
Jobs	642,500	553,090	748,100
<i>Source: John Rahaim, Director of Planning, San Francisco Planning Department, correspondence with Michael P. Carlin, Deputy General Manager at the San Francisco Public Utilities Commission, July 9, 2009.</i>			

Table V.D-7 presents workers per household trends and projections. The number of workers per household declined between 2000 and 2005, from 1.33 to 1.15. This number is expected to remain fairly constant until 2030 when it will increase to 1.30 workers per household.

**Table V.D-7
Workers per Household Trends and Projections, 2000-2030**

	2000	2005	2010	2015	2020	2025	2030
Workers per Household	1.33	1.15	1.19	1.18	1.23	1.28	1.30
<i>Source: City and County of San Francisco, Planning Department, Draft Housing Element, Part I: Data and Needs Analysis, June 2010, at page 14.</i>							

REGULATORY SETTING

The following discussion includes a brief explanation of the regulations and plans related to population and housing that are relevant to the proposed Housing Elements.

Federal

Federal Uniform Relocation Act

The Federal Uniform Relocation Act requires that comparable, decent, safe, and sanitary replacement housing that is within a person's financial means (comparable and affordable) be made available before any person is displaced. The new housing, to the maximum extent practicable, should be housing of the tenant's choice, on a nondiscriminatory basis, without regard to race, color, religion (creed), national origin, handicap, age, or sex, and in compliance with applicable federal and state laws.

State

Government Code Section 65580-65590 (Housing Element Law)

Refer to the Regulatory Setting subsection of Section IV (Project Description) of the Draft EIR for a discussion of State-mandated housing element requirements.

Regional

San Francisco Bay Area Housing Needs Plan 2007-2014

The RHNA process is a state mandate designed to address the need for housing throughout the state. As part of RHNA, the State requires each jurisdiction to plan for its share of the region's housing need, for people of all income categories. The Bay Area's regional housing need is specified by HCD and finalized through negotiations with ABAG. ABAG then allocates a portion of the regional need, for all income groups, to every jurisdiction in the Bay Area. The jurisdictions must then plan for that need in their local housing elements, which must be eventually certified by HCD. The RHNA process does not necessarily encourage or promote growth, but rather requires communities to anticipate projected growth, so that they can grow in ways that enhance quality of life, improve access to jobs, transportation and housing, and not adversely impact the environment. It consists of two measurements of housing: (a) existing need; and (b) future need. The RHNA for the 2009 Housing Element is presented in Table V.D-5.

Local

San Francisco Subdivision Code Section 1302(c)(2)

Section 1302(c)(2) of the San Francisco Subdivision Code recognizes that condominium conversion subdivisions differ from other subdivisions and, therefore, the adoption of special requirements are required. The purposes of these special requirements include: a) preserving a balance of ownership and rental housing; b) promote expansion of homeownership opportunities; c) reduce impact of conversions on nonpurchasing tenants who may be required to relocate; d) prevent displacement of elderly and disabled tenants; e) assure purchasers of converted housing have been properly informed of structure's physical condition; f) prevent loss of City's low or moderate income housing stock; and g) expand supply of City's low or moderate income housing stock.

San Francisco Planning Code Section 317

Section 317 of the San Francisco Planning Code codifies review criteria for allowing housing demolition, conversion and mergers and denies residential demolition permits until approval of a new construction permit is obtained. San Francisco faces a continuing shortage of affordable housing. There is a high ratio of rental to ownership tenure among the City's residents. The General Plan recognizes that existing housing is the greatest stock of rental and financially accessible residential units, and is a resource in need of protection. Therefore, Section 317 of the Planning Code requires that a public hearing be held prior to approval of any permit that will remove existing housing, with certain codified exceptions. Where a project will result in the loss of one or two residential units, the project is subject to a Mandatory Discretionary Review (DR) hearing before the Planning Commission, unless the Code specifically requires Conditional Use (CU) Authorization. Projects resulting in the loss of three or more units will require a Conditional Use hearing by the Planning Commission.

Residential Hotel Unit Conversion and Demolition Ordinance

The Residential Hotel Unit Conversion and Demolition Ordinance benefits the general public by minimizing adverse impacts on the housing supply and on displaced low income, elderly, and disabled persons resulting from the loss of residential hotel units through their conversion and demolition. This is to be accomplished by establishing the status of residential hotel units, by regulating the demolition and conversion of residential hotel units to other uses, and by appropriate administrative and judicial remedies.

IMPACTS

Significance Thresholds

The proposed Housing Elements would normally have a significant effect on the environment if they would:

- Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure);
- Displace substantial numbers of existing housing units or create demand for additional housing, necessitating the construction of replacement housing; or
- Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere.

Impact Evaluation

As discussed previously, the 2004 Housing Element and 2009 Housing Elements would not change the land use objectives and policies in the City's area and redevelopment plans. According to Part I of the 2009 Housing Element (Data and Needs Analysis), the City has available capacity to meet the RHNA. Therefore, the rezoning of land uses is not required. The proposed Housing Elements are policy documents that provide direction for accommodating the need for new housing driven by population growth. A variety of local factors support growth projections for San Francisco. The desirability of San Francisco, with its wealth of natural and urban amenities, has always appealed strongly to consumers. This desirability has resulted in continued high demand for housing, as evidenced by high property values and a growing population. Therefore, it is expected that residential development in the City would occur regardless of the proposed Housing Elements, and housing element law ensures that local agencies, including San Francisco, plan for the development of, and make land available for, new housing. To meet the City's share of the RHNA, the proposed Housing Elements aim to do the following: 1) preserve and upgrade existing housing units to ensure they do not become dilapidated, abandoned, or unsound, and 2) provide direction for how and where new housing development in the City should occur. With respect to the latter, the 2004 Housing Element encourages new housing in Downtown and in underutilized commercial and industrial areas. The 2004 Housing Element also encourages increased housing in neighborhood commercial districts and mixed-use districts near Downtown. On the other hand, the 2009

Housing Element encourages housing in new commercial or institutional projects and accommodating housing through existing community planning processes.

Impact PH-1: The proposed Housing Elements would not induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure). (Less than Significant)

New construction could result in impacts related to substantial population growth if new housing would generate more residents than planned for by ABAG projections, including through the creation of jobs related to construction or by increasing household size. Section V.A (Plans and Policies) of this Draft EIR describes the area plans and redevelopment plans that serve to guide the nature of future development in specific neighborhoods or districts in the City. The City's General Plan includes area plans for the following areas: Bayview Hunters Point, Central Waterfront, Chinatown, Civic Center, Downtown, East SoMa, Market & Octavia, Mission, Northeastern Waterfront, Showplace Square/Potrero Hill, Rincon Hill, South of Market, Van Ness Avenue, and Western Shoreline. The San Francisco Redevelopment Agency maintains redevelopment plans for the following areas: Bayview Hunters Point, Federal Office Building, Golden Gateway, Hunters Point Shipyard, Mission Bay, Rincon Point - South Beach, South of Market, Transbay, Visitacion Valley, Western Addition A-1, and Yerba Buena Center. The 2004 Housing Element and 2009 Housing Element do not directly or indirectly include any changes to the objectives and policies in the City's area plans or redevelopment plans for the abovementioned areas. Growth within area plans or redevelopment plans would continue to be subject to the guiding policies of the appropriate plan. Both the 2004 and 2009 Housing Elements call for community planning processes to guide future growth and give overall guidance for community planning efforts. Any proposed community planning process would be required to undergo a separate environmental review.

A housing element is required to adequately plan for and address the housing needs of all segments of its population, such that all communities contribute to the attainment of the state housing goals. As shown in Table V.D-5, based on ABAG projections and the resulting RHNA, the 2009 Housing Element identifies San Francisco's share of the regional housing need for January 2007 through June 2014 as 31,193 housing units, or 4,159 units per year. The proposed Housing Elements would help achieve the RHNA goals through implementation of housing-related policies. In developing the proposed Housing Elements, the City found that there are substantial infill housing opportunity sites to meet the City's share of the RHNA.¹² According to Tables IV-7 and IV-5 in Section IV (Project Description), there are approximately 56,435 units are anticipated to be developed in the City (pipeline projects), with the capacity for 60,995 additional units, respectively. The pipeline units anticipated to be developed in the City total approximately 25,000 units more than the City's share of the RHNA. Additionally, area planning processes and rezoning alternatives would allow the additional capacity of 27,844 units.

Housing growth would occur regardless of the proposed Housing Elements. The proposed Housing Elements provide direction for that growth with a specific emphasis on housing affordability. As

¹² City and County of San Francisco, Planning Department, Draft Housing Element, Part I: Data and Needs Analysis, April 2009, at page 82.

previously discussed, implementation of the proposed Housing Elements would not directly induce population growth, but is designed so that the City can accommodate this growth. For the purposes of this analysis, “infrastructure” is comprised of roads and utility systems, including water, sewer, stormwater, solid waste, and electrical distribution, processing, or storage systems. This is discussed further below.

Impacts related to roadways are discussed in Section V.F (Transportation and Circulation). The proposed Housing Element polices related to redirecting housing growth, parking provision, and increased residential density would not affect overall operations of roadway, transit, pedestrian facilities, nor would they impact loading, emergency access, or construction areas. Potential impacts related to these issues would be offset by compliance with the previously discussed plans and regulations including the Regional Transportation Plan, San Francisco Countywide Transportation Plan, SFMTA’s Strategic Plan, San Francisco General Plan, San Francisco Municipal Code, San Francisco Bicycle Plan, Pedestrian Master Plan, Better Streets Plan, and the Transit First Policy. It should be noted that as development proposals for specific locations throughout the City are developed, project-level environmental review would be required to evaluate environmental impacts of specific projects. The proposed Housing Elements indirectly support growth by accommodating housing needs. However, this growth would occur regardless of the proposed Housing Elements. Policies related to infrastructure are not designed to increase housing, but are designed to serve the needs of the projected population increase.

As a result, the proposed Housing Elements would not trigger the need for roadway expansions that were not previously anticipated. Therefore, no growth inducing impact related to roadway expansion is anticipated to occur.

As discussed in Section V.K (Utilities and Service Systems), the City’s combined sewer system infrastructure is aging. However, the City has a master plan with a long-term strategy for management of the City’s sewer system. Under CEQA, the San Francisco Public Utilities Commission is required to confirm that the City has adequate water available for new development. The Water Supply Availability Study prepared for the City in October 2009 utilized updated water demand forecasts in 2010 through 2030 to reflect San Francisco’s three major development projects, i.e., Candlestick Point-Hunters Point Shipyard, Treasure Island, and Park Merced, incremental growth projected to occur throughout the City, and the 2009 San Francisco nonresidential planning projections (based on ABAG 2009 Employment Projections) for 2030.¹³ Because the Water Supply Availability Study was prepared based on the same population projections used in this EIR, the potential impacts related to water demand due to increased density resulting from the proposed Housing Elements have already been accounted for in the Water Supply Availability Study. New sources of groundwater, recycled water, and water conservation are essential to provide the City with adequate supply in dry year periods, as well as improving supply reliability during years with normal precipitation. The SFPUC’s demand management programs range from financial incentives for plumbing devices to improvements in the distribution efficiency of the

¹³ SFPUC, Final Water Supply Availability Study for City and County of San Francisco, October 2009, at page 23. (See Appendix H).

system.¹⁴ In addition, project applicants for individual development projects would be responsible for the necessary stormwater and sanitary sewer infrastructure improvements to accommodate the individual project. As a result, the projected growth that would be accommodated by the proposed Housing Elements through increased density and community planning processes could result in the need for upgraded sewer and stormwater conveyance infrastructure. Because growth under the proposed Housing Elements would be mostly infill, improvements to utilities infrastructure would not result in extension of utilities to previously unserved areas. As a result, infrastructure improvements associated with housing growth would not be considered growth inducing. Therefore, no growth inducing impacts related to infrastructure expansion would occur.

As shown in Table V.D-7, the workers to household ratio was 1.15 in 2005 and is expected to incrementally increase through 2025. Given that no substantial change in the workers to household ratio would occur between 2005 and 2025, no impact to the jobs/housing balance is anticipated to occur.

2004 Housing Element Analysis

The focus of the 2004 Housing Element is to alleviate some of the constraints to providing the needed type, amount, and affordability of new housing in the City. The following 2004 Housing Element policies could help to accommodate population growth by increasing land available for housing, identifying housing opportunity sites and increasing the amount of housing on that land.

Impact	2004 Housing Element	Corresponding 1990 Residence Element Policy
Direct growth to certain areas of the City.	Policy 1.1: Encourage higher residential density in areas adjacent to downtown, in underutilized commercial and industrial areas proposed for conversion to housing and in neighborhood commercial districts where higher density will not have harmful effects, especially if the higher density provides a significant number of units that are affordable to lower income households. Set allowable densities in established residential areas at levels which will promote compatibility with prevailing neighborhood scale and character where there is neighborhood support.	Policy 2.1: Set allowable densities in established residential areas at levels which will promote compatibility with prevailing neighborhood character. Policy 2.2: Encourage higher residential density in areas adjacent to downtown, in underutilized commercial and industrial areas proposed for conversion to housing and in neighborhood commercial districts where higher density will not have harmful effects, especially if the higher density provides a significant number of units that are permanently affordable to lower income households.

¹⁴ Id. at page 8.

Impact	2004 Housing Element	Corresponding 1990 Residence Element Policy
	<p>Implementation Measure 1.1.1: A Citywide action plan (CAP) should provide a comprehensive framework for the allocation of higher density, mixed-use residential development in transit-rich areas with stable urban amenities in place. In these areas, specific CAP strategies should include: higher densities and reduced parking requirements in downtown areas or through a Better Neighborhoods type planning process; pedestrian-oriented improvements to enhance the attractiveness and use of transit.</p>	
	<p>Policy 1.2: Encourage housing development, particularly affordable housing, in neighborhood commercial areas without displacing existing jobs, particularly blue-collar jobs or discouraging new employment opportunities.</p>	
	<p>Implementation Measure 1.2.1: The Planning Department will develop proposals in neighborhood commercial districts (NCDs) well served by transit to strengthen their functions as a traditional “town center” for the surrounding residential districts.</p>	
	<p>Policy 1.3: Identify opportunities for housing and mixed-use districts near downtown and former industrial portions of the City.</p>	<p>Policy 1.2: Facilitate the conversion of underused industrial and commercial areas to residential use, giving preference to permanently affordable housing uses.</p>
	<p>Implementation Measure 1.3.1: Downtown areas and areas subject to a Better Neighborhoods type planning process will be expected to absorb major office and residential developments over the next decade.</p>	<p>Implementation Measure 1.1.3: Inclusion of housing in Downtown.</p>

Impact	2004 Housing Element	Corresponding 1990 Residence Element Policy
	cases where in return the development will provide major public benefits to the community.	
	Implementation Measure 1.3.2: The Planning Department will introduce zoning changes in the traditionally industrial eastern parts of the City. The areas under study are: Mission, South of Market, Showplace Square/Potrero Hill, Bayview Hunter’s Point, and Visitacion Valley. Housing, especially affordable housing, will be encouraged in former industrial areas where residential neighborhoods are established and urban amenities are in place or feasible.	
	Policy 1.4: Locate in-fill housing on appropriate sites in established residential neighborhoods.	Policy 1.4: Locate in-fill housing on appropriate sites in established neighborhoods.
	Policy 1.6: Create incentives for the inclusion of housing, particularly permanently affordable housing, in new commercial development projects.	
	Implementation Measure 1.6.2: The Planning Department and the Redevelopment Agency will propose increasing height limits, eliminating density requirements and modifying off-street parking requirements in the Transbay/Rincon Hill Redevelopment survey areas. The Mid-Market redevelopment survey area will be rezoning to include mixed-use residential areas and reduced residential parking requirements.	
	Implementation Measure 1.6.4: The Planning Department will update the Land Use Element to define areas for mixed use development focused	

Impact	2004 Housing Element	Corresponding 1990 Residence Element Policy
	along transit corridors that are determined to be served by sufficient and reliable transit.	
	Implementation Measure 1.8.1: The Board of Supervisors has introduced Planning Code amendments to allow secondary units in new buildings that are in close proximity to neighborhood commercial districts and public transit.	
	Implementation Measure 2.4.2: As part of the Planning Department’s current citywide action plan, planning efforts in the eastern neighborhoods of the City, where housing exists in commercial and industrially zoned districts, should address housing retention as new policies and zoning are established. Mixed use should be encouraged where appropriate.	
	Implementation Measure 4.1.4: The City will work to identify underutilized, vacant, and Brownfield sites that are publicly or privately owned and suitable for affordable housing development. TH City will work with for profit and non-profit housing developers to acquire these sites for permanently affordable housing.	Implementation Measure 1.1.1: Aggressive pursuit of development opportunities [on] underused public sites. Implementation Measure 1.1.4: In-fill housing on vacant or underused sites.
	Implementation Measure 4.1.6: Permanently affordable housing sites will be especially sought out in places where transportation and existing amenities are in place.	
	Policy 11.6: Employ flexible land use controls in residential areas that can regulate inappropriately sized development in new neighborhoods, in downtown areas and in other areas through a Better	Policy 12.5: Relate land use controls to the appropriate scale for new and existing residential areas.

Impact	2004 Housing Element	Corresponding 1990 Residence Element Policy
	<p>opportunity for housing near transit.</p> <p>Implementation Measure 11.6.1: The City will continue to promote increased residential densities in areas well served by transit and neighborhood compatible development with the support and input from local neighborhoods.</p>	
<p>Promote increased density-related development standards</p>	<p>Policy 1.1: Encourage higher residential density in areas adjacent to downtown, in underutilized commercial and industrial areas proposed for conversion to housing and in neighborhood commercial districts where higher density will not have harmful effects, especially if the higher density provides a significant number of units that are affordable to lower income households. Set allowable densities in established residential areas at levels which will promote compatibility with prevailing neighborhood scale and character where there is neighborhood support.</p>	<p>Policy 2.1: Set allowable densities in established residential areas at levels which will promote compatibility with prevailing neighborhood character.</p> <p>Policy 2.2: Encourage higher residential density in areas adjacent to downtown, in underutilized commercial and industrial areas proposed for conversion to housing and in neighborhood commercial districts where higher density will not have harmful effects, especially if the higher density provides a significant number of units that are permanently affordable to lower income households.</p>
	<p>Implementation Measure 1.1.1: A Citywide action plan (CAP) should provide a comprehensive framework for the allocation of higher density, mixed-use residential development in transit-rich areas with stable urban amenities in place. In these areas, specific CAP strategies should include: higher densities and reduced parking requirements in downtown areas or through a Better Neighborhoods type planning process; pedestrian-oriented improvements to enhance the attractiveness and use of transit.</p>	
	<p>Implementation Measure 1.3.1: Downtown areas and areas subject to a Better Neighborhoods type</p>	<p>Implementation Measure 1.1.3: Inclusion of housing in Downtown (allowing housing to exceed permitted Floor-Area-Ratios [FARs] in C-3-G</p>

Impact	2004 Housing Element	Corresponding 1990 Residence Element Policy
	<p>absorb major office and residential developments over the next decade. Planning and zoning code changes should include floor-to-area ratio exemptions. These development bonuses would be conferred only in cases where in return the development will provide major public benefits to the community.</p>	<p>and C-3-S Districts).</p>
	<p>Policy 1.6: Create incentives for the inclusion of housing, particularly permanently affordable housing, in new commercial development projects.</p>	<p>Policy 1.3: Create incentives for the inclusion of housing, particularly permanently affordable housing, in new commercial development projects.</p>
	<p>Implementation Measure 1.6.2: The Planning Department and the Redevelopment Agency will propose increasing height limits, eliminating density requirements and modifying off-street parking requirements in the Transbay/Rincon Hill Redevelopment survey areas. The Mid-Market redevelopment survey area will be rezoning to include mixed-use residential areas and reduced residential parking requirements.</p>	
	<p>Policy 1.7: Encourage and support the construction of quality, new family housing.</p>	
	<p>Implementation Measure 1.7.1: In response to the increasing number of families in San Francisco, the Planning Department will develop zoning amendments to require a minimum percentage of larger family units ranging from two to four bedrooms, in new major residential projects. The Planning Department will also propose eliminating density requirements within permitted building envelopes in downtown areas and areas subject</p>	

Impact	2004 Housing Element	Corresponding 1990 Residence Element Policy
	planning process to maximize family units constructed.	
	Policy 1.8: Allow new secondary units in areas where their effects can be dealt with and there is neighborhood support, especially if that housing is made permanently affordable to lower income households.	Policy 1.5: Allow new secondary units in areas where their effects can be dealt with and there is neighborhood support, especially if that housing is made permanently affordable to lower income households.
	Implementation Measure 1.8.1: The Board of Supervisors has introduced Planning Code amendments to allow secondary units in new buildings that are in close proximity to neighborhood commercial districts and public transit.	
	Implementation Measure 1.8.3: On-going planning will propose Planning Code amendments to encourage secondary units where appropriate.	
	Policy 4.4: Consider granting density bonuses and parking requirement exemptions for the construction of affordable housing or senior housing.	Policy 7.3: Grant density bonuses for construction of affordable or senior housing.
	Implementation Measure 4.4.1: The Planning Department will look at establishing uniform density bonus standards and equal requirements for affordable and senior housing development. Until then, affordable and senior housing will continue to be granted density bonuses and reduced parking requirements on a case-by-case basis.	
	Policy 4.5: Allow greater flexibility in the number and size of units within established building envelopes, potentially increasing the number of affordable units in multi-family structures.	Policy 2.3: Allow flexibility in the number and size of units within permitted volumes of larger multi unit structures, especially if the flexibility results in creation of a significant number of dwelling units that are permanently affordable to lower

Impact	2004 Housing Element	Corresponding 1990 Residence Element Policy
		income households.
	Policy 11.6: Employ flexible land use controls in residential areas that can regulate inappropriately sized development in new neighborhoods, in downtown areas, and in other areas through a Better Neighborhoods type planning process while maximizing the opportunity for housing near transit.	Policy 12.5 Relate land use controls to the appropriate scale for new and existing residential areas.
	Implementation Measure 11.6.1: The City will continue to promote increased residential densities in areas well served by transit and neighborhood compatible development with the support and input from local neighborhoods.	
	Policy 11.7: Where there is neighborhood support, reduce or remove minimum parking requirements for housing, increasing the amount of lot area available for housing units.	
	Implementation Measure 11.7.1: The Planning Department will work to reduce parking in older neighborhoods through a Better Neighborhoods type planning process with the support and input from local neighborhoods.	
	Policy 11.8: Strongly encourage project sponsors to take full advantage of allowable building densities in their housing developments while remaining consistent with neighborhood character.	
	Policy 11.9: Set allowable densities and parking standards in residential areas at levels that promote the City’s overall housing objectives while respecting neighborhood scale and character.	Policy 2.1: Set allowable densities in established residential areas at levels which will promote compatibility with prevailing neighborhood character.

As shown above, the 2004 Housing Element promotes housing in commercial (Policies 1.1, 1.6) and industrial (Policies 1.1, 1.3) areas, neighborhood commercial districts (Policy 1.2 and Implementation Measure 1.2.1), housing near the Downtown (Policies 1.1, 1.3 and Implementation Measure 1.3.1) and along transit corridors (Policies 1.6, 11.6 and Implementation Measures 1.1.1, 1.6.4, 1.8.1, 4.1.6, and 11.6.1). The 2004 Housing Element also encourages new housing through on-going and future community planning processes (Policies 1.1, 11.6 and Implementation Measures 1.3.1, 1.3.2, 1.6.2, and 2.4.2) and on underutilized, vacant, surplus lands and on Brownfield sites (Implementation Measure 4.1.4). The above referenced policies and implementation measures are strategies contained in the Housing Element that are intended to provide direction for new housing growth, as anticipated by ABAG regional projections, by vacant lands and opportunity sites.

Additionally, the 2004 Housing Element promotes increased density in certain areas of the City (Policy 1.1 and Implementation Measure 1.1.1, 1.8.1 and 11.6.1) and promotes density bonuses (Policy 4.4 and Implementation Measures 1.3.1 and 4.4.1) and the elimination of density requirements (Policy 1.6 and Implementation Measures 1.6.2 and 1.7.1). The 2004 Housing Element also encourages increased density by promoting reduced parking requirements (Policies 4.4, 11.7, 11.9 and Implementation Measures 1.1.1, 1.6.2, 4.4.1, 11.7.1), support for secondary units (Policy 1.8 and Implementation Measures 1.8.1 and 1.8.3) and flexible building envelopes (Policies 4.5 and 11.6). These density-related strategies are intended to increase the number of units that could potentially be developed on each parcel, compared to what was included in the 1990 Residence Element.

While there are parcels of land still available for development, San Francisco's tight land market increases pressures on land values. Both market-rate and affordable housing developers report that acquiring land for housing in the City is a challenge.¹⁵ The heightened values of land make some of the land identified as a potential housing site infeasible for actual housing development, especially housing affordable to lower income households. The City's finite supply of land, coupled with strong development pressure, means that landowners can expect high prices for parcels they own, if they choose to sell their land for housing development at all. The City's fair share of the regional housing need for the period covering January 1999 through June 2006 was 20,372 units. Even with aggressive policies and programs, given that San Francisco is a mature, built-up city with limited large tracts of undeveloped land and the previous decades' housing production record, the "fair share" of affordable housing units was not achieved. Only 86 percent of the state mandated production targets and 47 percent of the affordable housing production for the period covered by the 2004 Housing Element were achieved.

Although the 2004 Housing Element would not result in the construction of residential units, it would shape how and where new residential development should occur and ensures that there is adequate land available to meet future housing needs. As discussed at the beginning of this section, a variety of local factors support growth projections for San Francisco. The desire to live in San Francisco has resulted in

¹⁵ City and County of San Francisco, Planning Department, Part I: Data and Needs Analysis, June 2010, at page 73.

continued high demand for housing, as evidenced by high property values and a growing population. The intent of the Housing Element policies is to accommodate future housing growth, as anticipated by ABAG regional projections, and therefore the proposed Housing Element would not directly induce a substantial amount of population growth. As discussed throughout this EIR, new residential development would occur regardless of the proposed Housing Element policies; the Housing Element policies provide direction for that growth with a focus on housing affordability. Therefore, impacts related to inducing a substantial amount of population growth under the 2004 Housing Element would be *less than significant*.

2009 Housing Element Analysis

Overall, the 1990 Residence Element promotes increased density on a broader, citywide, scale to a greater extent than the 2009 Housing Element. However, there are two areas under which the 2009 Housing Element promotes greater density than the 1990 Residence Element. These include the following themes: increasing density for affordable housing projects; and increased density as a strategy to be pursued through a comprehensive community planning process.

As with the 2004 Housing Element, the focus of the 2009 Housing Element is to alleviate some of the constraints to providing the needed type, amount, and affordability of new housing in the City. The following 2009 Housing Element policies could help to accommodate population growth by increasing land available for housing, identifying housing opportunity sites and increasing the amount of housing on that land.

Impact	2009 Housing Element	Corresponding 1990 Residence Element Policy
Direct growth to certain areas of the City.	Policy 1.1: Focus housing growth- and the infrastructure necessary to support that growth- according to community plans. Complete planning underway in key opportunity areas such as Treasure Island, Candlestick Park and Hunter's Point Shipyard.	Implementation Measure 1.1.2: Pursuit of housing development opportunities in neighborhood and area plans.
	Policy 1.3: Work proactively to identify and secure opportunity sites for permanently affordable housing.	Policy 1.1: Promote development of permanently affordable housing on surplus, underused and vacant public lands.
	Policy 1.6: Consider greater flexibility in the number and size of units within established building envelopes in community plan areas, especially if it can increase the number of affordable units in multi-family structures.	Policy 2.5: Allow flexibility in the number and size of units within permitted volumes of larger multi-unit structures, especially if the flexibility results in creation of a significant number of dwelling units that are permanently affordable to lower income households.

Impact	2009 Housing Element	Corresponding 1990 Residence Element Policy
	Policy 1.7: Consider public health objectives when designating and promoting housing development sites.	Policy 12.1: Assure housing is provided with adequate public improvements, services and amenities.
	Policy 1.8: Promote mixed use development, and include housing, particularly permanently affordable housing, in new commercial, institutional or other single use development projects.	Policy 1.3: Create incentives for the inclusion of housing, including permanently affordable housing in commercial developments.
	Policy 4.6: Encourage an equitable distribution of growth according to infrastructure and site capacity.	Policy 12.1: Assure housing is provided with adequate public improvements, services and amenities.
	Policy 10.3: Support state legislation and programs that promote environmentally favorable projects.	
	Policy 12.1: Encourage new housing that relies on transit use and environmentally sustainable patterns of movement.	
	Policy 12.2: Consider the proximity of quality of life elements, such as open space, child care and neighborhood serves, when development new housing units.	
	Policy 13.1: Support “smart” regional growth that locates new housing close to jobs and transit.	
	Policy 13.3: Promote sustainable land use patterns that integrate housing with transportation via transit, pedestrian, and bicycle modes.	
	Implementation Measure 3: Consistent with the SFMTA’s Climate Action Plan, MOH shall work with MTA to identify Muni sites that can serve as potential housing sites.	

Impact	2009 Housing Element	Corresponding 1990 Residence Element Policy
	<p>Implementation Measure 4: The Mayor’s Office of Housing (MOH) shall continue to actively pursue surplus or underused publicly-owned land for housing potential, working with agencies not subject to the Surplus Property Ordinance such as the San Francisco Public Utilities Commission, SFUSD and the Municipal Transportation Agency to identify site opportunities. City agencies shall continue to survey their properties for affordable housing opportunities or joint use potential.</p>	<p>Implementation Measure 1.1.1: Aggressive pursuit of development opportunities [in] underused public sites.</p> <p>Implementation Measure 1.1.4: In-fill housing on vacant or underused sites.</p>
	<p>Implementation Measure 6: To further smaller scale TOD opportunities, Planning and MTA shall evaluate smaller surplus MTA-owned sites (typically surface parking lots) and identify barriers towards their redevelopment, such as Planning Code issues, neighborhood parking needs and communities sentiment.</p>	
	<p>Implementation Measure 8: Planning, Redevelopment and Mayor’s Office of Economic and Workforce Development (MOEWD) should complete long range planning processes already underway: Japantown, Glen Park, the Northeast Embarcadero Study, the Bayview Hunters Point Plan, Candlestick/ Hunters Pont, India Basin shoreline community planning process, Treasure Island, and Hunters Point.</p>	
	<p>Implementation Measure 14: Planning staff shall prioritize support for projects which are located within a reasonable walking distance of stops along major transit lines, including BART, Muni rail lines and “Muni’s 24-hour Rapid Network.”</p>	

Impact	2009 Housing Element	Corresponding 1990 Residence Element Policy
	<p>Implementation Measure 74: The City shall coordinate with regional entities to complete the necessary planning document for SB 375, including a “Sustainable Community Strategy” which promotes sustainable growth; and corresponding updates to the Housing, Recreation and Open Space, and Land Use Elements of the General Plan.</p>	
	<p>Implementation Measure 80: In development of new community plans, Planning shall include mixed-use design standards for both residential and commercial buildings.</p>	
	<p>Implementation Measure 85: Planning shall ensure community plans for growth are accompanied by capital plans and programs to support both the “hard” and “soft” elements of infrastructure needed by new housing.</p>	<p>Implementation Measure 7.7.1: Acquisition and improvement of open space; facilities and public environmental improvements in six neighborhood strategy areas; street improvements; parking facilities in neighborhoods; transit and street improvements.</p>
	<p>Implementation Measure 90: Planning and SFMTA should coordinate housing development with the ongoing Transit Effectiveness Project.</p>	
	<p>Implementation Measure 94: Regional planning entities such as ABAG shall continue to prioritize regional transportation decisions and funding to “smart” local land use policies that link housing, jobs and other land uses, including focusing on VMT reduction. The City shall encourage formalization of state policy that similarly prioritizes transportation and infrastructure dollars for “smart growth” areas such as San Francisco, rather than geographic allocation.</p>	

Impact	2009 Housing Element	Corresponding 1990 Residence Element Policy
	Implementation Measure 97: On a local level, the City shall prioritize planned growth areas such as Better Neighborhoods, other Area Plans or Redevelopment Areas for regional, state, and federal bond and grants, especially for discretionary funding application processes such as the State's Prop 1C.	
Promote increased density-related development standards.	Policy 1.4: Ensure changes to land use controls are proposed through neighborhood-supported community planning processes.	<p>Policy 2.1: Set allowable densities in established residential areas at levels which will promote compatibility with prevailing neighborhood character.</p> <p>Policy 2.2: Encourage higher residential density in areas adjacent to downtown, in underutilized commercial and industrial areas proposed for conversion to housing and in neighborhood commercial districts where higher density will not have harmful effects, especially if the higher density provides a significant number of units that are permanently affordable to lower income households.</p>
	Policy 1.5: Consider secondary units in community plans where there is neighborhood support and when other neighborhood goals can be achieved, especially if that housing is made permanently affordable to lower-income households.	Policy 1.5: Allow new secondary units in areas where their effects can be dealt with and there is neighborhood support, especially if that housing is made permanently affordable to lower income households.
	Policy 1.6: Consider greater flexibility in number and size of units within established building envelopes in community plan areas, especially if it can increase the number of affordable units in multi-family structures.	Implementation Measure 1.1.3: Inclusion of housing in Downtown (allowing housing to exceed permitted Floor-Area-Ratios [FARs] in C-3-G and C-3-S Districts).
	Policy 7.5: Encourage the production of affordable housing through process and zoning accommodations, and prioritize affordable housing in the review and approval processes.	Policy 7.3: Grant density bonuses for construction of affordable or senior housing.

Impact	2009 Housing Element	Corresponding 1990 Residence Element Policy
	<p>Policy 11.4: Maintain allowable densities in established residential areas at levels which promote compatibility with prevailing neighborhood character.</p>	<p>Policy 2.1 Set allowable densities in established residential areas at levels which will promote compatibility with prevailing neighborhood scale and character.</p>
	<p>Implementation Measure 12: Planning shall require integration of new technologies that reduce the space required for non-housing functions, such as parking, and shall consider requiring parking lifts to be supplied in all new housing developments seeking approval for parking at a ratio of 1:1 or above.</p>	
	<p>Implementation Measure 13: When considering legalization of secondary units within community planning processes, Planning shall develop a Design Manual that illustrates how secondary units can be developed to be sensitive to the surrounding neighborhood, to ensure neighborhood character is maintained.</p>	
	<p>Implementation Measure 36: Planning shall continue to implement Planning Code Section 209, which allows a density bonus of twice the number of dwelling units otherwise permitted as a principal use in the district, when the housing is specifically designed for and occupied by senior citizens, physically or mentally disabled persons.</p>	<p>Policy 7.3: Grant density bonuses for construction of affordable or senior housing.</p>

Impact	2009 Housing Element	Corresponding 1990 Residence Element Policy
	Strategy for further review: MOH and Planning should continue to consider, within the context of a community planning process, zoning categories which require a higher proportion of affordable housing where increased density or other benefits are granted. Options include Affordable Housing Only Zones (SLI); Affordable Housing Priority Zones (UMU) or Special Use District Opportunities.	
	Implementation Measure 64: Planning staff shall support affordable housing projects in the development review process, including allowing sponsors of permanently affordable housing to take advantage of allowable densities provided their projects are consistent with neighborhood character.	
	Implementation Measure 79. Planning staff shall continue to use community planning processes to develop policies, zoning and standards that are tailored to neighborhood character.	Implementation Measure 2.2.1: Densities compatible with neighborhood character.

As shown above, the 2009 Housing Element promotes housing through community planning processes (Policies 1.1, 1.6, and Implementation Measures 8, 80 and 97), near transit and other infrastructure (Policies 1.8, 4.6, 10.3, 12.1, 13.1 and Implementation Measures 6, 14, 74, 90, and 94), and in proximity to neighborhood services (Policies 1.7, 12.2, 13.1 and Implementation Measure 85). The 2009 Housing Element also promotes housing on underused, vacant and surplus lands (Policy 1.3 and Implementation Measures 3 and 4), and housing within mixed-use areas (Policy 1.8 and Implementation Measure 80). These policies and implementation measures are strategies of the 2009 Housing Element that are intended to provide direction for new housing growth, as anticipated by ABAG regional projections, by vacant lands and opportunity sites.

Additionally, the 2009 Housing Element generally promotes increased density through community planning processes (Policies 1.4, 1.5, 1.6, and Implementation Measures 13 and 79) and for affordable

housing (Policy 7.5 and Implementation Measures 36 and 64). These density-related strategies are intended to increase the number of units that could potentially be developed on each parcel.

While the above referenced policies are intended to increase the amount of new housing developed in the City by identifying vacant lands and opportunity sites, and by increasing the development potential of individual parcels, similar to the 2004 Housing Element, the 2009 Housing Element would not result in the construction of residential units. The 2009 Housing Element is intended to shape how and where new residential development should occur and ensures that there is adequate land available to meet future housing needs. The desire to live in San Francisco has resulted in continued high demand for housing, as evidenced by high property values and a growing population. The intent of the Housing Element policies is to accommodate future housing growth, as anticipated by ABAG regional projections, and therefore the proposed Housing Element would not directly induce a substantial amount of population growth. As discussed throughout this EIR, new residential development would occur regardless of the proposed Housing Element policies; the Housing Element policies provide direction for that growth with a focus on housing affordability. Therefore, impacts related to inducing a substantial amount of population growth under the 2009 Housing Element would be *less than significant*.

Impact PH-2: The proposed Housing Elements would not displace substantial numbers of existing housing units or create demand for additional housing, necessitating the construction of replacement housing. (Less than Significant)

The Proposed Housing Elements could result in significant impacts if they would displace a substantial number of housing units, create the need for additional housing or the need for construction of replacement housing. New construction that is proposed on already developed sites could displace those individuals or necessitate the need for the construction of replacement housing.

2004 Housing Element and 2009 Housing Element Analysis

The proposed Housing Element policies are intended to increase the City's housing supply in an effort to alleviate a tight housing market. In doing so, the proposed Housing Elements aim to do the following: 1) preserve and upgrade existing housing units to ensure they do not become dilapidated, abandoned, or unsound, and 2) provide direction for how new housing development in the City should occur. As discussed under Impact PH-1, the Proposed Housing Elements would not induce a substantial amount of population growth; therefore the Proposed Housing Elements would not create the demand for additional housing.

As discussed above, new construction on already developed sites could displace those individuals or necessitate the need for replacement housing. However, new construction would be required to comply with Section 1302(c)(2) of the San Francisco Subdivision Code, San Francisco Planning Code Section 317, and the Residential Hotel Unit Conversion and Demolition Ordinance. Specifically, Section 317 of the San Francisco Planning Code codifies review criteria for allowing housing demolition, conversion and mergers and denies residential demolition permits until approval of a new construction permit is obtained. Section 317 of the Planning Code requires that a public hearing be held prior to approval of any permit that will remove existing housing, with certain codified exceptions. Where a project will result in the loss

of one or two residential units, the project is subject to a Mandatory Discretionary Review hearing before the Planning Commission, unless the Code specifically requires Conditional Use Authorization, in which case a hearing is already required. Projects resulting in the loss of three or more units will require a Conditional Use hearing by the Planning Commission. Furthermore, as discussed extensively in Section V.E (Cultural and Paleontological Resources) under Impact CP-1, and throughout this EIR, both the 2004 and 2009 Housing Elements contain numerous policies that promote the preservation of existing housing units. Additionally, the 2009 Housing Element contains policies that explicitly state that in many cases where housing is being upgraded, those upgrades must not result in the displacement of existing tenants (See 2009 Housing Element Policies 3.2, 7.6). Policies that prohibit the displacement of tenants would reduce the necessity for construction of replacement housing. It is noted, that the 2004 Housing Element does not contain policies that explicitly prohibit the displacement of tenants. Rather, the 2004 Housing Element contains policies that are intended to mitigate the impacts of displaced individuals by providing relocation services and the right of first refusal to occupy replacement units.

In summary, the 2004 and 2009 Housing Elements would not result in substantial population growth (Impact PH-1) and would therefore not create demand for additional housing. Furthermore, new construction would be required to comply with the above referenced regulations which limit the demolition and merger of housing units, reducing impacts associated with replacing existing housing units, or necessitating the construction of replacement housing. Additionally, both the 2004 and 2009 Housing Elements contain policies that promote the preservation of existing housing units, further reducing the potential to displace existing housing units. Therefore, the 2004 Housing Element and the 2009 Housing Element would result in a *less than significant* impact with respect to the displacement of existing housing units, demand for additional housing, or the need for construction of replacement housing.

Impact PH-3: The proposed Housing Elements would not displace substantial numbers of people, necessitating the construction of replacement housing elsewhere.

2004 Housing Element and 2009 Housing Element Analysis

As discussed above, there would be no significant impacts related to the displacement of housing; therefore the proposed Housing Elements would not displace substantial numbers of people. The proposed Housing Elements are designed to allow the City to meet current and future housing needs in part by discouraging demolition of existing housing. Therefore, the 2004 Housing Element and the 2009 Housing Element would result in a *less than significant* impact related to the displacement of people.

Cumulative Impacts

The geographic context for cumulative population and housing impacts is the San Francisco Bay Area. Cumulative impacts occur when significant impacts from a proposed project combine with similar impacts from other past, present, or reasonably foreseeable projects in a similar geographic area.

ABAG's regional growth data project that the population in the San Francisco Bay Area will be 8,389,600 persons in 2025,¹⁶ an increase of 1,429,521 persons over the San Francisco Bay Area's population in 2008.¹⁷ Implementation of the proposed Housing Elements would assist with the achievement of RHNA goals, which are calculated based on ABAG's projections. Any new development within the City would be subject, on a project-by-project basis, to independent CEQA review as well as policies in the San Francisco General Plan, governing area plans, design guidelines, zoning codes (including development standards), and other applicable land use plans that are intended to reduce impacts related to population and housing. On a cumulative level, the proposed Housing Elements would not result in substantial population growth beyond regional growth projections, either directly or indirectly. The proposed Housing Elements seek to accommodate regional growth projections. Therefore, this cumulative impact would be *less than significant*. Furthermore, San Francisco's tight land market increases pressures on land values. Both market-rate and affordable housing developers report that acquiring land for housing in the City is a challenge. The City's fair share of the regional housing need for the period covering January 1999 through June 2006 was 20,372 units. Even with aggressive policies and programs, given that San Francisco is a mature, built-up city with limited large tracts of undeveloped land and the previous decades' housing production record, the "fair share" of affordable housing units was not achieved. Only 86 percent of the state mandated production targets and 47 percent of the affordable housing production for the period between January 1999 and June 2006 were achieved. The proposed Housing Elements would have a *less than significant* contribution to inducing population growth.

The policies in the proposed Housing Elements are designed to preserve existing units and their affordability. In addition, development associated with meeting the City's RHNA goals under the proposed Housing Elements would not result in, or contribute to, substantial demolition of existing housing that would displace existing people or dwelling units. New construction is required to comply with existing regulations, including Section 317, which regulates mergers and demolition of housing units. If housing units were displaced as a result of future development proposals in the San Francisco Bay Area, relocation plans would be prepared consistent with federal and State law. On a cumulative level, development in the San Francisco Bay Area would not result in the displacement of persons or housing without providing replacement housing. This cumulative impact would be *less than significant*. The proposed Housing Elements would have a *less than significant* contribution to this impact.

MITIGATION AND IMPROVEMENT MEASURES

Mitigation Measures

No mitigation measures are warranted by the proposed Housing Elements.

¹⁶ ABAG, Projections 2009.

¹⁷ Bay Area Census, San Francisco Bay Area, website: <http://www.bayareacensus.ca.gov/bayarea.htm>, accessed June 23, 2009.

Improvement Measures

No improvement measures are warranted by the proposed Housing Elements.

V. ENVIRONMENTAL SETTING AND IMPACTS

E. CULTURAL AND PALEONTOLOGICAL RESOURCES

INTRODUCTION

This section addresses potential impacts of the 2004 Housing Element and 2009 Housing Element policies related to historical resources, archaeological resources, paleontological and geologic resources, and human remains. Information used to prepare this section was taken from the following sources:

- *San Francisco 2004 and 2009 Housing Element Historic Resources Report*, Circa: Historic Property Development, June 2010. (See Appendix C-1.)
- *Archaeological Technical Memorandum: San Francisco General Plan Housing Element EIR*, William Self Associates, Inc. in collaboration with Randall Dean, MUP, MA, Major Environmental Analysis, San Francisco Planning Department, April 2010. (See Appendix C-2.)

ENVIRONMENTAL SETTING

Historical Resources

The character of San Francisco's built environment has been influenced over time by a number of factors, including significant historical events, cultural influences, technological advances, significant individuals, and evolving trends in urban design and architecture. Any discussion of San Francisco's development, however, must begin with an understanding of the city's dramatic topography. At the tip of a peninsula, with the Pacific Ocean to the west merging through the Golden Gate into the San Francisco Bay on the east, the city occupies roughly 47 square miles. It is distinguished by hills offering a myriad of views of the Ocean, the Bay, and the city skyline. The cultural landscape that emerged here during the 19th and 20th centuries resulted in the alteration of the original physical landscape, as coves and marshes along the Bay were filled in, and hills and dunes were leveled. Located at an important natural harbor, maritime commerce played a vital role in the development of San Francisco. In turn, the economic and commercial importance of the port was balanced by the city's relative geographic isolation by land; until the 1930s and the construction of the iconic Golden Gate and Bay Bridges, the only direct approach to San Francisco from points north and east was by boat or ferry. These natural features played a key role in the development of today's San Francisco.

Extant buildings in San Francisco date to as early as the late 18th Century, corresponding to the arrival of Spanish missionaries and military personnel in 1776. Archaeological remains of indigenous peoples date back much further, over 5,000 years ago. Indigenous peoples living in the area when the Spanish arrived in the later 18th century were transformed through missionization with respect to every aspect of their existence. By the early 1800s the populations of many indigenous groups had declined to near non-existence as a result of exposure to newly introduced diseases. Descendents of those who survived this period continue today in the form of several revitalized tribal groups.

The government of Spain first established a military outpost, or Presidio, at the northern end of the peninsula near the mouth of the Golden Gate. At the same time, Catholic missionaries established the sixth in a chain of 21 California missions near what is now 16th Street and Dolores Street, today called Mission Dolores. Beginning in 1821 with Mexico's independence from Spain, the area became a territory of the Mexican government. By 1835 the civilian port settlement, the Pueblo of Yerba Buena, had been established in the area of California and Montgomery Streets, initially supported by the export of California hides and tallow and the import of goods from the eastern United States and Europe.

Two development patterns were established in these early years. In 1839, the pueblo's first survey platted the area around Portsmouth Square in what is known as the 50 Vara Survey. The survey established a rectangular grid of blocks, each composed of six square lots. Each lot was 50 Mexican varas on a side (a vara being 33 inches), separated by streets 25 varas wide. Later surveys repeated this pattern from San Francisco Bay to Market Street, and from Sansome Street to Presidio Avenue. In 1847, Market Street was laid out at an angle to the earlier streets, running from the center of the shoreline of Yerba Buena Cove (approximately at the intersection of present day Battery and Market Streets) toward Twin Peaks, with much of its route along an old path to Mission Dolores. Soon thereafter, the area south of Market was surveyed with streets parallel to Market Street, again in blocks containing six lots. This time, lots were quadrupled in size, becoming the 100 Vara Survey. These unconventional lot sizes, platted over 150 years ago, are apparent today as extra long blocks south of Market Street.

In 1847, during the Mexican-American War that began the year before, the name Yerba Buena was officially changed to San Francisco. When the war ended and the United States officially assumed control of the territory in 1848, the population had reached about 400, including traders from the eastern United States and other countries. That soon changed, however, with the discovery of gold on the American River in the Sierra Nevada foothills that same year. San Francisco was the closest harbor to the strike, and by 1849 the city was growing exponentially as people flooded in, primarily by sea, bound for gold country. Exact population numbers in 1850 aren't known due to six major fires that swept through San Francisco between late 1849 and June of 1851, destroying records and most of the city's early structures. However, by 1852 the population stood at approximately 34,776, and the character of the place had entirely changed from four years before; it was a city.

With an increasing population came new construction to support housing, commerce and industry. The port was the natural location of trade in goods and services, and so commercial structures were concentrated in that area, where the Financial District is located today. Related industrial activities were housed near the port as well, primarily in the South of Market area, with rail spurs providing connections to move materials and goods to and from warehouses and manufacturing plants. Locations for housing were generally linked to transportation corridors, which developed from the original trails linking the three earliest Spanish/Mexican settlements to a regimented street grid system. Streetcars provided a means for people to live further away from the commercial and industrial core, beyond what was within walking distance. These vehicles were rudimentary at first, appearing in the form of horse-drawn cars on tracks in the late 1850s and early 1860s. A significant innovation soon followed with Andrew Hallidie's invention of the cable car in 1873, providing the means to conquer hills and thereby opening more areas to residential development. Electrification of the lines began gradually in the 1890s and accelerated after

1906, although cable lines continued to be used along the steeper hills. By the late 19th century, streetcar lines ran on nearly every major street, extending earlier housing patterns further westward.

At 5:12 a.m. on April 18th, 1906, a massive earthquake with a moment wave magnitude of approximately 7.9 struck San Francisco, and became one of the most significant events in the city's history. Streets and streetcar lines buckled, water pipes and gas pipes broke, houses were knocked off their foundations, and masonry buildings collapsed. But the worst was yet to come. The damage to gas lines and brick chimneys soon produced fires, and the extreme heat of the fires along with damaged water mains made firefighting extraordinarily difficult. The city's residential buildings, most of which were made of wood, served as kindling for the great inferno. Firefighters, augmented by troops from the Presidio, tried to create fire blocks by dynamiting buildings, but sometimes succeeded only in creating new fires. For three days the fire blazed, and some 28,000 buildings that housed an estimated 250,000 people were destroyed; almost every structure east of Van Ness Avenue and north of Duboce Street. Research has concluded that 3,000 or more people perished, and the majority of the entire population of San Francisco was left homeless by the disaster. Businesses were destroyed, and the city's financial system was in ruins.

Rebuilding began immediately. New construction included both reconstruction on previously developed lots and expansion onto formerly vacant lots. New architectural styles emerged, both to address safety concerns more effectively and as a reflection of changing trends in design. In response to earlier fires, the use of brick and other fireproof construction materials had been required within specified commercial zones, and those zones were extended after 1906. Residential construction after 1906 favored flat roof construction with a tar and gravel surface that was more fire resistant than a traditional pitched shingle roof. Victorian asymmetry and ornament lost favor to the more orderly and restrained Classical revival styles. This stylistic shift was perhaps best embodied by the completion in 1915 of the Beaux Arts-style City Hall, and the structures erected on filled land in the Marina District for the Panama Pacific International Exposition that same year, all classically styled buildings that marked the symbolic end of the reconstruction of San Francisco.

The building boom that began after the 1906 earthquake and fire continued nearly unabated through the 1920s. Much of the city had taken the physical shape that prevails today by the time of the Great Depression in the 1930s, during which new construction slowed dramatically. Despite the economic downturn, the Depression years provided the city with some of its finest public works projects. Major structures such as the Bay Bridge, the Transbay Terminal, Coit Tower, Rincon Annex, Aquatic Park, the Cow Palace, and numerous firehouses, libraries, police stations, and schools were constructed with the aid of Federal funds. The Golden Gate Bridge itself did not receive federal funds, but federal funds helped to construct the approaches. During the first half of the 1940s, World War II preempted all construction projects except work that supported military efforts.

Until the 20th century, architecture in San Francisco tended to utilize contemporary styles popular in the East, though on a somewhat delayed timeline. Greek Revival flourished in the 1850s and 1860s, Italianate in the 1870s, Stick Eastlake in the 1880s, Queen Anne in the 1890s, and Classical or Colonial Revival in the early 20th century. There were also a smaller number of homes built in the Gothic Revival, First Bay Area Tradition (also called Western Stick), and Craftsman styles. In the 1910s and 1920s, styles with

origins in California were popularized, such as Mission, Spanish Colonial, and Mediterranean Revival. Art Deco was used beginning in the late 1920s, most often on commercial rather than residential buildings, as was the related Streamline Moderne style that emerged in the postwar era. International Modernism also appeared as early as the 1930s in San Francisco in the form of dramatic hillside residential buildings by architects such as Richard Neutra. The 1950s brought the concept of 'urban renewal' to San Francisco, resulting in the loss of many historic resources and a surge of new construction, often in the International style vernacular, in areas including Yerba Buena, the Western Addition, Golden Gateway, Diamond Heights, and parts of the Bayshore District. Brutalist styles and Postmodernism followed, and the Bay Area's Tech Boom of the late 1990s and early 2000s resulted in further development pressure and new construction in emerging 21st century styles.

Today, San Francisco's built environment consists of architectural styles that are as varied and unique as the topography, views and microclimates that have made San Francisco famous. From the most humble cottage to towering skyscrapers, the architecture and traditional development patterns of San Francisco are the physical representation of the City's history and its historic context. The retention of these components is a direct link to understanding and respecting the City's past while moving forward to accommodate modern needs.

Historical Resource Surveys

The City and County of San Francisco recognizes the potential for properties of historic significance to still remain unidentified throughout the city. In an effort to address this uncertainty, the Planning Department developed the Citywide Cultural and Historic Resource Survey (Survey Program). The Survey Program¹ has facilitated a number of surveys in neighborhoods that are undergoing long-range Planning Department projects such as Community or Area Plans and Better Neighborhood Plans. As of the writing of this EIR, twelve surveys have either been completed or are currently underway. In addition, nine non-Planning Department (Community) surveys have been planned or are currently underway.

Survey areas facilitated by the City within Area Plans are:

- Balboa Park (Prepared August 3, 2008)
- Central Waterfront (Updated in 2008)
- Japantown (Currently underway)
- Market/Octavia (Currently underway)
- Mission (Prepared in November 2007)

¹ Historic Resources Survey Program information can be found on the Planning Department's website at: <http://www.sfplanning.org/index.aspx?page=1826>.

- Showplace Square (Draft Prepared October 20, 2008)
- South of Market (Both West SOMA and East SOMA) (Prepared June 2, 2008)

Survey areas relating to other projects:

- Bayview Hunters Point Redevelopment Project Area “B”
- Glen Park
- Hunters Point Shipyard (Currently planned or underway)
- Transbay/Transit Center (Completed in 2008)
- Van Ness Automotive Support Structures (Current and upcoming)

Survey areas facilitated by community organizations are:

- Aquatic Park/Lower Russian Hill (Currently planned or underway)
- Bernal Heights (Currently planned or underway)
- India Basin
- Mission Dolores (Currently planned or underway)
- North Beach (Currently planned or underway)
- Oceanview-Merced-Ingleside
- Parkside (Currently planned or underway)
- Russian Hill (West Slope) (Currently planned or underway)
- Sunset/Oceanside (Currently planned or underway)

In addition to identifying the physical descriptions of the buildings, structures or objects, each potential resource within a survey area is assessed for their historic significance.

Archaeological Resources

Prehistory: Paleoenvironmental change

Since the late Pleistocene, when Indigenous peoples may have first arrived in the Bay Area, the region has undergone significant environmental changes as a result of global climate fluctuations, including rising sea levels and changes in the distribution and availability of natural resources. Beginning around

11,000 years ago as the colder Pleistocene geological era gave way to the warmer Holocene era, the broad inland valley now forming San Francisco Bay became progressively inundated.^{2 3} Older archaeological sites at lower elevations within the Bay would have been submerged by rising sea levels or buried beneath sedimentary deposits up to the beginning of the Late Holocene.

The oldest evidence for humans in the City of San Francisco was found approximately 75 feet below the modern ground surface, during the construction of the Bay Area Rapid Transit (BART) tunnel near the Civic Center Station, at the western end of the Downtown District. A human skeleton estimated to have been buried more than 5,000 years ago, was found in a clay matrix that was once part of marshlands associated with an inland creek. The majority of known prehistoric era sites in the City of San Francisco date to the period of 2,000 years ago or less, and are found buried at depths from approximately 10 to 20 feet below ground surface. They were originally deposited within the dune sands that were blown eastward from the Pacific coast, across the peninsula over the past 6,000 years or so.

Prehistoric resources and sites that have survived to be discovered during historic times represent only a portion of the past. The early growth of San Francisco was characterized by filling of the shallow Bay waters and other low-lying lands, removal of hills of sand and rock, and the obscuring of original ground surfaces by fill, roadways, buildings and structures. Nels Nelson conducted a systematic survey around the perimeter of the entire San Francisco Bay between 1906 and 1909, focusing on mounds of shell partially submerged or adjacent to the Bay waters. He recorded 425 shell mounds, and yet his survey occurred well after the Yerba Buena Cove had been filled and the area heavily developed and covered by the built environment.⁴ It is likely that the filling of the cove and subsequent development obscured any prehistoric occupations that may have existed in that location. Conversely, the notable concentration of shell mounds observed and mapped by Nelson in the Southeast Housing Opportunity Area (HOA),⁵ quite distinctly following the edge of the bayshore, were visible to him in the first decade of the 20th century because the area had not yet experienced significant filling, construction, and occupation. Even then, the mounds had been damaged (erosion, bisected by roadways, or partially removed and reused for fertilizer/road beds). The majority of the western neighborhoods have not yet yielded archaeological resources from prehistory, but it is not clear whether this is a reflection of past settlement preferences, lack of systematic archaeological investigation, or a combination of changes of landscape over time that have buried or otherwise obscured resources, together with a lack of construction to depths likely to reveal any such buried resources.

² Atwater, Brian F. 1979. Ancient Processes at the Site of Southern San Francisco Bay: Movement of the Crust and Changes in Sea Level. In *San Francisco Bay: The Urbanized Estuary*, T. John Conomos, editor, pp. 31 - 45. Pacific Division/American Association for the Advancement of Science, San Francisco, CA.

³ Atwater, Brian F., Charles W. Hedel, and Edward J. Helley. 1977. Late Quaternary Depositional History, Holocene Sea Level Changes, and Vertical Crustal Movement, Southern San Francisco Bay, California. U.S. Geological Survey Professional Paper, No. 1014. Washington, D. C.

⁴ Nelson, Nels C. 1909. Shellmounds of the San Francisco Bay area. *University of California Publications in American Archaeology and Ethnology* 7 (4):310 - 356. Berkeley.

⁵ The Southeast San Francisco HOA includes Bayview, Hunters Point, India Basin, Bayshore, Executive Park, and Visitacion Valley.

Significance of San Francisco's Archaeological Record

The archaeological literature for San Francisco⁶ clearly demonstrates that San Francisco's archaeological record has significant research value in an unusually broad range of research domains. A small sample of research themes associated with archaeological sites in San Francisco includes: paleoenvironmental change; prehistoric settlement patterns; prehistoric social interaction and change; prehistoric cultural chronology; prehistoric resource intensification and adaptive change; shell mounds as constructed landscapes; Mission Dolores water conveyance system; social stratification within the neophyte village; Gold Rush period waterfront; Gold Rush period storeships; Chinese fishing camp settlements; Chinese farms; Gold Rush period mining equipment industries; the emergence of the middle class; Victorian values and the concept of nuisance; Victorian values and the rise of charitable institutions; the social role of cemeteries; health and violence in the 19th century; the economics of refuse in the 19th century; small craft boatyards; ethnic and religious/cultural identity; working class identity; and differences in gender treatment in steam-operated and non-steam operated laundries.

Significance of the Archaeological Record: Special Cases

Archaeological research in San Francisco has tended to give special significance to archaeological resources associated with the Prehistoric period, the Hispanic Period (1776-1850) and the Yerba Buena Period (1835-1848). Archaeological deposits associated with these periods may have legal-significance whether or not they possess, in their own right, research-value because the deposits may have special characteristics that make them, otherwise, legally significant, such as their scarcity (San Francisco prehistoric and Native American archaeological sites) or their eligibility for listing in the State or National Register on the basis of their association with a significant historical event (the Franciscan missionization of indigenous people in California or the original settlement of San Francisco).

Prehistory: Chronological Context

Terminal Pleistocene (13,500-11,600 BP⁷)

No prehistoric sites dating from this period have as yet been discovered in the San Francisco Bay Area. The nearest Terminal Pleistocene site is the Borax Lake site (LAK-36). Assumedly populations were small and highly mobile. The archaeological signature of such groups would be faint, geographically sparse, and easily disturbed by geological processes such as erosion, rising sea level, and alluvial burial.

Early Holocene (11,600-7700 BP)

Early Holocene human populations are known from a few Bay Area sites, such as at Los Vaqueros reservoir and Santa Clara Valley (CA-SCL-178). Communities from this period were semi-mobile hunter-

⁶ Archaeological Technical Memorandum: San Francisco General Plan Housing Element EIR, William Self Associates, Inc. in collaboration with Randall Dean, MUP, MA, Major Environmental Analysis, San Francisco Planning Department, November 2009.

⁷ BP – before the present.

gatherers who used tools and some “site furniture” such as manos⁸ and milling slabs⁹. Human burials from this period have also been investigated. There are no documented Early Holocene sites in San Francisco.

Middle Holocene (7700-3800 BP)

Middle Holocene sites are more widespread in the San Francisco Bay Area and are evidenced by substantial settlements, isolated burials, distinct cemeteries, evidence of possible social stratification, and in addition to milling slabs, mortars and pestles, the fabrication and use of shell beads and other ornaments. The expansion of San Francisco Bay’s estuaries and tidal wetlands seems to have resulted in a shift toward coastal and maritime resource exploitation. San Francisco has one Middle Holocene site (SFR-28), the remains of a young woman found in marsh deposits 75 feet below the surface.

Late Holocene (3800-170 BP)

It is the Late Holocene that has left the strongest archaeological record of prehistoric populations in San Francisco. This period is marked by the establishment of the large shell mounds. Artifact assemblages are characterized by bone awls (indicating appearance of coiled basketry), net sinkers, mortars (probably indicating greater consumption of acorns), Olivella shell beads, the appearance of the bow and arrow, and diverse beads and ornaments, such as incised bird bone tubes. There is some indication of a greater exploitation of deer, sea otter, mussels, and clams. There is growing indication of shell mounds as planned, constructed landscapes on sites of ancestral, or at least, mortuary importance.

Late Prehistory and Ethnohistory

The City of San Francisco is part of the coastal region occupied by the Ohlone or Costanoan group of Native Americans at the time of historic contact with Europeans.¹⁰ Although the term Costanoan is derived from the Spanish word *costaños*, or “coast people,” its application as a means of identifying this population is based in linguistics. The Costanoans spoke a language now considered one of the major subdivisions of the Miwok-Costanoan, which belonged to the Utian family within the Penutian language stock.¹¹ Costanoan designates a family of eight languages.

Costanoan-speaking tribal groups occupied the area from the Pacific Coast to the Diablo Range and from San Francisco to Point Sur. Modern descendants of the Costanoan prefer to be known as Ohlone. The

⁸ Mano - A hand-held stone used by prehistoric populations in California in food preparation to grind primarily seeds on a stone slab, known as a milling slab or metate. To variable extent the use of mano and milling slabs disappeared when acorns replaced seeds as a major dietary staple of indigenous peoples in Central California.

⁹ Milling slab - A stone slab that served as the surface on which prehistoric peoples in California ground primarily seeds with a mano. Also known as a metate.

¹⁰ Kroeber, Alfred. 1925. Handbook of the Indians of California. Bureau of American Ethnology Bulletin 78. Washington, DC.

¹¹ Shipley, William F. 1978. Native Languages of California. In Handbook of North American Indians, Volume 8, California, Robert F. Heizer, editor, pp. 80 - 90. Smithsonian Institution, Washington, D.C.

name Ohlone is derived from the Oljon group, which occupied the San Gregorio watershed in San Mateo County.¹² The two terms (Costanoan and Ohlone) are used interchangeably in much of the ethnographic literature.

Prehistorians differ as to the precise linguistic affiliation and date of arrival of the first Penutian-speakers in the San Francisco Bay Area. There is near universal belief today that the ancestors of the Ohlone arrived in the Bay region much earlier than formerly thought. Based on historical linguistics and archaeological evidence, these populations are thought to have introduced a language, cultural patterns, and mortuary practices quite distinct from that of the indigenous Hokan-speaking populations into the eastern part of the Bay region approximately 4,000 BP. Some archaeologists have conjectured that some communities retained Hokan characteristics or populations (SFR-112) or established Hokan cultural refuges (SFR-4) in San Francisco well after Penutian-speaking communities dominated the central Bay region.

Although linguistically linked as a family, the eight Costanoan languages comprised a continuum in which neighboring groups could probably understand each other. However, beyond neighborhood boundaries, each group's language was reportedly unrecognizable to the other. Each of the eight language groups was subdivided into smaller village complexes or tribal groups. The groups were independent political entities, each occupying specific territories defined by physiographic features. Each group controlled access to the natural resources of their territories, which also included one or more permanent villages and numerous smaller campsites used as needed during a seasonal round of resource exploitation.

The Costanoan tribe that occupied the northern end of the San Francisco peninsula in the late 18th century is known under the general term Yelamu. The Yelamu were divided into three semi sedentary village groups. The Yelamu were composed of at least five settlements (Chutchi, Sitlintac, Amuctac, Tubsinte, and Petlenuc) that were located within present day San Francisco. Yelamu may have also been the name of an additional settlement within the vicinity of Mission Dolores. Sitlintac may have been located on the Bay shore near the large tidal wetlands of the Mission Creek estuary. Chutchui was located near the lake (Laguna de los Dolores) east of the current Mission Dolores, two to three miles inland. These two villages were probably the seasonal settlements of one band of the Yelamu who used them alternately. Another Yelamu band seasonally occupied the settlement sites of Amuctac and Tubsinte ethnographically associated with Visitation Valley and perhaps, archaeologically identifiable with the Ralston Shellmound and SFR-35. A third Yelamu band, the Petlenuc, may have had a small settlement near the Presidio, perhaps SFR-129. The Yelamu were allied by marriage to Costanoan groups on the east side of San Francisco Bay.

Within less than two months of the Spanish beginning permanent occupation of the area, all of the Yelamu villages in San Francisco were attacked and burned by an expedition from the Ssalson, the Costanoan tribelet in the San Mateo area. The Yelamu survivors abandoned the San Francisco peninsula

¹² Bocek, Barbara. 1986. Hunter - Gatherer Ecology and Settlement Mobility along San Francisquito Creek. Doctoral Dissertation, Stanford University, Stanford, CA.

seeking refuge with other Indigenous groups in the East Bay and Marin. Until their complete missionization in the late 18th century, the Yelamu returned to San Francisco occasionally on hunting excursions.

As known through ethnographic accounts, the Costanoan or Ohlone in general lived as extended families in domed structures thatched with tule, grass, wild alfalfa, or ferns.¹³ Semi-subterranean sweatshops were built into pits excavated in stream banks and covered with a structure against the bank. The tule raft, propelled by double-bladed paddles, was used to navigate across San Francisco Bay.¹⁴ Mussels were an important staple in the Ohlone diet, as were the acorns of the coast live oak, valley oak, tanbark oak, and California black oak. Seeds and berries, roots and grasses, and the meat of deer, elk, grizzly, rabbit, and squirrel formed the Ohlone diet. Careful management of the land through controlled burning served to ensure a plentiful, reliable source of all these foods.¹⁵

In the more recent prehistoric and historical periods, the Ohlone usually cremated the remains of the deceased immediately upon death but internment without cremation also occurred. Burials were frequently accompanied with mortuary items such as the personal belongings of the deceased and sometimes lavish amounts of shell beads, especially strings of clam shell disk beads.¹⁶

Living in close quarters in comparatively large numbers exposed missionized Indians to several diseases and periodic epidemics which resulted in a precipitous drop in the Native American population, mostly heavily for tribelets who lived indigenously nearest the missions. Over the course of its occupancy, the Mission Dolores neophyte community would have had not only Costanoans, but Native Americans from other tribelets around the Bay Area, such as Coastal Miwok, Southern Patwin, and Pomo who were linguistically and culturally distinct from the Costanoans. Historical records indicate that even after the mission in San Francisco was secularized c. 1833, some former neophyte Indians remained in the area around the former mission and in Yerba Buena where they found occasional employment as laborers.

Since the 1980s, several Native American groups (Ohlone/Esselen Nation, Amah-Mutsun Band, Costanoan-Ohlone Indian Canyon Tribe, Muwekma Ohlone Tribe) in the San Francisco Bay Area have emerged as catalysts of and a voice for Ohlone cultural practices and identity. Many of these groups have sought federal standing but no group is currently a federally recognized descendant group. Some representatives of these groups are recognized by the California Native American Heritage Commission as appropriate contacts for Native American issues or, in the case of discovery of Native American human remains, Most-Likely-Descendants.

¹³ Levy, Richard. 1978 Costanoan. In *Handbook of North American Indians*, Volume 8, California, Robert F. Heizer, editor, pp. 485 - 495. Smithsonian Institution, Washington, D.C.

¹⁴ Kroeber, Alfred. 1925 *Handbook of the Indians of California*. Bureau of American Ethnology Bulletin 78. Washington, DC.

¹⁵ Levy, Richard. 1978 Costanoan. In *Handbook of North American Indians*, Volume 8, California, Robert F. Heizer, editor, pp. 485 - 495. Smithsonian Institution, Washington, D.C.

¹⁶ Levy, Richard. 1978 Costanoan. In *Handbook of North American Indians*, Volume 8, California, Robert F. Heizer, editor, pp. 485 - 495. Smithsonian Institution, Washington, D.C.

The Hispanic Period (1775-1846)

A Spanish expedition in search of sites for a northern mission and fortified outpost (presidio) passed through the area of modern-day San Francisco in 1775. The first European settlement in San Francisco was a temporary Franciscan mission complex of structures consisting of a small arbor-like chapel, rectory, and compound protectively surrounded by a palisade constructed in 1776. The first mission was constructed near a large freshwater lake (Laguna de Nuestra Senora de los Dolores) from which it derives its popular name, Mission Dolores, although the mission was dedicated to San Francisco de Asis. There appear to have been five mission structures, in total, but the precise locations of the first three have only been tentatively identified (MEA Hispanic Period Archeo GIS Project). The second, third and fourth mission chapels were of palizada (similar to wattle and daub) construction and built circa 1776, 1783, and 1787, respectively. The existing Mission Dolores chapel was constructed over a period of several years (1788-1791). It was the first Mission Dolores chapel constructed of adobe and clay roof tiles (tejas). Mission Dolores was secularized in 1835 most of its land, building and moveable properties made available to private acquisition by petition and neophytes at least legally removed from the guardianship of the Franciscans. There are, at least, two archaeologically important points regarding the 59 year period that Mission Dolores was the principal physical and societal facility on the peninsula: 1) the mission complex should be treated as an archaeological landscape since it was composed of an extensive network of structures and operations (tanneries, mills, school, water conveyance system of channels & reservoirs, prison, forge, bathhouse, corrals, weaving and carpentry shops, a music room, library and neophyte village); and 2) the “tribal”/cultural affiliation of the neophytes (Native American converts) at the mission changed over time ranging from Ohlone, to Coastal Miwok, Southern Pomo, and Wappo as new converts were continually incorporated into the system. The Mission Dolores area underwent a renaissance during the late 1830s – early 1850s as many Californios¹⁷ families relocated here as well as the remnants of the military at the Presidio, various early Gold Rush entrepreneurs and a dissident Mormon group resulting in the new construction of adobe and wood-frame houses and adaptation of abandoned adobe structures to new uses.

Yerba Buena Period (1835-1848)

Yerba Buena was the name of the small Mexican outpost that, following United States acquisition, was re-named San Francisco. Initially a hide-and-tallow trading settlement, Yerba Buena was governed until statehood as a Mexican polity with an alcalde (mayor), sinico (treasurer), and an ayuntiametno (governing council). The majority of the population was British, American, and French ex-patriots who in addition to trading hide and tallow with fortuitously arriving ships, maintained a brewery, bakery, carpentry shop, blacksmithy, grist mill, cabinet shop, and washhouse. Amenities included several “grogeries” and “bowling alleys” and for the probably ex-neophyte Native American laborers, a tesmesca (sweat house). By 1848, Yerba Buena had up to 150-200 adobe and wood-frame buildings, two wharves (stone and timber), and a cemetery at Clarks Point. The settlement roughly occupied the area bounded by Battery,

¹⁷ Californios – refers to inhabitants of California of Spanish or Mexican descent during the Spanish and early American period.

Bush, Mason, and Vallejo Streets. There have been relatively few archaeological discoveries of Yerba Buena period resources, by comparison, for example with Gold Rush period archaeological sites. The apparent difference in the relative state of preservation between Yerba Buena period sites and Gold Rush period sites may be in part due to the fact that many Gold Rush period structures were constructed on pilings over water which burnt and collapsed in the great fires of the early 1850s and have therefore been anaerobically preserved. Yerba Buena period structures were, by contrast, nearly all land-based and so more likely to have been completely destroyed by the 1850's fires or subsequent development. Prominent among discovered Yerba Buena period archaeological sites was the putative discovery of remnants of San Francisco's first wharf, the 1839 Leese-Vallejo stone pier, discovered in North Beach.¹⁸ Constructed by Jacob Leese and Salvador Vallejo, together with a warehouse, for use by the Russian American Company at Fort Ross, the exposed wall section of the pier was formed of dressed mortared granite blocks in an Uncoursed Roughly Squared pattern. Archaeological investigations at the Pan Magna Plaza/International Hotel site recovered an extensive collection of used carpentry/woodworking tools, a fragment of a planked floor, and a pit filled with wood shavings. Also found was a domestic deposit consisting of household furnishings, glassware, ceramics, and children's items. These archaeological deposits were interpreted as post-1849 in origin¹⁹ but for reasons that were unclear. No other association for the assemblages was offered. In the absence of clear artifactual or depositional evidence to the contrary, the probable association for the Pan Magna features and archaeological assemblages would seem to be the residence and carpentry shop of John C. Davis who occupied the site from 1839 to 1847 and his widow who lived there until 1850s. Lastly, an archaeologically excavated artifact-filled well (CA-SFR-117H) at 505 Montgomery Street was interpreted as associated with the Hudson Bay Company store building (1838-?) which for many years was the most prominent visual landmark in Yerba Buena.

Early Gold Rush Period (1848-1851)

San Francisco was the principal transshipment center of goods, persons, and wealth during the California Gold Rush. The population of the city grew from approximately 1,000 to nearly 35,000 during this period (1848-1852). Having no industry or commodity base, the city was utterly dependent on its maritime commerce. The most spectacular and signature of San Francisco archaeological discoveries are probably those associated with the early Gold Rush, especially its storeships. Storeships were abandoned ships that were used as buildings principally during the period 1849-1852. Although long known as "storeships" since their most frequent use was as commission merchant warehouses, "storeships" were also were modified to serve as offices, hotels, saloons, lodgings, chapels, prisons, and insane asylums. It has estimated that there were a minimum of 200 storeships in San Francisco. There may be currently 50 – 60 Gold Rush period storeships buried in San Francisco. Five storeships, the Niantic, Apollo, General Harrison, Roma and William Gray from this period have been archaeologically investigated. Construction documentation of the General Harrison along with that of the Niantic and the Apollo has contributed significantly to the knowledge of early 19th century naval architecture in which most ships were built

¹⁸ Archeo-Tec. 2007. Final Report on Archaeological Monitoring for the Broadway Family Apartments.

¹⁹ Archeo - Tec. 1996. Archaeological Data Recovery Program Conducted Within Site A of the Kearny/Columbus Site.

without plans. The analysis of 1851 merchandise recovered from the General Harrison²⁰ has resulted in a new, revised view of the shift of Euro-American trade into the Pacific basin, and this shift as the primary impetus for the emergence of San Francisco as a major American city and port (and not the Gold Rush), and the primary role of San Francisco commission merchants in brokering these changes. The first timber pile-and-platform pier constructed in San Francisco was constructed by William Clark in 1847-1848. An archaeologically documented 95-foot long section of a dressed sandstone block wall has been interpreted as part of a retaining wall for the Clark's Wharf. Also exposed were burned stubs of redwood piles and a collapsed wood plank floor structure which were identified as remnants of Clark's warehouse.²¹ Clark's Wharf and warehouse burned and collapsed in the great fire of May 3-4, 1851. Several early Gold Rush period commercial archaeological sites have been excavated^{22 23 24}, including "Hoff's Store", a store serving the local Chinese community, and a store/residence possibly associated with the commission merchant Philip Caduc. The Hoff's Store archaeological project resulted in the recovery of an unusual quantity (28,000 items) of Gold Rush period store merchandise. Various interpretations have been put forward as to the nature of the enterprises associated with the merchandise assemblage based on aspects of the collection (construction hardware, maritime supply, Chinese export porcelain, military supplies, foodstuffs, footwear). Delgado originally arguing that Hoff's Store was in fact a ship chandlery more recently has taken the view that the site is a mixed array of various commercial establishments.²⁵ The Hoff's Store collection will continue to have high interpretive value, since major components of the collection such as Chinese brownware, Euro-American ceramics, textiles, and jewelry have not been analyzed. The archaeological site at 343 Sansome Street is also associated with a store or warehouse on Howison's Pier. The archaeological site represented the remains of a building on pilings with two or more rooms that had burned and collapsed in the fire of May 1851. It appears probable that the building was that of the commission merchant Mohler, Caduc & Co and perhaps, that Philip Caduc was the occupant of the living quarters. It was Caduc who constructed Howison's Pier in 1850. Present also was a large iron safe with a slightly ajar door and a board axe protruding from the interior indicative of the attempt to salvage the safe's content in the 1851 fire.²⁶ The 600 California Street archaeological site revealed the remains of an Early Gold Rush period Chinese store that catered to a Chinese clientele²⁷ that burned in the May 1851 fire. An archaeological property type that is of primary historical importance because of its crucial role in the development of San Francisco as the leading port in the Pacific international commerce is the Gold Rush period wharf. The type of wharf that was dominant in the San

²⁰ Delgado, James P. 2005. Documentation and Identification of a Stern Section of Gold Rush Vessel Recovered from the Charles Hare Shipbreaking Yard Site, 2005: A Report Submitted to James Allan, Vice - President, William Self Associates, Orinda, California. On file at William Self Associates, Orinda, CA.

²¹ Archeo - Tec. 2007. Final Report on Archaeological Monitoring for the Broadway Family Apartments.

²² Archeo - Tec. 1992. Archaeological Investigations at 600 California Street.

²³ Pastron, Allen G. et al. 1990. The Hoff Store Site and Gold Rush Merchandise for San Francisco.

²⁴ Pastron, Allen et al. 2000. Archaeological Investigations at 275 Sacramento Street: On-site Monitoring and Data Recovery Program.

²⁵ Delgado, James. P. 2006. Gold Rush *Entrepôt*: The Maritime Archeology of the Rise of the Port of San Francisco. Dissertation. Simon Fraser University.

²⁶ Kelly, Michael S. 1989. Archaeological Investigations at an 1851 Commercial Site along Howison's Pier.

²⁷ Archaeological Site Record for CA-SFR-123H. 600 California Street. Northwest Information Center. 1988.

Francisco waterfront during this period was the timber pile-and-platform projecting wharf or pier. Use of marginal wharves or cribwork wharves although common in the eastern seaboard was rare here.²⁸ However, a crib wharf was apparently documented at the 343 Sansome Street site.²⁹ The 1839 stone masonry Leese-Vallejo Wharf was probably based on a European prototype masonry block-and-bridge pier. The choice of the pile-and-platform wharf is economical where timber is available and labor costs are high. The cribwork wharf and dressed stone wharf types, by contrast, require the use of a large organized labor force and derricks and rigs. Early Gold Rush period wharves have been frequently archaeologically encountered but in nearly all cases, have not been contextually studied and appropriately documented.

Late Gold Rush Period (1852-1860)

During the 1850s San Francisco underwent the difficult transformation from a small, weakly governed, economically fragile port-town to the principal city in maritime trade, industry and finance in the western half of the nation. The Comstock Boom in silver mining had made the city more important in financial markets than the Gold Rush. The experimental mining equipment produced by the city's foundries had a global market. The city was a regional center for other industries (textile, tanning, dynamite) and its waterfront now began to expand into the southern part of Yerba Buena Cove and Potrero Point. Between 1850 and 1860, the city's population had increased by almost two-thirds but this population increase was demographically more gender-balanced and foreign-born than the population upsurge of the Early Gold Rush. In the Late Gold Rush period the city became "domesticated" with a strong city government that vigorously suppressed criminal behavior and with an expanding Victorian middle class who introduced institutions such as orphanages and parks. Archaeological sites dating from the Late Gold Rush period are fewer in number of sites and in artifact assemblages but a broader in range of historical associations than Early Gold Rush period sites. The structural remains of John Cowell's warehouse (1850s) were exposed and documented within the same site where the 1839 Leese-Vallejo stone pier and Clark's 1847/1848 wharf and warehouse were recorded.³⁰ The archaeological site consisted of the original foundation of Douglas Fir planks over Telegraph Hill sandstone rock fill and segments of the brick masonry walls of the first floor of the Cowell's three-story masonry warehouse. Two well preserved brick floors (CA-SFR-117H) were discovered in the 505 Montgomery Street project site of which one floor (mortared brick in a herringbone pattern) was associated with the banking house of James King of William (1850) and the other floor (unmortared) was dated to 1849/50 but assigned no clear association. In the North Waterfront area,³¹ fragmentary remains of Meigg's Wharf (1852-1881) were exposed and documented in 2005 (CA-SFR-163H). Meigg's pier, constructed to accommodate lumber schooners, was the longest wharf in the

²⁸ Bone, Kevin et al. 1997. *The New York Waterfront: Evolution and Building Culture of the Port and Harbor*. Monacelli Press.

²⁹ Kelly, Michael S. 1989. *Archaeological Investigations at an 1851 Commercial Site along Howison's Pier*.

³⁰ Archeo-Tec. 2007 Final Report on Archaeological Monitoring for the Broadway Family Apartments.

³¹ The North Waterfront area includes the waterfront area from Fort Mason south to Broadway.

City.³² A vertical ferrous cylinder recovered was of uncertain function but, was conjectured to be a part of a crane or elevator system for loading small watercraft.

In the late 1990's remains of Fort Gunnybags, the building that served as the headquarters of the 2nd Vigilance Committee in 1856, were discovered. The 2nd Vigilance Committee was an ad hoc organization of local grandees that in 1856 supplanted the legally constituted authorities, widely viewed as corrupt and impotent, for the maintenance of law and order. During their occupation of the nearly block-long, granite building, the Committee held a State Supreme Court justice hostage for nearly two months until he vacated his seat. Structural remains documented including part of the redwood flooring and the complex foundation composed of several alternating layers of Douglas Fir planks, foot-square beams, and sand fill.

The site of Yerba Buena Cemetery (1850-1867) is now covered by United Nations Plaza and several public and private buildings. In 1852, the burials in North Beach cemetery which dated from at least the 1840s were re-interred here. The Yerba Buena Cemetery served as the first municipal public cemetery. Victims of the cholera epidemics of 1850-1854 were buried here. The cemetery was closed with the creation of Lone Mountain Cemetery to which burials in Yerba Buena Cemetery were to be transferred. In 1870 Yerba Buena Cemetery was converted to a public park. Of the approximately 9,000 grave lots in Yerba Buena Cemetery, as few as 1,868 burials may have actually been re-located. Nearly all construction projects within the former site of Yerba Buena Cemetery have encountered burials: Methodist Book Concern (1906) – 25 burials; Federal Building (1932) – 20 burials; Main Library (1992-1993) – over 59 burials; Asian Art Museum (2000-2001) – over 200 burials. Yerba Buena Cemetery has demonstrated substantial archaeological research value in a number of areas, such as the study of 19th century epidemiology, diversity of practices with respect to treatment of the dead in the 19th century based on ethnicity, religion, and relative income/wealth, the prominence of fist fighting and of the routine carrying of heavy loads by certain population groups.³³

Later 19th Century (1860- 1906)

In the forty years between 1860 and 1900, the City's population had increased by 600 percent (56,802 in 1860 to 342,782 in 1900). Like New York, a significant part of the San Francisco's growing population was the result of foreign immigration that in addition brought increased ethnic, cultural, and religious diversity to the city. The 1860s saw major infrastructural and institutional changes to address the City's port facilities, nuisance industries, population expansion, poverty, health care, urban amusements, and the shortage of burial grounds. Increasingly, since the 1850s San Francisco's harbor was becoming unserviceable for coastal and oceanic vessels, first because of the obstruction of hundreds of abandoned vessels during the Gold Rush, then, because of the rapid siltation of the slips between the wharves and dilapidated state of the wharves.

³² Praetzellis, Adrian. 2005. Final Report on Archaeological Test Excavations (CA - SFR - 163H).

³³ Basin Research Associates. 1994. San Francisco Library Project Archaeological Monitoring and Architectural Documentation Site of the Former City Hall Completed in 1897.

Although San Francisco, in authorizing construction of the initial wharves in 1849-1850, had envisioned the wharves being public and, then, public-private ventures, the City's wharves became proprietary, each owned by a separate company subject to ten-year municipal leases. While lobbying for long-term leases, wharf owners refused to maintain the city's piers. Faced with the loss of its principal port, the State asserted control of San Francisco's harbor in 1863 and immediately began planning how to address its principal problems: siltation, dilapidated and dysfunctionally designed and configured wharves, and the absence of a rationally-based plan to address the diversity of types of vessels, merchandise, and passengers that must be accommodated. The State Board of Harbor Commissioners assumed control of the City's port in 1864, plans were developed to construct a seawall to reduce the necessity for constant dredging. The first project undertaken by the Harbor Commission was the design and construction of the Old Seawall (const. 1867-1868) along the former shoreline of the City's waterfront. The Old Seawall today lies below portions of Front Street and the Embarcadero. The Old Seawall was determined to be NRHP-eligible in 1979. Portions of the Old Seawall have been archaeologically investigated.³⁴ To facilitate access to the prospective new waterfront developing along the southern shoreline of Rincon Point, Second Street was extended through Rincon Hill. The Second Street Cut resulted in the development of Nob Hill as the City's new elite residential neighborhood, which had formerly been located at Rincon Hill and South Park.

During the 1860s livestock product industries (meat, leather, soap, candles, fertilizer, tanneries, leather goods, etc.) located near the Brannan Street Wharf at the base of Ninth Street, in an area known as "Butchertown." Economies of agglomeration drew these industries and derivative industries (glove manufacturers, whip makers, book binders) together because of the availability of water, tidal currents for the removal of noxious wastes, and accessibility by shallow craft. In expectation that an economic boom would follow with San Francisco's railway connection to the transcontinental railroad, a causeway was constructed connecting the terminus of Fourth Street at Steamboat Point with points further south such as Potrero Point and Hunters Point. Known as "Long Bridge" (const. 1865-1867), the timber pile-and-platform causeway permitted San Francisco workmen to more easily reach jobs in the mills, factories, slaughterhouses, and tanneries that were now moving to Potrero and Hunter's Point. Long Bridge was also a major urban recreational venue flanked by rowing club boathouses, saltwater bathhouses, the San Francisco Yacht Club, cafés, saloons, and off an extension known as Hobbs Wharf, immensely popular for smelt fishing. The construction of Long Bridge facilitated the development of Potrero Point as a ship building/repair and steel foundries center (Pacific Rolling Mills, North's shipyard) and of new amusement venues (Bayview Race Course). The emergence of a strong middle class with Victorian concerns about the disadvantaged resulted in the establishment of several orphanages (Protestant Orphan Asylum, Ladies' Protection and Relief Society Children's Home, Pacific Hebrew Orphan Asylum and Home Society), child reformatory institutions (House of Refuge), prostitute rescue organizations (Magdalen Asylum), and hospitals (St. Lukes Hospital, St. Mary's Hospital). Victorian values also demanded that recreation and amusements be morally and intellectually inspiring, in place of the beer garden-like ambiance of Russ Gardens, the Willows, and Hayes Park of the 1850s. Woodward's Gardens (1865-1894)

³⁴ William Self Associates. 1996. Historical Archaeology of the Muni Metro Turnback Project, San Francisco, California. 3 vol. Report to City of San Francisco. William Self Associates, Orinda, CA.

contained a museum with South Pacific and East Asian artifacts, an art gallery with copies of European old-master paintings, a menagerie with stuffed and live animals, and one of the world's first salt-water aquariums. Founded by a life-long temperance advocate, Woodward Gardens served no alcohol. By the late 1850s San Francisco's four cemeteries (Yerba Buena, Mission Dolores, Nevai and Gibbath Olom cemeteries) could not accommodate additional burials. In addition, based on the prototype of the Père Lachaise cemetery in Paris, there was a growing sentiment that cemeteries should be creatively landscaped memorial parks where families could pass spiritually uplifting Sunday afternoons. Beginning in the 1860s, new park-like cemeteries (Laurel Hill, Calvary, Odd Fellows and Masonic) were developed in sparsely improved Outside Lands.³⁵

The 1870s saw several major city-shaping projects undertaken including the creation of Golden Gate Park, and the reclamation of much of Mission Bay, North Beach Cove, and Harbor View. The filling of Mission Bay was not a comprehensively planned project but was the result of piecemeal incremental actions over a period of fifty years. To the north, Southern Pacific and Central Pacific Railroad Company's depot and maintenance shops and Pacific Mail Steamship Company's warehouse/wharf complex displaced shipyards on Steamboat Point. By 1877, the northern portion of Mission Bay extending south to China Basin Channel had been filled in and within less than ten years, the southern side of the Channel had been filled in. China Basin Channel had become the importation/distribution point for much of the City's construction-related materials (lumber, brick, milled wood, etc). Several large textile and yarn mills (Mission Woolen Works, Pacific Woolen and Knitting Mills, Pioneer Woolen Mill) were constructed on Mission Creek and at North Beach. The Palace Hotel, when constructed in 1875, was the largest hotel in the world. The City began construction of a new neo-classical City Hall in 1871 that beleaguered by construction scandals was finally completed in 1897. In 1872, the City also completed construction of a new pavilion-style San Francisco County Hospital seemingly modeled after the hospital design advocated by the U.S Surgeon General to reduce the contagion and spread of disease due to inadequate ventilation, air, and natural light of earlier hospital construction.

The development of larger scale industries (Claus Spreckel's California Sugar Refinery, Union Iron Works shipyard) characterized the latter part of the 19th century and "sky-scraper" office buildings (Chronicle Building, Mills Building) along Market Street characterized the City's growth through the latter nineteenth century. San Francisco's belle époque was represented by the Midwinter Fair of 1893, completion of the new City Hall, the new Ferry Building, and The Emporium (the City's largest department store).

1906 Earthquake and Fire

On April 18, 1906 an earthquake with a registered intensity of 8.2 on the Richter Scale jolted San Francisco precipitating several small fires. The dispersed fires coalesced over the next few days into a general conflagration consuming the City's most developed and populated areas. An estimated 28,000 buildings were destroyed in the firestorm of 1906, encompassing an area of nearly five square miles. The

³⁵ Outside Lands – this term originated with an 1866 Act of Congress which authorized the disposal and sale of lands west of today's Divisadero Street by the City of San Francisco.

Great Earthquake and Fire of 1906 again showed the horrific combustibility of Victorian cities, like Boston (1872) and Baltimore (1904) with their closely-spaced, wood-frame houses and combustion-prone industries. With the destruction of the City's water distribution system, the only weapon available to contain the fire, was to dynamite fire breaks but dynamite in turn caused a firestorm. It was only the year prior that Daniel Burnham's master plan for San Francisco proposing along the lines of the beaux-arts City Beautiful movement a wholesale re-design of the City's layout with long, diagonally oriented Parisian boulevards, grand vistas, monumental roundpoints, and new elaborately landscaped parks. The general leveling of much of the City following the Great 1906 Fire and Earthquake would have seemed to provide the fortuitous opportunity to actualize the Burnham Plan, but the heavy pressure to rebuild quickly the city's economic base and basic lodging limited the realization of Burnham's master plan around the Civic Center and parts of downtown.

Changes in the demographic pattern of the City also resulted from the devastation of 1906. The crowded, poor Irish working class families and families of German middle class business-proprietors living in the South of Market Area largely relocated to the Mission District. The heavy industry area that had developed in the eastern part of SOMA since the Gold Rush period, dispersed to more peripheral points, such as Potrero and Hunters Points.

Reconstruction (1906-1929)

San Francisco's ability to rebuild itself on even a grander scale than before 1906 was demonstrated to the general public in the City's staging of the Panama Pacific International Exposition (PPIE) in 1915. Nominally, the PPIE celebrated the completion of the Panama Canal by the United States, but stronger subtext of the Exposition erected in the slough and mudflats of Crissey Field and Harbor View (the current Marina district) was the City's amazing power to rebuild itself in a few short years. The beaux-arts Palace of Fine Arts, eventually reconstructed in the 1960s, was originally built as part of the Exposition.

Replacement housing in vast parts of the City such as Nob Hill, the Tenderloin, the Mission District, and the Western Addition took the form of apartment blocks and three-story flats. More and taller steel-framed skyscrapers were erected along lower Market Street (Pacific Telephone and Telegraph building, the Call Building). An important boost to the City's maritime role and economy resulted from the Navy's award in 1914 of a significant shipbuilding contract to the Union Iron Works Shipbuilding Yard (later becoming the Bethlehem Shipbuilding Company) at Hunters Point, allowing a sizable expansion of the drydocks facility. Under the demands of the two World Wars and later acquisition of the shipbuilding facility by the U.S. Navy, the ship construction yard at Hunter's Point would define the character of the Bayview Hunters Point area through much of the century.

Transportation Connections 1930-1941

In the 19th century, San Francisco's port facilities, combined with passenger and freight rail service, shaped the development of the City. Twentieth-century development was largely shaped by two factors: the re-building efforts that followed the earthquake and fire of 1906, as well as the introduction of new modes of transportation and related infrastructure.

Traditionally, the Southern Pacific dominated overland travel in and out of the City and those visitors who wished to access San Francisco via water relied on one of several ferries. The volume of ferry traffic grew from the time it was established in the 1850s until it peaked in the 1930s. In the early years of that decade, 60 million people crossed the Bay on ferries each year.

The Ferry Building was the second busiest transportation terminal in the world in the early 1930s. Each day, some 250,000 persons traveled through the Ferry Building to work or other destinations. Ferries made approximately 170 landings a day at this time, and the Ferry Building was served by trolley lines which left every 20 seconds for city destinations. Ferries to Oakland could carry 4,000 persons, and were designed to incorporate restaurants, shoe shine parlors, and luxury surroundings, including mohair hangings, teak chairs, hammered copper lighting fixtures, and leather chairs in the ladies lounges. The highly efficient Key Route ferry/train transfer at the Oakland Mole enabled 9,000 commuters to load and unload in less [than] 20 minutes.³⁶

Despite their popularity, ferry routes were quickly abandoned when the San Francisco-Oakland Bay Bridge opened for traffic in 1936. Although the bridge itself was the most prominent element, it was constructed in the context of a larger system, designed to allow automobile and rail traffic to quickly access downtown San Francisco from the East Bay. In addition to the bridge, which was anchored on Rincon Hill, the new system included the Transbay Terminal, which was designed to accommodate the Bridge Railway, an electrified rail line that originally utilized the lower deck of the Bay Bridge. The Bridge Railway carried passenger cars, and provided a connection between East Bay interurban lines like the Key System, Southern Pacific, and Sacramento Northern, and various San Francisco municipal lines.³⁷ When the bridge railway was completed in 1939, it freed passengers who utilized the interurban lines from relying on ferries for the trans-bay portion of their journey. Once across the bridge, the electrified rail line was carried on elevated structures that allowed it to reach the Transbay Terminal and return to the bridge without impacting street traffic.³⁸ In the late 1950s the rail line was removed from the bridge and both the upper and lower deck were dedicated to automobile traffic. In turn, the terminal and the ramps were reconfigured to accommodate bus, and not rail, traffic.³⁹ In the end, “The vehicle access provided by the Bay Bridge reoriented the distribution system for goods in the Bay Area,” and diminished the importance of the City’s port and rail facilities while pointing towards a future focused on bus, truck, and automobile travel.

With the region’s reliance on port and rail facilities diminished, it allowed manufacturers and warehouses to relocate to less costly and less crowded cities throughout the Bay Area. Even before the turn-of-the-century, the search for cheap land and the space to build new factories had lured employers to South San

³⁶ Pacific Transit Management Corporation. *1992 Regional Ferry Plan San Francisco Bay Area Final Report*. Prepared for the Metropolitan Transportation Commission. September 1992.

³⁷ Bunse, Meta and Bryan Larson. 2001. *Draft Historic Architectural Survey Report for the Transbay Terminal / Caltrain Extension Project*, San Francisco, CA. Prepared by JRP Historical Consulting Services, Davis, CA.

³⁸ Ibid.

³⁹ Ibid.

Francisco and then across the Bay to Oakland and the shores of Contra Costa County. In addition, the dispersal of manufacturing and the new transportation model encouraged residents to raise their families in the outlying suburbs that grew rapidly during the mid-20th century.

In 1936, the same year that the Bay Bridge was completed, the construction of Treasure Island began. The 403-acre island was built by the Army Corps of Engineers on the Yerba Buena Island shoals and was initially constructed to host the Golden Gate International Exposition of 1939-1940.

World War II, Post-War Modernity, Anti-Modernity and Post-Modernity (1942-Present)

World War II had a profound effect on the development and demographics of San Francisco. While there had been a flood of immigrants into California during the Depression the previous decade, the influx during the war was substantially greater. The defense industry expanded and new cities developed rapidly, particularly in the San Francisco Bay area. New shipyards came into existence, the number of factories in use increased by a third, and the population of industrial workers more than doubled.

In San Francisco specifically, the Navy took possession of the dry docks at Hunters Point in 1940. The Hunters Point Shipyard was an annex to the Mare Island Shipyard and when the war in the Pacific escalated, the Navy began a massive expansion program at Hunters Point. This included acquiring an additional 200 acres to expand the facility. The Hunters Point Naval Yard was expanded again in the 1950s. In 1940, the Navy also took possession of Treasure Island, cutting short the Golden Gate International Exposition. After the attack on Pearl Harbor, the scope of the Treasure Island facilities was greatly expanded, and the island became home port for thousands of sailors.

While the local wartime build-up provided economic relief for residents employed in the defense-related industries, the war also brought with it a wave of anti-Japanese sentiment that permanently altered the demographics of San Francisco neighborhoods. Over 1,000 San Francisco Japanese and Japanese descendant residents were removed from their homes to eventually spend the remaining years of the war in internment camps.

While the automobile was already well established, the construction of freeways accelerated in the post-war period. As the 1950s progressed, San Franciscans began to resist the construction of additional freeways within the City. San Francisco's "freeway revolt" was the first such broad-based public opposition movement to the partitionment of communities by freeway projects that was occurring throughout the country in the 1950s and 1960s. In 1959, the San Francisco Board of Supervisors cancelled seven of ten planned freeway projects. In the 1960s plans for two additional freeway projects, through Golden Gate Park and an extension of the Embarcadero Freeway were also abandoned. A combination of damage sustained during the Loma Prieta earthquake of 1989, and lingering anti-freeway sentiment, made San Francisco the only major U.S. city to lose freeway miles between 1990 and 2005.

From 1964 to 1972 the Bay Area Rapid Transit (BART), a subway/light-rail transportation system was constructed linking three San Francisco Bay Area counties (San Francisco, Alameda, and Contra Costa). The BART District originally included five counties (Marin and San Mateo counties later withdrew).

Paleontological Resources

The City of San Francisco is primarily underlain by Franciscan Complex bedrock and surficial deposits such as dune sand and artificial fill. The bedrock comprises sedimentary and metamorphic rocks of the Franciscan formation, late Jurassic or Cretaceous in age. The bedrock is Cretaceous to Jurassic in age (65 to 165 million years old). Surficial sedimentary deposits found in the City are primarily Holocene and Pleistocene artificial fill, dune sand, slope and ravine fill and undifferentiated Quaternary sedimentary deposits. Section V.N (Geology and Soils) of the Draft EIR includes detailed descriptions of the soils and rock units.

Fossils are typically found in river, lake, and bog deposits, although they may occur in nearly any type of sedimentary sequence. Franciscan Complex rocks (Jurassic and Cretaceous in age) underlying the City consist of sandstone, shale, serpentinite, mélangé, and minor greenstone outcrops. Although uncommon in the low-grade metamorphic Franciscan rocks, fossils from widely scattered localities have been important in sorting out the depositional history of the Franciscan Complex. A Cretaceous ammonite was found in Franciscan shale in northeastern San Francisco, as were fossil plant remains (usually reported as carbonaceous matter or carbonaceous particles and layers), and thin shells resembling parts of arthropods. Tiny shark's teeth are the only known vertebrate fossils reported from the Franciscan Complex.

Undifferentiated surficial deposits found in the City include beach sand, marine deposits, artificial fill, alluvium, landslides, and, in the South San Francisco quadrangle, some Colma Formation. Colma Formation contains marine and terrestrial fossils including bones and teeth of mammoth and extinct bison and ground sloth, juniper and red cedar. Holocene pollen, plant, and shell fossils have been reported in the Bay mud. Remains of land mammals (extinct mammoth, bison, and horse) have been reported from localities in younger alluvium along the bay margin south of the Bay Bridge San Francisco Anchorage. No fossils have been reported from artificial fill in the San Francisco Bay area.

REGULATORY SETTING

Federal

Federal regulations for cultural resources are primarily governed by Section 106 of the *National Historic Preservation Act of 1966* (NHPA), which applies to actions taken by federal agencies, including projects that take place on federally controlled land or facilities, require federal agency permits, or receive federal funding. The criteria for determining NRHP eligibility are found in 36 *Code of Federal Regulations* (CFR) Part 60. Section 106 of the NHPA requires federal agencies to take into account the effects of their undertakings on historic properties and affords the federal Advisory Council on Historic Preservation a reasonable opportunity to comment on such undertakings. Section 301(7) of the NHPA defines an undertaking as any project, activity, or program funded in whole or in part under the direct or indirect jurisdiction of a federal agency, including:

- Those carried out by or on behalf of the agency
- Those carried out with federal financial assistance

- Those requiring a federal permit, license, or approval
- Those subject to state or local regulation administered pursuant to a delegation of approval by a federal agency⁴⁰

The NHPA also authorizes the Secretary of the Interior to maintain a National Register of Historic Places (NRHP) and directs the Secretary to approve state historic preservation programs that provide for a State Historic Preservation Officer.

The Council's implementing regulations, "Protection of Historic Properties," are found in 36 CFR Part 800. The NRHP criteria (contained in 36 CFR 60.4) are used to evaluate resources when complying with NHPA Section 106. Those criteria state that eligible resources comprise districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association, and any of the following:

- a) Are associated with events that have made a significant contribution to the broad patterns of our history
- b) Are associated with the lives of persons significant in our past
- c) Embody the distinctive characteristics of a type, period, or method of construction, or that possess high artistic values, or that represent a significant distinguishable entity whose components may lack individual distinction
- d) Have yielded or may be likely to yield, information important to history or prehistory

Archaeological site evaluation assesses the potential of each site to meet one or more of the criteria for NRHP eligibility based upon visual surface and subsurface evidence (if available) at each site location, information gathered during the literature and records searches, and the researcher's knowledge of and familiarity with the historic or prehistoric context associated with each site.

The minimum level of information needed for a property to be included in the Office of Historic Preservation's filing system is the *Primary Record* that gives an overview of each building, structure or object from which a preliminary evaluation may be developed. Once a property is identified as having the potential to be historic, it is evaluated for its Associative Value as defined below. This level of evaluation requires additional research and the completion of the California Department of Parks and Recreation (DPR) 523b *Building, Structure and Object (BSO)* record or DPR 523d *District Record*.

The NRHP is the official list of properties, structures, districts, and objects significant in American history, architecture, archaeology, engineering, and culture. NRHP properties have significance to the prehistory and history of their community, State, or Nation.

⁴⁰ 16 USC 470w(7).

The National Register Criteria for Evaluation is...“the basis for judging a property's significance for their association with important events or persons, for their importance in design or construction, or for their information potential...”⁴¹ The National Register Criteria recognizes the following four categories of Associative Values:

- A) Event: properties significant for their association or linkages to events
- B) Person(s): properties significant for their association to persons important to the past
- C) Design or Construction Value: properties significant as representatives of the manmade expression of culture or technology
- D) Information Value: properties significant for their ability to yield important information about prehistory or history

State

Public Resources Code (PRC) Section 5020.5 directs the State Historical Resources Commission to develop criteria and methods for determining the significance of archaeological sites. PRC Section 5024.1 establishes the California Register of Historical Resources (CRHR) and criteria for inclusion of resources on the Register. Under CEQA, public agencies must consider the effects of their actions on both “historical resources” and “unique archaeological resources.”

“Historical resource” is a term with a defined statutory meaning (refer to PRC Section 21084.1 and CEQA Guidelines Section 15064.5(a) and (b)). The term embraces any resource listed in or determined to be eligible for listing in the CRHR. The CRHR includes resources listed in or formally determined eligible for listing in the NRHP, as well as some California State Landmarks and Points of Historical Interest. In addition, properties of local significance that have been designated under a local preservation ordinance (local landmarks or landmark districts) or that have been identified in a local historical resources inventory may be eligible for listing in the CRHR and are presumed to be “historical resources” for purposes of CEQA unless a preponderance of evidence indicates otherwise (PRC Section 5024.1 and *California Code of Regulations* (CCR), Title 14, Section 4850). Unless a resource listed in a survey has been demolished, lost substantial integrity, or there is a preponderance of evidence indicating that it is otherwise not eligible for listing, a lead agency should consider the resource to be potentially eligible for the CRHR and as a historical resource under CEQA.

In addition to assessing whether historical resources potentially impacted by a proposed project are listed or have been identified in a survey process, lead agencies have a responsibility to evaluate them against the CRHR criteria prior to making a finding as to a proposed project’s impacts to historical resources (PRC Section 21084.1 and CEQA Guidelines Section 15064.5(a)(3)). Properties that are eligible for the

⁴¹ Historic Resources Survey Program information can be found on the Planning Department’s website at: <http://www.sfplanning.org/index.aspx?page=1826>.

National Register are automatically eligible for the California Register. In general, an historical resource, under this approach, is defined as any object, building, structure, site, area, place, record, or manuscript that:

- (a) Is historically or archeologically significant, or is significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political or cultural annals of California; and
- (b) Meets any of the following criteria:
 - 1) Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;
 - 2) Is associated with the lives of persons important in our past;
 - 3) Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or
 - 4) Has yielded, or may be likely to yield, information important in prehistory or history.

(CEQA Guidelines Section 15064.5(a)(3))

CRHR criteria are similar to National Register criteria, and are tied to CEQA, as any resource that meets the above criteria, and retains sufficient historic integrity, is considered an historical resource under CEQA. In addition to meeting one or more of the above criteria, the CRHR requires that sufficient time must have passed to allow a "scholarly perspective on the events or individuals associated with the resource." Fifty years is used as a general estimate of the time needed to understand the historical importance of a resource.⁴² The Office of Historic Preservation (OHP) recommends documenting, and taking into consideration in the planning process, any cultural resource that is 45 years or older.⁴³

The CRHR also requires a resource to possess integrity, which is defined as "the authenticity of a historical resource's physical identity evidenced by the survival of characteristics that existed during the resource's period of significance. Integrity is evaluated with regard to the retention of location, design, setting, materials, workmanship, feeling, and association".⁴⁴

Under CEQA, the significance of an historical resource is materially impaired when a project "demolishes or materially alters in an adverse manner those physical characteristics of an historical resource that convey its historical significance" (CEQA Guidelines Section 15064.5(b)(2)(A) and that justify or

⁴² CCR 14(11.5) §4852 (d)(2).

⁴³ California Office of Historic Preservation, 1995, p.2. Instructions for Recording Historical Resources. Office of Historic Preservation, Sacramento.

⁴⁴ California Office of Historic Preservation, 2006, p.2. California Register and National Register: A Comparison. Technical Assistance Series No. 6. California Department of Parks and Recreation, Sacramento. Assistance Series No. 6. California Department of Parks and Recreation, Sacramento.

account for its inclusion in, or eligibility for inclusion in, the CRHR. Thus, a project may cause a substantial change in an historical resource but still not have a significant adverse effect on the environment as defined by CEQA, so long as the historical resource continues to convey its historical significance.

CEQA Guidelines Section 15064.5(b)(3) states that “generally, a project that follows the Secretary of the Interior’s Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings or the Secretary of the Interior’s Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings shall be considered as mitigated to a level of less than a significant impact on the historical resource.”

CEQA requires that the effects of a project on an archaeological resource shall be taken into consideration and that if a project may affect an archaeological resource that it shall first be determined if the archaeological resource is an “historical resource”, that is, if the archaeological resource meets the criteria for listing in the CRHR. To be eligible for listing to the CRHR under Criterion 1, 2, or 3, an archaeological site must contain artifact assemblages, features, or stratigraphic relationships associated with important events, or important persons, or exemplary of a type, period, or method of construction (CEQA Guidelines Section 15064.5(a)(1) and (3) and (c)(1) and (2)). To be eligible under Criterion 4, an archaeological site need only show the potential to yield important information. An archaeological resource that qualifies as a “historical resource” under CEQA, generally, qualifies for listing under Criterion 4 of the CRHR (CEQA Guidelines Section 15064.5(a)(3)(D)). An archaeological resource may qualify for listing under Criterion 4 when it can be demonstrated that the resource has the potential to significantly contribute to questions of scientific/historical importance (CA OHP. Preservation Planning Bulletin No. 5).

CEQA Guidelines Section 15064.5(e) requires that excavation activities be stopped whenever human remains are uncovered and that the county coroner be called in to assess the remains. If the county coroner determines that the remains are those of Native Americans, the Native American Heritage Commission (NAHC) must be contacted within 24 hours. At that time, the lead agency must consult with the appropriate Native Americans, if any, as timely identified by the NAHC. Section 15064.5 directs the lead agency (or applicant), under certain circumstances, to develop an agreement with the Native Americans for the treatment and disposition of the remains.

Local

San Francisco Landmarks and Historic Districts

The City of San Francisco maintains a list of locally designated City Landmarks and Historic Districts, similar to the National Register of Historic Places but at the local level. Landmarks can be buildings, sites, or landscape features. Districts are defined generally as an area of multiple historic resources that are contextually united. The regulations governing Landmarks, as well as the list of individual Landmarks and descriptions of each Historic District, are found in Articles 10 and 11 of the Planning Code.

Owners of Landmark properties, or of contributors to Historic Districts, may be eligible for property tax relief and other incentives. Consult Preservation Bulletins Nos. 5, 9, and 10 for more information about Article 10 and 11 Landmarks, Historic Districts, and the landmarking process.⁴⁵

According to San Francisco Preservation Bulletin #5, the San Francisco Historic Preservation Commission (formally the Landmarks Advisory Board) and the Planning Commission use the National Register Criteria for evaluating potential historic properties.

City and County of San Francisco Planning Department CEQA Review Procedures for Historic Resources

The San Francisco Planning Department considers a listing of historical resources approved by ordinance or resolution of the Board of Supervisors or the Planning Commission to be a local register of historical resources for the purposes of CEQA evaluation.⁴⁶ San Francisco Preservation Bulletin No. 16 provides guidance for the CEQA review process with regard to historic resources. As a certified local government and the lead agency in CEQA determinations, the City has instituted guidelines and a system for initiating CEQA review of historic resources. The San Francisco Planning Department's CEQA Review Procedures for Historical Resources incorporates the CEQA Guidelines into the City's existing regulatory framework. To facilitate the review process, the Planning Department has established the categories to determine the baseline significance of historic properties based on their inclusion within cultural resource surveys and/or historic districts. These categories include Category A.1 (Resources listed on or formally determined to be eligible for the CRHR), Category A.2 (Adopted local registers, and properties that have been determined to appear or may become eligible, for the CRHR), Category B (Properties requiring further consultation and review), Category C (Properties determined not to be historical resources or properties for which the City has no information indicating that the property is an Historical Resource).

Local

San Francisco

A sizable archaeological literature exists for San Francisco supported by a considerable amount of archaeological field investigation. Most of this documentation has been more descriptive than analytic in its approach and most field projects have been archaeological salvage responses to development proposals rather than research-initiated projects. Until the last two decades, archaeologists had tended to concentrate a small set of resource types: prehistoric sites, Gold Rush period sites, including buried ships and storehouses, Chinese sites, and burials from former cemeteries. Since the 1990's as a result of ever increasing archaeological discoveries and the assumption of new research approaches by archaeologists, a growing awareness of the wide range and complexity of the City's archaeological record has changed

⁴⁵ http://www.sfgov.org/site/planning_index.asp?id=77300#landmarks (accessed 5.14.2009).

⁴⁶ Public Resources Code Sec. 5020.1(k) states, —_Local register of historical resources' means a list of properties officially designated or recognized as historically significant by a local government pursuant to a local ordinance or resolution.

cultural resource management practices to ensure professional standards in research and documentation, broader regional and comparative approaches, and greater emphasis on archaeologically documenting population groups that are poorly documented in the written historical record.

San Francisco General Plan

The San Francisco General Plan provides general policies and objectives to guide land use decisions and development throughout the City. General Plan objectives and policies relevant to cultural resources are discussed in Section V.A (Plans and Policies) of this Draft EIR. The San Francisco General Plan currently contains no Preservation Element. The purpose of the Preservation Element of the San Francisco General Plan is to outline a comprehensive set of objectives and policies for the preservation and enhancement of San Francisco's historic resources, which include buildings, districts, sites, and landscapes that are historically and/or archaeologically significant. Once adopted, the Draft Preservation Element of the General Plan would further establish and maintain preservation of historic resources as City policy. General Plan objectives and policies discussed in this Section are as follows:

Urban Design Element

Objective 2: Conservation of resources which provide a sense of nature, continuity with the past, and freedom from overcrowding.

Policy 2.4: Preserve notable landmarks and areas of historic, architectural, or aesthetic value, and promote the preservation of other buildings and features that provide continuity with past development.

Policy 2.5: Use care in remodeling of older buildings, in order to enhance rather than weaken the original character of such buildings.

Policy 2.6: Respect the character of older development nearby in the design of new buildings.

Paleontological Resources

A variety of federal, state, and local regulations and policies protect paleontological resources. These include, NEPA, CEQA, the federal Antiquities Act of 1906, the National Natural Landmarks Program, and the PRC. Under California law, paleontological resources are included in CEQA⁴⁷ and are required to be examined as part of the CEQA process. The City has no policies directly protecting paleontological resources, but uses the CEQA process to address potential adverse effects.

CEQA requires that paleontological resources be addressed during the EIR process. CEQA Guidelines, Appendix G, states, in part, that a project will "normally" have a significant effect on the environment if, among other things, it will disrupt or adversely affect a paleontological site, except as part of a scientific study. If paleontological resources are identified during the initial project scoping studies (such as an

⁴⁷ California Administrative Code, Title 14, Section 4306 et seq., and Public Resources Code Section 5097.5.

Initial Study or in a comment on the Notice of Preparation) as being on the project site, the Lead Agency must take those resources into consideration when evaluating the potential effects of the project. In the context of the PRC (Section 5097.5), fossils of vertebrates and evidence of their environment generally are considered important (i.e., “significant”) paleontological resources.

IMPACTS

Significance Thresholds

The proposed Housing Elements would normally have a significant effect on the environment if they would:

- Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5, including those resources listed in Article 10 or Article 11 of the San Francisco *Planning Code*;
- Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5;
- Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature;
or
- Disturb any human remains, including those interred outside of formal cemeteries.

Impact Evaluation

Methodology

Historic Districts

According to National Register Bulletin 15 (NRB15), a historic district “possesses a significant concentration, linkage, or continuity of sites, buildings, structures, or objects united historically or aesthetically by plan or physical development.” Bulletin 15 continues:

Concentration, Linkage, & Continuity of Features

A district derives its importance from being a unified entity, even though it is often composed of a wide variety of resources. The identity of a district results from the interrelationship of its resources, which can convey a visual sense of the overall historic environment or be an arrangement of historically or functionally related properties. For example, a district can reflect one principal activity, such as a mill or a ranch, or it can encompass several interrelated activities, such as an area that includes industrial, residential, or commercial buildings, sites, structures, or objects. A district can also be a grouping of archaeological sites related primarily by their common components; these types of districts often will not visually represent a specific historic environment.

Significance

A district must be significant, as well as being an identifiable entity. It must be important for historical, architectural, archaeological, engineering, or cultural values. Therefore, districts that are significant will usually meet the last portion of the National Register of Historic Places Criterion C plus Criterion A, Criterion B, other portions of Criterion C, or Criterion D, previously discussed in the Regulatory Setting.

Types of Features

A district can comprise both features that lack individual distinction and individually distinctive features that serve as focal points. It may even be considered eligible if all of the components lack individual distinction, provided that the grouping achieves significance as a whole within its historic context. In either case, the majority of the components that add to the district's historic character, even if they are individually undistinguished, must possess integrity, as must the district as a whole...A district can contain buildings, structures, sites, objects, or open spaces that do not contribute to the significance of the district. The number of noncontributing properties a district can contain yet still convey its sense of time and place and historical development depends on how these properties affect the district's integrity.

Geographical Boundaries

A district must be a definable geographic area that can be distinguished from surrounding properties by changes such as density, scale, type, age, style of sites, buildings, structures, and objects, or by documented differences in patterns of historic development or associations. It is seldom defined, however, by the limits of current parcels of ownership, management, or planning boundaries. The boundaries must be based upon a shared relationship among the properties constituting the district.

Discontiguous Districts

A district is usually a single geographic area of contiguous historic properties; however, a district can also be composed of two or more definable significant areas separated by nonsignificant areas. A discontiguous district is most appropriate where:

- Elements are spatially discrete;
- Space between the elements is not related to the significance of the district; and
- Visual continuity is not a factor in the significance.⁴⁸

⁴⁸ U.S. Department of the Interior, National Park Service. National Register Bulletin 15: How to Apply the National Register Criteria for Evaluation, Section IV.

Integrity

“Integrity is the ability of a property to convey its significance. . . . Historic properties either retain their integrity or they do not.”⁴⁹ Guidance for assessing integrity is in National Register Bulletin 15, Section VIII.

“Integrity is based on significance: why, where and when a property is important. Only after significance is fully established can you proceed to the issue of integrity. . . . Ultimately the question of integrity is answered by whether or not the property retained the identity for which it is significant.” [Section VIII]
“All properties change over time. It is not necessary for a property to retain all its historic physical features or characteristics.

The property must retain, however, the essential physical features that enable it to convey its historic identity. These essential physical features are those features that define both why a property is significant (Applicable criteria and Areas of Significance) and when it was significant (Periods of Significance). They are features without which a property can no longer be identified as, for instance, a late 19th century dairy barn or an early 20th century commercial district.” [Section VIII]

“The quality of significance . . . is present in districts, sites, buildings, structures, and objects that possess integrity of:

- Location = Location is the place where the historic property was constructed or the place where the historic event occurred.
- Design = Design is the combination of elements that create the form, plan, space, structure, and style of a property.
- Setting = Setting is the physical environment of the historic property.
- Materials = Materials are the physical elements that were combined or deposited during a particular period of time and in a particular pattern or configuration to form a historic property.
- Workmanship = Workmanship is the physical evidence of the crafts of a particular culture or people during any given period in history or prehistory.
- Feeling = Feeling is a property's expression of the aesthetic or historic sense of a particular period of time.
- Association = Association is the direct link between an important historic event or person and a historic property.”⁵⁰

⁴⁹ Ibid, Section VIII.

⁵⁰ Ibid, Section VIII.

“To retain historic integrity a property will always possess several, and usually most, of the above aspects. The retention of specific aspects of integrity is paramount for a property to convey its significance. Determining which of these aspects are most important to a particular property requires knowing why, where, and when the property is significant.”

Section VIII provides guidance for evaluating integrity under each of the four eligibility criteria. As with the California Register regulations, the National Register recognizes that alterations and changes in a property’s use over time may themselves have significance. This is expressed most clearly under Criterion C, “A property can be significant not only for the way it was originally constructed or created, but also for the way it was adapted at a later period, or for the way it illustrates changing tastes, attitudes, and uses over a period of time.”⁵¹

The California Register regulations also address integrity. “Integrity is the authenticity of an historical resource’s physical identity evidenced by the survival of characteristics that existed during the resources’ period of significance.”⁵²

Historical resources eligible for listing in the California Register must:

- meet one of the criteria of significance described in CCR §4852(b) of this chapter
- retain enough of their historic character or appearance to be recognizable as historical resources and to convey the reasons for their significance.” or

“Integrity is evaluated with regard to the retention of: location, workmanship, design, feeling, setting, association, and materials. It must also be judged with reference to the particular criteria under which a resource is proposed for eligibility. Alterations over time to a resource or historic changes in its use may themselves have historical, cultural, or architectural significance. Historical resources that have been rehabilitated or restored may be evaluated for listing.”⁵³

Identifying Historical Areas of Potential Effect (APE)

Generally, the Area of Potential Effect (APE) is the geographic area or areas within which an undertaking (project or activity) may cause changes in the character or use of any cultural resources present. The State of California Department of Transportation (Caltrans) defines APE as “...the area, or areas, within which an undertaking may cause changes in the character or use of historic properties, should any be present.”⁵⁴

⁵¹ Ibid, Section VI.

⁵² California Office of Historic Preservation Technical Assistance Series #6, California Register and National Register: A Comparison.

⁵³ Ibid.

⁵⁴ Definition of terms can be accessed on the California Department of Transportation website at www.dot.ca.gov/ser/vol2/exhibits/exhibit_1_2_Definitions.htm.

In the broadest sense, the APE is coterminous with the City and County of San Francisco. For the Housing Element one may then reduce the APE to those areas where zoning permits residential development under the jurisdiction of the City (excluding federal and State lands, parks, etc.). A further reduction may be made to eliminate areas where Housing Element policies intended to encourage attainment of the RHNA would not be expected to result in any change in the nature of residential development, such as areas in RH zones. As Housing Element Policies would apply throughout the City, the APE for purposes of this report is the entirety of the City and County of San Francisco.

As new development occurs, site specific APE's should be clearly defined at the project level. Officially designated individual historic resources and historic resource areas (historic districts) in San Francisco are listed in the San Francisco Planning Code. Article 10 lists individual Landmarks and Historic Districts. Article 11 lists significant buildings and Conservation Districts within the downtown C-3 zoning districts. The Article 10 and Article 11 areas are those that retain resources that meet the criteria for historic significance as discussed previously. Figure V.E-1 shows capacity and pipeline housing units that could be within Article 10 and Article 11 Areas, which will have a high potential for the need to establish a historic APE. According to this data, approximately 1,671 units in the City's pipeline occur within Article 10 and Article 11 areas, with the capacity for another 633 units. Article 10 and Article 11 areas are most common in the Downtown, Market Octavia, and East SoMa neighborhoods.

Other buildings and properties have not been designated, but have been identified as historic resources for the purposes of CEQA (See Preservation Bulletin #16, categories A1 and A2⁵⁵). Figure V.E-2 shows capacity and pipeline housing units that could be within sites surveyed for potential historic resources as part of various surveys conducted in the City. According to City data, approximately 12,607 units in the City's pipeline occur within sites surveyed for potential historic resources, with the capacity for another 15,943 units. Sites surveyed for potential resources that could be affected by new housing units are most common in the Downtown, Market Octavia, and Visitacion Valley neighborhoods. In addition, several other areas of San Francisco have not been subject to survey activity, but contain properties that are likely to be considered historic resources for the purposes of CEQA. In order to determine whether a proposed project affects a historic resource and whether any effects of a project would result in a significant impact to a resource, development applications are subject to review in accordance with the requirements of Preservation Bulletin 16. Site-specific APEs should be defined by the extent of future development as specific development occurs in the above-listed areas.

⁵⁵ San Francisco Preservation Bulletin No. 16, City and County of San Francisco Planning Department, website: <http://www.sfplanning.org/Modules/ShowDocument.aspx?documentid=5340>, accessed May 19, 2010.



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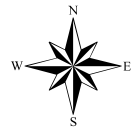
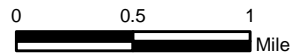
Figure V.E-1 Potential Housing Units: Capacity and Pipeline Units within Article 10 and Article 11 Areas

- Article 10 and Article 11 Areas
- Parks
- Water

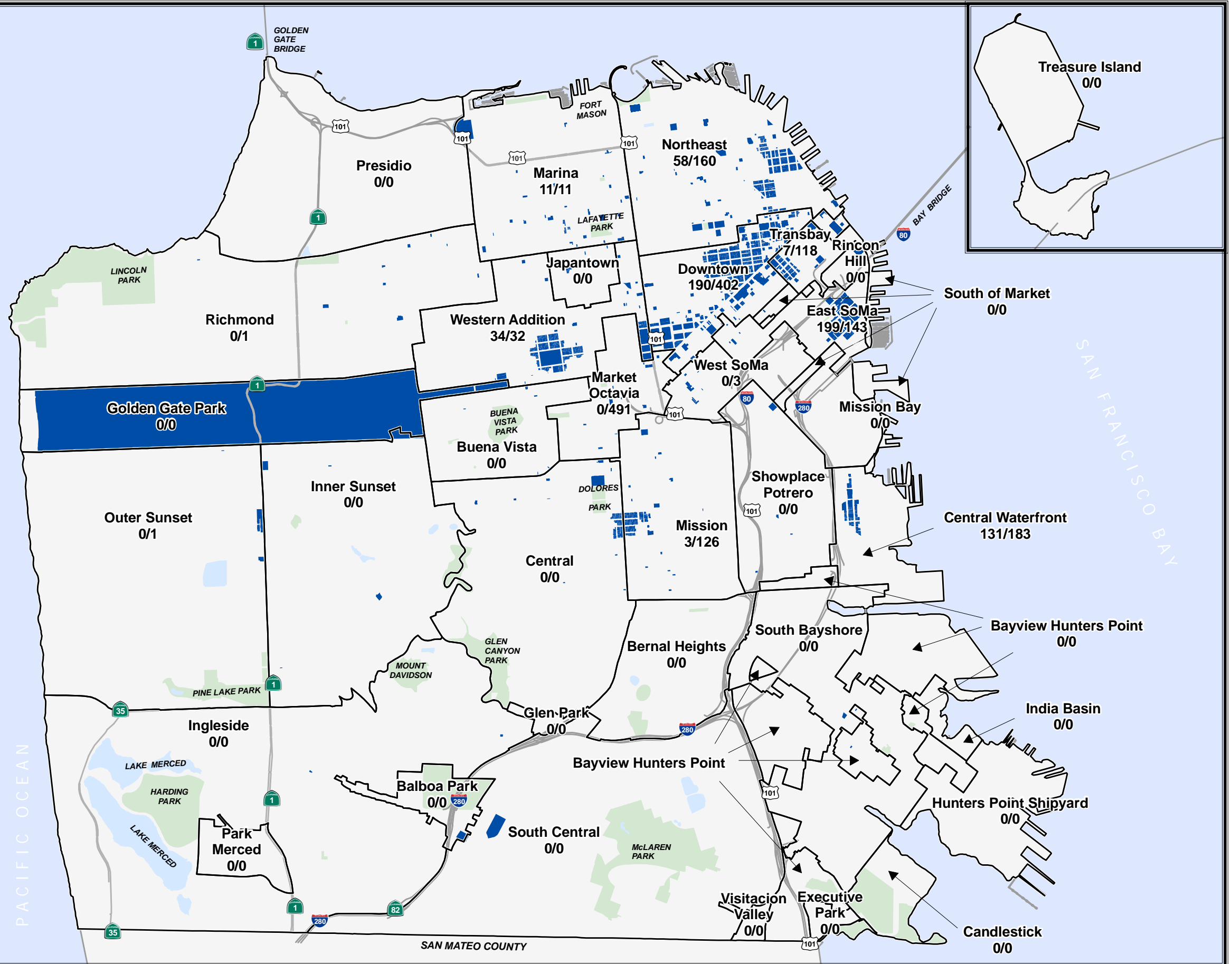
Notes:

1. Numerical values represent housing capacity within Article 10 and Article 11 areas followed by net pipeline units within these areas (Housing Unit Capacity/ Pipeline Units), except as noted below.

2. Within the Mission Bay, Hunters Point, Candlestick Point, Visitacion Valley, and Treasure Island Redevelopment Areas, as well as the Park Merced area plan, the specific locations of housing units are unknown, therefore total net units anticipated under those plans are indicated.



Sources:
Capacity and Pipeline: CCSF Planning Department, Q1 2009.
Article 10 & 11 Areas: San Francisco Planning Code, May 2010.



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Figure V.E-2 Potential Housing Units: Capacity and Pipeline within Sites Surveyed for Potential Historic Resources

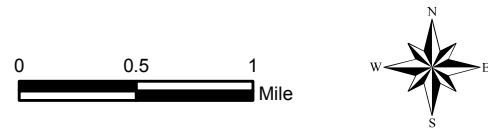
- Sites Surveyed for Potential Historic Resources
- Parks

Notes:

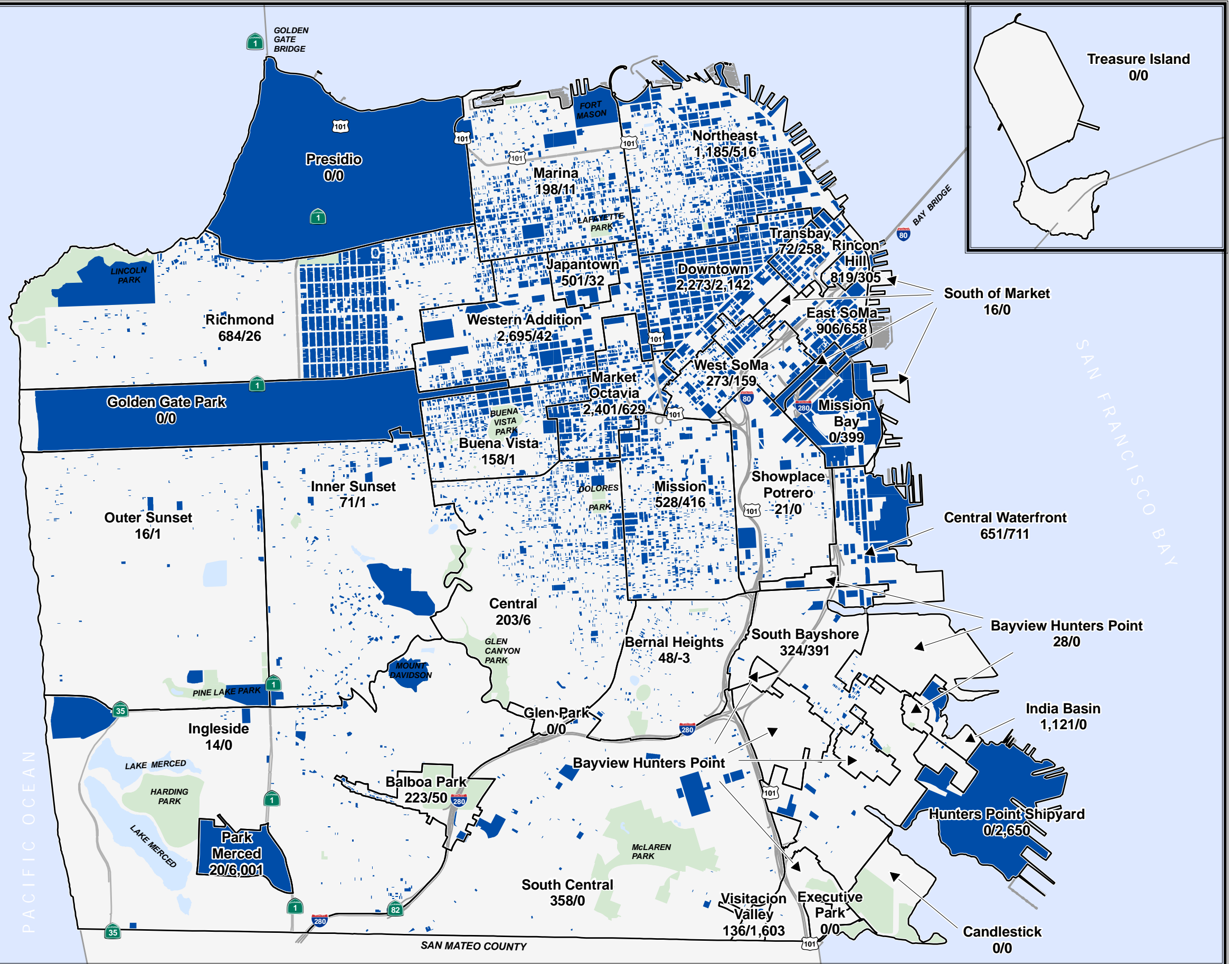
1. Numerical values represent housing capacity within sites surveyed for potential historic resources followed by net pipeline units within these sites (Housing Unit Capacity/ Pipeline Units), except as noted below.

2. Within the Mission Bay, Hunters Point, Candlestick Point, Visitacion Valley, and Treasure Island Redevelopment Areas, as well as the Park Merced area plan, the specific locations of housing units are unknown, therefore total net units anticipated under those plans are indicated.

3. "Sites surveyed for potential historic resources" refer to sites that have been surveyed as part of the 1968 Junior League Here Today survey, the 1976 Department of City Planning Architectural Survey, the Unreinforced Masonry Building Survey, or Heritage Surveys. This designation does not include sites evaluated through other past or ongoing surveys or other sites 50 years or older that may be historic resources.



Sources:
Pipeline and Capacity: CCSF Planning Department, Q1 2009.
Sites Surveyed for Potential Historic Resources: CCSF Planning Department, May 2010.



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A few examples of project-related impacts in an APE that are beyond the actual construction limits include:

- Disposal sites or waste areas.
- New or upgraded access or haul roads.
- Staging, storage, and stockpile areas.
- Drainage diversions.
- Changes to the character-defining features of an adjacent historic district.

Additionally, vibration sources resulting from housing development could have a direct or indirect impact on historic resources. Prior to an actual construction project it should be determined that structures adjacent to work sites also be evaluated for historical significance due to potential impacts to these structures from vibration generated by construction equipment and construction methods, such as installing sheet piles.⁵⁶ According to the American Association of State Highway and Transportation Officials Maximum Vibration Levels for Preventing Damage - Historic Structures, there would be a number of noise and vibration sources associated with new construction. These include the following vibration sources.

- | | |
|-----------------------------------|---|
| – Backhoe | – Augering/Boring/Drill Rig |
| – Bulldozer/Earthmoving equipment | – Concrete Mixer/Pump |
| – Concrete saw | – Jackhammer |
| – Vibratory Compactor | – Crane |
| – Excavator/Trencher | – Grader/Scraper |
| – Paver/Paving Equipment | – Front end loader |
| – Roller | – Haul and trailer trucks |
| – Generator | – Compressor |
| – Pump | – Pneumatic Tools |
| – Vibratory sheet pile driver | – Other construction support activities |
| | – Private vehicles |

California Environmental Quality Act

According to State CEQA Guidelines Section 15064.5 (b)(1) and (2), a project that results in a “substantial adverse change in the significance of an historical resource” may have a significant adverse effect on the environment (Public Resources Code Section 21084.1). An “historical resource” is a

⁵⁶ Transportation and Construction-Induced Vibration Guidance Manual, Appendix A, Jones and Stokes for California Department of Transportation, June 2004.

resource listed in, or determined to be eligible for listing in, the California Register. All National Register-listed or eligible resources qualify for listing in the California Register. The Public Resources Code defines “substantial adverse change” as “demolition, destruction, relocation or alteration,” activities that would impair the significance of an historical resource (Public Resources Code Section 5020.1q and State CEQA Guidelines Section 15064.5 (b)(1) and (2)).

CEQA also defines activities that would impair the significance of an historical resource:

The significance of an historical resource is materially impaired when a project:

- (A) Demolishes or materially alters in an adverse manner those physical characteristics of an historical resource that convey its historical significance and that justify its inclusion in, or eligibility for inclusion in the California Register of Historic Resources; or
- (B) Demolishes or materially alters in an adverse manner those physical characteristics that account for its inclusion in a local register of historic resources pursuant to section 5020.1(k) of the Public Resources Code or its identification in an historical resources survey meeting the requirements of section 5024.1 (g) of the Public Resources Code, unless the public agency reviewing the effects of the project establishes by a preponderance of evidence that the resource is not historically or culturally significant; or
- (C) Demolishes or materially alters in an adverse manner those physical characteristics of an historical resource that convey its historical significance and that justify its eligibility for inclusion in the California Register of Historical Resources as determined by a lead agency for purposes of CEQA.⁵⁷

According to CEQA, “Generally, a project that follows The Secretary of the Interior’s Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings or The Secretary of the Interior’s Standards for Rehabilitating Historic Buildings...shall be considered as mitigated to a level of less than a significant impact on the historical resource.”⁵⁸

CEQA requires that the effects of a project on an archaeological resource shall be taken into consideration and that if a project may affect an archaeological resource that it shall first be determined if the archaeological resource is an “historical resource”, that is, if the archaeological resource meets the criteria for listing in the California Register of Historical Resources (CRHR). To be eligible for listing to the CRHP under Criteria 1, 2, or 3, an archaeological site must contain artifact assemblages, features, or stratigraphic relationships associated with important events, or important persons, or exemplary of a type, period, or method of construction (CEQA Guidelines § 15064.5(a)(1) and (3) and (c)(1) and (2)). To be eligible under Criterion 4, an archaeological site need only show the potential to yield important

⁵⁷ State CEQA Guidelines Section 15064.5 (b)(2)(A)(B)(C).

⁵⁸ State CEQA Guidelines Section 15064.5 (b)(3).

information.⁵⁹ An archaeological resource that qualifies as a “historical resource” under CEQA, generally, qualifies for listing under Criterion “4” of the CRHR (CEQA Guidelines §15064.5 (a)(3)(D)). An archaeological resource may qualify for listing under Criterion “4” when it can be demonstrated that the resource has the potential to significantly contribute to questions of scientific/historical importance. The research value of an archaeological resource can only be evaluated within the context of the historical background of the site of the resource and within the context of prior archaeological research related to the property type represented by the archaeological resource.⁶⁰

Secretary of the Interior's Standards for Rehabilitation (SISR)

The Secretary of the Interior is responsible for establishing standards for all programs under Departmental authority and for advising federal agencies on the preservation of historic properties listed or eligible for listing in the National Register of Historic Places. In partial fulfillment of this responsibility, the Secretary of the Interior's Standards for Historic Preservation Projects have been developed to guide work undertaken on historic buildings.

The Standards for Rehabilitation (36 CFR 67) comprise that section of the overall historic preservation project standards and addresses the most prevalent treatment. ‘Rehabilitation’ is defined as ‘the process of returning a property to a state of utility, through repair or alteration, which makes possible an efficient contemporary use while preserving those portions and features of the property which are significant to its historic, architectural, and cultural values.’

The intent of the Standards for Rehabilitation (standards) is to assist the long-term preservation of a property’s significance through the preservation of historic materials and features. The Standards pertain to historic buildings of all materials, construction types, sizes, and occupancy and encompass the exterior and interior of the buildings. They also encompass related landscape features and the building's site and environment, as well as attached, adjacent, or related new construction.

The following are the Secretary of Interior's Standards for Rehabilitation.

1. A property shall be used for its historic purpose or be placed in a new use that requires minimal change to the defining characteristics of the building and its site and environment.
2. The historic character of a property shall be retained and preserved. The removal of historic materials or alteration of features and spaces that characterize a property shall be avoided.
3. Each property shall be recognized as a physical record of its time, place, and use. Changes that create a false sense of historical development, such as adding conjectural features or architectural elements from other buildings, shall not be undertaken.

⁵⁹ National Register Criteria for Evaluation, United States Department of Interior, National Park Service, website: http://www.nps.gov/history/nr/publications/bulletins/nrb15/nrb15_2.htm, accessed May 19, 2010.

⁶⁰ Preservation Planning Bulletin No. 5, California Office of Historic Preservation, February 1991.

4. Most properties change over time; changes that have acquired historic significance in their own right shall be retained and preserved.
5. Distinctive features, finishes, and construction techniques or examples of craftsmanship that characterize a property shall be preserved.
6. Deteriorated historic features shall be repaired rather than replaced. Where the severity of deterioration requires replacement of a distinctive feature, the new feature shall match the old in design, color, texture, and other visual qualities and, where possible, materials. Replacement of missing features shall be substantiated by documentary, physical, and pictorial evidence.
7. Chemical or physical treatments, such as sandblasting, that cause damage to historic materials shall not be used. The surface cleaning of structures, if appropriate, shall be undertaken using the gentlest means possible.
8. Significant archeological resources affected by a project shall be protected and preserved. If such resources must be disturbed, mitigation measures shall be undertaken.
9. New additions, exterior alterations, or related new construction shall not destroy historic materials that characterize the property. The new work shall be differentiated from the old and be compatible with the massing, size, scale, and architectural features to protect the historic integrity of the property and its environment.
10. New additions and adjacent or related new construction shall be undertaken in such a manner that if removed in the future, the essential form and integrity of the historic property and its environment would be unimpaired.

As stated in the definition, "Rehabilitation" assumes that at least some repair or alteration of the historic resource will need to take place in order to provide for an efficient contemporary use; however these repairs and alterations must not damage or destroy the materials and features, including their finishes, that are important in defining the building's historic character.

Impact Evaluation

As discussed previously, the 2004 Housing Element and 2009 Housing Elements would not change the land use objectives and policies in the City's area and redevelopment plans. According to Part I of the 2009 Housing Element (Data and Needs Analysis), the City has available capacity to meet the RHNA. Therefore, the rezoning of land uses is not required. To meet the City's share of the RHNA, the proposed Housing Elements aim to do the following: 1) preserve and upgrade existing housing units to ensure they do not become dilapidated, abandoned, or unsound, and 2) provide direction for how new housing development in the City should occur. With respect to the latter, the 2004 Housing Element encourages new housing in Downtown and in underutilized commercial and industrial areas. The 2004 Housing Element also encourages increased housing in neighborhood commercial districts and mixed-use districts

near Downtown. The 2009 Housing Element encourages housing in new commercial or institutional projects and accommodating housing through existing community planning processes.

Impact CP-1: The proposed Housing Elements would not cause a substantial adverse change in the significance of a historical resource as defined in §15064.5, including those resources listed in Article 10 or Article 11 of the San Francisco Planning Code. (Less than Significant)

New construction could result in impacts related to potential historic districts through inappropriate alterations/alterations, inappropriate new construction, and demolition by neglect, which are further discussed below. While an individual future project may not have an impact to a larger historic district, cumulative impacts may occur with the demolition and/or new housing construction over time. Impacts resulting from policies that would allow for demolition and/or new construction could have direct or indirect impacts on historic resources.

The term “directly affected” refers to work, alterations or replacement that demolishes or materially alters that specific building, structure or object. In addition, the term “directly” refers to work, alterations or replacement of material in the vicinity of the building, structure or object. The 2004 Housing Element and the 2009 Housing Element would not have any direct impacts related to historic resources. The term “indirectly” refers to policies that could ultimately lead to direct effects on historic properties. As an example: policies that encourage the demolition or alteration of an existing building resource that is considered underutilized and is potentially a resource, in order to build a multi-unit residential building would be an indirect impact of the Housing Elements, not only for the individual resource but potentially a historic district if the resource is a contributor to such a district.

Implementation of the 2004 Housing Element and the 2009 Housing Element could have a significant impact or a substantial adverse change on historic resources by promoting inappropriate alterations and/or additions, inappropriate new construction, and demolition by neglect. CEQA defines "substantial adverse change" as "demolition, destruction, relocation or alteration," activities that would impair the significance of a historical resource either directly or indirectly. Although the proposed 2004 and 2009 Housing Elements would not directly result in the construction of residential units, they would direct housing to locations where residential growth is deemed appropriate, promote the retention of existing housing, and encourage development in accordance with the City's needs. Policies that encourage new construction within Article 10 and Article 11 areas, or other areas of the City with known or potential Historic Resources could result in indirect impacts upon these resources through demolition, removal of character-defining features, alteration or inappropriate new construction.

The following potential impacts are organized and defined as:

- Inappropriate Alterations/Additions = alterations or new construction that demolishes, alters, removes or conceals those character defining features that convey the historic significance of a historic resource and thereby substantially alters the property's integrity.

- Inappropriate New Construction = new construction (allowed by zoning) that demolishes, alters, removes or conceals those character defining features that convey the historic significance of an adjacent historic resource, or inappropriate new construction within a historic district.
- Demolition by Neglect = the gradual deterioration of a building when routine or major maintenance is not performed and/or is allowed by the owner to remain vacant and open to vandals.

2004 Housing Element Analysis

The following 2004 Housing Element policies could potentially result in impacts to historic resource through inappropriate alterations and/or additions, inappropriate new construction, and demolition by neglect.

Impact	2004 Housing Element	Corresponding 1990 Residence Element Policy
Inappropriate Alterations/Additions	Policy 1.1: Encourage higher residential density in areas adjacent to downtown, in underutilized commercial and industrial areas proposed for conversion to housing and in neighborhood commercial districts where higher density will not have harmful effects, especially if the higher density provides a significant number of units that are affordable to lower income households. Set allowable densities in established residential areas at levels which will promote compatibility with prevailing neighborhood scale and character where there is neighborhood support.	Policy 2.1: Set allowable densities in established residential areas at levels which will promote compatibility with prevailing neighborhood character. Policy 2.2: Encourage higher residential density in areas adjacent to downtown, in underutilized commercial and industrial areas proposed for conversion to housing and in neighborhood commercial districts where higher density will not have harmful effects, especially if the higher density provides a significant number of units that are permanently affordable to lower income households.
	Policy 1.2: Encourage housing development, particularly affordable housing, in neighborhood commercial areas without displacing existing jobs, particularly blue-collar jobs or discouraging new employment opportunities.	
	Policy 1.3: Identify opportunities for housing and mixed-use districts near downtown and former industrial portions of the City.	Policy 1.2: Facilitate the conversion of underused industrial and commercial areas to residential use, giving preference to permanently affordable housing uses.

Impact	2004 Housing Element	Corresponding 1990 Residence Element Policy
	Policy 1.4: Locate in-fill housing on appropriate sites in established residential neighborhoods.	Policy 1.4: Locate infill housing on appropriate sites in established neighborhoods.
	Policy 1.7: Encourage and support the construction of quality, new family housing	
Inappropriate New Construction	Policy 1.1: Encourage higher residential density in areas adjacent to downtown, in underutilized commercial and industrial areas proposed for conversion to housing and in neighborhood commercial districts where higher density will not have harmful effects, especially if the higher density provides a significant number of units that are affordable to lower income households. Set allowable densities in established residential areas at levels which will promote compatibility with prevailing neighborhood scale and character where there is neighborhood support.	Policy 2.1: Set allowable densities in established residential areas at levels which will promote compatibility with prevailing neighborhood character. Policy 2.2: Encourage higher residential density in areas adjacent to downtown, in underutilized commercial and industrial areas proposed for conversion to housing and in neighborhood commercial districts where higher density will not have harmful effects, especially if the higher density provides a significant number of units that are permanently affordable to lower income households.
	Policy 1.2: Encourage housing development, particularly affordable housing, in neighborhood commercial areas without displacing existing jobs, particularly blue-collar jobs or discouraging new employment opportunities.	
	Policy 1.4: Locate in-fill housing on appropriate sites in established residential neighborhoods.	Policy 1.4: Locate infill housing on appropriate sites in established neighborhoods.
	Policy 1.7: Encourage and support the construction of quality, new family housing.	
	Policy 4.1: Actively identify and pursue opportunity sites for permanently affordable housing.	Policy 7.1: Create more housing opportunity sites for permanently affordable housing
	Policy 11.1: Use new housing development as a means to enhance neighborhood vitality and diversity.	
	Policy 11.5: Promote the construction of well-designed housing that enhances existing neighborhood character.	12.4: Promote construction of well designed housing that conserves existing neighborhood character.

To the extent that a given site is identified as an historic resource, alterations/additions to that resource may be inappropriate. As shown above, the 2004 Housing Element proposes policies that support alterations/additions to existing buildings (including Policies 1.2 and 1.7) to a greater degree than the 1990 Residence Element. Similarly, the 2004 Housing Element promotes new residential construction (including Policies 1.2, 1.7, and 11.1) to a greater degree than the 1990 Residence Element. To the extent that new construction is incompatible with any surrounding historic resource, such policies could result in inappropriate new construction. Inappropriate alterations/additions could include demolishing, altering, removing or concealing those character defining features that convey the historic significance of a historic resource and thereby substantially alter the property's integrity. 2004 Housing Element Policy 1.1 essentially merged 1990 Residence Element Policies 2.1 and 2.2 and therefore does not represent a shift in policy. 2004 Housing Element Policy 1.3 modified 1990 Residence Element Policy 1.2 by changing the wording from “facilitate” to “identify.” “Facilitate” indicates active conversion and “identify” indicates passive action. Therefore, 2004 Housing Element Policy 1.3 would appear to have less of a potential impact on historic resources than 1990 Residence Element Policy 1.2.

New construction in the vicinity of a historic resource (allowed under existing zoning) could alter, remove, or conceal those character defining features that convey the historic significance of an adjacent historic resource, or result in inappropriate new construction within a historic district. As discussed previously, 2004 Housing Element Policy 1.1 does not represent a shift in policy from its corresponding 1990 Residence Element policies. 2004 Housing Element Policy 1.4 clarifies 1990 Residence Element Policy 1.4 by including the word “residential”. 2004 Housing Element Policy 4.1 modifies 1990 Residence Element Policy 7.1 to encourage a more intense search for opportunity sites.⁶¹ To the extent that any opportunity site is identified as a historic resource or located within an historic district, development of that site could result in demolition or inappropriate new construction. Therefore, the shift in policy to actively identify such sites could encourage demolition for new construction more so than Residence Element Policy 7.1. 2004 Housing Element Policy 11.5 modified 1990 Residence Element Policy 12.4 by changing the wording from “conserve” to “enhance” with regard to new residential construction; neither term would serve to ensure that significant impacts to historic buildings or districts would not occur, although 1990 Residence Element Policy 12.4 emphasizes maintenance of existing neighborhood character more so than 2004 Housing Element Policy 11.5. The evaluation of an impact to historic resources under any such circumstance is most appropriately evaluated at the specific project-level and the City’s programs and regulations ensure new construction is consistent with the City’s historic districts, to the extent practicable.

Demolition by neglect could result from the gradual deterioration of a building when routine or major maintenance is not performed and/or is allowed by the owner to remain vacant and open to vandals. 2004 Housing Element Policy 4.1 modified 1990 Residence Element Policy 7.1 to encourage more intense

⁶¹ Underdeveloped sites are generally classified as soft sites, sites with development potential, or opportunity sites. The City identifies two levels of soft sites, sites that are built to only 30 percent of their maximum potential, and sites that are built to only five percent of their maximum potential, as determined by the zoning for that parcel. There are economic incentives for developing soft sites due to the difference between their existing level of developing and maximum potential.

search for opportunity sites, which could have neglected resources. New development or redevelopment of such sites that are consistent with the Secretary of Interior's Standards could help to rehabilitate neglected resources. No polices from the 2004 Housing Element have been identified that would promote neglect of historic resources, such that demolition by neglect could be expected.

Although the aforementioned policies could potentially increase indirect impacts to historic resources, the following 2004 Housing Element policies could reduce the 2004 Housing Element's effects to historic resources by establishing policies for review, criteria for the protection of historic resources and by promoting policies that discourage demolition.

Impact	2004 Housing Element	Corresponding 1990 Residence Element Policy
Protection of historic resources	Policy 3.6: Preserve landmark and historic residential buildings.	Policy 5.5: Preserve landmark and historic residential buildings.
	Implementation Measure 3.6.1: The Planning Commission will review and adopt the Preservation Element of the General Plan.	
	Implementation Measure 3.6.2: The Planning Department and the Department of Building Inspection will continue to regulate the preservation and protection of landmark and historic buildings by monitoring use, alterations, and demolition.	
	Implementation Measure 3.6.3: The City will continue to implement the Proposition M priority policy that landmarks and historic buildings be preserved.	
	Implementation Measure 3.6.4: The Planning Department's Citywide Cultural Resource Survey program is a multi-year effort that will document resources in neighborhoods and commercial areas throughout San Francisco.	
Implementation Measure 3.6.5: The Mayor's Office of Housing and the Redevelopment Agency will continue to fund the acquisition and rehabilitation of landmark and historic buildings for use as affordable housing.		

Impact	2004 Housing Element	Corresponding 1990 Residence Element Policy
	Implementation Measure 3.6.6: The Planning Department will encourage property owners to use preservation incentives to repair, restore, or rehabilitate historic resources in lieu of demolition. These include federal tax credits for rehabilitation of qualified historical resources, Mills Act property tax abatement programs, the State Historic Building Code, and tax deductions for preservation easements.	
	Implementation Measure 3.6.7: The Planning Department will continue to assist in federal environmental review and review under Section 106 of the National Historic Preservation Act for historically significant local buildings receiving federal assistance.	
Discourage demolitions, potentially reducing effects to historic resources	Implementation Measure 11.1.3: The Planning Department will encourage historic preservation and adaptive reuse of older buildings to enhance neighborhood vibrancy.	

As shown above, the 2004 Housing Element proposes policies that encourage the establishment of project-level review and criteria for the protection of historical resources (including Policy 3.6 and Implementation Measures 3.6.1 to 3.6.7) to a degree similar as the 1990 Residence Element. 2004 Housing Element Policy 3.6 is identical to its corresponding 1990 Residence Element policy. Implementation Measures 3.6.1 through 3.6.7 do not represent policy shifts. The 2004 Housing Element also proposes policies that discourage demolitions (including Implementation Measure 11.1.3) to a greater degree than the 1990 Residence Element. Implementation Measure 11.1.3 encourages historic preservation and adaptive reuse of historic buildings, reducing the potential for demolitions and increasing the potential for retaining existing structures. Both the 1990 Residence Element and 2004 Housing Element recognize the need to preserve landmark and historic buildings through project-level review and criteria for the preservation of historic resources, although the 2004 Housing Element more strongly encourages the preservation and adaptive reuse of older buildings.

Although the 2004 Housing Element would not result in the construction of residential units, it would shape how new residential development should occur and ensures that there is adequate land available to meet future housing needs. Potential impacts related to inappropriate alterations and/or additions, inappropriate new construction, and demolition by neglect would be offset by compliance with the previously discussed federal, state, and local regulations, including:

- Secretary of the Interior's Standards for the Treatment of Historic Properties
The appropriate identified treatment would apply to the alteration of a historic resource or new construction adjacent to a historic resource or within an historic district, depending on whether the property or properties are Article 10 City Landmarks and Historic Districts or in Article 11 Conservation Areas.
- California Environmental Quality Act (CEQA)
The California Environmental Quality Act gives guidance for the evaluation of properties but also defines impacts to historic resources that meet the criteria of the California Register of Historic Places. Generally, a project that complies with the Secretary of the Interior's Standards will meet the CEQA criteria for less a than significant impact finding.
- Section 106 of the National Environmental Policy Act (NEPA)
The National Environmental Policy Act gives guidance for the evaluation of properties but also defines impacts to historic resources that meet the criteria of the National Register of Historic Resources.
- The City of San Francisco's Preservation Bulletins Nos. 1-21
These bulletins provide information, guidance and incentives, depending on the nature of the housing project and its location.
- Articles 10 and 11 of the City of San Francisco's Planning Code
The purpose of this planning code is to protect and maintain historic resources for continued use, and to enhance, protect and maintain the setting and environment of historic districts. The code would apply directly to changes to historic buildings and indirectly for new construction adjacent to a historic resource or within a historic district.
- The Urban Design Element of the San Francisco General Plan
The Urban Design Element is concerned with the physical character of the City and the protection of these characteristics. Understanding the unique nature of historic districts and conservation districts, the Urban Design Element would serve as guidance for new construction in or adjacent to these districts.
- The California Historic Building Code
The California Historic Building Code (CHBC) is a mandate for reasonable alternatives to the requirements of standard codes and ordinances, and is applicable to all qualified historic resources as recognized by local building officials.
- The San Francisco Residential Design Guidelines
The Residential Design Guidelines provide principles of urban design to "maintain neighborhood identity, preserve historic resources, and enhance the City of San Francisco and its residential neighborhoods." The guidelines therefore are applicable for new construction in or adjacent to

these districts. The guidelines also provide guidance for appropriate additions to historic resources, window replacement etc.

- Other Design Guidelines

There are numerous guidelines available about specific technical issues, such as window replacements, weatherproofing, additions to residential and commercial buildings. The National Park Service *Interpreting the Secretary of the Interior Standards for Rehabilitation* provides simple discussion of what is or is not an appropriate approach to rehabilitation. These guidelines would be applicable to the rehabilitation of historic resources.

Once adopted, the Draft Preservation Element of the General Plan would further establish and maintain preservation of historic resources as City policy. The San Francisco General Plan currently contains no Preservation Element. Numerous drafts of this Element have been produced, beginning around 1987, but none have been adopted. The purpose of the Preservation Element of the San Francisco General Plan is to outline a comprehensive set of objectives and policies for the preservation and enhancement of San Francisco's historic resources, which include buildings, districts, sites, and landscapes that are historically and/or archaeologically significant.

In practice, the issue of impacts to historical resources is addressed to a considerable degree in San Francisco through the environmental review process and the actions of the Historic Preservation Commission. Because of the prevalence of both known and potential historic resources, potential impacts are a common area of consideration in determining the feasibility of residential projects. The 2004 Housing Element does not contain policies that would curtail or modify this project-level review; although it does actively encourage new residential development, it does not propose to facilitate such development through reduction in review requirements for historical resources. Therefore, the 2004 Housing Element would not be expected to substantially increase the potential for significant impacts to historic resources in residential development.

Impacts to individual historic resources or historic districts are appropriately addressed at the project level, where the historic context and character defining features can be evaluated with respect to a given project proposal. Although some 2004 Housing Element policies could indirectly affect historic resources, other policies in the 2004 Housing Element specifically protect historic resources, reducing the potential for the Housing Element policies to directly or indirectly affect historic resources. Furthermore, the 2004 Housing Element would shape how and where new residential development should occur and would not propose new construction. The City has well-established review criteria and procedures to evaluate impacts to historic resources at the project-level. Project applicants who wish to obtain a building permit or any permit from the Planning Department must submit a Supplemental Information Form for Historical Resource Evaluation in order to gather additional information regarding whether a structure is a historic resource under CEQA and to assess the impacts on a historic resource.

As addressed above, the Planning Department has developed procedures for the site-specific review of the environmental effects to historic resources resulting from individual projects, this evaluation, as carried out by the Planning Department for all projects with the potential to affect historic resources, ensures that

any potential to affect historic resources at the project-level, can be addressed and reduced to a less-than-significant level. Given that impacts to historic resources are most appropriately addressed at the project level and that the 2004 Housing Element would not permit any new development or exempt any future projects from review for impacts to historic resources, the 2004 Housing Element would have a *less than significant* impact with respect to the substantial adverse change to a historic resource.

2009 Housing Element Analysis

The following 2009 Housing Element policies could affect historic resources by promoting inappropriate alterations and/or additions, inappropriate new construction, and demolition by neglect.

Impact	2009 Housing Element	Corresponding 1990 Residence Element Policy
Inappropriate Alterations/Additions	Policy 4.1: Develop new housing, and encourage the remodeling of existing housing, for families with children.	
	Policy 2.2: Retain existing housing by controlling the merger of residential units, except where a merger clearly creates new family housing.	Policy 3.1: Discourage the demolition of sound existing housing. Policy 3.2: Control the merger of residential units.
	Policy 1.6: Consider greater flexibility in the number and size of units within established building envelopes in community plan areas, especially if it can increase the number of affordable units in multi-family structure.	Policy 2.3: Allow flexibility in the number and size of units within permitted volumes of larger multi unit structures, especially if the flexibility results in the creation of a significant number of dwelling units that are permanently affordable to lower income households.
Inappropriate New Construction	Policy 1.1: Focus housing growth- and the infrastructure necessary to support that growth- according to community plans. Complete planning underway in key opportunity areas such as Treasure Island, Candlestick Park and Hunters Point Shipyard.	
	Policy 1.3: Work proactively to identify and secure opportunity sites for permanently affordable housing.	Policy 7.1: Create more housing opportunity sites for permanently affordable housing.

Impact	2009 Housing Element	Corresponding 1990 Residence Element Policy
	Policy 2.1: Discourage the demolition of sound existing housing, unless the demolition results in a net increase in affordable housing.	Policy 3.1: Discourage the demolition of sound existing housing.
	Policy 4.1: Develop new housing, and encourage the remodeling of existing housing, for families with children.	

As discussed in the analysis of the 2004 Housing Element's impacts to historic resources, to the extent that a given site is identified as an historic resource, alterations/additions to that resource may be inappropriate. As shown above, the 2009 Housing Element proposes policies that support alterations/additions to existing buildings and promotes new construction (including Policy 4.1) to a greater degree than the 1990 Residence Element. Inappropriate alterations/additions could include demolishing, altering, removing or concealing those character-defining features that convey the historic significance of a historic resource and thereby substantially alter the property's integrity. 2009 Housing Element Policy 4.1 is a new policy that encourages remodeling of existing housing, which could promote additions or alterations that may be inappropriate for that specific resource. Compared to 1990 Residence Element Policies 3.1 and 3.2, 2009 Housing Element Policy 2.2 provides a stipulation that unit merging can occur in cases where the needs for family housing are supported. This policy could impact historic resource by providing more opportunity for unit mergers, which could include inappropriate alterations. However, unit mergers would typically result in a less than significant impact to a resource; as such remodeling projects typically include interior renovations that generally would have little effect on the historic significance of a specific resource. Any such impacts might be balanced by a reduced need for exterior additions to provide more living space, if interior unit mergers are supported as described. Furthermore, the evaluation of an impact to historic resources under any such circumstance is most appropriately evaluated at the specific project-level and the City's programs and regulations ensure any such alteration is consistent with the Secretary of Interior's Standards for the treatment of historic resources, to the extent practicable.

New construction in the vicinity of a historic resource (allowed under existing zoning) could alter, remove, or conceal those character-defining features that convey the historic significance of an adjacent historic resource, or inappropriate new construction within a historic district. 2009 Housing Element 2.1 modifies 1990 Residence Element 3.1 and qualifies the demolition of properties for the benefit of increased housing stock. 2009 Housing Element Policy 4.1 is a new policy that encourages remodeling of existing housing. These policies could potentially impact historic resources through inappropriate new construction, if such construction were to occur adjacent to an historic resource.

Demolition by neglect could result from the gradual deterioration of a building when routine or major maintenance is not performed and/or is allowed by the owner to remain vacant and open to vandals. 2009 Housing Element Policy 1.3 modifies 1990 Residence Element Policy 7.1 to encourage a more intense search for infill sites, some of which may contain neglected resources. New development or redevelopment of such sites that is consistent with the Secretary of Interior's Standards could help to rehabilitate neglected resources. No policies from the 2009 Housing Element have been identified that would promote neglect of historic resources, such that demolition by neglect could be expected.

The following 2009 Housing Element policies could reduce the 2009 Housing Element's effects to historic resources by establishing policies for review, criteria for the protection of historic resources and by promoting policies that discourage demolition.

Impact	2009 Housing Element	Corresponding 1990 Residence Element Policy
Reduce alterations to existing buildings	Policy 2.3: Prevent the removal or reduction of housing for parking.	Policy 3.2: Control the merger of residential units.
	Implementation Measure 20: Planning shall amend the Historic Preservation bulletins and Residential Design Guidelines to discourage the reduction of habitable or potentially habitable space for parking.	
Ensure good design standards	Policy 11.2: Ensure implementation of the accepted design standards in project approvals.	Policy 12.4: Promote construction of well designed housing that conserves existing neighborhood character.
Preserve landmark buildings and historic resources	Policy 11.6: Respect San Francisco's historic fabric, by preserving landmark buildings and ensuring consistency with historic districts.	Policy 5.5: Preserve landmark and historic residential buildings.
	Implementation Measure 81: Planning Department staff shall continue project review and historic preservation survey work, in coordination with the Historic Preservation Commission; and shall continue to integrate cultural and historic surveys into area plan projects.	
	Implementation Measure 82: Planning shall complete and adopt the Preservation Element of the General Plan	

Impact	2009 Housing Element	Corresponding 1990 Residence Element Policy
	Implementation Measure 83: The Mayor's Office of Housing and San Francisco Redevelopment Agency shall continue funding the acquisition and rehabilitation of landmark and historic buildings for use as affordable housing.	
Strengthen sense of history	Policy 11.8: Foster development that strengthens local culture, sense of place and history.	
Consideration of neighborhood character	Policy 11.1: Promote the construction and rehabilitation of well-designed housing that emphasizes beauty, flexibility, and innovative design, respects neighborhood character.	Policy 12.4: Promote construction of well designed housing that conserves existing neighborhood character.
	Policy 11.3: Ensure growth is accommodated without significantly impacting existing residential neighborhood character.	Policy 12.3: Minimize disruption caused by expansion of institutions into residential areas.
	Policy 11.4: Maintain allowable densities in established residential areas at levels with promote compatibility with prevailing neighborhood character.	Policy 12.5: Relate land use controls to the appropriate scale for new and existing residential areas.
Discourage demolition and promote maintenance/ rehabilitation of housing units	Policy 2.1: Discourage the demolition of sound existing housing, unless the demolition results in a net increase in affordable housing.	Policy 3.1: Discourage the demolition of sound existing housing.
	Policy 3.2: Promote voluntary housing acquisition and rehabilitation to protect affordability for existing occupants.	Policy 5.2: Promote and support voluntary housing rehabilitation which does not result in the displacement of lower income occupants.
	Policy 3.4: Preserve "naturally affordable" housing types, such as smaller and older ownership units.	

As shown above, the 2009 Housing Element proposes policies that could reduce the number of alterations to a property (including Policy 2.3 and Implementation Measure 20), encourage the preservation of landmark buildings (including Policy 11.6), and strengthen area's sense of history (including Policy 11.8) to a greater degree the 1990 Residence Element. 2009 Housing Element Policies 11.1, 11.3, and 11.4 are similar to their corresponding 1990 Residence Element Policies. 2009 Housing Element Policy 2.3 and

Implementation Measure 20 could result in a decrease in the number of permits to alter the ground floor of structures for parking, thereby decreasing the potential for inappropriate alterations associated with adding garages to the ground floor of historic structures. 2009 Housing Element Policy 11.6 ensures consistency with historic districts, an addition to the 1990 Residence Element Policy 5.5 that seeks to preserve landmark buildings. Implementation Measure 81 states the City would continue current practices related to project review and survey work, which does not represent a shift in policy. Both the 2009 Housing Element and 1990 Residence Element discourage the demolition of structures and encourage maintenance of existing housing units, which could reduce instances of demolition and demolition by neglect. Essentially both the 1990 Residence Element and 2009 Housing Element recognize the need to ensure good design standards, preserve landmark buildings, and consider existing neighborhood character, although the 2009 Housing Element more strongly encourages consistency with historic districts and the strengthening of an area's sense of history.

Although the 2009 Housing Element would not result in the construction of residential units, it would shape how new residential development should occur and ensures that there is adequate land available to meet future housing needs. As discussed previously, impacts to individual historic resources or historic districts are appropriately addressed at the project-level, where the historic context and character-defining features can be evaluated with respect to a given project proposal. Although some 2009 Housing Element policies could indirectly affect historic resources, other policies in the 2009 Housing Element specifically protect historic resources, reducing the potential for the Housing Element policies to directly or indirectly affect historic resources. Furthermore, the proposed Housing Elements would shape how and where new residential development should occur and would not propose new construction. The City has well-established review criteria and procedures to evaluate impacts to historic resources at the project-level. Project applicants who wish to obtain a building permit or any permit from the Planning Department must submit a Supplemental Information Form for Historical Resource Evaluation in order to gather additional information regarding whether a structure is a historic resource under CEQA and to assess the impacts on a historic resource.

As addressed above, the Planning Department has developed procedures for the site-specific review of the environmental effects to historic resources resulting from individual projects, this evaluation, as carried out by the Planning Department for all projects with the potential to affect historic resources, ensures that any potential to affect historic resources at the project-level, can be addressed and reduced to a less-than-significant level. Given that impacts to historic resources are most appropriately addressed at the project level and that the 2009 Housing Element would not permit any new development or exempt any future projects from review for impacts to historic resources, the 2009 Housing Element would have a *less than significant* impact with respect to the substantial adverse change to a historic resource.

Impact CP-2: The proposed Housing Elements would not cause a substantial adverse change in the significance of an archeological resource pursuant to §15064.5. (Less than Significant)

New construction could result in impacts related to the significance of an archeological resource in the following ways:

- New construction/seismic foundation upgrade within State Liquefaction Hazard Zone: potential to require deep foundations or soils improvement;
- New construction resulting in soils disturbance in area where archeological deposits tend to be near the existing surface (for example, portions of Bayview, the Mission District, and former cemetery sites);
- New construction in areas where archeological sites are heavily concentrated (e.g., the Northeast, South of Market Area, and the Mission District).

Figure V.O-5 shows the available housing unit capacity and pipeline units that are anticipated to be developed, or have the potential for residential development, within liquefaction hazard zones. According to this data, approximately 37,672 units in the City’s pipeline occur within liquefaction zones, with the capacity for another 16,438 units. The areas of the City with the greatest number of housing units in the pipeline that have the potential to occur in a liquefaction hazard zone are the Candlestick, Treasure Island, Mission Bay, and areas of SoMa neighborhoods.

2004 Housing Element Analysis

The following 2004 Housing Element policies could affect archeological resources by increasing potential to require deep foundations or soil improvements due to locations in liquefaction zones, soils disturbance, or directing housing to areas of the City with high known or possible archeological deposits near the existing surface.

Impact	2004 Housing Element	Corresponding 1990 Residence Element Policy
Direct growth to certain areas of the City.	Policy 1.1: Encourage higher residential density in areas adjacent to downtown, in underutilized commercial and industrial areas proposed for conversion to housing and in neighborhood commercial districts where higher density will not have harmful effects, especially if the higher density provides a significant number of units that are affordable to lower income households. Set allowable densities in established residential areas at levels which will promote compatibility with prevailing neighborhood scale and character where there is neighborhood support.	Policy 2.1: Set allowable densities in established residential areas at levels which will promote compatibility with prevailing neighborhood character. Policy 2.2: Encourage higher residential density in areas adjacent to downtown, in underutilized commercial and industrial areas proposed for conversion to housing and in neighborhood commercial districts where higher density will not have harmful effects, especially if the higher density provides a significant number of units that are permanently affordable to lower income households.

Impact	2004 Housing Element	Corresponding 1990 Residence Element Policy
	<p>Implementation Measure 1.1.1: A Citywide action plan (CAP) should provide a comprehensive framework for the allocation of higher density, mixed-use residential development in transit-rich areas with stable urban amenities in place. In these areas, specific CAP strategies should include: higher densities and reduced parking requirements in downtown areas or through a Better Neighborhoods type planning process; pedestrian-oriented improvements to enhance the attractiveness and use of transit.</p>	
	<p>Policy 1.2: Encourage housing development, particularly affordable housing, in neighborhood commercial areas without displacing existing jobs, particularly blue-collar jobs or discouraging new employment opportunities.</p>	
	<p>Implementation Measure 1.2.1: The Planning Department will develop proposals in neighborhood commercial districts (NCDs) well served by transit to strengthen their functions as a traditional “town center” for the surrounding residential districts.</p>	
	<p>Policy 1.3: Identify opportunities for housing and mixed-use districts near downtown and former industrial portions of the City.</p>	<p>Policy 1.2: Facilitate the conversion of underused industrial and commercial areas to residential use, giving preference to permanently affordable housing uses.</p>

Impact	2004 Housing Element	Corresponding 1990 Residence Element Policy
	<p>Implementation Measure 1.3.1: Downtown areas and areas subject to a Better Neighborhoods type planning process will be expected to absorb major office and residential developments over the next decade. Planning and zoning code changes should include floor-to-area ratio exemptions. These development bonuses would be conferred only in cases where in return the development will provide major public benefits to the community.</p>	<p>Implementation Measure 1.1.3: Inclusion of housing in Downtown.</p>
	<p>Implementation Measure 1.3.2: The Planning Department will introduce zoning changes in the traditionally industrial eastern parts of the City. The areas under study are: Mission, South of Market, Showplace Square/Potrero Hill, Bayview Hunter's Point, and Visitacion Valley. Housing, especially affordable housing, will be encouraged in former industrial areas where residential neighborhoods are established and urban amenities are in place or feasible.</p>	
	<p>Policy 1.4: Locate in-fill housing on appropriate sites in established residential neighborhoods.</p>	<p>Policy 1.4: Locate in-fill housing on appropriate sites in established neighborhoods.</p>
	<p>Policy 1.6: Create incentives for the inclusion of housing, particularly permanently affordable housing, in new commercial development projects.</p>	
	<p>Implementation Measure 1.6.2: The Planning Department and the Redevelopment Agency will propose increasing height limits, eliminating density requirements and modifying off-street parking requirements in the Transbay/Rincon Hill Redevelopment survey areas. The Mid-Market redevelopment survey area will be rezoned to include mixed-use residential areas and reduced residential parking requirements.</p>	

Impact	2004 Housing Element	Corresponding 1990 Residence Element Policy
	Implementation Measure 1.6.4: The Planning Department will update the Land Use Element to define areas for mixed-use development focused along transit corridors that are determined to be served by sufficient and reliable transit.	
	Implementation Measure 1.8.1: The Board of Supervisors has introduced Planning Code amendments to allow secondary units in new buildings that are in close proximity to neighborhood commercial districts and public transit.	
	Implementation Measure 2.4.2: As part of the Planning Department’s current citywide action plan, planning efforts in the eastern neighborhoods of the City, where housing exists in commercial and industrially zoned districts, should address housing retention as new policies and zoning are established. Mixed use should be encouraged where appropriate.	
	Implementation Measure 4.1.4: The City will work to identify underutilized, vacant, and Brownfield sites that are publicly or privately owned and suitable for affordable housing development. TH City will work with for profit and non-profit housing developers to acquire these sites for permanently affordable housing.	Implementation Measure 1.1.1: Aggressive pursuit of development opportunities [on] underused public sites. Implementation Measure 1.1.4: In-fill housing on vacant or underused sites.
	Implementation Measure 4.1.6: Permanently affordable housing sites will be especially sought out in places where transportation and existing amenities are in place.	
	Policy 11.6: Employ flexible land use controls in residential areas that can regulate inappropriately sized development in new neighborhoods, in downtown areas and in other areas through a Better Neighborhoods type planning process while maximizing the opportunity for housing near transit.	Policy 12.5: Relate land use controls to the appropriate scale for new and existing residential areas.

Impact	2004 Housing Element	Corresponding 1990 Residence Element Policy
	<p>Implementation Measure 11.6.1: The City will continue to promote increased residential densities in areas well served by transit and neighborhood compatible development with the support and input from local neighborhoods.</p>	
<p>Promote increased density-related development standards.</p>	<p>Policy 1.1: Encourage higher residential density in areas adjacent to downtown, in underutilized commercial and industrial areas proposed for conversion to housing and in neighborhood commercial districts where higher density will not have harmful effects, especially if the higher density provides a significant number of units that are affordable to lower income households. Set allowable densities in established residential areas at levels which will promote compatibility with prevailing neighborhood scale and character where there is neighborhood support.</p>	<p>Policy 2.1: Set allowable densities in established residential areas at levels which will promote compatibility with prevailing neighborhood character.</p> <p>Policy 2.2: Encourage higher residential density in areas adjacent to downtown, in underutilized commercial and industrial areas proposed for conversion to housing and in neighborhood commercial districts where higher density will not have harmful effects, especially if the higher density provides a significant number of units that are permanently affordable to lower income households.</p>
	<p>Implementation Measure 1.1.1: A Citywide action plan (CAP) should provide a comprehensive framework for the allocation of higher density, mixed-use residential development in transit-rich areas with stable urban amenities in place. In these areas, specific CAP strategies should include: higher densities and reduced parking requirements in downtown areas or through a Better Neighborhoods type planning process; pedestrian-oriented improvements to enhance the attractiveness and use of transit.</p>	

Impact	2004 Housing Element	Corresponding 1990 Residence Element Policy
	<p>Implementation Measure 1.3.1: Downtown areas and areas subject to a Better Neighborhoods type planning process will be expected to absorb major office and residential developments over the next decade. Planning and zoning code changes should include floor-to-area ratio exemptions. These development bonuses would be conferred only in cases where in return the development will provide major public benefits to the community.</p>	<p>Implementation Measure 1.1.3: Inclusion of housing in Downtown (allowing housing to exceed permitted Floor-Area-Ratios [FARs] in C-3-G and C-3-S Districts).</p>
	<p>Policy 1.6: Create incentives for the inclusion of housing, particularly permanently affordable housing, in new commercial development projects.</p>	<p>Policy 1.3: Create incentives for the inclusion of housing, particularly permanently affordable housing, in new commercial development projects.</p>
	<p>Implementation Measure 1.6.2: The Planning Department and the Redevelopment Agency will propose increasing height limits, eliminating density requirements and modifying off-street parking requirements in the Transbay/Rincon Hill Redevelopment survey areas. The Mid-Market redevelopment survey area will be rezoning to include mixed-use residential areas and reduced residential parking requirements.</p>	
	<p>Policy 1.7: Encourage and support the construction of quality, new family housing.</p>	

Impact	2004 Housing Element	Corresponding 1990 Residence Element Policy
	<p>Implementation Measure 1.7.1: In response to the increasing number of families in San Francisco, the Planning Department will develop zoning amendments to require a minimum percentage of larger family units ranging from two to four bedrooms, in new major residential projects. The Planning Department will also propose eliminating density requirements within permitted building envelopes in downtown areas and areas subject to a Better Neighborhoods type planning process to maximize family units constructed.</p>	
	<p>Policy 1.8: Allow new secondary units in areas where their effects can be dealt with and there is neighborhood support, especially if that housing is made permanently affordable to lower income households.</p>	<p>Policy 1.5: Allow new secondary units in areas where their effects can be dealt with and there is neighborhood support, especially if that housing is made permanently affordable to lower income households.</p>
	<p>Implementation Measure 1.8.1: The Board of Supervisors has introduced Planning Code amendments to allow secondary units in new buildings that are in close proximity to neighborhood commercial districts and public transit.</p>	
	<p>Implementation Measure 1.8.3: On-going planning will propose Planning Code amendments to encourage secondary units where appropriate.</p>	
	<p>Policy 4.4: Consider granting density bonuses and parking requirement exemptions for the construction of affordable housing or senior housing.</p>	<p>Policy 7.3: Grant density bonuses for construction of affordable or senior housing.</p>
	<p>Implementation Measure 4.4.1: The Planning Department will look at establishing uniform density bonus standards and equal requirements for affordable and senior housing development. Until then, affordable and senior housing will continue to be granted density bonuses and reduced parking requirements on a case-by-case basis.</p>	

Impact	2004 Housing Element	Corresponding 1990 Residence Element Policy
	<p>Policy 4.5: Allow greater flexibility in the number and size of units within established building envelopes, potentially increasing the number of affordable units in multi-family structures.</p>	<p>Policy 2.3: Allow flexibility in the number and size of units within permitted volumes of larger multi unit structures, especially if the flexibility results in creation of a significant number of dwelling units that are permanently affordable to lower income households.</p>
	<p>Policy 11.6: Employ flexible land use controls in residential areas that can regulate inappropriately sized development in new neighborhoods, in downtown areas, and in other areas through a Better Neighborhoods type planning process while maximizing the opportunity for housing near transit.</p>	<p>Policy 12.5 Relate land use controls to the appropriate scale for new and existing residential areas.</p>
	<p>Implementation Measure 11.6.1: The City will continue to promote increased residential densities in areas well served by transit and neighborhood compatible development with the support and input from local neighborhoods.</p>	
	<p>Policy 11.7: Where there is neighborhood support, reduce or remove minimum parking requirements for housing, increasing the amount of lot area available for housing units.</p>	
	<p>Implementation Measure 11.7.1: The Planning Department will work to reduce parking in older neighborhoods through a Better Neighborhoods type planning process with the support and input from local neighborhoods.</p>	
	<p>Policy 11.8: Strongly encourage project sponsors to take full advantage of allowable building densities in their housing developments while remaining consistent with neighborhood character.</p>	
	<p>Policy 11.9: Set allowable densities and parking standards in residential areas at levels that promote the City’s overall housing objectives while respecting neighborhood scale and character.</p>	<p>Policy 2.1: Set allowable densities in established residential areas at levels which will promote compatibility with prevailing neighborhood character.</p>

As shown above, the 2004 Housing Element promotes housing in commercial (Policies 1.1, 1.6) and industrial (Policies 1.1, 1.3) areas, neighborhood commercial districts (Policy 1.2 and Implementation Measure 1.2.1), housing near the Downtown (Policies 1.1, 1.3 and Implementation Measure 1.3.1) and along transit corridors (Policies 1.6, 11.6 and Implementation Measures 1.1.1, 1.6.4, 1.8.1, 4.1.6, and 11.6.1). The 2004 Housing Element also encourages new housing through on-going and future community planning processes (Policies 1.1, 11.6 and Implementation Measures 1.3.1, 1.3.2, 1.6.2, and 2.4.2) and on underutilized, vacant, surplus lands and on Brownfield sites (Implementation Measure 4.1.4). The 1990 Residence Element similarly directs growth to commercial and industrial areas, neighborhood commercial districts, the Downtown and on infill development sites, although to a lesser degree than the 2004 Housing Element. Commercial and industrial uses don't require deep excavation typically associated with underground parking for residential uses. In addition, the clean up of Brownfield sites and preparation of vacant lands for new development requires excavation and groundmoving. These types of activities, specifically excavation and groundmoving, have the potential to impact archeological resources. Policies that direct growth to certain areas of the City could promote housing in areas where archeological deposits tend to be near the existing surface or in areas where archeological sites are concentrated. These types of results could have a substantial adverse impact on the significance of an archeological resource.

The 2004 Housing Element promotes increased density in certain areas of the City (Policy 1.1 and Implementation Measure 1.1.1, 1.8.1 and 11.6.1) and promotes density bonuses (Policy 4.4 and Implementation Measures 1.3.1 and 4.4.1) and the elimination of density requirements (Policy 1.6 and Implementation Measures 1.6.2 and 1.7.1). The 2004 Housing Element also encourages increased density by promoting reduced parking requirements (Policies 4.4, 11.7, 11.9 and Implementation Measures 1.1.1, 1.6.2, 4.4.1, 11.7.1), support for secondary units (Policy 1.8 and Implementation Measures 1.8.1 and 1.8.3) and flexible building envelopes (Policies 4.5 and 11.6). Increased density standards could result in the increased need for deep foundations and heavier buildings, both of which could result in the disturbance of more soil compared to the 1990 Residence Element. Therefore, the 2004 Housing Element policies could increase the amount of disturbance to archeological resources in certain areas of the City.

To the extent that modifying current regulatory use, density, or building envelopment restrictions will result in new housing projects with a greater potential to disturb/modify existing soils due to the size/weight of the new development, presence of liquefiable soils, or site remediation requirements and the new housing project is in an archeologically sensitive area, this policy may create opportunities for new housing to affect archeological resources. Some existing institutions (for ex. USF, CC of SF, St. Luke's Hospital) are located in archeologically sensitive areas. 2004 Housing Element Policy 1.9, to the extent that this policy would result in the integration of new housing development within/near the campuses of these institutions, the new housing could affect archeological resources. Therefore, the 2004 Housing Element promotes policies that have the potential to require deep foundations or soils improvements in within a State Liquefaction Hazard Zone, disturb soils in an area where archeological deposits tend to be near the surface, or direct housing to areas where archeological sites are heavily concentrated.

Although the 2004 Housing Element would not result in the construction of residential units, it would shape how new residential development should occur and ensures that there is adequate land available to meet future housing needs. The archeological technical memorandum prepared for the proposed Housing Elements shows that legally-significant archeological resources are likely present within potential housing opportunity areas throughout the City. The analysis of archeological effects in the table above shows the changes between the 1990 Residence Element and the 2004 Housing Element. These changes could result in effects to archeological resources but this is only knowable once a specific project has been proposed, because it is highly dependent on both the individual project site conditions and the characteristics of the proposed ground-disturbing activity. The potential for a significant adverse effect to legally significant archeological resources resulting from the 2004 Housing Element are appropriately addressed at the project-level, where the site specific characteristics of archeological resources can be evaluated with respect to a given project proposal. Similar to the evaluation of the effects of a proposed project on historic resources, the City has well-established review criteria and procedures to evaluate impacts to archeological resources at the project-level. Project applicants wishing to obtain a building permit from the City are required to undergo environmental review pursuant to CEQA. The Planning Department, as the lead agency, requires an evaluation of the potential archeological effects of a proposed project. Pursuant to this evaluation, the Planning Department has established a review procedure which may include the following actions, as determined appropriate by the Environmental Review Officer, and carried out by the Department archeologist or by a qualified archeological consultant, as retained by the project sponsor:

- archeological record search at the Northwest Information Center;
- review of Major Environmental Analysis (MEA) archeological library and Archeo Geographic Information System (GIS) Projects; and
- preparation of an archeological research design and treatment plan which may include, as appropriate, include the following:
 - Historic Context
 - Prior Archeological Research
 - Archeological Research Design
 - Archeological Treatment Plan
 - Assessment of Prior Disturbance
 - Assessment of Potential Project Effects
 - Archeological Testing Plan
 - Archeological Monitoring Plan

○ Archeological Data Recovery Plan

As addressed above, the Planning Department has developed procedures for the site-specific review of the environmental effects to archeological resources resulting from individual projects, this evaluation, as carried out by the Planning Department for all projects with the potential to affect archeological resources, ensures that any potential to affect archeological resources at the project-level, can be addressed and reduced to a less-than-significant level. Given that impacts to archeological resources are most appropriately addressed at the project level and that the 2004 Housing Element would not permit any new development or exempt any future projects from review for impacts to archeological resources, the 2004 Housing Element would have a *less than significant* impact with respect to the substantial adverse change to an archeological resource.

2009 Housing Element Analysis

The following 2009 Housing Element policies could affect archeological resources by increasing the potential to require deep foundations or soil improvements, soils disturbance, or directing housing to areas with high potential for archeological deposits near the existing surface.

Impact	2009 Housing Element	Corresponding 1990 Residence Element Policy
Direct growth to certain areas of the City.	Policy 1.1: Focus housing growth- and the infrastructure necessary to support that growth- according to community plans. Complete planning underway in key opportunity areas such as Treasure Island, Candlestick Park and Hunter's Point Shipyard.	Implementation Measure 1.1.2: Pursuit of housing development opportunities in neighborhood and area plans.
	Policy 1.3: Work proactively to identify and secure opportunity sites for permanently affordable housing.	Policy 1.1: Promote development of permanently affordable housing on surplus, underused and vacant public lands.
	Policy 1.6: Consider greater flexibility in the number and size of units within established building envelopes in community plan areas, especially if it can increase the number of affordable units in multi-family structures.	2.5: Allow flexibility in the number and size of units within permitted volumes of larger multi-unit structures, especially if the flexibility results in creation of a significant number of dwelling units that are permanently affordable to lower income households.
	Policy 1.7: Consider public health objectives when designating and promoting housing development sites.	Policy 12.1: Assure housing is provided with adequate public improvements, services and amenities.

Impact	2009 Housing Element	Corresponding 1990 Residence Element Policy
	Policy 1.8: Promote mixed use development, and include housing, particularly permanently affordable housing, in new commercial, institutional or other single use development projects.	Policy 1.3: Create incentives for the inclusion of housing, including permanently affordable housing in commercial developments.
	Policy 4.6: Encourage an equitable distribution of growth according to infrastructure and site capacity.	Policy 12.1: Assure housing is provided with adequate public improvements, services and amenities.
	Policy 10.3: Support state legislation and programs that promote environmentally favorable projects.	
	Policy 12.1: Encourage new housing that relies on transit use and environmentally sustainable patterns of movement.	
	Policy 12.2: Consider the proximity of quality of life elements, such as open space, child care and neighborhood serves, when development new housing units.	
	Policy 13.1: Support “smart” regional growth that locates new housing close to jobs and transit.	
	Policy 13.3: Promote sustainable land use patterns that integrate housing with transportation via transit, pedestrian, and bicycle modes.	
	Implementation Measure 3: Consistent with the SFMTA’s Climate Action Plan, MOH shall work with MTA to identify Muni sites that can serve as potential housing sites.	

Impact	2009 Housing Element	Corresponding 1990 Residence Element Policy
	<p>Implementation Measure 4: The Mayor’s Office of Housing (MOH) shall continue to actively pursue surplus or underused publicly-owned land for housing potential, working with agencies not subject to the Surplus Property Ordinance such as the San Francisco Public Utilities Commission, SFUSD and the Municipal Transportation Agency to identify site opportunities. City agencies shall continue to survey their properties for affordable housing opportunities or joint use potential.</p>	<p>Implementation Measure 1.1.1: Aggressive pursuit of development opportunities [in] underused public sites.</p> <p>Implementation Measure 1.1.4: In-fill housing on vacant or underused sites.</p>
	<p>Implementation Measure 6: To further smaller scale TOD opportunities, Planning and MTA shall evaluate smaller surplus MTA-owned sites (typically surface parking lots) and identify barriers towards their redevelopment, such as Planning Code issues, neighborhood parking needs and communities sentiment.</p>	
	<p>Implementation Measure 8: Planning, Redevelopment and Mayor’s Office of Economic and Workforce Development (MOEWD) should complete long range planning processes already underway: Japantown, Glen Park, the Northeast Embarcadero Study, the Bayview Hunters Point Plan, Candlestick/ Hunters Pont, India Basin shoreline community planning process, Treasure Island, and Hunters Point.</p>	
	<p>Implementation Measure 14: Planning staff shall prioritize support for projects which are located within a reasonable walking distance of stops along major transit lines, including BART, Muni rail lines and “Muni’s 24-hour Rapid Network.”</p>	

Impact	2009 Housing Element	Corresponding 1990 Residence Element Policy
	<p>Implementation Measure 74: The City shall coordinate with regional entities to complete the necessary planning document for SB 375, including a “Sustainable Community Strategy” which promotes sustainable growth; and corresponding updates to the Housing, Recreation and Open Space, and Land Use Elements of the General Plan.</p>	
	<p>Implementation Measure 80: In development of new community plans, Planning shall include mixed-use design standards for both residential and commercial buildings.</p>	
	<p>Implementation Measure 85: Planning shall ensure community plans for growth are accompanied by capital plans and programs to support both the “hard” and “soft” elements of infrastructure needed by new housing.</p>	<p>Implementation Measure 7.7.1: Acquisition and improvement of open space; facilities and public environmental improvements in six neighborhood strategy areas; street improvements; parking facilities in neighborhoods; transit and street improvements.</p>
	<p>Implementation Measure 90: Planning and SFMTA should coordinate housing development with the ongoing Transit Effectiveness Project.</p>	
	<p>Implementation Measure 94: Regional planning entities such as ABAG shall continue to prioritize regional transportation decisions and funding to “smart” local land use policies that link housing, jobs and other land uses, including focusing on VMT reduction. The City shall encourage formalization of state policy that similarly prioritizes transportation and infrastructure dollars for “smart growth” areas such as San Francisco, rather than geographic allocation.</p>	

Impact	2009 Housing Element	Corresponding 1990 Residence Element Policy
	<p>Implementation Measure 97: On a local level, the City shall prioritize planned growth areas such as Better Neighborhoods, other Area Plans or Redevelopment Areas for regional, state, and federal bond and grants, especially for discretionary funding application processes such as the State’s Prop 1C.</p>	
<p>Promote increased density-related development standards.</p>	<p>Policy 1.4: Ensure changes to land use controls are proposed through neighborhood-supported community planning processes.</p>	<p>Policy 2.1: Set allowable densities in established residential areas at levels which will promote compatibility with prevailing neighborhood character.</p> <p>Policy 2.2: Encourage higher residential density in areas adjacent to downtown, in underutilized commercial and industrial areas proposed for conversion to housing and in neighborhood commercial districts where higher density will not have harmful effects, especially if the higher density provides a significant number of units that are permanently affordable to lower income households.</p>
	<p>Policy 1.5: Consider secondary units in community plans where there is neighborhood support and when other neighborhood goals can be achieved, especially if that housing is made permanently affordable to lower-income households.</p>	<p>Policy 1.5: Allow new secondary units in areas where their effects can be dealt with and there is neighborhood support, especially if that housing is made permanently affordable to lower income households.</p>
	<p>Policy 1.6: Consider greater flexibility in number and size of units within established building envelopes in community plan areas, especially if it can increase the number of affordable units in multi-family structures.</p>	<p>Implementation Measure 1.1.3: Inclusion of housing in Downtown (allowing housing to exceed permitted Floor-Area-Ratios [FARs] in C-3-G and C-3-S Districts).</p>
	<p>Policy 7.5: Encourage the production of affordable housing through process and zoning accommodations, and prioritize affordable housing in the review and approval processes.</p>	<p>Policy 7.3: Grant density bonuses for construction of affordable or senior housing.</p>

Impact	2009 Housing Element	Corresponding 1990 Residence Element Policy
	<p>Policy 11.4: Maintain allowable densities in established residential areas at levels which promote compatibility with prevailing neighborhood character.</p>	<p>Policy 2.1: Set allowable densities in established residential areas at levels which will promote compatibility with prevailing neighborhood scale and character.</p>
	<p>Implementation Measure 12: Planning shall require integration of new technologies that reduce the space required for non-housing functions, such as parking, and shall consider requiring parking lifts to be supplied in all new housing developments seeking approval for parking at a ratio of 1:1 or above.</p>	
	<p>Implementation Measure 13: When considering legalization of secondary units within community planning processes, Planning shall develop a Design Manual that illustrates how secondary units can be developed to be sensitive to the surrounding neighborhood, to ensure neighborhood character is maintained.</p>	
	<p>Implementation Measure 36: Planning shall continue to implement Planning Code Section 209, which allows a density bonus of twice the number of dwelling units otherwise permitted as a principal use in the district, when the housing is specifically designed for and occupied by senior citizens, physically or mentally disabled persons.</p>	<p>Policy 7.3: Grant density bonuses for construction of affordable or senior housing.</p>
	<p>Strategy for further review: MOH and Planning should continue to consider, within the context of a community planning process, zoning categories which require a higher proportion of affordable housing where increased density or other benefits are granted. Options include Affordable Housing Only Zones (SLI); Affordable Housing Priority Zones (UMU) or Special Use District Opportunities.</p>	

Impact	2009 Housing Element	Corresponding 1990 Residence Element Policy
	Implementation Measure 64: Planning staff shall support affordable housing projects in the development review process, including allowing sponsors of permanently affordable housing to take advantage of allowable densities provided their projects are consistent with neighborhood character.	
	Implementation Measure 79. Planning staff shall continue to use community planning processes to develop policies, zoning and standards that are tailored to neighborhood character.	Implementation Measure 2.2.1: Densities compatible with neighborhood character.

As shown above, the 2009 Housing Element promotes housing through community planning processes (Policies 1.1, 1.6, and Implementation Measures 8, 80 and 97), near transit and other infrastructure (Policies 1.8, 4.6, 10.3, 12.1, 13.1 and Implementation Measures 6, 14, 74, 90, and 94), and in proximity to neighborhood services (Policies 1.7, 12.2, 13.1 and Implementation Measure 85). The 2009 Housing Element also promotes housing on underused, vacant and surplus lands (Policy 1.3 and Implementation Measures 3 and 4), and housing within mixed-use areas (Policy 1.8 and Implementation Measure 80). As discussed previously, directing housing to certain areas of the City could result in an increase in new construction associated with that housing, thereby resulting in increased disturbance to archeological deposits that tend to be near the existing surface or in areas where archeological sites are concentrated.

The 2009 Housing Element generally promotes increased density through community planning processes (Policies 1.4, 1.5, 1.6, and Implementation Measures 13 and 79) and for affordable housing (Policy 7.5 and Implementation Measures 36 and 64). The 2009 Housing Element also includes a strategy designed to reduce the amount of space required for non-housing functions (Implementation Measure 12). While the 2009 Housing Element contains a policy that advocates for family-sized housing units (Policy 4.1 and Implementation Measure 32), overall density increases from such policy would be speculative as less units would be accommodated within a given building envelope. Overall, the 2009 Housing Element does not promote increased density more so than the 1990 Residence Element. However, as discussed in the analysis of the 2004 Housing Element, increased density standards could result in the increased need for deep foundations and heavier buildings, both of which could result in the disturbance of a similar amount of soil compared to the 1990 Residence Element. Although increased density standards may only incrementally increase the need for deep foundations and the general weight of buildings, when combined with policies that also direct growth to certain areas of the City (as discussed above), the 2009 Housing Element policies could not only consolidate new construction to certain areas of the City, but also incrementally increase the disturbance of soil. Therefore, the 2009 Housing Element policies could increase the amount of disturbance to archeological resources in certain areas of the City.

Although the 2009 Housing Element would not result in the construction of residential units, it would shape how new residential development should occur and ensures that there is adequate land available to meet future housing needs. The archeological technical memorandum prepared for the Project (William Self Associates & Dean. 2009) shows that legally-significant archeological resources are likely present within potential housing opportunity areas throughout the City. The analysis of archeological effects in the table above shows the changes between the 1990 Residence Element and the 2009 Housing Element. These changes could result in effects to archeological resources but this is only knowable once a specific project has been proposed, because it is highly dependent on both the individual project site conditions and the characteristics of the proposed ground-disturbing activity. The potential for a significant adverse effect to legally significant archeological resources resulting from the 2009 Housing Element are appropriately addressed at the project-level, where the site specific characteristics of archeological resources can be evaluated with respect to a given project proposal. As discussed above, the City has well-established review criteria and procedures to evaluate impacts to archeological resources at the project-level. Project applicants wishing to obtain a building permit from the City are required to undergo environmental review pursuant to CEQA. The Planning Department, as the lead agency, requires an evaluation of the potential archeological effects of a proposed project. Pursuant to this evaluation, the Planning Department has established a review procedure which may include the following actions, as determined appropriate by the Environmental Review Officer, and carried out by the Department archeologist or by a qualified archeological consultant, as retained by the project sponsor:

- archeological record search at the Northwest Information Center;
- review of MEA archeological library and Archeo GIS Projects; and
- preparation of an archeological research design and treatment plan which may include, as appropriate, include the following:
 - Historic Context
 - Prior Archeological Research
 - Archeological Research Design
 - Archeological Treatment Plan
 - Assessment of Prior Disturbance
 - Assessment of Potential Project Effects
 - Archeological Testing Plan
 - Archeological Monitoring Plan
 - Archeological Data Recovery Plan

As referenced above, the City's established review procedures ensure that any potential to affect archeological resources at the project-level can be addressed and reduced to a less-than-significant level. Given that impacts to archeological resources are most appropriately addressed at the project-level and that the 2009 Housing Element would not permit any new development or exempt any future projects from review for impacts to archeological resources, the 2009 Housing Element would have a *less than significant* impact with respect to the substantial adverse change to an archeological resource.

Impact CP-3: The proposed Housing Elements would not directly or indirectly destroy a unique paleontological resource or site or unique geologic feature. (Less than Significant)

2004 Housing Element and 2009 Housing Element Analysis

As described previously, paleontological resources may be present in fossil-bearing soils and rock formations below the ground surface. Ground-disturbing activities associated with new construction in these fossil-bearing soils and rock formations have the potential to damage or destroy paleontological resources that may be present below the ground surface. Therefore, construction-related and earth-disturbing actions could damage or destroy fossils in these rock units. As with archeological resources, paleontological resources are generally considered to be historical resources, as defined in Section 15064.5(a)(3)(D) (“[h]as yielded, or may be likely to yield, information important in history or prehistory”). Consequently, damage or destruction to these resources could result in a significant impact.

Although the proposed Housing Elements would not directly result in the construction of residential units, they would shape how and where new residential development should occur and ensures that there is adequate land available to meet future housing needs. Potential impacts would be offset by compliance with the previously discussed regulations, including the National Historic Preservation Act. Therefore, the 2004 Housing Element and 2009 Housing Element would have a *less than significant* impact with respect to the paleontological resources or unique geologic features.

Impact CP-4: The proposed Housing Elements would not disturb any human remains, including those interred outside of formal cemeteries. (Less than Significant)

2004 Housing Element and 2009 Housing Element Analysis

Archeological materials, including human burials, have been found in the City. Human burials outside of formal cemeteries often occur in prehistoric archeological contexts. Excavation associated with new construction activities in the City would have the potential to disturb these resources, including Native American burials. Human burials, in addition to being potential archeological resources, have specific provisions for treatment in Section 5097 of the California Public Resources Code. Disturbing human remains would destroy these resources and could potentially violate the health code. The previously discussed California Health and Safety Code (Sections 7050.5, 7051, and 7054) also has specific provisions for the protection of human burial remains. Existing regulations address the illegality of interfering with human burial remains, and protects them from disturbance, vandalism, or destruction, and establishes procedures to be implemented if Native American skeletal remains are discovered. Public

Resources Code §5097.98 also addresses the disposition of Native American burials, protects such remains, and establishes the Native American Heritage Commission to resolve any related disputes.

Although the proposed Housing Elements would not directly result in the construction of residential units, they would shape how and where new residential development should occur and ensures that there is adequate land available to meet future housing needs. Potential impacts would be offset by compliance with the previously discussed regulations, including Sections 7050.5, 7051, and 7054 of the California Health and Safety Code and Public Resources Code Section 5097.98. Therefore, the 2004 Housing Element and 2009 Housing Element would have a *less than significant* impact with respect to the disturbance of human remains.

Cumulative Impacts

The geographic context for cumulative cultural and paleontological resource impacts is the entire City of San Francisco. Cumulative impacts occur when impacts that are significant or less than significant from a proposed project combine with similar impacts from other past, present, or reasonably foreseeable projects in a similar geographic area. This would include the demolition of existing structures or new construction in the City resulting from past, present and reasonably foreseeable future projects combining with similar impacts from the 2004 Housing Element and 2009 Housing Element. The cumulative effect of development within the City could contribute to impacts related to cultural and paleontological resources. As discussed throughout this Draft EIR, growth would occur regardless of implementation of the proposed projects. The proposed projects merely guide residential new construction with an emphasis on affordability. Furthermore, any new development within the City would be subject, on a project-by-project basis, to independent CEQA review as well as policies in the San Francisco General Plan, governing area plans, design guidelines, zoning codes (including development standards), and other applicable land use plans that are intended to reduce impacts related to cultural and paleontological resource. The 2004 Housing Element and 2009 Housing Element policies would not directly or indirectly affect cultural and paleontological resources. New development could affect such issues, but would be evaluated on a project-by-project basis.

With adherence to applicable federal, state, and local regulations governing historic resources, paleontological resources, and human remains, the potential risks associated with cultural and paleontological resources would be *less than significant*. With implementation of Mitigation Measure CP-1, the potential risks associated with archeological resources would be less than significant. The contribution of potential impacts from the proposed projects to the cumulative cultural and paleontological resource impacts would not be cumulatively considerable. As such, cumulative impacts would be *less than significant*.

MITIGATION AND IMPROVEMENT MEASURES

Mitigation Measures

No mitigation measures are warranted by the proposed Housing Elements.

Improvement Measures

No improvement measures are warranted by the proposed Housing Elements.

V. ENVIRONMENTAL SETTING AND IMPACTS

F. TRANSPORTATION AND CIRCULATION

INTRODUCTION

This section addresses the potential impacts of the 2004 Housing Element and 2009 Housing Element related to the circulation system, congestion management system, air traffic patterns, the adequacy of emergency access, the adequacy of parking capacity, and potential conflicts with adopted policies and programs that support alternative transportation. The Planning Department prepared a transportation study, consistent with the Department's *Transportation Impact Analysis Guidelines for Environmental Review (SF Guidelines)*, to identify the impacts of the proposed Housing Elements on the transportation and circulation system, which serves as the data source for this section unless otherwise noted.¹

Existing transit conditions are described in terms of available routes, transit ridership and capacity at the screenlines for San Francisco Municipal Railway (Muni) and regional transit carriers. A public transit screenline analysis was performed on key Muni routes and regional transit carriers under the study scenarios. Existing pedestrian and bicycle conditions are described qualitatively. Existing parking conditions in the city are also described qualitatively, with emphasis on the Residential Parking Permit program and its locations. The existing traffic conditions were evaluated at 60 study intersections during the p.m. peak period for a typical weekday. The peak period analyzed was between 4:00 p.m. and 6:00 p.m., which is generally the period of peak demand on the transportation network. The study intersections were identified by the Planning Department as the intersections citywide that experience the most congestion or represent the constraints on the transportation network.

ENVIRONMENTAL SETTING

The transportation study area is defined as the entirety of the City and County of San Francisco and is depicted in Figure IV-1 (Section IV. Project Description). The following section describes the existing transportation network.

Existing Roadway Network

The following describes of the existing transportation network, including descriptions of the existing roadway and transit network, parking, pedestrian, and bicycle conditions. Descriptions of the roadway system serving the project site use the classifications from the Transportation Element of the San Francisco General Plan. The Transportation Element of the General Plan classifies roadways within the City as Freeways, Major Arterials, Transit Conflict Streets, Secondary Arterials, Recreational Streets, Collector Streets, and Local Streets. It also identifies Transit Preferential Streets, which include Primary

¹ *San Francisco General Plan Housing Element Final Transportation Impact Study* (hereinafter referred to TIS), TJKM Transportation Consultants, June 18, 2010. (See Appendix F).

Transit Streets (transit-oriented, non-major arterials), Primary Transit Streets (transit-important, major arterials), and Secondary Transit Streets. Transit Conflict Streets are similar to Primary Transit Streets (transit-oriented). This subsection also includes a discussion of adopted and proposed transportation plans and programs that could affect the citywide transportation network in the future.

Regional Access

This subsection describes the existing regional roadway network in the study area, including Interstate 80 (I-80), U.S. Highway 101 (US 101), and Interstate 280 (I-280). In addition, State Route 1 (SR 1) and State Route 35 (SR 35) also serve the City. These facilities are described below.

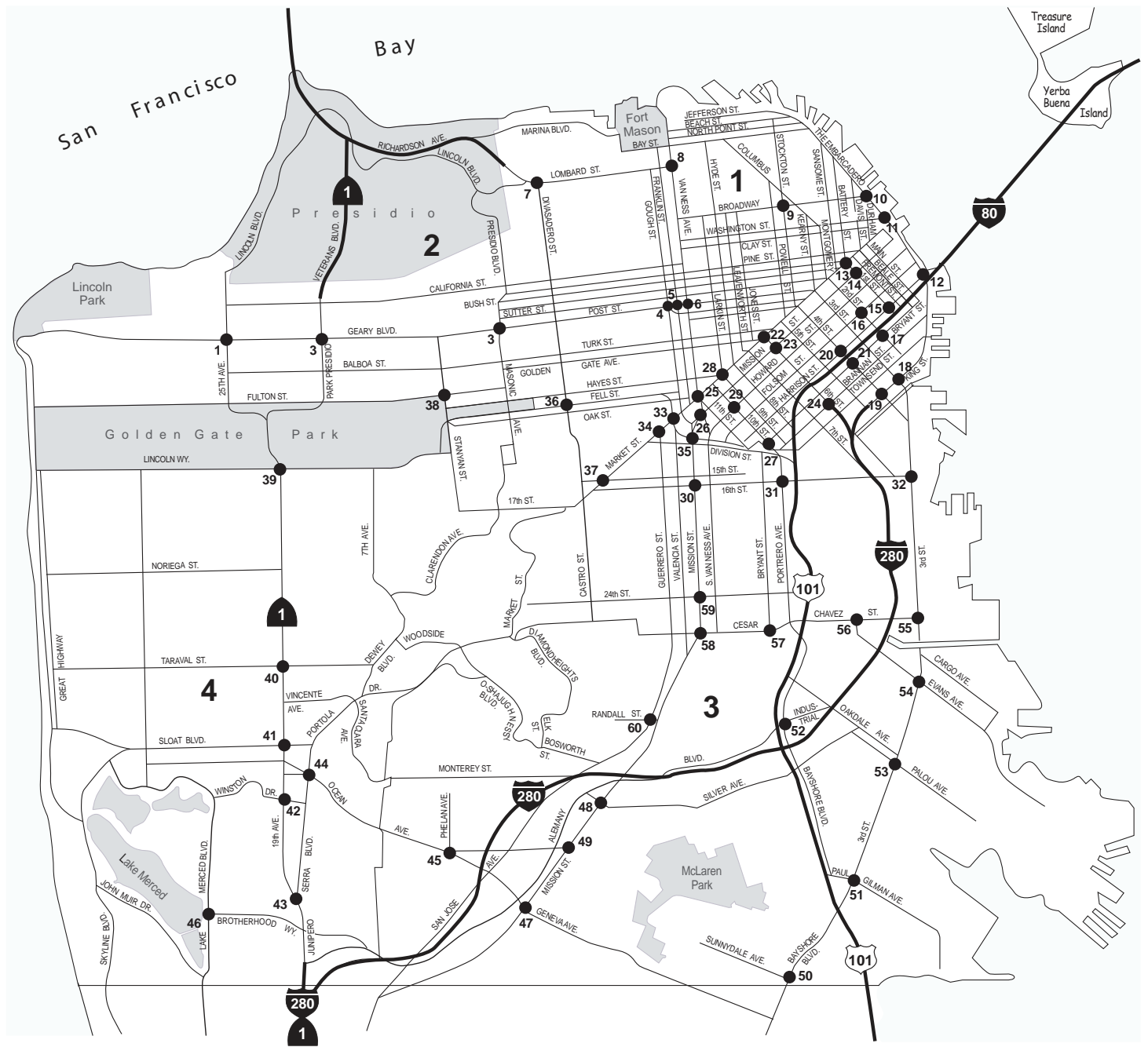
I-80 is generally an east-west freeway, connecting San Francisco with the East Bay and points east via the San Francisco-Oakland Bay Bridge. I-80 is a six- to eight-lane facility from the west side of the Bay Bridge to the connection with US 101 south of Downtown San Francisco.

US 101 provides regional access to both the north and south of San Francisco. The north portion of US 101, from Mission and Howard Streets to Doyle Drive in the Presidio, operates as an arterial street along Van Ness Avenue and Lombard Street. Doyle Drive is a freeway that connects to the Golden Gate Bridge. The south portion of US 101, from Mission and Howard Streets to San Mateo County, operates as a six- to eight-lane facility. US 101 connects to I-80 southwest of Downtown San Francisco.

I-280 is generally a north-south freeway, providing regional access to western San Francisco and the South Bay and the Peninsula. I-280 terminates in the South of Market area at two locations: Brannan Street/Sixth Street and King Street.

SR 1 is an arterial street on the western side of San Francisco, traveling via 19th Avenue, Crossover Drive through Golden Gate Park, Park Presidio Boulevard, Veterans Boulevard, and joins US 101 at Doyle Drive in the Presidio.

SR 35 is an arterial street that travels via Skyline Boulevard and Sloat Boulevard servicing southwest portion of the City.



Source: TJKM Transportation Consultants, June 2010.



Not to Scale

Figure V.F-1
Study Intersections

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Local Access

Local roadways in the City are described in terms of roadway designation, number of travel lanes, traffic flow directions, and curbside parking regulations. The functional designation of these roads is obtained from the San Francisco General Plan Transportation Element. Detailed descriptions of the major streets of the existing local roadway network are included in the TIS prepared for this EIR (Appendix F of this EIR).² Definitions of the General Plan's roadway classification schemes are included in Appendix C of the TIS. The TIS prepared for this EIR analyzed 60 study intersections, as depicted in Figure V.F-1.

Transit Network

Local transit service within the city limits is provided by Muni, the transit division of the San Francisco Municipal Transportation Agency (SFMTA). Muni bus, cable car and light rail lines can be used to access regional transit operators. Bay Area Rapid Transit (BART), Alameda-Contra Costa Transit District (AC Transit) and ferries provide service to and from the East Bay; Golden Gate Transit buses and ferries provide service to and from the North Bay; and Caltrain, SamTrans, and BART provide service to and from the Peninsula and South Bay.

Regional Transit System

BART: The Bay Area Rapid Transit District (BART) operates regional rail service between the East Bay (from Pittsburg/Bay Point, Richmond, Dublin/Pleasanton, and Fremont lines) and San Francisco, and between northern San Mateo County (San Francisco International Airport and Millbrae) and San Francisco. During the p.m. peak period, headways are generally 5 to 15 minutes for each line. The most recent BART ridership data showed weekday average ridership is approximately 342,274 between October and December 2009.

Caltrain: The Peninsula Commute Service (Caltrain) provides passenger rail service on the Peninsula between Gilroy and San Francisco. The San Francisco terminal is located at the intersection of Fourth/Townsend Streets. Caltrain currently operates 98 trains each weekday, with a combination of express and local services. Headways during the p.m. peak period are approximately 5 to 15 minutes. Caltrain staff estimated the average weekday ridership to be 39,122 boardings in February 2009.

Caltrain has plans to modernize the system by electrifying trains along its route and extending service to the San Francisco Downtown area in a modernized Transbay Terminal. It is anticipated that the high-speed rail will also be built and extend to the Transbay Terminal.

SamTrans: The San Mateo County Transit District (SamTrans) provides bus service between San Mateo County and San Francisco. SamTrans operates 12 diesel bus lines that serve San Francisco, including nine routes into the Downtown area. Nine of these routes operate as peak-only commute routes, one route operates as an express route, and two routes provide service throughout the day. The total average

² Ibid. See pages 28-38.

weekday ridership to and from Downtown San Francisco is approximately 11,300 per day. Headways during the p.m. peak period are approximately 20 to 30 minutes per line.

AC Transit: The Alameda-Contra Costa Transit District (AC Transit) provides local bus service in the East Bay (western Alameda and Contra Costa Counties). In addition, AC Transit operates Transbay bus service between the East Bay and San Francisco. All Transbay routes terminate at the Transbay Terminal located on Mission Street between First and Fremont Streets. Most Transbay bus lines are for peak period and peak direction (to San Francisco during the a.m. peak period and from San Francisco during the p.m. peak period), with headways of 15 to 30 minutes per route. AC Transit has an average daily Transbay ridership of approximately 13,000 passengers.

Golden Gate Transit (bus): Golden Gate Transit, operated by the Golden Gate Bridge, Highway, and Transportation District (GGBHTD), provides bus service between the North Bay (Marin and Sonoma Counties) and San Francisco. Golden Gate Transit operates 22 commuter bus routes, nine basic bus routes and 16 ferry feeder bus routes. Most routes serve either the Civic Center (via Van Ness Avenue and Mission Streets) or the Financial District (via Battery and Sansome Streets). Basic bus routes operate at 15 to 90 minutes, depending on the time and day of the week. Commute and ferry feeder bus routes operate at more frequent intervals in the mornings and evenings. Golden Gate Transit carries approximately 6,700 passengers per day to and from San Francisco.

Golden Gate Transit (ferry): The GGBHTD provides ferry service between the North Bay and San Francisco. During the a.m. and p.m. peak periods, ferries are operated between Larkspur and San Francisco and between Sausalito and San Francisco. The San Francisco terminal is located at the Ferry Building on The Embarcadero at Market Street. Approximately 900 passengers ride the ferry to North Bay during the p.m. peak hour.

Local Transit Service

Muni currently operates 80 routes throughout San Francisco with stops within two blocks of 90 percent of all residences in the city. Most routes operate seven days a week, between 6:00 a.m. and midnight. Limited late night (Owl) service is available between 1:00 a.m. and 5:00 a.m. on sections of 13 Muni routes. On weekdays, frequencies generally range from 4 to 12 minutes during midday, and 10 to 30 minutes during evenings. On weekends, base frequencies of service range from 5 to 60 minutes. In addition to regular, standard services, Muni operates 15 express lines and 5 limited-service (semi-express) lines. Express lines only run during peak hours in the commute directions. All express lines have an "X", "AX", or "BX" following the line's number. Limited-service lines provide faster service by making fewer stops than the standard line along their routes. All limited-service lines have an "L" following the line's number. Figure V.F-2 shows the existing transit network in the study area.

Recent Changes to Muni Service

On April 21, 2009, the SFMTA Board approved Resolution 09-064 in which SFMTA declared that it found a fiscal emergency existed within the definition of CEQA § 21080.32. In order to address the fiscal emergency, on April 30, 2009, the SFMTA Board approved the 2009-2010 amended Operating Budget and

related actions, and on December 5, 2009, Muni service changes associated with the budget deficit were implemented.

The fiscal emergency declared on April 21, 2009 continues through the Fiscal Year (FY) 2010. As a result, the SFMTA has faced a shortfall in its current FY, which ends on June 30, 2010. To address the continuing fiscal emergency, on May 8, 2010, the SFMTA executed additional reductions in service, beyond those implemented on December 5, 2009, which resulted in a 10 percent overall cut in service hours. The cuts were realized across almost all Muni routes, and resulted in a combination of both reduced frequency of service, as well as shortened hours of operation of many routes. The SFMTA is endeavoring to find new sources of revenue as well as reduce operating costs, in order to restore service.

Parking Conditions

Parking conditions vary throughout the City depending upon the location. Most San Francisco streets include on-street parking, and metered parking is typical in the Downtown area and on commercial districts throughout the City. Off-street parking facilities (surface lots, above-ground and below-ground parking structures) are available in Downtown and in some shopping areas, where demand is highest. Many of these facilities charge a fee for the provision of parking.

San Francisco's streets with on-street parking include parallel parking, diagonal parking, or perpendicular parking configurations. On-street parking is prohibited during the peak periods (7:00-9:00 a.m. and/or 4:00-6:00 p.m.) on certain streets, so that additional travel lanes can be provided. SFMTA estimated that there are 320,000 on-street parking spaces and 25,000 metered parking spaces in the City. The *San Francisco Planning Code* generally requires a minimum of one off-street space for each residential unit; however in certain areas within the City, such as Downtown and the Market/Octavia Plan area, the *Planning Code* does not require any parking spaces per dwelling unit and sets limits on the maximum amount of parking that can be built per unit. Residential Preferred Parking (RPP) zones limit long-term (greater than one to four hours) parking to residents only during daytime hours. This program helps to ensure that residents of densely populated areas have reasonable access to parking near their residences, while short-term parking is permitted for retail uses. Figure V.F-3 shows the location of the RPP zones in the City. Currently there are 27 RPP zones in the City.

Pedestrian Conditions

Sidewalks are provided for most city streets on both sides of the street. On major pedestrian corridors such as Market Street and The Embarcadero, wide (greater than 30 feet) sidewalks exist to provide a pedestrian friendly environment. Major pedestrian corridors often coincide with major transit and bicycle corridors. The heaviest pedestrian activities are encountered at major tourist attractions (e.g., Fisherman's Wharf, Golden Gate Bridge, and Chinatown) and Downtown commercial areas. Most of the intersections with major pedestrian activities are signalized and include crosswalks with pedestrian signals. San Francisco is in the process of installing pedestrian countdown signals citywide, which improve safety by alerting pedestrians of the remaining time to cross the street.

Bicycle Conditions

San Francisco has a large and growing bicycle route network. Bikeways are typically classified as Class I, Class II, or Class III facilities. Class I bikeways are bike paths with exclusive right-of-way for use by bicyclists or pedestrians. Class II bikeways are bike lanes striped with the paved areas of roadways and established for the preferential use of bicycles, while Class III bikeways are signed bike routes that allow bicycles to share streets or sidewalks with vehicles or pedestrians.

Currently San Francisco has 23 miles of Class I facilities, 45 miles of Class II facilities, 79 miles of Class III facilities, 53 miles of Class IIIA facilities (Class III Bicycle route with wide curb lanes), and 8 miles of other facilities. Figure V.F-4 shows the existing bikeways in the City. Major bicycle corridors often coincide with major transit and pedestrian corridors. Bicycles are generally allowed to be carried on racks on Muni buses.

Loading Conditions

Within San Francisco, loading facilities for residential land uses can be located both on-street and off-street, and for the loading of both freight and passengers.

Off-street facilities: In most sections of the city, residential developments of over 100,000 square feet are required to provide at least one off-street freight loading dock, as described in the Planning Code³. However, in Downtown Residential Districts, there is a maximum instead of minimum number of freight loading docks; land uses with up to 100 units are permitted one dock, while larger developments are permitted to have more than one dock.

While some residential developments have a *porte cochere*, which is an off-street passenger loading driveway, the *Planning Code*⁴ prohibits their construction within the Downtown C-3 zoning district or in Downtown Residential Districts.

On-street facilities: On-street parking spaces that are reserved for freight loading activities are prevalent throughout San Francisco and can be distinguished by the yellow curb painting. These spaces can be utilized for residential freight loading activities. Additionally, on-street parking spaces can be reserved for a residential move-in through the Municipal Transportation Agency.

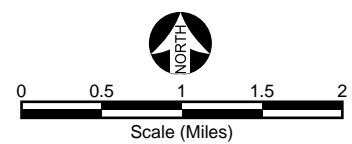
On-street passenger loading spaces are located throughout San Francisco and can be distinguished by the white curb painting. The Municipal Transportation Agency processes requests for passenger loading zones for large residential developments.

³ San Francisco Planning Code Sections 152 and 152.1.

⁴ San Francisco Planning Code Section 155(s)5(B)



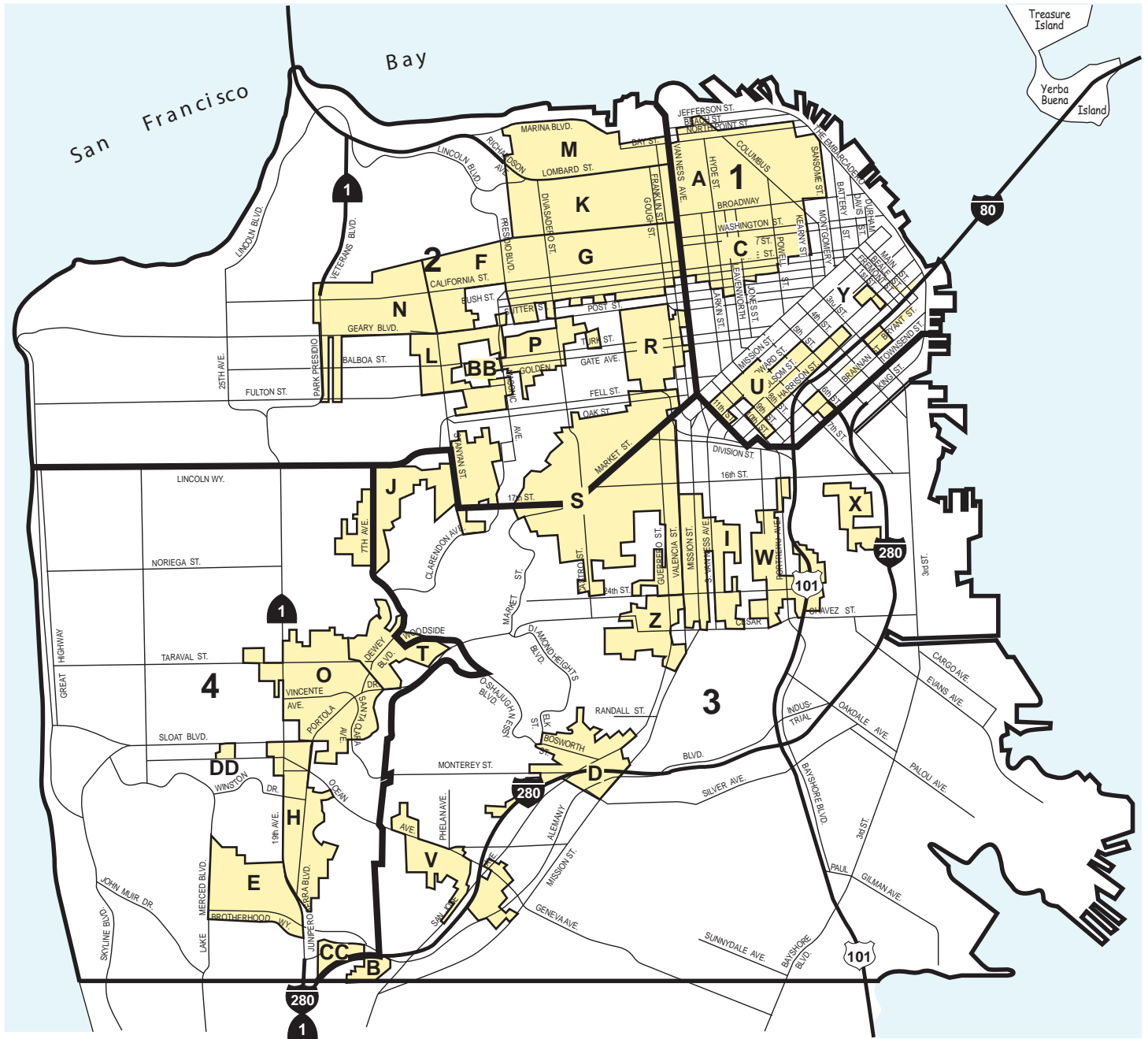
- Ferry Service
- - - - Caltrain
- BART
- - - - Muni Metro/Rail
- Bus
- Parks
- Water



Source: SFMTA, April 2010.

Figure V.F-2
Existing Transit Network

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LEGEND	
	Residential Permit Parking Areas

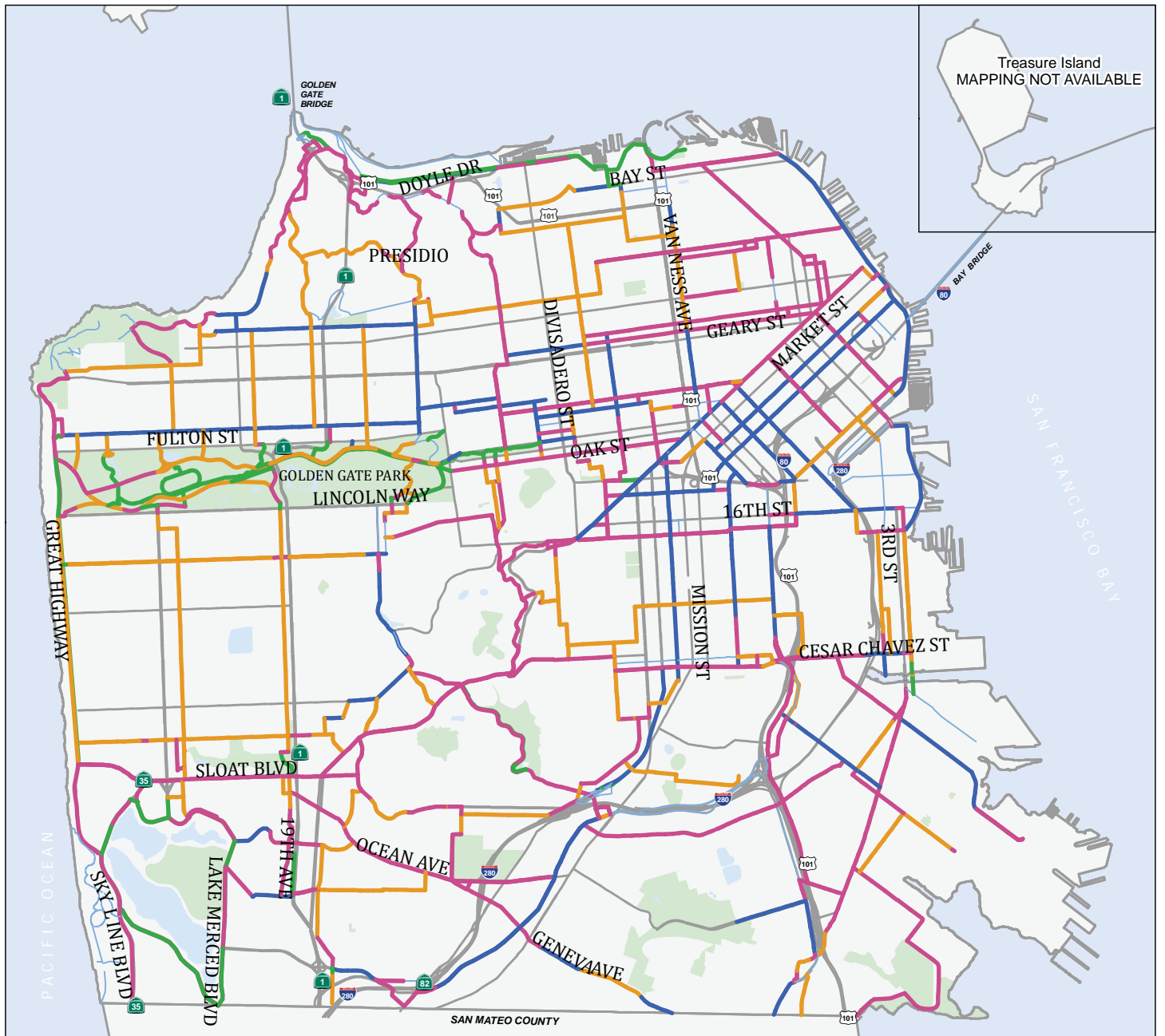
Source: TJKM Transportation Consultants, June 2010.



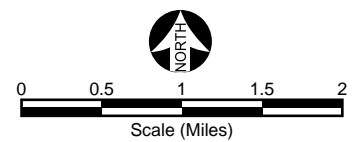
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Figure V.F-3
Residential Permit Parking Zones

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- Bike Path (Class 1)
- Bike Lane (Class 2)
- Bike Route (Class 3)
- Wide Curb Lane
- Others
- Parks
- Water



Source: SFMTA, April 2010.

Figure V.F-4
San Francisco Bicycle Network

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Emergency Vehicle Access Conditions

Generally, emergency vehicles utilize the roadway network when accessing residential land uses. The San Francisco Fire Department (SFFD), which has 43 fire stations geographically spread throughout the city, is usually the first responder at the scene of an emergency.

Emergency vehicles are permitted to utilize transit lanes as a means to avoid congestion. Some SFFD vehicles are equipped with signal priority devices, which give emergency vehicles a green light at signalized intersections.

Adopted and Proposed Citywide Transportation Plans and Programs

A number of citywide transportation-related plans and programs have been recently adopted or are currently proposed. These programs are anticipated to reduce traffic congestion through improved traffic management, increased viability of transit service, and promotion of non-motorized modes of transportation across the transportation network.

Adopted Plans and Approved Projects

- *SFPark*: The SFPark program, as being implemented by the SFMTA, will improve on-street parking management. Sensors embedded within the pavement will detect parking occupancy, which can be downloaded onto smart phones and vehicle navigation systems, directing drivers to available parking. Further, SFPark will manage the cost of on-street parking to respond to demand, achieving the correct price point where most parking spaces are occupied, but some vacant spaces remain, enabling a driver to always find a parking space.

The SFPark program will reduce traffic congestion related to drivers circling blocks in search of an available parking space. By correctly pricing parking in response to demand so that several spaces are always available on any given block, and by directing drivers to available parking spaces, parking-related congestion is expected to be reduced.

- *SFGo*: The SFMTA is in the process of implementing the SFGo project, which is an advanced citywide traffic management system. A new centralized traffic control station, staffed by SFMTA traffic engineers, is connected to traffic signal controllers across the city, and also has closed-circuit television cameras installed to monitor traffic conditions in real-time. SFMTA engineers are able to dynamically adjust traffic signal timing plans in response to observed congestion and incidents. Engineers also control electronic message boards installed along major roadways that can alert drivers to traffic conditions and advise on alternate routes. In the future, the traffic control station will be combined with Muni Central Control, so that transit operations can also respond in real-time to congestion and incidents.

SFGo is expected to reduce congestion by increasing the efficiency of the transportation network. Signals will adjust to flush queues or handle unexpected traffic surges, and drivers will be alerted

to alternate routes before becoming stuck in gridlock. Transit reliability is also expected to improve, enticing drivers to switch modes onto transit.

- *San Francisco Bicycle Plan:* The SFMTA is in the process of implementing the Bicycle Plan, which will add new bicycle lanes and bicycle parking throughout the city. This Bicycle Plan is expected to increase convenience and safety for bicyclists.

The Bicycle Plan is expected to reduce congestion by enhancing the attractiveness of bicycling in the city, which will entice drivers to shift modes and use a bicycle instead of a car for travel needs. In limited circumstances, new bicycle facilities (such as bike lanes) will come at the expense to drivers, either due to reductions in roadway travel lanes or reductions in on-street parking spaces, which would further entice motorists to switch modes, resulting in fewer vehicles and less congestion citywide.

- *Transbay Terminal, Caltrain Electrification and High Speed Rail:* The Transbay Terminal at First and Mission Street is planned to be torn down and replaced with a larger, modern multi-modal terminal, allowing an increased volume of buses to serve the city. The Caltrain commuter rail service is planned to be upgraded from diesel to electric train service, and extended in a tunnel to terminate at the reconstructed Transbay Terminal, allowing for a more direct transit connection from the peninsula to Downtown, and for more rapid acceleration and deceleration of trains, both of which are expected to reduce transit travel times. It would also allow trains to be run at higher frequencies, increasing convenience and capacity. Also, the California High Speed Rail project is planned to link San Francisco with San Jose as well as points south via high-speed electric trains.

These improvements would improve the convenience, travel time and capacity of rail transit to points south of the City, and also improve bus service to points east of the City. It is anticipated that provision of better transit service would facilitate a mode shift from vehicles to transit, which would result in fewer vehicles and less congestion citywide, and particularly in Downtown.

- *Central Subway:* The SFMTA is constructing the Central Subway, which will link the Third Street light rail service with the South of Market, Union Square and Chinatown neighborhoods to the north via a new subway. It is anticipated that provision of better transit service and connection to neighborhoods currently not served by a subway would facilitated a mode shift from vehicles to transit.

Proposed Plans and Projects

- *Congestion Pricing:* The San Francisco County Transportation Authority (SFCTA) is currently investigating the feasibility of a congestion pricing charge in San Francisco. The proposed charge would apply to vehicles entering a defined zone, which could be either Downtown San Francisco, or the entire city limits, or a zone in between these sizes. The charge could vary by time of day, for different types/sizes of vehicles, and for different users (such as residents). Similar congestion pricing schemes have been implemented in cities around the world (London, Stockholm, Singapore, and others) but have not been implemented in the US.

Such a pricing program could cause a change in travel demand patterns, which would reduce traffic congestion during peak periods. Fewer vehicles would enter the congestion zone when it is in effect, which would be expected to reduce congestion. There could be a mode shift from vehicles to other modes, such as transit and bicycle, and there could also be a shift of vehicles traveling during off-peak times (peak spreading). Both of these shifts would be expected to reduce congestion during peak travel periods.

- *Transit Effectiveness Project (TEP)*: The proposed Transit Effectiveness Project (TEP) is the first comprehensive effort in over 25 years to review Muni and recommend ways to transform it into a faster, more reliable and more efficient public transit system for San Francisco. Launched in May 2006, the TEP has gathered an unprecedented level of ridership data, studied best practices from other transit systems, and conducted extensive public outreach to community stakeholders, policy makers and SFMTA employees. Informed by these efforts, the TEP developed a set of preliminary proposals designed to improve reliability, reduce travel delay, and update routes to better meet current and project travel patterns throughout the City. The SFMTA Board of Directors endorsed the TEP recommendations in October 2008. The TEP recommendations focus on service factors aimed at increasing customer convenience: improved reliability, reduced travel time, more frequent service and updated Muni bus routes and rail lines that track with current travel patterns. The recommendations focus on providing resources where they are most needed. This includes new routes and route extensions, more service on busy routes and elimination or consolidation of certain routes or route segments with low ridership. By investing in delay reduction techniques and shifting resources to crowded routes, these recommendations are expected to deliver more service to Muni customers without increasing Muni's operating budget.

The improved Muni service is expected to make transit more competitive with auto travel, encouraging auto users to shift mode to transit instead. Further, transit-preferential roadway treatments such as transit lanes or traffic signal priority may come at the expense of increased delay to private vehicles, which could entice drivers to switch to transit. A shift in mode from vehicles to transit could reduce traffic congestion.

- *Van Ness Avenue and Geary Boulevard Bus Rapid Transit*: The SFCTA and the SFMTA are currently preparing the Van Ness Corridor Bus Rapid Transit (BRT) Study and the Geary Corridor Bus Rapid Transit (BRT) Study. The agencies initiated these studies in 2004 and these projects are currently in the environmental review stage. Bus rapid transit would increase bus service frequency along Van Ness Avenue and Geary Boulevard by giving buses a dedicated travel lane, priority at traffic signals, and high-quality bus stations. The agencies are considering these improvements to benefit existing riders and to attract new transit riders.

The improved service along the Van Ness and Geary corridors are expected to make transit more competitive with auto travel, encouraging auto users to shift mode to transit instead. Further, transit-preferential roadway treatments may come at the expense of increased delay to private vehicles, which could entice drivers to switch to transit. A shift in mode from vehicles to transit could reduce traffic congestion.

- *Better Streets Plan*: The Planning Department and SFMTA are proposing the Better Streets Plan, which aims to improve pedestrian safety and convenience citywide through enhanced sidewalks, crosswalks, and other pedestrian amenities. The plan contains a set of pedestrian enhancements that would be implemented over time as city streets are maintained and reconstructed.

The Better Streets Plan is expected to increase the attractiveness of walking in the city, as well as enhance access to transit stops. Provision of better pedestrian amenities could encourage a shift in mode and potentially result in fewer vehicles and less congestion citywide.

EXISTING AND CUMULATIVE 2025 CONDITIONS

This section presents the methodology used to derive Existing and Future 2025 Cumulative Conditions and presents the Conditions and an analysis of 2025 Cumulative Conditions for the City's transportation network. Results of this analysis are used as the basis for analyzing the effects of the proposed 2004 and 2009 Housing Elements.

The proposed Housing Elements are each organized into two main parts. Part I of each Housing Element consists of the Data and Needs Analysis section, which provides a statistical baseline for determining appropriate housing objectives, policies and implementation strategies. This section includes San Francisco population and employment trends, housing data, and inventories of land available for increased housing development. Part I does not contain any changes to city policy and would have no effect on the transportation and circulation system.

Part II of the proposed Housing Elements contains the objectives, policies and implementation measures that are designed to meet the RHNA. The RHNA identifies the amount of new housing anticipated for the Housing Element's planning period, and distributes these units by affordability levels. Thus, while the Housing Elements do not propose new residential development, local jurisdictions must show, through their Housing Elements, that they have capacity available to meet the RHNA. If there is not available capacity to meet the RHNA, a jurisdiction must rezone a portion of their land to accommodate the RHNA.

The 2007-2014 RHNA anticipates a need for approximately 31,000 housing units during the planning period for this housing element. According to the soft site analysis conducted for this EIR, the City has additional capacity for approximately 61,000 housing units. Therefore, rezoning to accommodate the RHNA is not required. Additionally, implementation of the proposed Housing Elements would not result in changes to height and bulk districts or to allowable uses under the *Planning Code*.

ABAG population estimates project that the City will grow by approximately 39,568 households by 2025 (2009-2025), requiring about 41,651 new housing units to accommodate the 2025 growth projections. As discussed above, the Housing Elements do not propose to develop new housing, nor would the proposed Housing Elements result in changes to land use regulations or modify the amount of housing that could be developed in San Francisco. Therefore, the 2004 and 2009 Housing Elements would not generate any new person trips beyond the 2025 ABAG projections. Residential growth within the City would occur

regardless of the proposed Housing Elements; the Housing Elements would provide direction for how new residential development in the City should occur.

The proposed Housing Elements are policy documents that provide direction for accommodating the need for new housing driven by population growth. In providing direction for meeting regional housing needs, ABAG focuses on both the amount of housing and the affordability of housing. To meet the City's share of the RHNA, the proposed Housing Elements aim to do the following: 1) preserve and upgrade existing housing units to ensure they do not become dilapidated, abandoned, or unsound, and 2) provide direction for how new and where housing development in the City should occur. With respect to the latter, the 2004 Housing Element encourages new housing in Downtown and in underutilized commercial and industrial areas. The 2004 Housing Element also encourages increased housing in neighborhood commercial districts and mixed-use districts near Downtown. On the other hand, the 2009 Housing Element encourages housing in new commercial or institutional projects and accommodating housing through existing community planning efforts. The analysis prepared for the proposed Housing Elements presents future Cumulative 2025 Conditions for the City's transportation network and qualitatively analyzes the potential for the 2004 and 2009 Housing Elements to affect the distribution of projected person trips among the transportation network.

Intersection Operating Conditions

An analysis was performed for the study intersections for both Existing Conditions and modeled future 2025 Cumulative Conditions. Existing and 2025 Cumulative Conditions at the study intersections were quantified through the determination of level of service (LOS), a qualitative measure describing operational conditions within a traffic stream. There are six levels of service defined for each type of facility (i.e., roadway or intersection) that is analyzed. LOS has letter designations ranging from A to F, with LOS A representing free flow traffic with little or no delay and LOS F representing jammed conditions with excessive delay and long back-ups. Procedures for analyzing each type of facility are based on the *Highway Capacity Manual 2000 (HCM 2000)*.⁵

Existing Traffic Conditions

The existing traffic conditions were evaluated at 60 study intersections during the p.m. peak period for a typical weekday. The peak period analyzed was between 4:00 p.m. and 6:00 p.m., which is generally the period of peak demand on the transportation network. The study intersections were identified by the Planning Department as the intersections citywide that experience the most congestion or represent the constraints on the transportation network.

The following 60 study intersections were analyzed for this EIR, as shown in Figure V.F-1.

1. Geary Boulevard / 25th Avenue

⁵ The LOS methodology is described in detail in Appendix D of the TIS. The TIS is incorporated as Appendix F of this EIR.

2. Geary Boulevard / Park Presidio Avenue
3. Geary Boulevard / Masonic Avenue
4. Geary Boulevard / Gough Street
5. Geary Boulevard / Franklin Street
6. Geary Boulevard / Van Ness Avenue
7. Lombard Street / Richardson Avenue
8. Lombard Street / Van Ness Avenue
9. Stockton Street / Broadway
10. The Embarcadero / Broadway
11. The Embarcadero / Washington Street
12. The Embarcadero / Harrison Street
13. 1st Street / Market Street
14. 1st Street / Mission Street
15. 1st Street / Harrison Street
16. 2nd Street / Folsom Street
17. 2nd Street / Bryant Street
18. 3rd Street / King Street
19. 4th Street / King Street
20. 4th Street / Harrison Street
21. 4th Street / Bryant Street
22. 6th Street / Market Street
23. 6th Street / Mission Street
24. 6th Street / Brannan Street
25. Market Street / Van Ness Avenue

26. Mission Street / South Van Ness Avenue
27. 10th Street / Brannan Street / Potrero Avenue / Division Street
28. 9th Street / Market Street
29. 10th Street / Howard Street
30. 16th Street / Mission Street
31. 16th Street / Potrero Avenue
32. 16th Street / 3rd Street
33. Market Street / Octavia Street
34. Market Street / Guerrero Street / Laguna Street
35. Mission Street / Otis Street / Division Street
36. Fell Street / Divisadero Street
37. 15th Street / Market Street / Sanchez Street
38. Fulton Street / Stanyan Street
39. Lincoln Way / 19th Avenue
40. Taraval Street / 19th Avenue
41. Sloat Boulevard / 19th Avenue
42. Winston Drive / 19th Avenue
43. Junipero Serra Boulevard / 19th Avenue
44. Junipero Serra Boulevard / Ocean Avenue
45. Phelan Avenue / Ocean Avenue / Geneva Street
46. Lake Merced Boulevard / Brotherhood Way
47. Mission Street / Geneva Street
48. Mission Street / Silver Avenue
49. Mission Street / Ocean Avenue

50. Sunnysdale Avenue / Bayshore Boulevard
51. Gilman Street / Paul Avenue / 3rd Street
52. Industrial Street / Bayshore Boulevard / Alemany Boulevard
53. 3rd Street / Palou Avenue
54. 3rd Street / Evans Avenue
55. 3rd Street / Cesar Chavez Street
56. Evans Avenue / Cesar Chavez Street
57. Bryant Street / Cesar Chavez Street
58. Mission Street / Cesar Chavez Street
59. Mission Street / 24th Street
60. San Jose Avenue / Randall Street

Following the procedure described in the San Francisco Planning Department's *Transportation Impact Analysis Guidelines for Environmental Review (SF Guidelines)*, existing vehicle counts were collected during the weekday p.m. peak period (4:00 p.m. to 6:00 p.m.), which represent the time of maximum utilization of the transportation system in the City. All counts were collected on typical weekdays during non-holiday weeks. Figure V.F-5 shows the existing lane geometry and traffic controls at the 60 study intersections. Figure V.F-6 shows existing turning movement volumes at the study intersections.

The sources of the data used to analyze existing traffic conditions varied. Data collection and LOS analysis for 27 of the 60 study intersections were based on traffic counts conducted in October 2009. For the remaining 33 intersections, data were compiled from existing transportation studies completed for recent development projects.⁶

Table V.F-1 summarizes the p.m. peak hour levels of service for all 60 study intersections under Existing Conditions and also future 2025 Cumulative Conditions. Under Existing Conditions, the following 13 study intersections currently operate at LOS E or F, and therefore, operate below City standards:

#13 1st Street / Market Street

#14 1st Street / Mission Street

⁶ For more information on traffic counts collected for the transportation analysis prepared for this EIR, please see the *San Francisco General Plan Housing Element Final Transportation Impact Study*, incorporated into this EIR as Appendix F.

- #15 1st Street / Harrison Street
- #17 Second Street / Bryant Street
- #20 4th Street / Harrison Street
- #24 Sixth Street/ Brannan Street
- #26 Mission Street / South Van Ness Avenue
- #27 Tenth Street / Brannan Street / Potrero Avenue / Division Street
- #35 Mission Street / Otis Street / Division Street
- #39 Lincoln Way / 19th Avenue
- #41 Sloat Boulevard / 19th Avenue
- #42 Winston Drive / 19th Avenue
- #43 Junipero Serra Boulevard / 19th Avenue

The majority of the failing intersections are located in the South of Market area of the City as well as along 19th Avenue. The remaining 47 study intersections currently operate at LOS D or better, and therefore, operate within acceptable City standards.

Cumulative 2025 Traffic Conditions

As discussed above, the Housing Elements do not propose to develop new housing, nor would the proposed Housing Elements result in changes to land use regulations or modify the amount of housing that could be developed in San Francisco.. Therefore, the 2004 and 2009 Housing Elements would not generate any new person trips. Residential growth within the City would occur regardless of the proposed Housing Elements; the Housing Elements would provide direction for how new residential development in the City should occur, with an emphasis on affordability.

Typically for San Francisco transportation studies, trip generation estimates are made based on the *SF Guidelines*. However, because future residential growth will occur regardless of the adoption of the 2004 or 2009 Housing Element policies, and the policies themselves would not directly generate new trips, no trip generation estimates are provided as part of this EIR. This EIR does present future (2025) Cumulative Conditions that incorporate recently updated zoning controls, including (but not limited to) the neighborhoods of Market/Octavia, Mission, East South of Market (SOMA), Showplace Square/Potrero Hill, Central Waterfront, and Balboa Park. The cumulative scenario for these area plans would not change as a result of the proposed Housing Elements. Future residential growth from the City's area plans and redevelopment plans, and incremental growth anticipated by residential projects (the City's pipeline) have been incorporated into the traffic analysis results for Cumulative 2025 Conditions in this EIR.

The 2025 traffic forecast for the study intersections was developed by utilizing the SFCTA travel demand model runs (CHAMP model version 3.4.0, CHAMP networks version RTP2005/3/2/8) for years 2005 and 2025. The difference between 2005 and 2025 model link volumes were calculated to estimate a sixteen-year growth increment between the existing (2009) and 2025 analysis years. This increment was added to existing turning movement volumes proportionately based on existing left, through, and right turn volumes at the study intersections to calculate 2025 turning movements. Figure V.F-7 shows the resulting 2025 turning movement volumes.

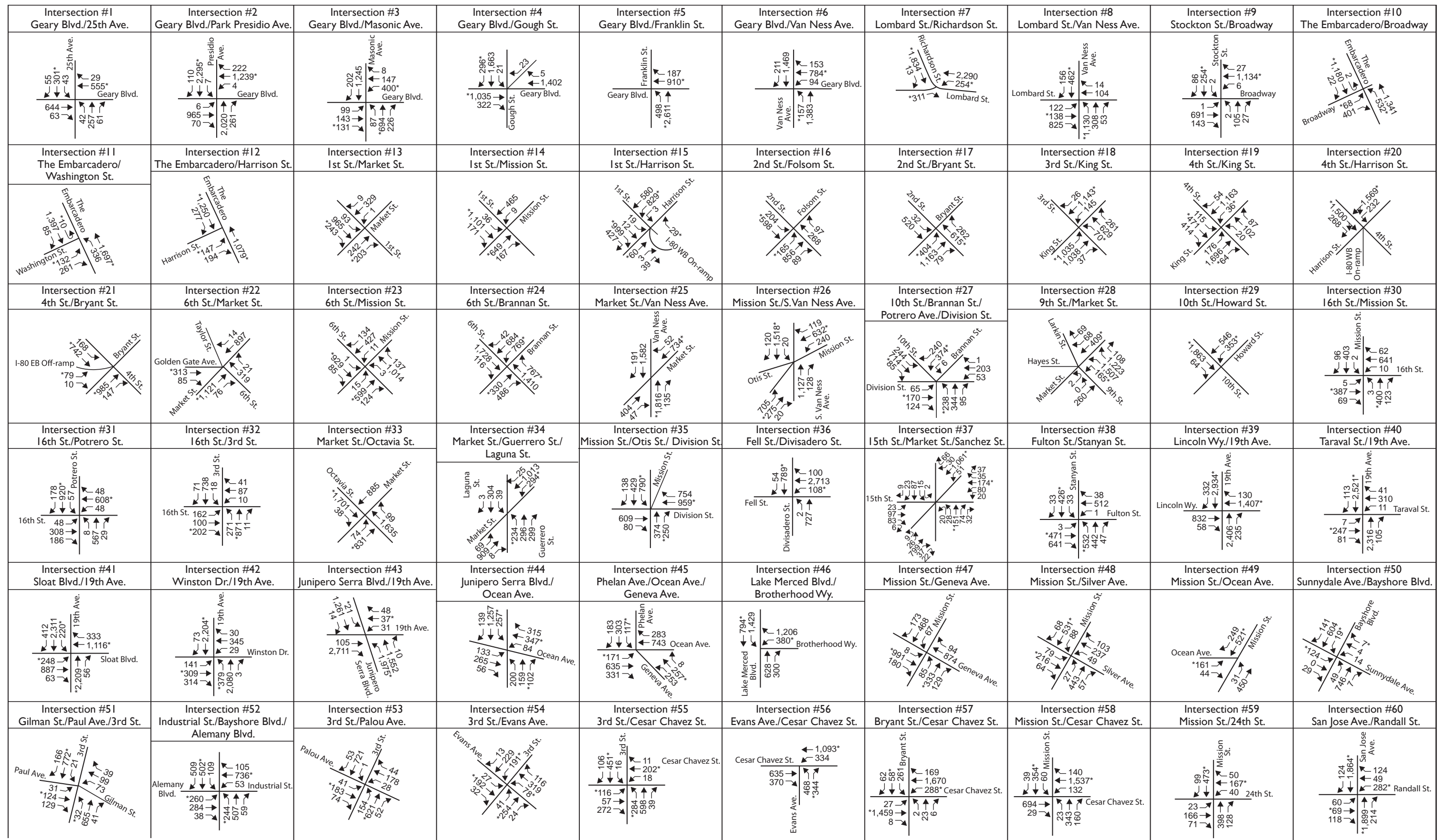
Table V.F-1 shows the results of an intersection level of service analysis for all study intersections during the p.m. peak hour for both Existing and 2025 Cumulative Conditions. Under 2025 Cumulative Conditions, 37 of the 60 study intersections are expected to operate at unacceptable levels of service (LOS E or F). Compared with Existing Conditions, there are 24 more intersections expected to operate unacceptably.

Intersection #1 Geary Blvd./25th Ave.	Intersection #2 Geary Blvd./Park Presidio Ave.	Intersection #3 Geary Blvd./Masonic Ave.	Intersection #4 Geary Blvd./Gough St.	Intersection #5 Geary Blvd./Franklin St.	Intersection #6 Geary Blvd./Van Ness Ave.	Intersection #7 Lombard St./Richardson St.	Intersection #8 Lombard St./Van Ness Ave.	Intersection #9 Stockton St./Broadway	Intersection #10 The Embarcadero/Broadway
Intersection #11 The Embarcadero/ Washington St.	Intersection #12 The Embarcadero/Harrison St.	Intersection #13 1st St./Market St.	Intersection #14 1st St./Mission St.	Intersection #15 1st St./Harrison St.	Intersection #16 2nd St./Folsom St.	Intersection #17 2nd St./Bryant St.	Intersection #18 3rd St./King St.	Intersection #19 4th St./King St.	Intersection #20 4th St./Harrison St.
Intersection #21 4th St./Bryant St.	Intersection #22 6th St./Market St.	Intersection #23 6th St./Mission St.	Intersection #24 6th St./Brannan St.	Intersection #25 Market St./Van Ness Ave.	Intersection #26 Mission St./S. Van Ness Ave.	Intersection #27 10th St./Brannan St./ Potrero Ave./Division St.	Intersection #28 9th St./Market St.	Intersection #29 10th St./Howard St.	Intersection #30 16th St./Mission St.
Intersection #31 16th St./Potrero St.	Intersection #32 16th St./3rd St.	Intersection #33 Market St./Octavia St.	Intersection #34 Market St./Guerrero St./ Laguna St.	Intersection #35 Mission St./Otis St./ Division St.	Intersection #36 Fell St./Divisadero St.	Intersection #37 15th St./Market St./Sanchez St.	Intersection #38 Fulton St./Stanyan St.	Intersection #39 Lincoln Wy./19th Ave.	Intersection #40 Taraval St./19th Ave.
Intersection #41 Sloat Blvd./19th Ave.	Intersection #42 Winston Dr./19th Ave.	Intersection #43 Junipero Serra Blvd./19th Ave.	Intersection #44 Junipero Serra Blvd./ Ocean Ave.	Intersection #45 Phelan Ave./Ocean Ave./ Geneva Ave.	Intersection #46 Lake Merced Blvd./ Brotherhood Wy.	Intersection #47 Mission St./Geneva Ave.	Intersection #48 Mission St./Silver Ave.	Intersection #49 Mission St./Ocean Ave.	Intersection #50 Sunnydale Ave./Bayshore Blvd.
Intersection #51 Gilman St./Paul Ave./3rd St.	Intersection #52 Industrial St./Bayshore Blvd./ Alemany Blvd.	Intersection #53 3rd St./Palou Ave.	Intersection #54 3rd St./Evans Ave.	Intersection #55 3rd St./Cesar Chavez St.	Intersection #56 Evans Ave./Cesar Chavez St.	Intersection #57 Bryant St./Cesar Chavez St.	Intersection #58 Mission St./Cesar Chavez St.	Intersection #59 Mission St./24th St.	Intersection #60 San Jose Ave./Randall St.

Source: TJKM Transportation Consultants, June 2010.

Figure V.F-5
Existing Lane Geometry and Traffic Controls

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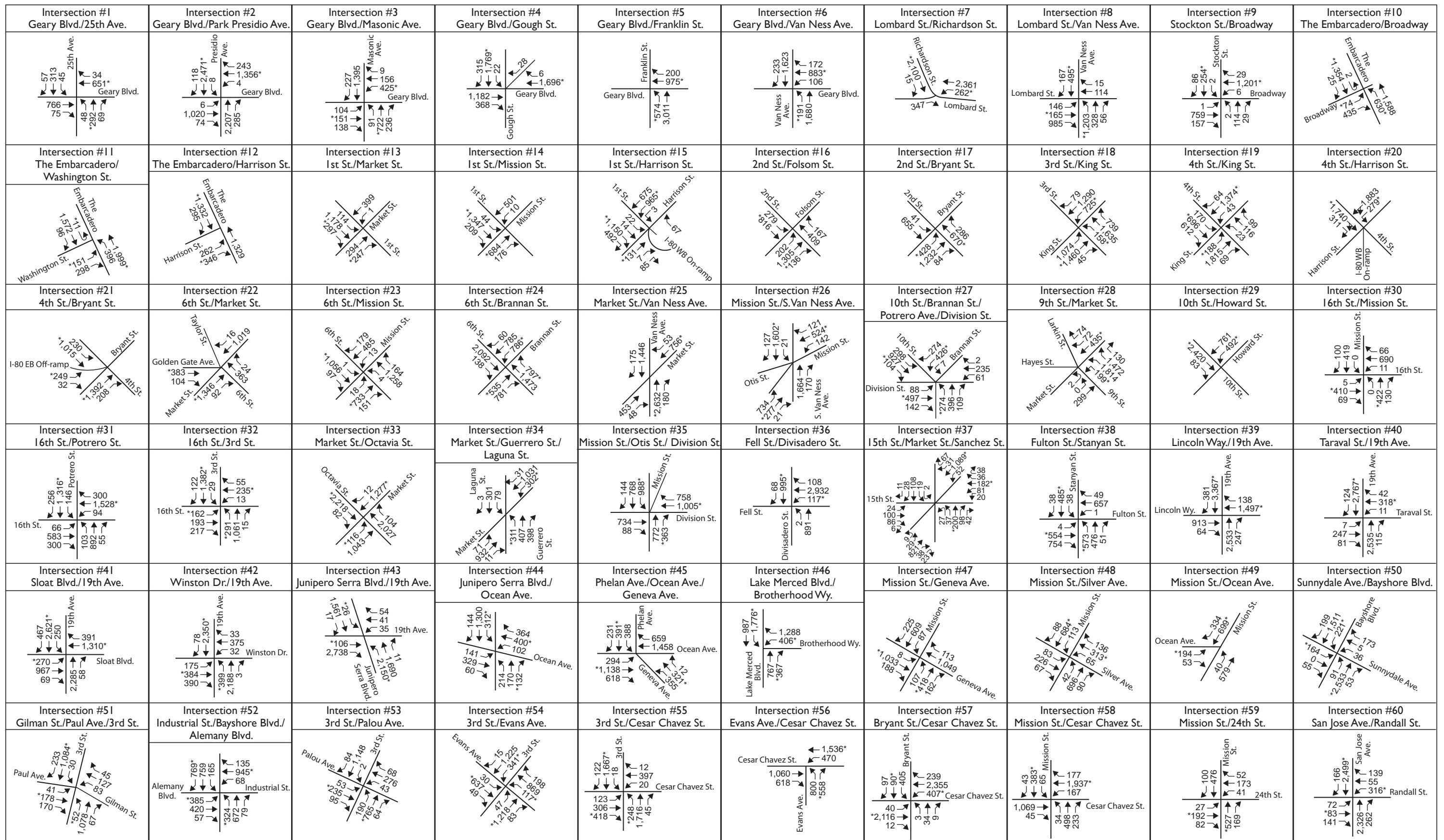


Source: TJKM Transportation Consultants, June 2010.

Figure V.F-6
Existing Turning Movement Volumes

LEGEND	
XX	PM, Peak Hour Volume
*	Critical Movement

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Source: TJKM Transportation Consultants, June 2010.

Figure V.F-7
Cumulative 2025 Turning Movement Volumes

LEGEND	
XX	P.M. Peak Hour Volume
*	Critical Movement

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Table V.F-1

P.M. Peak Hour Intersection LOS – Existing Conditions and Cumulative (2025) Conditions

ID	Intersection	Existing Conditions			Cumulative (2025) Conditions		
		P.M. Peak			P.M. Peak		
		Delay	LOS	V/C	Delay	LOS	V/C
1	Geary Blvd / 25th Ave	16.0	B		15.9	B	
2	Geary Blvd / Park Presidio Ave	22.9	C		26.8	C	
3	Geary Blvd / Masonic Ave	38.2	D		41.8	D	
4	Geary Blvd / Gough St	22.8	C		38.0	D	
5	Geary Blvd / Franklin St	20.6	C		47.1	D	
6	Geary Blvd / Van Ness Ave	35.9	D		67.2	E	
7	Lombard St / Richardson Ave	45.1	D		61.5	E	
8	Lombard St / Van Ness Ave	22.7	C		23.5	C	
9	Stockton St / Broadway	16.0	B		15.7	B	
10	The Embarcadero / Broadway	53.5	D		>80.0	F	0.768
11	The Embarcadero / Washington St	42.5	D		69.1	E	
12	The Embarcadero / Harrison St	24.2	C		55.0	E	
13	1st St / Market St	67.7	E		>80.0	F	0.750
14	1st St / Mission St	>80.0	F	1.253	>80.0	F	1.307
15	1st St / Harrison St	>80.0	F	1.204	>80.0	F	1.403
16	2nd St / Folsom St	44.7	D		>80.0	F	1.558
17	2nd St / Bryant St	60.3	E		>80.0	F	1.451
18	3rd St / King St	43.7	D		>80.0	F	1.178
19	4th St / King St	35.0	D		57.3	E	
20	4th St / Harrison St	63.2	E		67.4	E	
21	4th St / Bryant St	20.9	C		23.8	C	
22	6th St / Market St	29.1	C		60.2	E	
23	6th St / Mission St	46.0	D		>80.0	F	1.231
24	6th St / Brannan St	>80	F	1.263	>80.0	F	1.418
25	Market St / Van Ness Ave	21.8	C		54.9	D	
26	Mission St / South Van Ness Ave	70.3	E		>80.0	F	0.940
27	10th St / Brannan St / Potrero St / Division St	72.0	E		>80.0	F	1.264
28	9th St / Market St	15.1	B		17.9	B	
29	10th St / Howard St	18.9	B		24.9	C	
30	16th St / Mission St	30.8	C		34.7	C	
31	16th St / Potrero St	19.5	B		>80.0	F	1.722
32	16th St / 3 rd St	35.8	D		37.3	D	
33	Market St / Octavia St	41.9	D		>80.0	F	1.273
34	Market St / Guerrero St / Laguna St	40.1	D		45.1	D	

Table V.F-1

P.M. Peak Hour Intersection LOS – Existing Conditions and Cumulative (2025) Conditions

ID	Intersection	Existing Conditions			Cumulative (2025) Conditions		
		P.M. Peak			P.M. Peak		
		Delay	LOS	V/C	Delay	LOS	V/C
35	Mission St / Otis St / Division St	65.2	E		70.8	E	
36	Fell St / Divisadero St	20.1	C		25.4	C	
37	15th St / Market St / Sanchez St	47.9	D		56.5	E	
38	Fulton St / Stanyan St	47.8	D		70.3	E	
39	Lincoln Way / 19th Ave	>80	F	1.243	>80.0	F	1.229
40	Taraval St / 19th Ave	18.3	B		21.8	C	
41	Sloat Blvd / 19th Ave	>80	F	1.346	>80.0	F	1.411
42	Winston Dr / 19th Ave	62.7	E		>80.0	F	1.373
43	Junipero Serra Blvd / 19th Ave	75.9	E		>80.0	F	1.269
44	Junipero Serra Blvd / Ocean Ave	40.4	D		59.0	E	
45	Phelan Ave / Ocean Ave / Geneva St	17.6	B		34.7	C	
46	Lake Merced Blvd / Brotherhood Way	49.2	D		>80.0	F	1.158
47	Mission St / Geneva St	28.9	C		33.9	C	
48	Mission St / Silver Ave	15.7	B		20.9	C	
49	Mission Street / Ocean Ave	8.2	A		8.9	A	
50	Sunnydale Ave / Bayshore Blvd	23.6	C		>80.0	F	1.523
51	Gilman St / Paul Ave / 3rd St	23.9	C		33.3	C	
52	Industrial St / Bayshore Blvd / Alemany Blvd	51.2	D		>80.0	F	1.150
53	3rd St / Palou Ave	30.1	C		57.1	E	0.713
54	3rd St / Evans Ave	35.7	D		>80.0	F	1.309
55	3rd St / Cesar Chavez St	27.6	C		>80.0	F	0.951
56	Evans Ave / Cesar Chavez St	47.4	D		>80.0	F	1.365
57	Bryant St / Cesar Chavez St	51.4	D		>80.0	F	1.474
58	Mission St / Cesar Chavez St	27.7	C		64.9	E	
59	Mission St / 24th St	28.0	C		36.3	D	
60	San Jose Ave / Randall St	25.8	C		52.9	D	

Note: Delay = Overall average control delay in seconds per vehicle; V/C = overall volume to capacity ratio; LOS = overall level of service

The LOS results for Cumulative 2025 Conditions reveal several traffic operational trends along a number of corridors in San Francisco:

- Existing Embarcadero corridor service levels will deteriorate from acceptable levels under Existing Conditions to unacceptable levels (LOS E/F) under Cumulative 2025 Conditions;

- Current Sixth Street corridor service levels will deteriorate from acceptable to unacceptable conditions in 2025, and the Sixth/Brannan intersection in particular would remain at unacceptable service levels;
- Additional SOMA intersections are expected to deteriorate from currently acceptable to unacceptable service levels in 2025, including the 1st / Harrison, 4th / King, and 6th / Mission intersections;
- 19th Avenue corridor intersections currently operating unacceptably at LOS E and LOS F would deteriorate to a worse LOS F condition in 2025;
- Junipero Serra corridor intersections operating at LOS D (acceptable) and LOS E (unacceptable) would worsen to LOS E or F in 2025; and
- Key intersections on the Cesar Chavez Street, Market Street, Bayshore Boulevard, and Third Avenue corridors currently operating acceptably would deteriorate to LOS E or F in 2025.

It should be noted that although the above corridors and intersections are expected to deteriorate in traffic operations in 2025, the degraded service levels are expected due to proposed development and expected growth trends. The proposed Housing Elements are not expected to result in additional growth beyond the projected amount reflected in the cumulative analysis. Furthermore, several neighborhood-wide and development-specific transportation studies have been conducted, through the Better Neighborhoods and other area planning efforts, that have already identified the above deficient roadway corridors, and proposed appropriate mitigations to address the respective projects' impact. Under 2025 Cumulative Conditions, traffic volumes are projected to substantially increase throughout the City, resulting in noticeable increases in the average delays per vehicle at many of the study intersections. It is recognized that under 2025 Cumulative Conditions, 37 of the study intersections are anticipated to operate at unacceptable levels. While the proposed projects are not trip generating and the 37 identified intersection are expected to operate at unacceptable level of service irrespective of whether the proposed projects are approved, a number of steps could be taken to address vehicular congestion at these locations.

As conditions warrant, SFMTA could implement changes to the study intersections in order to reduce congestion. Measures that could potentially improve traffic operations to acceptable levels include:

- Adding traffic lanes by eliminating on-street parking;
- Restriping and reconstructing medians;
- Modifying traffic signal timing or extending traffic signal cycle length to improve traffic operations;
- Geometric changes (e.g., changing shared lanes to exclusive turn lanes, providing exclusive right turn or left-turn pockets); and

- Implementation of on-street parking restriction during peak periods to provide for additional vehicular capacity.

These measures are not currently programmed by SFMTA. Feasibility studies would be required prior to actual implementation of the potential improvement measures. As appropriate and feasible, the SFMTA would implement these measures if and when conditions warrant.

Furthermore, several previous transportation studies have been conducted for specific neighborhood areas in San Francisco. As a result of these previous studies, mitigation measures have been identified and adopted as part of those projects.⁷

The following measures have been identified in the Eastern Neighborhoods Rezoning and Area Plan:

- #18 Third Street / King Street: The intersection is expected to operate unsatisfactorily at a LOS F, with a V/C ratio of 1.18. To improve intersection operation, additional northbound, eastbound and westbound capacity would need to be provided. Improvements associated with the Mission Bay development have been implemented at this intersection, though additional right-of-way is not available to provide additional capacity. Since it is not known if these improvements are feasible, thus further evaluation will be conducted when conditions warrant.
- #35 Mission Street / Otis Street / Division Street: The intersection would operate unsatisfactorily at a LOS E, with 70.8 seconds of average delay. This intersection serves traffic destined to and from the U.S. 101 ramps at South Van Ness. To improve the Cumulative 2025 Conditions at this intersection, additional northbound and westbound capacity would need to be provided. It is not known if widening is feasible, thus further evaluation will be conducted when conditions warrant.

The following measures have been identified in the Market and Octavia Area Plan:

- #26 Mission / Otis / South Van Ness: The intersection is expected to operate unsatisfactorily at a LOS F, with a V/C ratio of 0.94. The following improvement measures do not bring the operating LOS to satisfactory levels, but reduce the average delay at this intersection.

It may be possible to add right turn pockets to the southbound approach on Mission Street and the northbound approach on South Van Ness Avenue. In addition, minor changes to the signal timing at the intersection to allow more time for impacted movements would improve intersection conditions. Implementation of signal timing changes would be dependent upon an assessment of transit and traffic coordination along Van Ness Avenue and Mission Street to ensure that the changes would not substantially affect Muni bus operations, signal progressions, pedestrian minimum green timing requirements, and programming limitations of signals. Since it is not

⁷ The *San Francisco General Plan Housing Element Final Transportation Impact Study* (Appendix F) lists the transportation study sources for the mitigations described.

known if signal timing changes are feasible, further evaluation would be conducted when conditions warrant.

- #37 Market / Sanchez / 15th: The intersection is expected to operate unsatisfactorily at a LOS E, with 56.5 seconds of average delay. The following improvement measure was identified to improve cumulative operating conditions at this intersection.

It may be possible to add a right turn pocket to the westbound approach on 15th Street. With this change, the level of service would improve to LOS D. In addition, minor changes to the signal timing at the intersection to allow more time for impacted movements may improve intersection conditions. Implementation of signal timing changes would be dependent upon an assessment of transit and traffic coordination along Market Street to ensure that the changes would not substantially affect Muni bus operations, signal progressions, pedestrian minimum green timing requirements, and programming limitations of signals. Since it is not known if signal timing changes are feasible, further evaluation will be conducted when conditions warrant.

The following measure has been identified in the Balboa Park Area Plan:

- #44 Ocean Avenue / Junipero Serra Boulevard: The intersection would operate unsatisfactorily at a LOS E, with 59.0 seconds of average delay. The following improvement measure was identified to improve cumulative operating conditions at this intersection:

Extend the cycle length by 15 seconds (from 90 to 105 seconds), with the additional green time provided to the eastbound and westbound approaches. With this change, the intersection operations would improve to LOS D with an average delay of 42.5 seconds. Since it is not known if signal timing changes are feasible, further evaluation will be conducted when conditions warrant.

The following measure has been identified in the Visitacion Valley Redevelopment Plan:

- #50 Bayshore Boulevard / Sunnysdale Avenue: The intersection would operate unsatisfactorily at a LOS F, with a V/C ratio of 1.52. No feasible improvement measures were identified for this intersection, but planned infrastructure improvements may alleviate this intersection's congestion.

There are three regional roadway improvements planned, including an extension of Geneva Avenue from its current terminus at Bayshore Boulevard to a new interchange with US 101; a new US 101 interchange at Geneva Avenue / Harney Way; and widening of Harney Way between US 101 and Jamestown Avenue. These improvements are expected to change the traffic patterns significantly at this intersection, and bring the operation condition from LOS F to LOS D.

The analysis of 2025 Cumulative conditions shows that a number of key intersections are expected to operate at unacceptable Level of Service. In addition to the specific measures identified above to improve the operating conditions at these intersections, as previously discussed, the City has developed a number

of plans and programs that aim to reduce the overall level of congestion citywide. Generally, these plans and programs are designed to make alternative modes of transportation more attractive, such that there would be a mode shift from single-occupancy vehicles to transit, biking and walking.

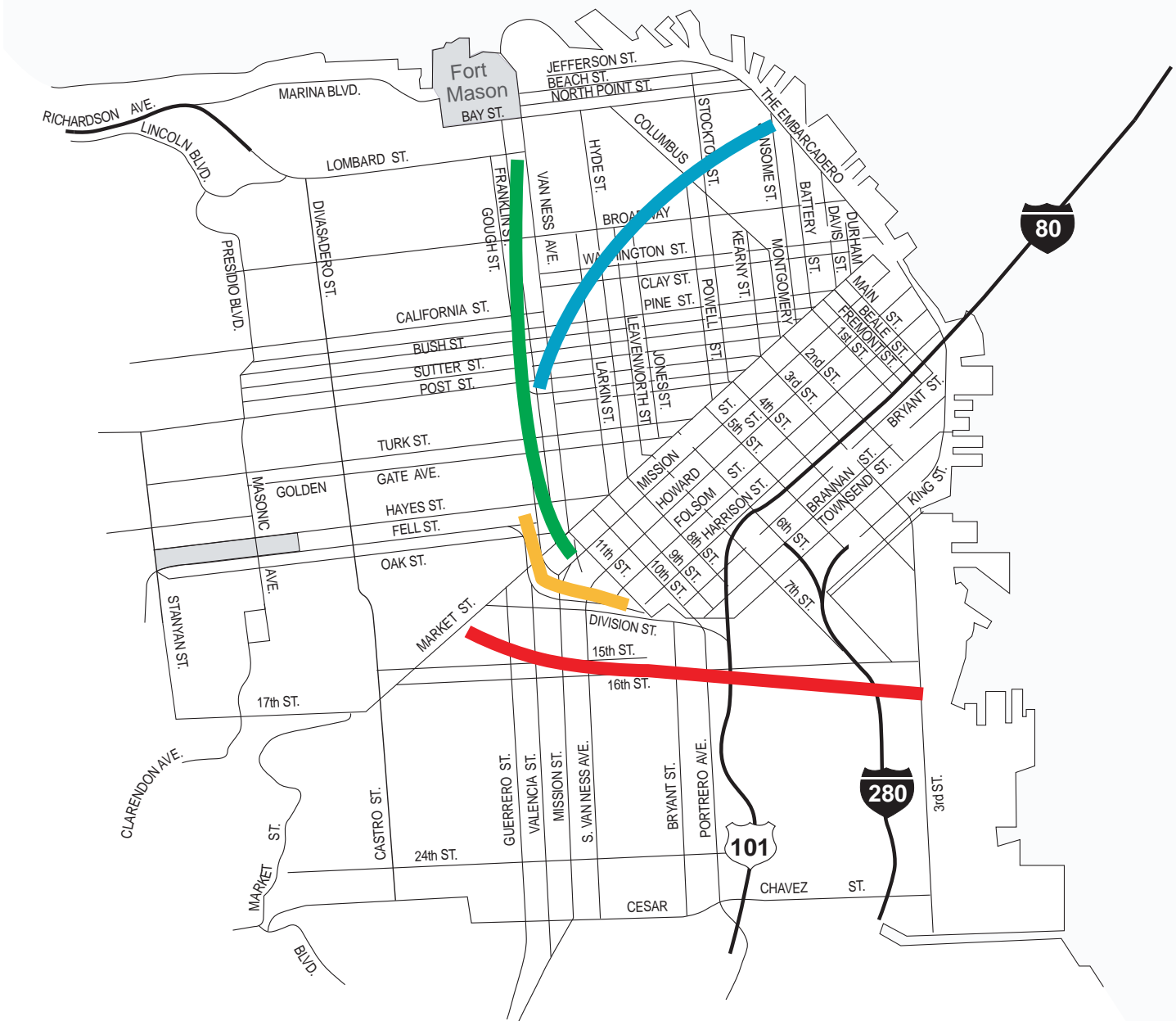
Local Transit Network Conditions

This subsection presents existing local Muni transit conditions and a local Muni transit screenline analysis for future 2025 Cumulative Conditions. Existing and future 2025 Cumulative Conditions of Muni service were analyzed in terms of a series of screenlines. The concept of screenlines is used to describe the magnitude of travel to or from the greater Downtown area by corridors, and to compare estimated transit volumes to available capacities. Screenlines are hypothetical lines that would be crossed by persons traveling between Downtown and other parts of San Francisco and the region. The screenline data were updated in 2009 using information from the ongoing Transit Effectiveness Project (TEP). Figure V.F-8 shows the four Muni screenlines surrounding the greater Downtown area.

Existing transit conditions are described in terms of available routes, transit ridership and capacity at the screenlines for Muni and regional transit carriers. A public transit screenline analysis was performed on key Muni routes and regional transit carriers for 2025 Cumulative Conditions.

Existing Muni Screenline Analysis

Four screenlines (Northeast, Northwest, Southeast, and Southwest) have been established to evaluate Muni operations into and out of the greater Downtown area, roughly corresponding to Superdistricts 1, 2, 3, and 4, respectively. Each screenline is further divided into key corridors such as the Geary Corridor within the Northwest screenline and the Mission Corridor within the Southwest screenline, for which ridership and capacity are presented separately from other lines. Together, the lines included in the screenline analysis represent the primary commute lines into and out of the greater Downtown area. In contrast, “policy” lines (lines with headways greater than ten minutes) or lines which pass through Downtown but do not attract a significant number of Downtown riders are generally excluded from the analysis. For the purposes of this analysis, screenline calculations consider only inbound service (towards Downtown) during the weekday a.m. peak hour and outbound service (from Downtown) during the weekday p.m. peak hour, as these are the primary commute directions for the greater Downtown area. Table V.F-2 shows the Muni peak period screenline groupings described above.



LEGEND	
	Southeast
	Northeast
	Southwest
	Northwest

Source: TJKM Transportation Consultants, June 2010.



Not to Scale

Figure V.F-8
Muni Screenlines

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**Table V.F-2
Muni Peak Period Screenline Groupings**

Screenline / Corridor	Transit Lines			
Northeast Screenline				
Kearny / Stockton	20	Columbus	9X	Bayshore Express
	30	Stockton		
	45	Union-Stockton		
Other	F	Market & Wharves		
	10	Townsend		
	41	Union		
Northwest Screenline				
Geary	38	Geary	38AX	Geary A Express
	38L	Geary Limited	38BX	Geary B Express
California	1	California	1AX	California A Express
			1BX	California B Express
Sutter / Clement	2	Clement		
	3	Jackson		
	4	Sutter		
Fulton / Hayes	5	Fulton		
	21	Hayes		
Balboa	31	Balboa	31AX	Balboa A Express
			31BX	Balboa B Express
Chestnut / Union	30	Stockton	30X	Marina Express
	41	Union		
	45	Union-Stockton		
Southeast Screenline				
Third	T	Third Street		
Mission	14	Mission	14X	Mission Express
			14 L	Mission Limited
	49	Van Ness-Mission		
San Bruno / Bayshore	9	San Bruno	9X	Bayshore Express
			9AX	Bayshore A Express
			9BX	Bayshore B Express
Other	J	Church		
	12	Folsom		
	19	Polk		
Southwest Screenline				
Subway	K	Ingleside		
	L	Taraval		
	M	Ocean View		
	N	Judah		
Haight / Noriega	6	Parnassus	16AX	Noriega A Express
	7	Haight	16BX	Noriega B Express
	71	Haight-Noriega		
	71L	Haight-Noriega Limited		

**Table V.F-2
Muni Peak Period Screenline Groupings**

Screenline / Corridor	Transit Lines		
Other	F	Market & Wharves	
<i>Source: San Francisco General Plan Housing Element Final Transportation Impact Study, TJKM Transportation Consultants, April 16, 2010. Original Source: Muni, 2008; AECOM, 2009.</i>			

The points of measurement for the screenline analysis does not actually follow the alignments schematically shown in the Figure V.F-8; rather, the screenline for each route reflects the maximum load point (MLP) for the Muni lines that cross one of the screenlines. The MLP is the point along the Muni route at which the bus or light rail vehicle is at its highest passenger load. The MLP for each individual line may occur at some point on either side of the schematic lines drawn for graphic representation. For the purpose of this analysis, Muni ridership measured at the four San Francisco screenlines and sub-corridors represents the peak direction of travel and patronage loads for the Muni system. Table V.F-3 shows the existing and future 2025 Cumulative utilization at the Muni screenlines during the p.m. peak hour. All screenlines operate within the 85 percent capacity utilization standard. However, it should be noted that under Existing Conditions in the Southwest screenline, the subway corridor operates above the capacity utilization standard at 87 percent.

Available space on each Muni line can be determined using the concept of capacity utilization, which relates the number of passengers per transit vehicle to the design capacity of the vehicle. The design capacity is based on Muni's maximum load standard for each size of vehicle. The capacity includes seated passengers and an appreciable number of standing passengers per vehicle (the number of standing passengers is between approximately 30 and 80 percent of the seated passengers, depending upon the specific transit vehicle configuration). A capacity utilization standard of 85 percent is considered the threshold for a significant transit impact.

Muni capacity standards include standing passengers, and therefore Muni screenlines and sub-corridors at or near capacity operate under noticeably crowded conditions with many standees. Each screenline and most sub-corridors include several Muni lines with multiple transit vehicles from each line. As a result, some transit vehicles operate at or above capacity and are extremely crowded during the p.m. peak hour while others operate under less crowded conditions. The extent of crowding is accentuated whenever targeted headways are not met either because of missed runs and/or bunching in service. Thus, transit operators may experience substantial problems in service delivery well short of established service capacity standards.

Cumulative 2025 Muni Screenline Analysis

Table V.F-3 shows the results of an analysis of Muni screenlines under the existing and future 2025 Cumulative Conditions during the p.m. peak hour.

As shown in the Muni screenline analysis under Existing Conditions, some of the existing Muni corridors operate near capacity. Under future 2025 Cumulative Conditions, none of the Muni corridors would operate

above Muni's capacity utilization standard of 85 percent. Under 2025 Cumulative Conditions, the California corridor in the Northwest screenline would operate near the capacity utilization standard, as would the subway corridor in the Southwest screenline.

Table V.F-3
Muni Screenline Analysis – Existing vs. Cumulative (2025) P.M. Peak Hour Conditions

Screenline / Corridor	Existing Conditions			Cumulative (2025) Conditions		
	Ridership	Capacity	Capacity Utilization	Ridership	Capacity	Capacity Utilization
Northeast Screenline						
Kearny / Stockton	1,129	2,010	56%	1,207	2,634	46%
Other	757	1,589	48%	1,256	2,065	61%
Subtotal	1,886	3,599	52%	2,463	4,699	52%
Northwest Screenline						
Geary	1,684	2,230	76%	1,914	2,700	71%
California	1,413	2,050	69%	1,722	2,050	84%
Sutter / Clement	565	1,008	56%	652	945	69%
Fulton / Hayes	861	1,260	68%	948	1,638	58%
Balboa	615	1,247	49%	567	1,326	43%
Chestnut / Union	1,483	2,328	64%	1,422	2,953	48%
Subtotal	6,621	10,123	65%	7,225	11,612	62%
Southeast Screenline						
Third	554	714	78%	2,107	2,856	74%
Mission	1,254	2,350	53%	1,342	2,256	60%
San Bruno / Bayshore	1,671	2,256	74%	2,184	3,008	73%
Other	1,189	1,708	70%	1,464	1,820	80%
Subtotal	4,668	7,028	66%	7,097	9,940	71%
Southwest Screenline						
Subway	5,883	6,783	87%	6,523	7,973	82%
Haight / Noriega	1,247	2,140	58%	1,230	1,890	65%
Other	304	700	43%	303	840	36%
Subtotal	7,434	9,623	77%	8,056	10,703	75%
Total All Screenlines	20,609	30,373	68%	24,841	36,954	67%
<p>Source: San Francisco General Plan Housing Element Final Transportation Impact Study, TJKM Transportation Consultants, June 2010. Original Source: Muni, 2008; AECOM, 2009.</p> <p>Notes: Capacity = design capacity x number of scheduled bus trips.</p> <p>Capacity Utilization = passenger demand / capacity. It should be noted that Muni uses a capacity utilization service standard of 0.85, which includes a substantial number of standees (between 30 to 80 percent) and that each screenline and most sub-corridors include more than one line. Therefore, there may be individual lines within a screenline that operate at or above 100 percent with extreme crowding even if the average capacity utilization for an entire screenline is less than 100 percent.</p>						

Regional Transit Network Conditions

The following presents the existing regional transit conditions and a screenline analysis of future 2025 Cumulative regional transit conditions.

Existing Regional Screenline Analysis

Three regional screenlines (East Bay, North Bay, and South Bay) were established to evaluate the regional transit operations into and out of the greater Downtown area. Each screenline is subdivided by transit operator (or mode, where appropriate), with ridership and capacity presented for each. Screenline calculations only consider the outbound service (from Downtown) during the weekday p.m. peak hour, since this is the primary commute direction. Available information on vehicle ridership data was combined with the vehicle capacities and service frequencies of the regional transit operators to obtain the operator capacity utilization. With the exception of BART, all regional transit operators including ferries have a one-hour capacity utilization standard of 100 percent, meaning a fully seated load on each vehicle. Passengers are not expected to stand since regional transit trips are typically long distance. BART, on the other hand, has a one-hour capacity utilization standard of 135 percent, meaning a full-seated load and an additional 35 percent of the seated load as standees, or 1.35 passengers per seat. The operators and their capacity and ridership information were grouped into the appropriate screenlines to obtain screenline capacity utilization. The resulting regional peak hour screenline operations are summarized in Table V.F-4.

As shown in Table V.F-4, regional transit services generally operate below capacity under Existing Conditions. Capacity utilization is highest on the East Bay screenline during the existing p.m. peak hours. During the p.m. peak hours, BART operates at 120 percent capacity utilization for the East Bay service, but under 100 percent capacity utilization for the South Bay service. Both services operate under its one-hour capacity utilization standard of 135 percent.

Cumulative 2025 Regional Screenline Analysis

Similar to Existing Conditions, regional screenline data were analyzed in terms of the regional transit operations into and out of the greater Downtown area. Three screenlines (East Bay, North Bay, and South Bay) were established to evaluate the regional transit operations into and out of the greater Downtown area. Table V.F-4 shows the results of the regional transit screenline analysis for Existing and Cumulative 2025 Conditions.

**Table V.F-4
Regional Screenline Analysis – Existing vs. Cumulative (2025) P.M. Peak Hour Conditions**

Screenline / Operator	Existing Conditions			2025 Cumulative Conditions		
	Ridership	Capacity	Capacity Utilization	Ridership	Capacity	Capacity Utilization
East Bay						
BART	16,985	14,140	120%	26,404	19,600	135%
AC Transit	2,517	4,193	60%	3,913	6,600	59%
Ferries	702	1,519	46%	1,753	2,719	64%
Subtotal	20,204	19,852	102%	32,070	28,919	111%
North Bay						
GGT Bus	1,397	2,205	63%	2,205	2,205	100%
Ferries	906	1,700	53%	1,430	1,700	84%
Subtotal	2,303	3,905	59%	3,635	3,905	93%
South Bay						
BART	9,545	10,360	92%	9,908	14,000	71%
Caltrain	1,986	3,250	61%	3,463	6,400	54%
SamTrans	575	940	61%	439	940	47%
Ferries	- ¹	- ¹	- ¹	73	300	24%
Subtotal	12,106	14,550	83%	13,883	21,640	64%
Total All Screenlines	34,613	38,307	90%	49,588	54,464	91%
Source: San Francisco General Plan Housing Element Final Transportation Impact Study, TJKM Transportation Consultants, June 2010.						
Note: ¹ There is no South Bay ferry service under Existing Conditions. Under 2025 Cumulative Conditions, ferry service will be added that connects South San Francisco to San Francisco.						

As shown in Table V.F-4, regional transit services are generally expected to operate below capacity in 2025. Capacity utilization is expected to be highest on the East Bay screenline during the p.m. peak hours, with BART expected to operate at 135 percent capacity utilization for the East Bay service during the p.m. peak hours. However, capacity utilization is expected to be at or under 100 percent for the South Bay and North Bay service. Both services are expected to operate at or below its one-hour capacity utilization standard of 135 percent.

Pedestrian and Bicycle Conditions

As the city continues to grow, the transportation network would absorb additional pedestrian and bicycle trips. These trips are expected to occur irrespective of whether the proposed projects are adopted. As discussed previously, the city has recently adopted the *San Francisco bicycle plan*, which will add new bicycle lanes and bicycle parking throughout the city. The bicycle plan is expected to increase convenience and safety for cyclists. Furthermore, the city is proposing to implement the *better streets plan*, which aims to improve pedestrian safety and convenience citywide through enhanced sidewalks, crosswalks, and other pedestrian amenities. Given the above plans, the new pedestrian and bicycle trips could be accommodated within the transportation network and would not substantially overcrowd public sidewalks or create potentially hazardous conditions.

REGULATORY SETTING

Federal/State

No federal plans, policies, regulations or laws related to transportation and circulation are applicable to the proposed Housing Elements.

Local

Regional Transportation Plan

Created by the state legislature in 1970 (California Government Code § 66500 et seq.), the Metropolitan Transportation Commission (MTC) is the transportation planning, coordinating and financing agency for the nine-county San Francisco Bay Area. MTC functions as both the regional transportation planning agency – a state designation – and for federal purposes, as the region's metropolitan planning organization (MPO). As such, it is responsible for regularly updating the Regional Transportation Plan, a comprehensive blueprint for the development of mass transit, highway, airport, seaport, railroad, bicycle and pedestrian facilities. Adopted in February 2005, the most recent edition of this long-range plan, known as Transportation 2030, charts a new course for the agency, particularly with regard to promoting “smart growth” development patterns.

San Francisco Countywide Transportation Plan

Pursuant to state law, in 1990, the San Francisco County Transportation Authority was designated the Congestion Management Agency for San Francisco. The Transportation Authority is responsible for setting transportation investment priorities for the City, developing and maintaining a computerized travel demand forecasting model and related databases, and programming state and federal funds for local transportation projects. The Authority is also responsible for preparing a long-range Countywide Transportation Plan. The Countywide Transportation Plan, adopted in July 2004 is the city's blueprint to guide transportation system development and investment over the next thirty years. The Plan is consistent

with the broader policy framework of San Francisco's General Plan and particularly its Transportation Element. The Countywide Transportation Plan further develops and implements General Plan principles by identifying needed transportation system improvements.

San Francisco General Plan

Transportation issues within the project site are guided by the Transportation Element of the San Francisco General Plan. The Transportation Element is composed of several sections, each of which deals with an important component of the local and regional transportation system. The plan sections are (1) General, (2) Regional Transportation, (3) Congestion Management, (4) Vehicle Circulation, (5) Transit, (6) Pedestrians, (7) Bicycles, (8) Citywide Parking and (9) Goods Movement. Each consists of objectives and policies regarding a particular segment of the master transportation system and related maps which describe key physical aspects.

San Francisco Municipal Code

The Transportation Code of the San Francisco Municipal Code contains provisions for traffic control devices, operation of vehicles, and trip reduction.

San Francisco Bicycle Plan

The 1997 Bicycle Plan was recently updated with the overall goal of increasing and encouraging bicycle transportation and bicycle safety within the City. The Bicycle Plan has identified the gaps in bicycle network within the City and recommends a comprehensive bicycle route network that would offer direct connections to City's entire neighborhood. The plan has identified 60 near-term bicycle improvement projects. In June 2009, the Bicycle Plan was approved by the Planning Commission and SFMTA Board of Directors.

Better Streets Plan

The Better Streets Plan consists of a comprehensive set of guidelines to make San Francisco streets more useable, attractive and accessible, to make them safer and more welcoming to pedestrians, to improve their ecological functioning, and to make them a more central point of civic life.

Transit First Policy

In 1998, the San Francisco voters amended the City Charter (section 16.102) to include a Transit-First Policy. The Transit-First Policy is a set of principles which underscore the City's commitment that travel by transit, bicycle, and foot be given priority over the private automobile. These principles are embodied in the policies and objectives of the Transportation Element. All City boards, commissions, and departments are required, by law, to implement transit-first principles in conducting City affairs.

IMPACTS

Significance Thresholds

The proposed Housing Elements would have a significant effect on the environment if they would:

- Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit;
- Conflict with an applicable congestion management program, including but not limited to level of service standards and travel demand measures, established by the county congestion management agency for designated roads or highways;
- Result in a change in air traffic patterns, including either an increase in traffic levels, obstructions to flight, or a change in location, that results in substantial safety risks;
- Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses;
- Result in inadequate emergency access; or
- Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities, or cause a substantial increase in transit demand which cannot be accommodated by existing or proposed transit capacity or alternative travel modes.

Significance Criteria

Although the proposed Housing Elements would not directly generate any new trips, the City of San Francisco Planning Department criteria of significance are presented below:

Traffic: The operational impacts on signalized intersections are considered significant when project-related traffic causes the intersection level of service to deteriorate from LOS D or better to LOS E or LOS F, or from LOS E to LOS F. The project may result in significant adverse impacts at intersections that operate at LOS E or LOS F under Existing Conditions depending upon the magnitude of the project's contribution to worsening the average delay. In addition, the project would have a significant adverse impact if it would cause major traffic hazards, or would contribute considerably to the cumulative traffic increases that would cause the deterioration in levels of service to unacceptable levels.

Transit: The project would have a significant impact on the environment if it would cause a substantial increase in transit demand that could not be accommodated by adjacent transit capacity, resulting in

unacceptable levels of transit service; or cause a substantial increase in operating delay or operating costs such that significant adverse impacts in transit service levels could result. With the Muni and regional transit screenlines analyses, the project would have a significant effect on the transit provider if project-related transit trips would cause the capacity utilization standard to be exceeded during the p.m. peak hour.

Pedestrian: The project would have a significant effect on the environment if it would result in substantial overcrowding on public sidewalks, create potentially hazardous conditions for pedestrians, or otherwise interfere with pedestrian accessibility to the site and adjoining areas.

Bicycle: The project would have a significant effect on the environment if it would create potentially hazardous conditions for bicyclists or otherwise substantially interfere with bicycle accessibility to the site and adjoining areas.

Loading: The project would have a significant effect on the environment if it would result in a loading demand during the peak hour of loading activities that could not be accommodated within the proposed on-site loading facilities or within convenient on-street loading zones, and if it would create potentially hazardous traffic conditions or significant delays affecting traffic, transit, bicycles or pedestrians.

Emergency Vehicle: The project would have a significant impact on the environment if it would hinder emergency vehicle access.

Construction: Construction-related impacts generally would not be considered significant due to their temporary and limited duration.

Analytic Method

The following describes the analytic method applied in the analysis of the 2004 and 2009 Housing Elements.

Trip Generation

As discussed above, the Housing Elements policies do not directly propose to develop new housing. Therefore, the 2004 and 2009 Housing Elements would not generate any new person trips. Residential growth within the City would occur regardless of the proposed Housing Elements; the Housing Elements would provide direction for how new residential development in the City should occur, with an emphasis on affordability.

Any new development within the City would be subject, on a project-by-project basis, to independent environmental review pursuant to the California Environmental Quality Act (CEQA). This analysis would present the site-specific effects of proposed development projects on the City's transportation network. While the 2004 and 2009 Housing Element policies would not generate any new trips, their effects can be generally categorized into three areas: 1) directing growth to particular locations within the City, such as neighborhood commercial areas, areas near transit, and former industrial areas; 2) addressing the

provision of off-street vehicle parking for new developments through reduced parking requirements and other measures, and 3) directing increased residential density to certain locations within the City. These indirect effects are evaluated qualitatively in this EIR.

Trip Distribution

As part of this EIR, the Planning Department has identified and analyzed 60 intersections that experience the most congestion or represent constrained nodes in the citywide transportation network. Although the Housing Elements would not generate new trips, as discussed above, the Housing Elements do contain policies that direct growth to certain areas of the City and include policies intended to encourage a modal shift to transit, bicycling, and walking. This EIR qualitatively analyzes the potential for the 2004 and 2009 Housing Elements to affect the distribution of projected person trips among the City's transportation network.

Parking Demand

With regards to parking, the 2004 and 2009 Housing Elements propose policies that promote an overall reduction in parking for new development, either through reduced parking requirements, or encouraging housing in locations where alternative methods of transportation are available. The 2004 Housing Element promotes reduced parking primarily by exemptions from parking requirements (for example, 2004 Housing Element Policies 4.4 and 11.7). The 2009 Housing Element promotes reduced parking by advocating against reducing livable space for parking and promoting housing in locations with available alternative transportation, thereby reducing the need for parking (2009 Housing Element Policies 2.3 and 13.3).

The 2004 and 2009 Housing Elements also promote increased density in certain areas of the City. (See 2004 Housing Element Policies 1.7, 11.6, and 11.9 and Implementation Measures 1.7.1, 1.7.3, 1.8.4, 4.4.1, 4.5.1, 4.6.3, 11.7.1, and 11.8.1; and 2009 Housing Element Policies 1.4, 1.5, 1.6, 7.5, and 11.4). Increased density in certain areas throughout the City could result in potentially larger developments, which combined with reduced parking, could increase the on-street parking demand in localized areas. On the other hand, increased density, particularly when located near areas rich in transit, bicycle, and pedestrian facilities, generally produce lower vehicle ownership rates and therefore, generate less parking demand than would otherwise occur for the same amount of housing provided in less dense settings throughout the City. It should be noted that recently updated area plans in the neighborhoods of Market/Octavia, Mission, East South of Market (SOMA), Showplace Square/Potrero Hill, Central Waterfront, and Balboa Park contain detailed parking demand analyses for these specific areas.

Pedestrian and Bicycle Facilities

As discussed above, the effects of the 2004 and 2009 Housing Element policies can be generally categorized into three areas: 1) directing growth to particular locations within the City, such as neighborhood commercial areas, areas near transit, and former industrial areas; 2) addressing the provision of off-street vehicle parking for new developments through reduced parking requirements and other measures, and 3) directing increased residential density to certain locations within the City. The

indirect effects of the Housing Element policies on pedestrian and bicycle facilities are analyzed qualitatively in this EIR.

Impact Evaluation

With respect to the effects of the 2004 and 2009 Housing Elements on the transportation and circulation network, the housing element policies generally fall within three major categories as follows:

1. Policies that direct growth to particular locations in the City, including neighborhood commercial districts, transit rich areas, Downtown, former industrial lands, mixed use areas, and Brownfields;
2. Policies that address the provision of off-street vehicle parking for new developments, such as reduced parking requirements; and
3. Policies that are related to increases in residential density.

Below are examples of the 2004 Housing Element policies that relate to each of these three areas:

1. Directing Growth: 2004 HE Policy 1.3: Identify opportunities for housing and mixed-use districts near Downtown and former industrial portions of the City.
2. Parking: 2004 HE Implementation Measure (IM) 11.7.1 - The Planning Department will work to reduce parking requirements in older neighborhoods and in other areas through a Better Neighborhoods type planning process with the support and input from local neighborhoods.
3. Residential Density: Implementation Measure (IM) 1.1.1 – A Citywide Action Plan (CAP) should provide a comprehensive framework for the allocation of higher density, mixed-use residential development in transit-rich areas with stable urban amenities in place. In these areas, specific CAP strategies should include: higher densities and reduced parking requirements in Downtown areas or through a Better Neighborhoods type planning process; pedestrian-oriented improvements to enhance the attractiveness and use of transit.

Below are examples of the 2009 policies that relate to each of the three areas identified above:

1. Directing Growth: 2009 Housing Element Policy 12.1 – Encourage new housing that relies on transit use and environmentally sustainable mode choices.
2. Parking: 2009 Housing Element Policy 2.3 – Prevent the destruction or reduction of housing for parking.
3. Residential Density: 2009 Housing Element Policy 1.6- Consider greater flexibility in the number and size of units within established building envelopes in community plan areas, especially if it can increase the number of affordable units in multi-family structures.

While this EIR classifies the policies into three separate categories to facilitate the transportation analysis, it is important to note that a number of policies and implementation measures are related to two or three of the above categories. For example, 2004 Housing Element *Implementation Measure 11.7.1 – The Planning Department will work to reduce parking requirements in older neighborhoods and in other areas through a Better Neighborhoods type planning process with the support and input from local neighborhoods*, is a parking-related strategy in the housing element but is also a residential density-related strategy because a reduced parking requirement would allow for more area to be devoted to residential uses and could result in an increase in the number of residential units than could otherwise be constructed.

Impact TR-1: The proposed Housing Elements would not result in significant impacts related to traffic, pedestrians, bicycles, loading, emergency access, or construction areas. (Less than Significant)
The proposed Housing Elements would result in a significant transit impact. (Significant and Unavoidable)

2004 Housing Element Analysis

The following provides a comparison of 2004 Housing Element objectives, policies, and implementation measures and comparable 1990 Residence Element objectives and policies categorized by: 1) policies related to directing growth to specific areas of the City; 2) Policies related to parking; and 3) policies related to residential density.

Impact	2004 Housing Element	Corresponding 1990 Residence Element Policy
Direct growth to certain areas of the City.	Policy 1.1: Encourage higher residential density in areas adjacent to Downtown, in underutilized commercial and industrial areas proposed for conversion to housing and in neighborhood commercial districts where higher density will not have harmful effects, especially if the higher density provides a significant number of units that are affordable to lower income households. Set allowable densities in established residential areas at levels which will promote compatibility with prevailing neighborhood scale and character where there is neighborhood support.	Policy 2.1: Set allowable densities in established residential areas at levels which will promote compatibility with prevailing neighborhood character. Policy 2.2: Encourage higher residential density in areas adjacent to Downtown, in underutilized commercial and industrial areas proposed for conversion to housing and in neighborhood commercial districts where higher density will not have harmful effects, especially if the higher density provides a significant number of units that are permanently affordable to lower income households.

Impact	2004 Housing Element	Corresponding 1990 Residence Element Policy
	<p>Implementation Measure 1.1.1: A Citywide action plan (CAP) should provide a comprehensive framework for the allocation of higher density, mixed-use residential development in transit-rich areas with stable urban amenities in place. In these areas, specific CAP strategies should include: higher densities and reduced parking requirements in Downtown areas or through a Better Neighborhoods type planning process; pedestrian-oriented improvements to enhance the attractiveness and use of transit.</p>	
	<p>Policy 1.2: Encourage housing development, particularly affordable housing, in neighborhood commercial areas without displacing existing jobs, particularly blue-collar jobs or discouraging new employment opportunities.</p>	
	<p>Implementation Measure 1.2.1: The Planning Department will develop proposals in neighborhood commercial districts (NCDs) well served by transit to strengthen their functions as a traditional “town center” for the surrounding residential districts.</p>	
	<p>Policy 1.3: Identify opportunities for housing and mixed-use districts near Downtown and former industrial portions of the City.</p>	<p>Policy 1.2: Facilitate the conversion of underused industrial and commercial areas to residential use, giving preference to permanently affordable housing uses.</p>
	<p>Implementation Measure 1.3.1: Downtown areas and areas subject to a Better Neighborhoods type planning process will be expected to absorb major office and residential developments over the next decade. Planning and zoning code changes should include floor-to-area ratio exemptions. These development bonuses would be conferred only in cases where in return the development will provide major public benefits to the community.</p>	<p>Implementation Measure 1.1.3: Inclusion of housing in Downtown.</p>

Impact	2004 Housing Element	Corresponding 1990 Residence Element Policy
	<p>Implementation Measure 1.3.2: The Planning Department will introduce zoning changes in the traditionally industrial eastern parts of the City. The areas under study are: Mission, South of Market, Showplace Square/Potrero Hill, Bayview Hunter’s Point, and Visitacion Valley. Housing, especially affordable housing, will be encouraged in former industrial areas where residential neighborhoods are established and urban amenities are in place or feasible.</p>	
	<p>Policy 1.4: Locate in-fill housing on appropriate sites in established residential neighborhoods.</p>	<p>Policy 1.4: Locate in-fill housing on appropriate sites in established neighborhoods.</p>
	<p>Policy 1.6: Create incentives for the inclusion of housing, particularly permanently affordable housing, in new commercial development projects.</p>	
	<p>Implementation Measure 1.6.2: The Planning Department and the Redevelopment Agency will propose increasing height limits, eliminating density requirements and modifying off-street parking requirements in the Transbay/Rincon Hill Redevelopment survey areas. The Mid-Market redevelopment survey area will be rezoning to include mixed-use residential areas and reduced residential parking requirements.</p>	
	<p>Implementation Measure 1.6.4: The Planning Department will update the Land Use Element to define areas for mixed-use development focused along transit corridors that are determined to be served by sufficient and reliable transit.</p>	
	<p>Implementation Measure 1.8.1: The Board of Supervisors has introduced Planning Code amendments to allow secondary units in new buildings that are in close proximity to neighborhood commercial districts and public transit.</p>	

Impact	2004 Housing Element	Corresponding 1990 Residence Element Policy
	<p>Implementation Measure 2.4.2: As part of the Planning Department’s current citywide action plan, planning efforts in the eastern neighborhoods of the City, where housing exists in commercial and industrially zoned districts, should address housing retention as new policies and zoning are established. Mixed use should be encouraged where appropriate.</p>	
	<p>Implementation Measure 4.1.4: The City will work to identify underutilized, vacant, and Brownfield sites that are publicly or privately owned and suitable for affordable housing development. TH City will work with for profit and non-profit housing developers to acquire these sites for permanently affordable housing.</p>	<p>Implementation Measure 1.1.1: Aggressive pursuit of development opportunities [on] underused public sites.</p> <p>Implementation Measure 1.1.4: In-fill housing on vacant or underused sites.</p>
	<p>Implementation Measure 4.1.6: Permanently affordable housing sites will be especially sought out in places where transportation and existing amenities are in place.</p>	
	<p>Policy 11.6: Employ flexible land use controls in residential areas that can regulate inappropriately sized development in new neighborhoods, in Downtown areas and in other areas through a Better Neighborhoods type planning process while maximizing the opportunity for housing near transit.</p>	<p>12.5: Relate land use controls to the appropriate scale for new and existing residential areas.</p>
	<p>Implementation Measure 11.6.1: The City will continue to promote increased residential densities in areas well served by transit and neighborhood compatible development with the support and input from local neighborhoods.</p>	
<p>Parking-related policies</p>	<p>Policy 4.4: Consider granting density bonuses and parking requirement exemptions for the construction of affordable housing or senior housing.</p>	
	<p>Policy 11.7: Where there is neighborhood support, reduce or remove minimum parking requirements for housing, increasing the amount of lot area available for housing units.</p>	

Impact	2004 Housing Element	Corresponding 1990 Residence Element Policy
	Implementation Measure 1.1.1: A citywide action plan (CAP) should provide a comprehensive framework for the allocation of higher density, mixed-user residential development in transit rich areas with stable urban amenities in place. In these areas, specific CAP strategies should include: higher densities and reduced parking requirements in Downtown areas or through a Better Neighborhoods type planning process; pedestrian oriented improvements to enhance the attractiveness and use of transit.	
	Implementation Measure 1.6.1: The Planning Department will review the following incentives for commercial project developments in the Downtown C-3 District; Floor-to-area ratio (FAR) exemption for housing; no residential parking requirements, and no density requirement for residential projects. Housing in excess of the base FAR in the Downtown General (C-3-G) and Downtown Support (C-3-S) Districts has also been proposed by the Board of Supervisors.	
	Implementation Measure 1.6.2: The Planning Department and the Redevelopment Agency will propose modifying off-street parking requirements in the Transbay/Rincon Hill Redevelopment survey areas. The Mid-Market redevelopment survey areas will be re-zoned to include mixed-use residential areas and reduced residential parking requirements.	
	Implementation Measure 1.8.3: The Planning Department will study the impacts of relaxing parking requirements for secondary units located in all neighborhoods.	
	Implementation Measure 4.4.1: Until the Planning Department establishes uniform requirements for affordable and senior housing development, affordable and senior housing projects will continue to be granted reduced parking requirements on a case-by-case basis.	

Impact	2004 Housing Element	Corresponding 1990 Residence Element Policy
	Implementation Measure 4.4.2: The Planning Department will investigate appropriate parking requirements for all affordable or senior housing projects.	
	Implementation Measure 11.7.1: The Planning Department will work to reduce parking requirements in older neighborhoods and in other areas through a Better Neighborhoods type planning process with the support and input from local neighborhoods.	
	Implementation Measure 11.8.1: The Planning Department, with the support and input from local neighborhoods, will study the impacts of reduced parking and private open space provisions and will consider revising the Planning Code accordingly.	
Promote increased density-related development standards	Policy 1.1: Encourage higher residential density in areas adjacent to Downtown, in underutilized commercial and industrial areas proposed for conversion to housing and in neighborhood commercial districts where higher density will not have harmful effects, especially if the higher density provides a significant number of units that are affordable to lower income households. Set allowable densities in established residential areas at levels which will promote compatibility with prevailing neighborhood scale and character where there is neighborhood support.	Policy 2.1: Set allowable densities in established residential areas at levels which will promote compatibility with prevailing neighborhood character. Policy 2.2: Encourage higher residential density in areas adjacent to Downtown, in underutilized commercial and industrial areas proposed for conversion to housing and in neighborhood commercial districts where higher density will not have harmful effects, especially if the higher density provides a significant number of units that are permanently affordable to lower income households.
	Implementation Measure 1.1.1: A Citywide action plan (CAP) should provide a comprehensive framework for the allocation of higher density, mixed-use residential development in transit-rich areas with stable urban amenities in place. In these areas, specific CAP strategies should include: higher densities and reduced parking requirements in Downtown areas or through a Better Neighborhoods type planning process; pedestrian-oriented improvements to enhance the attractiveness and use of transit.	

Impact	2004 Housing Element	Corresponding 1990 Residence Element Policy
	Implementation Measure 1.3.1: Downtown areas and areas subject to a Better Neighborhoods type planning process will be expected to absorb major office and residential developments over the next decade. Planning and zoning code changes should include floor-to-area ratio exemptions. These development bonuses would be conferred only in cases where in return the development will provide major public benefits to the community.	Implementation Measure 1.1.3: Inclusion of housing in Downtown (allowing housing to exceed permitted Floor-Area-Ratios [FARs] in C-3-G and C-3-S Districts).
	Policy 1.6: Create incentives for the inclusion of housing, particularly permanently affordable housing, in new commercial development projects.	Policy 1.3: Create incentives for the inclusion of housing, particularly permanently affordable housing, in new commercial development projects.
	Implementation Measure 1.6.2: The Planning Department and the Redevelopment Agency will propose increasing height limits, eliminating density requirements and modifying off-street parking requirements in the Transbay/Rincon Hill Redevelopment survey areas. The Mid-Market redevelopment survey area will be rezoning to include mixed-use residential areas and reduced residential parking requirements.	
	Policy 1.7: Encourage and support the construction of quality, new family housing.	
	Implementation Measure 1.7.1: In response to the increasing number of families in San Francisco, the Planning Department will develop zoning amendments to require a minimum percentage of larger family units ranging from two to four bedrooms, in new major residential projects. The Planning Department will also propose eliminating density requirements within permitted building envelopes in Downtown areas and areas subject to a Better Neighborhoods type planning process to maximize family units constructed.	
	Policy 1.8: Allow new secondary units in areas where their effects can be dealt with and there is neighborhood support, especially if that housing is made permanently affordable to lower income households.	Policy 1.5: Allow new secondary units in areas where their effects can be dealt with and there is neighborhood support, especially if that housing is made permanently affordable to lower income households.

Impact	2004 Housing Element	Corresponding 1990 Residence Element Policy
	Implementation Measure 1.8.1: The Board of Supervisors has introduced Planning Code amendments to allow secondary units in new buildings that are in close proximity to neighborhood commercial districts and public transit.	
	Implementation Measure 1.8.3: On-going planning will propose Planning Code amendments to encourage secondary units where appropriate.	
	Policy 4.4: Consider granting density bonuses and parking requirement exemptions for the construction of affordable housing or senior housing.	Policy 7.3: Grant density bonuses for construction of affordable or senior housing.
	Implementation Measure 4.4.1: The Planning Department will look at establishing uniform density bonus standards and equal requirements for affordable and senior housing development. Until then, affordable and senior housing will continue to be granted density bonuses and reduced parking requirements on a case-by-case basis.	
	Policy 4.5: Allow greater flexibility in the number and size of units within established building envelopes, potentially increasing the number of affordable units in multi-family structures.	Policy 2.3: Allow flexibility in the number and size of units within permitted volumes of larger multi unit structures, especially if the flexibility results in creation of a significant number of dwelling units that are permanently affordable to lower income households.
	Policy 11.6: Employ flexible land use controls in residential areas that can regulate inappropriately sized development in new neighborhoods, in Downtown areas, and in other areas through a Better Neighborhoods type planning process while maximizing the opportunity for housing near transit.	Policy 12.5 Relate land use controls to the appropriate scale for new and existing residential areas.
	Implementation Measure 11.6.1: The City will continue to promote increased residential densities in areas well served by transit and neighborhood compatible development with the support and input from local neighborhoods.	
	Policy 11.7: Where there is neighborhood support, reduce or remove minimum parking requirements for housing, increasing the amount of lot area available for housing units.	

Impact	2004 Housing Element	Corresponding 1990 Residence Element Policy
	Implementation Measure 11.7.1: The Planning Department will work to reduce parking in older neighborhoods through a Better Neighborhoods type planning process with the support and input from local neighborhoods.	
	Policy 11.8: Strongly encourage project sponsors to take full advantage of allowable building densities in their housing developments while remaining consistent with neighborhood character.	
	Policy 11.9: Set allowable densities and parking standards in residential areas at levels that promote the City's overall housing objectives while respecting neighborhood scale and character.	Policy 2.1: Set allowable densities in established residential areas at levels which will promote compatibility with prevailing neighborhood character.
<p><i>Notes: ¹ The policies in this Table are not exhaustive and, where necessary, this EIR also addresses potential physical environmental impacts associated with the objectives and implementation measures in the 2004 Housing Element.</i></p> <p><i>² The Housing Elements contain additional themes beyond what is presented in this Table. However, those themes, which include (but are not limited to) Homelessness, Housing Condition, Seismic Safety, and Displacement, do not have associated policies that could result in potential environmental impacts.</i></p>		

Growth in Certain Areas

As shown above, the 2004 Housing Element proposes policies that direct growth to certain areas in the City (see Policies 1.1, 1.2, 1.3, 1.4, 1.6, and 11.6, and Implementation Measures 1.1.1, 1.2.1, 1.3.1, 1.3.2, 1.6.2, 1.6.4, 1.8.1, 2.4.2, 4.1.4, 4.1.6, and 11.6.1) to a greater degree than the 1990 Residence Element. The 1990 Residence Element includes policies that direct growth to industrial and commercial areas (1990 Residence Element policy 1.2) as well as in areas adjacent to Downtown and in neighborhood commercial districts (1990 Residence Element policy 2.2). The 2004 Housing Element policies direct growth to these areas but also include a series of implementation measures to more aggressively encourage new development within those specific areas of the City. The 2004 Housing Element also directs growth along transit corridors (see Policy 11.6 and Implementation Measures 1.1.1, 1.6.4, 1.8.1 and 11.6.1), while the 1990 Residence Element does not contain any policies specifically directing housing near transit (although 1990 Residence Element Policy 12.1, which advocates for housing to be provided with adequate public improvements, services and amenities, could be interpreted as promoting housing near adequate transit infrastructure).

Policies that direct growth to industrial and commercial areas, and areas near the Downtown, promote residential uses in proximity to job cores and services. The Downtown and most commercial areas of the City are also adequately served by transit. Due to the nature of uses within these areas (mix of uses-office, commercial, and/or residential), many of these areas may already experience congested conditions. Increasing the number of residents in these areas could result in additional localized congestion under future 2025 Cumulative Conditions. Under Cumulative 2025 Conditions, four SOMA intersections are anticipated to operate at unacceptable levels, as are several intersections along the Embarcadero, 19th

Avenue, and Junipero Serra corridors, and key intersections on Cesar Chavez Street, Market Street, Bayshore Boulevard and Third Avenue. New development in industrial and commercial areas and the Downtown could contribute to future congestion.

However, the proposed 2004 Housing Element does not propose new growth that would not otherwise be projected to occur. Furthermore, individual residential developments within the City would continue to be subject, on a project-by-project basis, to independent environmental review pursuant to CEQA. Those analyses would present the site-specific effects of the proposed development project on the City's transportation network.

Although the 2004 Housing Element contains policies that encourage housing in areas of the City that may experience increased congestion under 2025 Cumulative Conditions, many of the policies could reduce overall vehicle trips and vehicle miles traveled (VMT) by locating residents near job cores and/or commercial areas and encouraging utilization of the existing transit system. Locating residents near places of employment, such as within the Downtown or in commercial areas of the City, would increase the likelihood that those individuals would utilize available public transit, or other alternative modes of transportation (bicycle and walking) to work, decreasing the overall number of vehicle trips or VMTs citywide. It also follows that housing in proximity to neighborhood services (such as along neighborhood commercial districts, mixed-use districts, or commercial areas) could reduce vehicle trips by shifting a portion of those trips to transit, bicycle or pedestrian trips. Proximity to neighborhood services could also result in lower VMT. Given that San Francisco's Downtown and many of its commercial areas are adequately served by transit, increasing residential uses in these areas would promote increased use of alternative transportation, potentially reducing the overall number of 2025 vehicle trips anticipated under Cumulative Conditions.

Further, 2004 Housing Element Policy 1.9 would require certain new developments to provide housing for the demand generated. This policy could reduce the City's overall VMT, which could minimize the burden on the City's roadways and public transit system by encouraging housing near major educational institutions and commercial developments.

The 2004 Housing Element proposes Implementation Measures 1.1.1, 1.2.1, 1.6.2, 1.6.4, 1.8.1 and 11.6.1, which are specifically directed towards locating residential uses near existing transit. These implementation measures could encourage residential development that could ultimately result in increased congestion of some portions of the City's transportation network. On the other hand, by encouraging future development to be built in transit-rich areas, overall VMT could be reduced and the City's roadways could, overall, experience improvements in levels of service, as compared to projected Cumulative Conditions. Trips resulting from potential residential development in these areas would be more likely to utilize the available capacity in local public transportation, bicycle, and pedestrian facilities.

It is recognized that under future 2025 Cumulative Conditions, some transit corridors, including the California corridor in the northwest screenline and the Subway corridor in the southwest screenline, would operate near Muni's capacity utilization standard of 85 percent. 2004 Housing Element policies

that promote alternative transportation to job cores or neighborhood services, could encourage a mode shift to transit, increasing the capacity utilization of transit lines near capacity under 2025 Cumulative Conditions. The impacts to the public transit system are considered less than significant if the increase in transit ridership can be absorbed within the existing available capacity of transit lines at the Maximum Load Point (MLP) locations. It is possible that the 2004 Housing Element policies that encourage a mode shift towards transit could result in an increase in transit ridership, which may exceed Muni's capacity utilization standard of 85 percent. Generally, as transit ridership increases, transportation agencies respond by expanding transit service and/or increasing transit frequency. However, given SFMTA's fiscal emergencies, Muni may not be able to increase transit service to accommodate increased transit ridership resulting from the 2004 Housing Element policies that encourage residential development in transit-rich areas or other policies that encourage the use of alternative transportation in the City. Therefore, the 2004 Housing Element could result in a *potentially significant* transit impact. The 2004 Housing Element contains additional policies intended to ensure that new development does not overburden the existing infrastructure, including transit infrastructure. 2004 Housing Element Policy 11.2 and Implementation Measures 11.2.1 and 11.2.2 seek to ensure that new housing is provided with adequate public improvements, services, and amenities.

The 2004 Housing Element also includes policies and implementation measures that advocate for accommodating growth in planning processes similar to the Better Neighborhoods program. One purpose for specific planning processes to accommodate growth is to ensure that increased development is adequately supported by services, including transit services, as discussed in 2004 Housing Element Implementation Measure 1.9.1, (*The City, through a Better Neighborhoods type planning process, will continue to work to improve and enhance housing with the goal of more housing and vital, attractive transit served neighborhoods*). Therefore, policies advocating for specific planning processes would not be expected to adversely affect the transportation network. Any planning process to accommodate growth would be required to undergo a separate environmental review pursuant to CEQA with an analysis of the site-specific effects of any proposed area plan, and the adoption of site specific mitigation measures if necessary.

Without the policies in the 2004 Housing Element that direct growth to certain areas in the City to a greater degree than the 1990 Residence Element, vehicle trips to the Downtown area (for example) could increase because residential uses would not be located in proximity to jobs in a way that more efficiently promotes walking, bicycling and public transit as a means of travel to work. The 2004 Housing Element encourages residential uses near transit-rich areas and could direct housing growth to areas of the City with a higher percentage of trips occurring by alternative transportation modes. Therefore, the 2004 Housing Element could reduce the overall number of vehicle trips to the Downtown area, as compared to the 1990 Residence Element.

For the reasons discussed above, the 2004 Housing Element is not anticipated to direct housing growth in such a way that would adversely affect traffic operations. The 2004 Housing Element encourages residential development that can take advantage of alternative modes of transportation, including transit, walking, and bicycling. Any such mode shift would be in keeping with the City's Transit First Policy (City Charter Article 8A, Section 8A.115). However, given SFMTA's recent fiscal emergencies, Muni

may not be able to accommodate increased ridership that may result from the 2004 Housing Element policies and may potentially exceed Muni's capacity utilization standard of 85 percent. Therefore, impacts to the City's transit system from the 2004 Housing Element policies are considered *potentially significant*. The proposed 2004 Housing Element policies that could direct future growth to certain areas of the City are not anticipated to affect overall bicycle or pedestrian facilities as the Housing Element policies would direct growth in areas that are already served by these facilities. Furthermore, the proposed *Better Streets Plan* and the adopted *Bicycle Plan* are expected to improved pedestrian and bicycle facilities. The 2004 Housing Element policies related to directing growth are also not anticipated to affect loading or emergency access.

Parking Provision

As shown in above, the 2004 Housing Element includes policies include reduced parking provisions (see Policies 4.4 and 11.7 and Implementation Measures 1.6.1, 1.6.2, 1.8.3, 4.4.1, 4.4.2, 11.7.1, and 11.8.1) to a greater degree than the 1990 Residence Element. 2004 Housing Element Policies 4.4 and 11.7 are specifically geared towards reducing (or removing) parking requirements associated with residential development. These policies could constrain local parking conditions because less parking would be provided for some new residential developments. The proposed 2004 Housing Element would not introduce new trips to the City's projected 2025 Cumulative Conditions; however, reduced parking requirements could result in locally constrained parking conditions. However, in the experience of San Francisco transportation planners, the absence of a ready supply of parking spaces, combined with available alternatives to auto travel (e.g., transit service, taxi, bicycles, travel by foot) and a relatively dense pattern of 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 local public transit, bicycle, and pedestrian facilities, would be in keeping with the City's "Transit First Policy", established in the City's Charter Article 8A, Section 8A.115.

As shown in the analysis of 2025 Cumulative Conditions, the California and Subway transit corridors are anticipated to operate near Muni's transit capacity utilization standard of 85 percent in 2025. Parking policies that encourage a mode shift to transit could adversely affect the public transit system, potentially resulting in a capacity utilization standard that exceeds 85 percent. As discussed previously, SFMTA may not be able to increase transit service to accommodate increased ridership resulting from the 2004 Housing Element. Therefore, the 2004 Housing Element policies that encourage a mode shift towards transit may result in a *potentially significant* transit impact. The 2004 Housing Element contains additional policies to ensure that new development does not overburden the existing infrastructure, including transit infrastructure. 2004 Housing Element policy 11.2 and Implementation Measures 11.2.1 and 11.2.2 seek to ensure that the City is provided with adequate public improvements, services, and amenities.

Reduced parking requirements, and any subsequent mode shift to transit or other alternative modes of transportation, would likely increase the efficiency of the overall transportation system on a broader scale. Several studies have shown that reducing the number of parking spaces may be an effective measure at discouraging auto travel, thereby encouraging drivers to use a different transportation mode (transit,

bicycle, walking). Studies have shown that parking management policies result in a reduction of vehicle traffic attracted to that area.^{8,9,10} This may especially apply to new residential development in the Downtown area that would be placed near the Downtown office core where a large percentage of Bay Area jobs and significant transit infrastructure are located.

The related 2004 Housing Element Implementation Measures 1.8.3 and 4.4.2, while not proposing any action, commits the Planning Department to studying parking requirements for secondary units and for affordable and senior housing projects, respectively. Senior and affordable housing units generally result in fewer vehicle trips and consequently do not create the same level of demand for parking as market-rate housing. Therefore, a percentage of affordable and senior trips would not affect the overall transportation system, but rather would be absorbed by available public transportation, pedestrian, and/or bicycle capacity. Implementation Measures 11.7.1 and 11.8.1, similar to the 2004 Housing Element Policies described above, would encourage a reduction in parking requirements for those uses that generally have a lower parking demand and are therefore not anticipated to have any effect on the City's transportation network.

2004 Housing Element policies that affect the supply of parking citywide could encourage a mode shift to alternative modes of transportation, including transit. Any such mode shift would be in keeping with the City's Transit First Policy (City Charter Article 8A, Section 8A.115). However, given SFMTA's recent fiscal emergencies, Muni may not be able to accommodate increased ridership that may result from the 2004 Housing Element policies and increased ridership could potentially exceed Muni's capacity utilization standard of 85 percent. Therefore, impacts to the City's transit system resulting from the 2004 Housing Element policies are considered *potentially significant*. The 2004 Housing Element policies related to reduced parking requirements are not anticipated to affect overall pedestrian and bicycle facilities, nor would they impact loading or emergency access. The following discusses the parking-related impacts of the 2004 Housing Element policies that encourage reduced parking.

The City of San Francisco's existing *Planning Code* Section 150 provides the requirements for off-street parking for residential and commercial development. The *Planning Code* is intended to ensure that off-street parking facilities are provided in amounts that are sufficient and consistent with the objectives and the policies of the San Francisco *General Plan*. San Francisco's *General Plan* intends to provide minimal off-street parking to discourage excessive use of auto transportation and encourage use of public transit as an alternative mode of travel. The policies of the 2004 Housing Element, as identified above, may influence an update of the City's parking requirements.

⁸ Willson, Richard and Shoup, Donald, 1990. Parking subsidies and travel choices: Assessing the evidence. *Transportation* 17:141-157.

⁹ Kim, Sungyop and Ulfarsson, Gudmundur, 2008. Curbing automobile use for sustainable transportation: analysis of mode choice on short home-based trips. *Transportation* 35: 723-737.

¹⁰ McShane, Mary and Meyer, Michael, 1982. Parking policy and urban goals: Linking strategy to needs. *Transportation* 11: 131-152

San Francisco does not consider parking supply as part of the permanent physical environment and therefore, does not consider changes in parking conditions to be environmental impacts as defined by CEQA. The San Francisco Planning Department acknowledges, however, that parking conditions may be of interest to the public and the decision makers. Therefore, this report presents a parking analysis for information purposes.

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. As previously discussed, in the experience of San Francisco transportation planners, 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 Article 8A, Section 8A.115 provides that "parking policies for areas well served by public transit shall be designed to encourage travel by public transportation and alternative transportation."

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. In summary, changes in parking conditions are considered to be social impacts rather than impacts on the physical environment. Accordingly, the parking analysis above is presented for informational purposes only.

Residential Density

As shown above, the 2004 Housing Element proposes policies that encourage increased residential density within individual development projects or within specified areas of the City (see Policies 1.8, 4.4, 11.6, and 11.9 and Implementation Measures 1.7.1, 4.4.1, 11.7.1, and 11.8.1) to a greater degree than the

1990 Residence Element. As discussed throughout this EIR, the proposed Housing Elements would not result in any additional trips beyond those assumed by ABAG in their growth projections, which are accounted for in the 2025 Cumulative Conditions. Measures that encourage increased density for development projects, or within specified areas of the City, could redistribute some of the anticipated future growth. The effects of directing growth to certain areas of the city were addressed above, and are summarized here. Increased density could result in localized increases in transit ridership and add additional cars onto the local roadways, potentially increasing local demands on the City's roadways and traffic system. The 2004 Housing Element policies are intended to encourage sustainable modes of transportation, including transit, bicycling, and walking. Therefore, the 2004 Housing Element policies are, overall, anticipated to reduce citywide vehicle trips and VMT. Therefore, traffic impacts from the 2004 Housing Element would be less than significant. Under 2025 Cumulative transit conditions, some Muni screenlines are anticipated to approach Muni's capacity utilization standard of 85 percent. The 2004 Housing Element policies that promote a mode shift towards transit could potentially increase transit ridership above Muni's capacity utilization standard, resulting in a potentially significant transit impact. The effects of specific 2004 Housing Element policies relating to increased residential density are discussed below.

The 2004 Housing Element encourages increased density more so than the 1990 Residence Element primarily through density bonuses for affordable or senior housing, reducing parking requirements, and through neighborhood planning processes. 2004 Housing Element Implementation Measure 4.4.1 advocates for density bonuses and reduced parking requirements for affordable and senior housing. Senior and affordable housing units generally result in fewer vehicle trips and consequently do not result in the same level of impact on the City's roadways as market-rate housing. Due to lower vehicle trip rates for senior and affordable housing, an increase in affordable and senior units beyond what would occur under the 1990 Residence Element would not substantially affect the overall transportation system, but would be absorbed by available public transportation, pedestrian, and/or bicycle capacity.

As discussed previously, the 2004 Housing Element includes policies that advocate for reduced parking requirements. Reduced parking requirements allow for a greater amount of buildable area that could be used to accommodate additional housing units, and therefore reduced parking is a housing strategy to increase residential density. The effects of reduced parking on the transportation network were discussed previously. With respect to increasing density from reduced parking requirements, increased density is a strategy that is used to reduce overall VMT. A considerable amount of research has been conducted on the links between residential density and travel behavior; studies have shown that a doubling of residential density could lower auto ownership and VMT by 16%.¹¹ As discussed previously, any reduction in auto ownership (and vehicle trips) and VMT, would result in overall beneficial impacts to the transportation network.

¹¹ Holtzclaw, 2004. Oral Presentation: Location Efficiency as the Missing Piece of the Energy Puzzle: How Smart Growth Can Unlock Trillion Dollar Consumer Cost Savings. Presented at the 2004 ACEEE Summer Study on Energy Efficiency in Buildings, Asilomar, California. Available online at: www.nrdc.org.

2004 Housing Element Policy 11.6 advocates for increasing housing near transit through a Better Neighborhoods type planning process to ensure that inappropriately sized developments are regulated, which was not proposed by the 1990 Residence Element Policy 12.5. As discussed previously, locating housing near transit-rich areas would direct housing to areas of the City with a greater potential for trips to occur by alternative transportation modes. Therefore, the 2004 Housing Element policies that advocate for increased density near transit could reduce the overall number of vehicle trips citywide compared to the 1990 Residence Element by potentially encouraging a transportation mode shift towards transit. Therefore, the flexible land use controls identified by 2004 Housing Element Policy 11.6 would not adversely affect traffic operations. As discussed previously, 2004 Housing Element policies that promote a mode shift towards transit, could result in increases in transit ridership that may exceed Muni's capacity utilization standard of 85 percent. Therefore, impacts to transit resulting from the 2004 Housing Element policies are considered *potentially significant*.

New construction with increased density standards could result in a longer duration of housing construction, which could incrementally increase the associated activities that generate temporary traffic and parking demand. On the other hand, if more of the projected future housing units are accommodated within a given building envelope, the overall number of new residential projects to meet projected future housing may incrementally decrease. Therefore, increased residential density is not anticipated to result in substantial construction-related impacts to the transportation network.

Although not shown in the policies listed above, the 2004 Housing Element includes a number of policies pertaining to encouraging certain types of housing (see 2004 Housing Element policy 1.7 and Implementation Measures 1.7.1 and 4.5.1). These policies advocate for flexible development controls within a given building envelope to accommodate a variety of units including smaller units and larger, family-sized units. Family-sized units would not necessarily result in a substantial increase in residential density, as fewer units would be constructed within the given building envelope to accommodate more people per unit. Conversely, a building with smaller units (studio and 1-bedroom units) would be anticipated to accommodate more total units within the building envelope, although serve a smaller number of people per unit.

Overall, the policies related to increased residential density would not substantially affect operations of roadway, pedestrian and bicycle facilities, nor would they impact loading, emergency access, or construction areas. Policies that encourage a mode shift towards transit, may result in increased transit ridership above Muni's capacity utilization standard of 85 percent, therefore the 2004 Housing Element's impact on the transit system is considered *potentially significant*. The 2004 Housing Element policies would have a similar effect on the transportation network as the 1990 Residence Element policies that seek to increase density in areas already well served by modes other than automobiles, including public transportation, pedestrian, and bicycle facilities.

2004 Housing Element Analysis Conclusions

The proposed 2004 Housing Element policies related to directing growth, parking provisions, and increased density, as discussed above, would have a less-than-significant impact on the City's traffic

operations, and pedestrian and bicycle facilities, and would have a *potentially significant* impact on the City's transit system.

The 2004 Housing Element policies would not adversely affect overall operations of the City's roadway network, above those identified under 2025 Cumulative Conditions. As discussed previously, the proposed 2004 Housing Element would not generate any new trips not anticipated under Cumulative Conditions. Policies related to directing growth to certain areas of the City, reduced parking requirements, and increased density are designed to encourage residential development that can take advantage of alternative modes of transportation, including transit, walking, and bicycling, thereby reducing impacts to the City's roadway network that would otherwise occur under 2025 Cumulative Conditions.

The proposed 2004 Housing Element policies encourage residential development to take advantage of alternative modes of transportation. Under 2025 Cumulative Conditions, the California and Subway transit corridors are anticipated to operate near Muni's transit capacity utilization in 2025. Although the proposed housing element would not add any new trips under 2025 Cumulative Conditions, the 2004 Housing Element contains policies that encourage a mode shift to transit. A substantial mode shift along these two transit corridors could adversely affect the public transit system. Given that the 2004 Housing Element policies could potentially encourage increases in transit ridership above Muni's capacity utilization standard of 85 percent, and that SFMTA's fiscal emergencies may not allow for expanded transit service, the 2004 Housing Element may result in a *potentially significant* impact on the City's transit system.

The proposed 2004 Housing Element policies would have a less-than-significant impact on citywide pedestrian facilities. The 2004 Housing Element policies would not adversely affect overall operations of pedestrian facilities as they seek to direct growth in areas already well served by modes other than auto, including pedestrian facilities. Furthermore, the policies are not development-specific and therefore, would not generate net new trips. As a result, the policies of the Housing Elements would not result in substantial overcrowding of sidewalks that could not be accommodated. Additionally, as specific residential development projects are proposed at specific locations throughout the City, project-level environmental review would be required to evaluate a variety of impacts, including those that may affect pedestrian facilities.

The proposed 2004 Housing Element policies would have a less-than-significant impact on citywide bicycle facilities. These policies would not adversely affect overall operations of bicycle facilities as these policies seek to direct growth in areas already well served by alternative transportation modes that include bicycle facilities. Furthermore, the policies are not development-specific and therefore, would not generate net new trips. As a result, the policies of the 2004 Housing Element would not result in any degradation of bicycle facility operations. As specific residential development projects are proposed at specific locations throughout the City, project-level environmental review would be required to evaluate a variety of impacts, including those that may affect bicycle facilities.

The proposed 2004 Housing Element policies would have a less-than-significant impact on citywide curb loading areas. The Housing Element policies would not adversely affect overall loading operations, as the

policies seek to direct residential growth into various areas of the City. Furthermore, the policies are not development-specific and therefore, would not generate net new loading demand. Individual development projects would be required to provide adequate loading spaces in compliance with *Planning Code* Section 152, or other applicable *Planning Code* requirements pertaining to loading spaces. As a result, the policies of the 2004 Housing Element would not result in any overcapacity of loading areas that could not be accommodated. Additionally, as specific residential development projects are proposed at specific locations throughout the City, project-level environmental review would be required to evaluate a variety of impacts, including those that may affect local loading conditions.

The proposed Housing Element policies would have a less-than-significant impact on citywide emergency vehicle access, since the policies are not development-specific and therefore, would not add any additional trips citywide. As a result, the 2004 Housing Element policies would not hinder any specific emergency access. As residential development projects are proposed at specific locations throughout the City, project-level environmental review would be required to evaluate a variety of impacts, including those that may affect emergency vehicle access in the proposed development vicinity.

The 2004 Housing Element policies would not cause any construction impacts since the policies are not development-specific. Therefore, the 2004 Housing Element would not generate any vehicle trips related to construction of specific developments that would not have occurred under the 1990 Residence Element. As residential development projects are proposed at specific locations throughout the City, project-level environmental review would be required to evaluate a variety of impacts, including those due to temporary construction activity in the vicinity of the proposed development.

2009 Housing Element Analysis

The following policies provide a comparison of 2009 Housing Element objectives, policies, and implementation measures and comparable 1990 Residence Element objectives and policies categorized by: 1) policies related to directing growth to specific areas of the City; 2) Policies related to parking; and 3) policies related to residential density.

Impact	2009 Housing Element	Corresponding 1990 Residence Element Policy
Direct growth to certain areas of the City.	Policy 1.1: Focus housing growth- and the infrastructure necessary to support that growth- according to community plans. Complete planning underway in key opportunity areas such as Treasure Island, Candlestick Park and Hunter's Point Shipyard.	Implementation Measure 1.1.2: Pursuit of housing development opportunities in neighborhood and area plans.
	Policy 1.3: Work proactively to identify and secure opportunity sites for permanently affordable housing.	Policy 1.1: Promote development of permanently affordable housing on surplus, underused and vacant public lands.

Impact	2009 Housing Element	Corresponding 1990 Residence Element Policy
	Policy 1.6: Consider greater flexibility in the number and size of units within established building envelopes in community plan areas, especially if it can increase the number of affordable units in multi-family structures.	2.5: Allow flexibility in the number and size of units within permitted volumes of larger multi-unit structures, especially if the flexibility results in creation of a significant number of dwelling units that are permanently affordable to lower income households.
	Policy 1.7: Consider public health objectives when designating and promoting housing development sites.	Policy 12.1: Assure housing is provided with adequate public improvements, services and amenities.
	Policy 1.8: Promote mixed use development, and include housing, particularly permanently affordable housing, in new commercial, institutional or other single use development projects.	Policy 1.3: Create incentives for the inclusion of housing, including permanently affordable housing in commercial developments.
	Policy 4.6: Encourage an equitable distribution of growth according to infrastructure and site capacity.	Policy 12.1: Assure housing is provided with adequate public improvements, services and amenities.
	Policy 10.3: Support state legislation and programs that promote environmentally favorable projects.	
	Policy 12.1: Encourage new housing that relies on transit use and environmentally sustainable patterns of movement.	
	Policy 12.2: Consider the proximity of quality of life elements, such as open space, child care and neighborhood serves, when development new housing units.	
	Policy 13.1: Support “smart” regional growth that locates new housing close to jobs and transit.	
	Policy 13.3: Promote sustainable land use patterns that integrate housing with transportation via transit, pedestrian, and bicycle modes.	
	Implementation Measure 3: Consistent with the SFMTA’s Climate Action Plan, MOH shall work with MTA to identify Muni sites that can serve as potential housing sites.	

Impact	2009 Housing Element	Corresponding 1990 Residence Element Policy
	<p>Implementation Measure 4: The Mayor’s Office of Housing (MOH) shall continue to actively pursue surplus or underused publicly-owned land for housing potential, working with agencies not subject to the Surplus Property Ordinance such as the San Francisco Public Utilities Commission, SFUSD and the Municipal Transportation Agency to identify site opportunities. City agencies shall continue to survey their properties for affordable housing opportunities or joint use potential.</p>	<p>Implementation Measure 1.1.1: Aggressive pursuit of development opportunities [in] underused public sites.</p> <p>Implementation Measure 1.1.4: In-fill housing on vacant or underused sites.</p>
	<p>Implementation Measure 6: To further smaller scale TOD opportunities, Planning and MTA shall evaluate smaller surplus MTA-owned sites (typically surface parking lots) and identify barriers towards their redevelopment, such as Planning Code issues, neighborhood parking needs and communities sentiment.</p>	
	<p>Implementation Measure 8: Planning, Redevelopment and Mayor’s Office of Economic and Workforce Development (MOEWD) should complete long range planning processes already underway: Japantown, Glen Park, the Northeast Embarcadero Study, the Bayview Hunters Point Plan, Candlestick/ Hunters Pont, India Basin shoreline community planning process, Treasure Island, and Hunters Point.</p>	
	<p>Implementation Measure 14: Planning staff shall prioritize support for projects which are located within a reasonable walking distance of stops along major transit lines, including BART, Muni rail lines and “Muni’s 24-hour Rapid Network.”</p>	
	<p>Implementation Measure 74: The City shall coordinate with regional entities to complete the necessary planning document for SB 375, including a “Sustainable Community Strategy” which promotes sustainable growth; and corresponding updates to the Housing, Recreation and Open Space, and Land Use Elements of the General Plan.</p>	

Impact	2009 Housing Element	Corresponding 1990 Residence Element Policy
	Implementation Measure 80: In development of new community plans, Planning shall include mixed-use design standards for both residential and commercial buildings.	
	Implementation Measure 85: Planning shall ensure community plans for growth are accompanied by capital plans and programs to support both the “hard” and “soft” elements of infrastructure needed by new housing.	Implementation Measure 7.7.1: Acquisition and improvement of open space; facilities and public environmental improvements in six neighborhood strategy areas; street improvements; parking facilities in neighborhoods; transit and street improvements.
	Implementation Measure 90: Planning and SFMTA should coordinate housing development with the ongoing Transit Effectiveness Project.	
	Implementation Measure 94: Regional planning entities such as ABAG shall continue to prioritize regional transportation decisions and funding to “smart” local land use policies that link housing, jobs and other land uses, including focusing on VMT reduction. The City shall encourage formalization of state policy that similarly prioritizes transportation and infrastructure dollars for “smart growth” areas such as San Francisco, rather than geographic allocation.	
	Implementation Measure 97: On a local level, the City shall prioritize planned growth areas such as Better Neighborhoods, other Area Plans or Redevelopment Areas for regional, state, and federal bond and grants, especially for discretionary funding application processes such as the State’s Prop 1C.	
Parking-related policies	Policy 2.3: Prevent the removal or reduction of housing for parking.	
	Policy 13.3: Promote sustainable land use patterns that integrate housing with transportation via transit, pedestrian and bicycle modes.	

Impact	2009 Housing Element	Corresponding 1990 Residence Element Policy
	<p>Implementation Measure 12: Planning shall require integration of new technologies that reduce space required for non-housing functions, such as parking, and shall consider requiring parking lifts to be supplied in all new housing developments parked at 1:1 or above.</p>	
	<p>Implementation Measure 101: OEWD will facilitate employer-supported transit and transportation demand management (TDM) programs, including rideshare matching, transit improvements, bicycle and pedestrian facility improvements, parking management and restriction of free parking, and continue to require that employers offer commuter benefits per Section 421 of the Environment Code to encourage employees to use transit or carpool.</p>	
<p>Promote increased density-related development standards</p>	<p>Policy 1.4: Ensure changes to land use controls are proposed through neighborhood-supported community planning processes.</p>	<p>Policy 2.1: Set allowable densities in established residential areas at levels which will promote compatibility with prevailing neighborhood character.</p> <p>Policy 2.2: Encourage higher residential density in areas adjacent to Downtown, in underutilized commercial and industrial areas proposed for conversion to housing and in neighborhood commercial districts where higher density will not have harmful effects, especially if the higher density provides a significant number of units that are permanently affordable to lower income households.</p>
	<p>Policy 1.5: Consider secondary units in community plans where there is neighborhood support and when other neighborhood goals can be achieved, especially if that housing is made permanently affordable to lower-income households.</p>	<p>Policy 1.5: Allow new secondary units in areas where their effects can be dealt with and there is neighborhood support, especially if that housing is made permanently affordable to lower income households.</p>
	<p>Policy 1.6: Consider greater flexibility in number and size of units within established building envelopes in community plan areas, especially if it can increase the number of affordable units in multi-family structures.</p>	<p>Implementation Measure 1.1.3: Inclusion of housing in Downtown (allowing housing to exceed permitted Floor-Area-Ratios [FARs] in C-3-G and C-3-S Districts).</p>
	<p>Policy 7.5: Encourage the production of affordable housing through process and zoning accommodations, and prioritize affordable housing in the review and approval processes.</p>	<p>Policy 7.3: Grant density bonuses for construction of affordable or senior housing.</p>

Impact	2009 Housing Element	Corresponding 1990 Residence Element Policy
	Policy 11.4: Maintain allowable densities in established residential areas at levels which promote compatibility with prevailing neighborhood character.	Policy 2.1 Set allowable densities in established residential areas at levels which will promote compatibility with prevailing neighborhood scale and character.
	Implementation Measure 12: Planning shall require integration of new technologies that reduce the space required for non-housing functions, such as parking, and shall consider requiring parking lifts to be supplied in all new housing developments seeking approval for parking at a ratio of 1:1 or above.	
	Implementation Measure 13: When considering legalization of secondary units within community planning processes, Planning shall develop a Design Manual that illustrates how secondary units can be developed to be sensitive to the surrounding neighborhood, to ensure neighborhood character is maintained.	
	Implementation Measure 36: Planning shall continue to implement Planning Code Section 209, which allows a density bonus of twice the number of dwelling units otherwise permitted as a principal use in the district, when the housing is specifically designed for and occupied by senior citizens, physically or mentally disabled persons.	Policy 7.3: Grant density bonuses for construction of affordable or senior housing.
	Strategy for further review: MOH and Planning should continue to consider, within the context of a community planning process, zoning categories which require a higher proportion of affordable housing where increased density or other benefits are granted. Options include Affordable Housing Only Zones (SLI); Affordable Housing Priority Zones (UMU) or Special Use District Opportunities.	
	Implementation Measure 64: Planning staff shall support affordable housing projects in the development review process, including allowing sponsors of permanently affordable housing to take advantage of allowable densities provided their projects are consistent with neighborhood character.	

Impact	2009 Housing Element	Corresponding 1990 Residence Element Policy
	Implementation Measure 79. Planning staff shall continue to use community planning processes to develop policies, zoning and standards that are tailored to neighborhood character.	Implementation Measure 2.2.1: Densities compatible with neighborhood character.
<p>Notes: ¹ The policies in this Table are not exhaustive and, where necessary, this EIR also addresses potential physical environmental impacts associated with the objectives, implementation measures, and strategies in the Housing Elements.</p> <p>² The Housing Elements contain additional themes beyond what is presented in this Table. However, those themes, which include (but are not limited to) Homelessness, Housing Condition, Seismic Safety, and Displacement, do not have associated policies that would result in potential environmental impacts.</p>		

Growth in Certain Areas

As shown above, the 2009 Housing Element proposes policies and implementation measures (see Policies 1.1, 1.3, 1.6, 1.7, 1.8, 4.6, 10.3, 12.1, 12.2, 13.1, 13.3; and Implementation Measures 3, 4, 6, 8, 14, 74, 80, 85, 90, 94, and 97) that direct growth to certain areas in the City to a greater degree than the 1990 Residence Element. These policies and implementation measures could result in traffic-related impacts if such measures focus specifically on already congested or underserved areas. On the other hand, many of the 2009 Housing Element policies would reduce overall citywide VMT by locating residents near employment and encouraging utilization of the existing transit system.

Areas of the City that are well served by transit include, but are not limited to, the Downtown, commercial, and neighborhood commercial districts. As shown, under existing and future conditions, many of these areas already experience congested conditions. Increasing the number of residents in these areas could result in additional localized congestion, but not above levels assumed under 2025 Cumulative Conditions. As discussed previously, under Cumulative 2025 Conditions, four SOMA intersections are anticipated to fail, the Embarcadero corridor is anticipated to fail, a number of intersections along 19th Avenue are expected to operate at unacceptable levels, as well as the Junipero Serra corridor, and key intersections on Cesar Chavez Street, Market Street, Bayshore Boulevard and Third Avenue.

On the other hand, by encouraging future development to be built in transit-rich areas, overall VMT could be reduced and the City's roadways could, overall, experience improvements in levels of service, as compared to projected 2025 Cumulative Conditions. Trips resulting from potential residential development in these areas would be more likely to utilize the available capacity in local public transportation, bicycle, and pedestrian facilities. Therefore, encouraging residential development along transit lines or in close proximity to places of employment could reduce the effects of future growth on the roadway network by shifting a portion of future vehicle trips to alternative modes of transportation, resulting in overall beneficial impacts to the City's roadway network.

2009 Housing Element Policies 4.6, 12.1, 13.1, and 13.3 would encourage housing near transit lines and existing transit infrastructure to a greater extent than their corresponding 1990 Residence Element policies. It is recognized that under future 2025 Cumulative Conditions, some transit corridors, including the California corridor in the northwest screenline and the Subway corridor in the southwest screenline, would operate near the Muni's capacity utilization standard of 85 percent. 2009 Housing Element policies that encourage new residential development along transit lines are intended to promote alternative transportation and could encourage a mode shift to transit, increasing the capacity utilization of those lines already near capacity under 2025 Cumulative Conditions. The impacts to the public transit system are considered less than significant if the increase in transit ridership can be absorbed within the existing available capacity of transit lines at the MLP locations. It is possible that the 2009 Housing Element policies that encourage a mode shift towards transit could result in an increase in transit ridership, which may exceed Muni's capacity utilization standard of 85 percent. Generally, as transit ridership increases, transportation agencies respond by expanding transit service and/or increasing transit frequency. However, given SFMTA fiscal emergencies, Muni may not be able to increase transit service to accommodate increased transit ridership resulting from the 2009 Housing Element policies that encourage residential development in transit-rich areas or other policies that encourage the use of alternative transportation in the City. Therefore, the 2009 Housing Element could result in a *potentially significant* transit impact. The 2009 Housing Element contains numerous policies to reduce the effects related to encouraging new housing along transit corridors; 2009 Housing Element policies 4.6, 12.1, 13.1 and 13.3 seek to ensure that new housing is provided with adequate public improvements, services, and amenities, and to reduce the reliance of residential development on vehicles. However, these policies may not be able to reduce the impact to a less than significant level, therefore, impacts to the City's transit system would remain *potentially significant*.

2009 Housing Element Policy 1.8 requires single-use development projects to include housing within the developments, a stipulation not required in 1990 Residence Element Policies 1.7 and 1.3. In San Francisco, the commercial and industrial areas are largely located near or along established transit corridors and/or are in proximity to places of employment and neighborhood services. Introducing additional residential development in these areas could result in impacts related to the overall traffic system by encouraging development in some areas of the city that may already experience congested conditions. However, this policy could reduce the overall VMT, by providing housing in proximity to job cores and services. Combined with available modes of alternative transportation, these mixed-use developments could minimize the burden on the City's roadways by shifting a portion of person trips to alternative modes of transportation, including transit, walking and bicycling. As discussed above, the 2009 Housing Element policies that encourage increased transit ridership may result in *potentially significant* impacts on the City's transit system.

2009 Housing Element Policy 1.1 calls for promoting housing within adopted and ongoing community planning processes. Ongoing community planning projects include Japantown, Glen Park, the Northeast Embarcadero Study, and a number of planning projects in the Southeast sector of the City. As discussed in Policy 1.4, "*Community plans are an opportunity for neighborhoods to work with the City to develop a strategic plan for their future, including housing, services and amenities.*" Community planning processes are geared towards planning processes that consider transportation when planning for housing and vice

versa. The 2009 Housing Element proposes Implementation Measures 14, 85, 90, and 94, which are specifically directed towards coordinating planning for housing with planning for transportation infrastructure and promoting alternative transportation choices for commuters. Similar to 2009 Housing Element Policies 4.6, 12.1, 13.1 and 13.3 above, these implementation measures could encourage residential development that could ultimately result in a larger portion of future trips occurring by transit instead of vehicles. By encouraging future development in transit-rich areas and ensuring adequate transit opportunities are provided during the planning process, overall VMT could be reduced and the City's roadways could, overall, experience improvements in level of service. Trips resulting from potential residential development in these areas would likely use available local public transportation, bicycle, and pedestrian facility capacities to a greater degree than trips not located in proximity to transit, job cores, or commercial areas.

Without the policies in the 2009 Housing Element that direct growth to certain areas in the City to a greater degree than the 1990 Residence Element, vehicle trips to new commercial and institutional projects could increase because residential uses would not be located in proximity to jobs and services in such a way that more efficiently promotes walking, bicycling and public transit as a means to travel to work. The 2009 Housing Element encourages residential uses near major transit lines and could direct housing growth to areas of the City with a higher percentage of trips occurring by alternative transportation modes. Therefore, the 2009 Housing Element could reduce the overall number of vehicle trips compared to the 1990 Residence Element, which does not emphasize residential development in transit-rich areas to the degree that the 2009 Housing Element policies do. Further, the 2009 Housing Element includes additional focus on housing that is accommodated by adequate transit infrastructure, reducing potential adverse impact to the City's transit system.

For the reasons discussed above, the 2009 Housing Element policies related to directing housing growth would not adversely affect traffic operations. The 2009 Housing Element encourages residential development that can take advantage of alternative modes of transportation, including transit, walking and bicycling. Any such mode shift would be in keeping with the City's Transit First Policy. However, given SFMTA's recent fiscal emergencies, Muni may not be able to accommodate increased ridership that may result from the 2009 Housing Element policies and may potentially exceed Muni's capacity utilization standard of 85 percent. Therefore, impacts to the City's transit system from the 2009 Housing Element policies are considered *potentially significant*. The proposed 2009 Housing Element policies that could direct future growth to certain areas of the City are not anticipated to affect overall bicycle or pedestrian facilities as the Housing Element policies would direct growth in areas that are already served by these facilities. Furthermore, the proposed *Better Streets Plan* and the adopted *Bicycle Plan* are expected to improved pedestrian and bicycle facilities in the City. The 2009 Housing Element policies related to directing growth are also not anticipated to affect loading or emergency access.

Parking Provision

As shown above, the 2009 Housing Element proposes policies that could affect parking conditions (see Policies 2.3 and 13.3 and Implementation Measures 12 and 101) to a greater degree than the 1990 Residence Element. 2009 Housing Element Policy 2.3 discourages the modification of housing in favor of

parking, which could incrementally reduce the number of new parking spaces met through the conversion of habitable space. 2009 Housing Element Policy 13.3 aims to reduce the use of the private car, by making alternative modes of transportation more attractive, reducing the need for parking. Because less habitable space is anticipated to be converted to parking, and by making alternative modes of transportation more attractive, these policies promote the use of available local public transportation, bicycle, and pedestrian facility capacity. Impacts to the transit system resulting from a mode shift from vehicles to transit were addressed above. Overall, 2009 Housing Element policies related to parking would likely increase the efficiency of the overall traffic system on a broader scale because the 2009 Housing Element could result in fewer VMT.

As mentioned above, there are also implementation measures in the 2009 Housing Element that would impact parking in the City. 2009 Housing Element Implementation Measure 12 directs the Planning Department to require new technologies, such as parking lifts, enabling an increase in the number of parking spaces provided (if provided at a 1:1 ratio or above). On the other hand, 2009 Housing Element Implementation Measure 101 promotes incentives to reduce VMT, which could include parking management and the restriction of free parking. As previously discussed, studies have shown that limited availability of parking in an area may result in the reduction of vehicle traffic attracted to that area, encouraging a mode shift away from automobile use, and resulting in widespread beneficial impacts to the overall transportation system in the City.

As previously discussed, 2009 Housing Element policies that promote a mode shift away from private vehicles to alternative modes of transportation would result in potentially significant impacts on the public transit system. Although any such mode shift to alternatives modes of transportation, including transit would be in keeping with the City's Transit First Policy, given SFMTA's recent fiscal emergencies, Muni may not be able to accommodate increased ridership that may result from the 2009 Housing Element policies. Therefore, impacts to the City's transit system resulting from the 2009 Housing Element policies are considered *potentially significant*. The 2009 Housing Element policies related to reduced parking requirements are not anticipated to affect overall pedestrian and bicycle facilities, nor would they impact loading or emergency access. The following discusses the parking-related impacts of the 2009 Housing Element policies that encourage reduced parking.

The City of San Francisco's existing *Planning Code* Section 150 provides the requirements for off-street parking for residential and commercial development. The *Planning Code* is intended to assure that off-street parking facilities are provided in amounts that are sufficient and consistent with the objectives and the policies of the San Francisco *General Plan*. San Francisco's *General Plan* intends to provide minimal off-street parking to discourage excessive use of auto transportation and encourage use of public transit as an alternative mode of travel. The 2009 Housing Element policies that may influence an update of the City's parking requirements are identified above.

As discussed in the analysis of the 2004 Housing Element parking-related policies, San Francisco does not consider parking supply as part of the permanent physical environment and therefore, does not consider changes in parking conditions to be environmental impacts as defined by CEQA. The San

Francisco Planning Department acknowledges, however, that parking conditions may be of interest to the public and the decision makers.

Residential Density

Overall, the 1990 Residence Element promotes increased density on a broader, citywide, scale to a greater extent than the 2009 Housing Element. However, there are two areas under which the 2009 Housing Element could promote greater density. These include the following themes: increased density for affordable housing projects; and increased density standards that are development through a community planning process.

The 2009 Housing Element proposes policies that encourage increased density for affordable housing (see Policy 7.5), and increased density in certain planning areas (see Policies 1.5 and 1.6) to a greater degree than the 1990 Residence Element. As discussed throughout this EIR, the proposed Housing Elements would not result in any additional trips beyond those assumed by ABAG in their growth projections, which are accounted for in the 2025 Cumulative Conditions. Measures that encourage increased density for development projects or within specified areas of the City could redistribute some of the anticipated future growth.

The 2009 Housing Element encourages increased density for affordable housing to a similar degree as the 1990 Residence Element primarily through density bonuses for affordable housing. 2009 Housing Element Policy 7.5 advocates for process and zoning accommodations for affordable housing, some of which may include increased density. As discussed previously, affordable housing units generally result in fewer vehicle trips than market-rate housing and consequently do not result in the same level of impact on the City's roadways as market-rate housing. Due to lower vehicle trip rates for affordable housing, a percentage of affordable and senior trips would not affect the overall transportation system, but would be absorbed by available public transportation, pedestrian, and/or bicycle capacity.

2009 Housing Element Policy 1.5 advocates for the consideration of secondary unit in community planning processes. This policy is similar to the 1990 Residence Element Policy 1.5, which also advocates for allowing secondary units, although more generally throughout the City, and not restricted to community planning processes. Similarly, 2009 Housing Element Policy 1.6 could promote increased building envelopes, developed through community planning processes, whereas 1990 Residence Element Policy 12.3 could result in increased building envelopes more generally throughout the City. Overall, the 1990 Residence Element promotes increased density more generally citywide, while the 2009 Housing Element limits increased density as a tool to accommodate new housing growth only through community planning processes. With respect to increasing density as part of community planning processes, a considerable amount of research has been conducted on the links between residential density and travel behavior; studies have shown that a doubling of residential density could lower auto ownership and VMT

by 16%.¹² As discussed previously, any reduction in auto ownership (and vehicle trips) and VMT, would result in overall beneficial impacts to the transportation network. However, given that the 2009 Housing Element does not substantially promote increased density more so than the 1990 Residence Element, the 2009 Housing Element's density-related policies are not anticipated to result in a substantial mode shift towards transit and would therefore not be anticipated to affect 2025 transit conditions. Therefore, the 2009 Housing Element's transit-related policies would result in a less than significant impact to the City's transit network under future 2025 conditions.

New construction with increased density standards could result in a longer duration of housing construction, which could incrementally increase the associated activities that generate temporary traffic and parking demand. On the other hand, if more of the projected future housing units are accommodated within a given building envelope, the overall number of new residential projects to meet projected future housing may incrementally decrease. Therefore, increased residential density is not anticipated to result in substantial construction-related impacts to the transportation network.

Although not shown above, the 2009 Housing Element includes a number of policies pertaining to encouraging certain types of housing (see 2009 Housing Element policies 1.2 and 2.2). These policies advocate for housing that meets the full range of existing and projected housing needs in the City, and supports the merger of residential units only in instances where the merger would support family housing. Merging of units to accommodate family-sized units would not necessarily result in a substantial increase in residential density, as fewer units would be constructed within the given building envelope to accommodate more people per unit. Conversely, a building with smaller units (studio and 1-bedroom units) would be anticipated to accommodate more units within the building envelope, although serve a smaller number of people per unit.

Overall, the 2009 Housing Element policies related to increased residential density would not substantially affect operations of roadway, transit, pedestrian or bicycle facilities, nor would they impact loading, or emergency access. The 2009 Housing Element policies would have a similar effect on the transportation network as the 1990 Residence Element policies that seek to direct growth in areas already well served by modes other than automobiles, including public transportation, pedestrian, and bicycle facilities.

2009 Housing Element Analysis Conclusions

The proposed 2009 Housing Element policies related to directing growth, parking provisions, and increased density, as discussed above, would have a less-than-significant impact on the City's traffic operations, and pedestrian and bicycle facilities. 2009 Housing Element policies that would direct growth to certain areas of the City and policies that discourage parking could result in a mode shift towards public transit. Any such mode shift, although in keeping with the City's Transit First Policy, could

¹² Holtzclaw, 2004. Oral Presentation: Location Efficiency as the Missing Piece of the Energy Puzzle: How Smart Growth Can Unlock Trillion Dollar Consumer Cost Savings. Presented at the 2004 ACEEE Summer Study on Energy Efficiency in Buildings, Asilomar, California. Available online at: www.nrdc.org.

potentially exceed Muni's capacity utilization standard of 85 percent, resulting in a *potentially significant* transit impact.

The 2009 Housing Element policies would not adversely affect overall operations of the City's roadway network, above those identified under 2025 Cumulative Conditions. As discussed previously, the proposed Housing Elements would not generate any new trips not anticipated under Cumulative Conditions. Policies related to directing growth to certain areas of the city, reduced parking requirements, and increased density are designed to encourage residential development that can take advantage of alternative modes of transportation, including transit, walking, and bicycling, thereby reducing impacts to the City's roadway network that would otherwise occur under 2025 Cumulative Conditions.

The proposed 2009 Housing Element policies encourage residential development to take advantage of alternative modes of transportation. Under 2025 Cumulative Conditions, the California and Subway transit corridors are anticipated to operate near Muni's transit capacity utilization in 2025. Although the proposed housing element would not add any new trips under 2025 Cumulative Conditions, the 2009 Housing Element contains policies that encourage a mode shift to transit. A substantial mode shift along these two transit corridors could adversely affect the public transit system. Given that the 2009 Housing Element policies could potentially encourage increases in transit ridership above Muni's capacity utilization standard of 85 percent, and that SFMTA's fiscal emergencies may not allow for expanded transit service, the 2009 Housing Element may result in a *potentially significant* impact on the City's transit system.

The proposed 2009 Housing Element policies would have a less-than-significant impact on citywide pedestrian facilities. The 2009 Housing Element policies would not adversely affect overall operations of pedestrian facilities as they seek to direct growth in areas already well served by modes other than auto, including pedestrian facilities. Furthermore, the policies are not development-specific and therefore, would not generate net new trips. As a result, the policies of the 2009 Housing Element would not result in substantial overcrowding of sidewalks that could not be accommodated. Additionally, as specific residential development projects are proposed at specific locations throughout the City, project-level environmental review would be required to evaluate a variety of impacts, including those that may affect pedestrian facilities.

The proposed 2009 Housing Element policies would have a less-than-significant impact on citywide bicycle facilities. The 2009 Housing Element policies would not adversely affect overall operations of bicycle facilities as these policies seek to direct growth in areas already well served by alternative transportation modes that include bicycle facilities. Furthermore, the policies are not development-specific and therefore, would not generate net new trips. As a result, the policies of the 2009 Housing Element would not result in any degradation of bicycle facility operations. Additionally, as specific residential development projects are proposed at specific locations throughout the City, project-level environmental review would be required to evaluate a variety of impacts, including those that may affect bicycle facilities.

The proposed 2009 Housing Element policies would have a less-than-significant impact on citywide curb loading areas. The Housing Element policies would not adversely affect overall loading operations, as the policies seek to direct residential growth into various areas of the City. Furthermore, the policies are not development-specific and therefore, would not generate net new loading demand. Individual development projects would be required to provide adequate loading spaces in compliance with *Planning Code* Section 152, or other applicable *Planning Code* requirements pertaining to loading spaces. As a result, the policies of the 2009 Housing Element would not result in any overcapacity of loading spaces that could not be accommodated. Additionally, as specific residential development projects are proposed at specific locations throughout the City, project-level environmental review would be required to evaluate a variety of impacts, including those that may affect local loading conditions.

The proposed Housing Element policies would have a less-than-significant impact on citywide emergency vehicle access, since the policies are not development-specific and therefore, would not add any additional trips citywide. As a result, the 2009 Housing Element policies would not hinder emergency access. As specific residential development projects are proposed at specific locations throughout the City, project-level environmental review would be required to evaluate a variety of impacts, including those that may affect emergency vehicle access in the proposed development vicinity.

The 2009 Housing Element policies would not cause any construction impacts, since the policies are not development-specific and therefore, would not generate any vehicle trips related to construction of specific developments. As specific residential development projects are proposed at specific locations throughout the City, project-level environmental review would be required to evaluate a variety of impacts, including those due to temporary construction activity in the vicinity of the proposed development.

MITIGATION AND IMPROVEMENT MEASURES

This EIR concludes that the proposed 2004 and 2009 Housing Elements would not result in significant impacts to traffic, pedestrian, bicycle, loading, or emergency vehicle access, and would not result in construction-related transportation impacts. This EIR concludes that the proposed 2004 and 2009 Housing Elements could result in *significant transit impacts*. The proposed Housing Element policies encourage residential development that takes advantage of alternative modes of transportation, including transit. Under 2025 Cumulative Conditions, the California Street and Market Street Subway transit corridors are anticipated to operate near Muni's transit capacity utilization standard of 85 percent. Although the proposed Housing Elements would not add any new trips onto the transportation network under 2025 Cumulative Conditions, the Housing Elements contains policies that encourage a mode shift to transit. A substantial mode shift could result in an increase in transit ridership above Muni's capacity utilization standard, thereby resulting in overcrowding on the public transit system. The SFMTA could reduce potential overcrowding on transit by increasing capacity on Muni, which can be accomplished in two ways.

The first approach would be for the City to implement the transportation plans and programs, as previously described, which would reduce congestion and decrease transit travel times. By decreasing

transit travel times, a given bus can complete more runs in a day, which allows the capacity to be increased without acquiring additional buses, i.e. at no additional cost. While many of the transportation management plans are in the process of being implemented, implementation has not been secured for all of the measures. Furthermore, it is not known whether the implementation of all of the measures would provide a sufficient decrease in travel time (and resulting increase in capacity) to carry all of the projected riders.

The second approach would be for the SFMTA to increase capacity by providing more buses. However, this approach would involve increased costs for the SFMTA for which funding has not been identified. Furthermore, SFMTA has recently cut service due to budget shortfalls, and its ability to restore service to previous levels is uncertain. Securing additional funding to provide increased service would require new sources of revenue.

The impact of the Housing Elements on transit capacity can be mitigated through either a reduction in transit travel time, or the provision of additional transit vehicles, or a combination of the two. However, the certainty of either of these mitigation measures has not been established. For these reasons, the impact on transit would remain *significant and unavoidable*.

Mitigation Measures

No feasible mitigation measures have been identified.

Improvement Measures

No feasible improvement measures have been identified

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V. ENVIRONMENTAL SETTING AND IMPACTS

G. NOISE

INTRODUCTION

This section addresses the potential impacts of the 2004 Housing Element and 2009 Housing Element policies related to noise exposure, groundborne vibration exposure, permanent ambient noise levels, temporary ambient noise levels, noise generated from public airports and private airstrips, and effects of existing noise levels.

BACKGROUND

Sound and Environmental Noise

Sound is technically described in terms of amplitude (loudness) and frequency (pitch). The standard unit of measurement for sound amplitude is the decibel (dB). The decibel scale is a logarithmic scale that describes the physical intensity of the pressure vibrations that make up any sound. The pitch of the sound is related to the frequency of the pressure vibration. Since the human ear is not equally sensitive to a given sound level at all frequencies, a special frequency-dependent rating scale has been devised to relate noise to human sensitivity. The A-weighted decibel scale (dBA) provides this compensation by discriminating against frequencies in a manner approximating the sensitivity of the human ear.

Noise is typically defined as unwanted sound. A typical noise environment consists of a base of steady ambient noise that is the sum of many distant and indistinguishable noise sources. Superimposed on this background noise is the sound from individual local sources. These can vary from an occasional aircraft or train passing by to virtually continuous noise from, for example, traffic on a major highway. Table V.G-1 illustrates representative noise levels in the environment.

Noise levels from a particular source generally decline as distance to the receptor increases. As a rule of thumb, noise levels are generally reduced by 1 dBA for each 1,000 feet of distance due to air absorption. Noise levels may also be reduced by intervening structures – generally, a single row of buildings between the receptor and the noise source reduces the noise level by about 5 dBA, while a solid wall or berm reduces noise levels by 5 to 10 dBA.¹ Other factors, such as the weather and noise reflection or barriers, also help intensify or reduce the noise level at any given location.

¹ National Cooperative Highway Research Program Report 117, Highway Noise: A Design Guide for Highway Engineers, 1971.

**Table V.G-1
Representative Environmental Noise Levels**

Common Outdoor Activities	Noise Level (dBA)	Common Indoor Activities
	—110—	Rock Band
Jet Fly-over at 100 feet		
	—100—	
Gas Lawnmower at 3 feet		
	—90—	
		Food Blender at 3 feet
Diesel Truck going 50 mph at 50 feet	—80—	Garbage Disposal at 3 feet
Noisy Urban Area during Daytime		
Gas Lawnmower at 100 feet	—70—	Vacuum Cleaner at 10 feet
Commercial Area		Normal Speech at 3 feet
Heavy Traffic at 300 feet	—60—	
		Large Business Office
Quiet Urban Area during Daytime	—50—	Dishwasher in Next Room
Quiet Urban Area during Nighttime	—40—	Theater, Large Conference Room (background)
Quiet Suburban Area during Nighttime		
	—30—	Library
Quiet Rural Area during Nighttime		Bedroom at Night, Concert Hall (background)
	—20—	
		Broadcast/Recording Studio
	—10—	
Lowest Threshold of Human Hearing	—0—	Lowest Threshold of Human Hearing

Source: California Department of Transportation, Technical Noise Supplement, October 1998.

Several rating scales have been developed to analyze the adverse effect of community noise on people. Since environmental noise fluctuates over time, these scales consider that the effect of noise upon people is largely dependent upon the total acoustical energy content of the noise, as well as the time of day when the noise occurs. Those that are applicable to this analysis are as follows:

- L_{eq} – An L_{eq} , or equivalent energy noise level, is the average acoustic energy content of noise for a stated period of time. Thus, the L_{eq} of a time-varying noise and that of a steady noise are the same if they deliver the same acoustic energy to the ear during exposure. For evaluating community impacts, this rating scale does not vary, regardless of whether the noise occurs during the day or the night.
- L_{max} – The maximum instantaneous noise level experienced during a given period of time.
- L_{min} – The minimum instantaneous noise level experienced during a given period of time.
- CNEL – The Community Noise Equivalent Level is a 24-hour average L_{eq} with a 5 dBA “weighting” during the hours of 7:00 P.M. to 10:00 P.M. and a 10 dBA “weighting” added to noise during the hours of 10:00 P.M. to 7:00 A.M. to account for noise sensitivity in the evening

and nighttime, respectively. The logarithmic effect of these additions is that a 60 dBA 24 hour L_{eq} would result in a measurement of 66.7 dBA CNEL.

- Day-Night Average Level (L_{dn}) - L_{dn} , like CNEL, is the weighted 24-hour average noise level in an environment, which accounts for peoples increased annoyance to noise occurring in the nighttime hours. It is the average equivalent A-weighted sound level during a 24-hour day, calculated after adding 10 decibels to sound levels which occur in the night after 10:00 P.M. and before 7:00 A.M. Typically, L_{dn} levels are within 1 dBA of CNEL levels.

Environmental noise levels are generally considered low when the CNEL is below 60 dBA, moderate in the 60–70 dBA range, and high above 70 dBA. Noise levels greater than 85 dBA can cause temporary or permanent hearing loss.

Health Effects of Environmental Noise

The World Health Organization (WHO) is perhaps the best source of current knowledge regarding health impacts due to the fact that the European nations have continued to study noise and its health effects, while the U.S. Environmental Protection Agency all but eliminated its noise investigation and control program in the 1970s.² According to WHO, sleep disturbance can occur when continuous indoor noise levels exceed 30 dBA or when intermittent interior noise levels reach 45 dBA, particularly if background noise is low. With a bedroom window slightly open, a noise reduction from outside to inside of 15 dBA would occur while the noise attenuation with closed windows is about 25 dBA.³ Under these conditions, the WHO criteria would suggest exterior continuous (ambient) nighttime noise levels should be 45 dBA or below, and short-term events should not generate noise in excess of 60 dBA. The WHO also notes that maintaining noise levels within the recommended levels during the first part of the night is believed to be effective for the ability to fall asleep.⁴

Other potential health effects of noise identified by WHO include decreased performance on complex cognitive tasks, such as reading, attention, problem solving, and memorization; physiological effects such as hypertension and heart disease (after many years of constant exposure, often by workers, to high noise levels); and hearing impairment (again, generally after long-term occupational exposure, although shorter-term exposure to very high noise levels, for example, exposure several times a year to concert noise at 100 dBA). Noise can also disrupt speech intelligibility at relatively low levels; for example, in a classroom setting, a noise level as low as 35 dBA can disrupt clear understanding. Finally, noise can cause annoyance, and can trigger emotional reactions like anger, depression, and anxiety. The WHO

² The San Francisco General Plan Land Use Compatibility Guidelines for Community Noise were created during the same era.

³ National Cooperative Highway Research Program Report 117, Highway Noise: A Design Guide for Highway Engineers, 1971.

⁴ World Health Organization, Guidelines for Community Noise. Geneva, 1999. Available on the internet at: <http://www.who.int/docstore/peh/noise/guidelines2.html>. This document is also available for review at the Planning Department, 1650 Mission Street, Suite 400.

reports that, during daytime hours, few people are seriously annoyed by activities with noise levels below 55 dBA, or moderately annoyed with noise levels below 50 dBA.⁵

Groundborne Vibration

Vibration is sound radiated through the ground. Vibration can result from a source (e.g., train operations, motor vehicles, machinery equipment, etc.) causing the adjacent ground to move, thereby, creating vibration waves that propagate through the soil to the foundations of nearby buildings. This effect is referred to as groundborne vibration. The peak particle velocity (PPV) or the root mean square (RMS) velocity is usually used to describe vibration levels. PPV is defined as the maximum instantaneous peak of the vibration level, while RMS is defined as the square root of the average of the squared amplitude of the level. PPV is typically used for evaluating potential building damage, while RMS velocity in decibels (VdB) is typically more suitable for evaluating human response.

The vibration velocity level threshold of perception for humans is approximately 65 VdB. Most perceptible indoor vibration is caused by sources within buildings, such as the operation of mechanical equipment, movement of people, or the slamming of doors. Typical outdoor sources of perceptible groundborne vibration are construction equipment, steel-wheeled trains, and traffic on rough roads. The range of interest is from approximately 50 VdB, which is the typical background vibration velocity level, to 100 VdB, which is the general threshold where minor damage can occur in fragile buildings.

The general human response to different levels of groundborne vibration velocity levels is described in Table V.G-2.

Table V.G-2
Human Response to Different Levels of Groundborne Vibration

Vibration Velocity Level	Human Reaction
65 VdB	Approximate threshold of perception for many people.
75 VdB	Approximate dividing line between barely perceptible and distinctly perceptible. Many people find that transportation-related vibration at this level is unacceptable.
85 VdB	Vibration acceptable only if there are an infrequent number of events per day.

Source: Federal Transit Administration, Transit Noise and Vibration Impact Assessment, May 2006.

ENVIRONMENTAL SETTING

This section will describe the major sources of noise in the City, sensitive receptors, existing ambient noise levels, and existing groundborne vibration levels.

⁵ Ibid.

Project Location

The majority of the City is urban in nature and is expected to experience relatively high noise levels due to roadway traffic and other human activities. Major thoroughfares within the City include Interstate 80, Interstate 280, Highway 101 (including Van Ness Avenue and Lombard Street), State Route 1 (19th Avenue), Market Street, and Van Ness Avenue. Other sources of noise include construction work and emergency sirens.

Sensitive Receptors

Sensitive receptors are populations that are more susceptible to the effects of noise and vibration than others, such as the elderly and children, and are therefore of particular focus in noise analysis. Locations that may contain high concentrations of sensitive receptors include long-term health care facilities, rehabilitation centers, convalescent centers, retirement homes, residences, schools, child care centers, and libraries. These types of locations are present throughout the City.

Existing Conditions

Existing Ambient Noise Levels

The existing ambient noise levels in the City are primarily dependent on vehicular traffic and vehicle fleet makeup. The major thoroughfares within the City include Interstate 80, Interstate 280, Highway 101, State Route 1, Market Street, and Van Ness Avenue. Noise from autos, trucks, buses, and Muni operations on local roadways also significantly contribute to ambient noise levels. As such, ground transportation noises from trucks, buses, motorcycles, and poorly muffled automobiles predominate over other types of noises as the most persistent cause for complaint in the City.⁶ In 2008, the San Francisco Department of Public Health (SFDPH) produced a comprehensive map showing the transportation noise levels on every street throughout the City, as shown in Figure V.G-1, as well as the areas subject to noise levels over 60 dBA (L_{dn}). This map was created using a digital local traffic-based model, which was based on the Federal Highway Administration (FHWA) Traffic Noise Model.

Figure V.G-1 shows the existing background noise levels throughout the City. As shown, the areas experiencing high ambient noise levels include: areas adjacent to Interstates 80 and 280, U.S. 101, State Route 1, as well as the following districts: Downtown, SoMa, Japantown, and the Western Addition. The high levels of noise experienced in these areas are mainly due to vehicular traffic.

In addition to vehicle traffic, continuous use or operation of mechanical equipment can contribute to ambient noise levels. This includes air conditioning, refrigeration, heating, pumping, and filtering equipment intended for repetitive use.

⁶ City and County of San Francisco, Planning Department, Environmental Protection Element of the General Plan.

Existing Groundborne Vibration Levels

Typical sources of groundborne vibration in the City are heavy-duty vehicular travel (e.g., refuse trucks, delivery trucks, and transit buses) on local roadways. Trucks and buses typically generate groundborne vibration velocity levels of around 63 VdB, and these levels could reach 72 VdB where trucks and buses pass over bumps in the road.⁷ In terms of PPV levels, a heavy-duty vehicle traveling a distance of 50 feet can result in a vibration level of approximately 0.001 inch per second. Vibration is also caused by the City's underground public transportation system, including BART and Muni.

REGULATORY SETTING

Federal

Noise Standards

The U.S. Department of Housing and Urban Development (HUD) has developed minimum national standards applicable to all HUD programs to protect citizens against excessive noise for their residences and in their communities. This guidance is used by project sponsors to evaluate site-specific noise conditions during the environmental review process for projects seeking funding from HUD. Accordingly, HUD has developed exterior noise goals, consistent with recommendations by the U.S. Environmental Protection Agency (EPA) for outdoor and residential areas, of a day-night average sound level of 55 dB, noting that sites with a day-night average sound level of 65 dB and below are acceptable and allowable. Interior noise goals shall not exceed 45 dB, emphasizing attenuation measures to meet interior noise goals where feasible. Particular importance is placed on compatible land use planning in relation to airports, highways and other sources of high noise. HUD generally does not support the new construction of noise sensitive uses on sites having unacceptable noise exposure. The degree of acceptability of the noise environment at a site is determined by the sound levels external to buildings or other facilities containing noise sensitive uses (Table V.G-3). Sites where the noise environment is above HUD's site acceptability standards deserve special attention and may require special approvals, additional environmental review, and the incorporation of noise attenuation features.

⁷ Federal Transit Administration, Transit Noise and Vibration Impact Assessment, May 2006.



CITY AND COUNTY OF SAN FRANCISCO
PLANNING DEPARTMENT

**Figure V.G-1
Background Noise Levels, 2009**



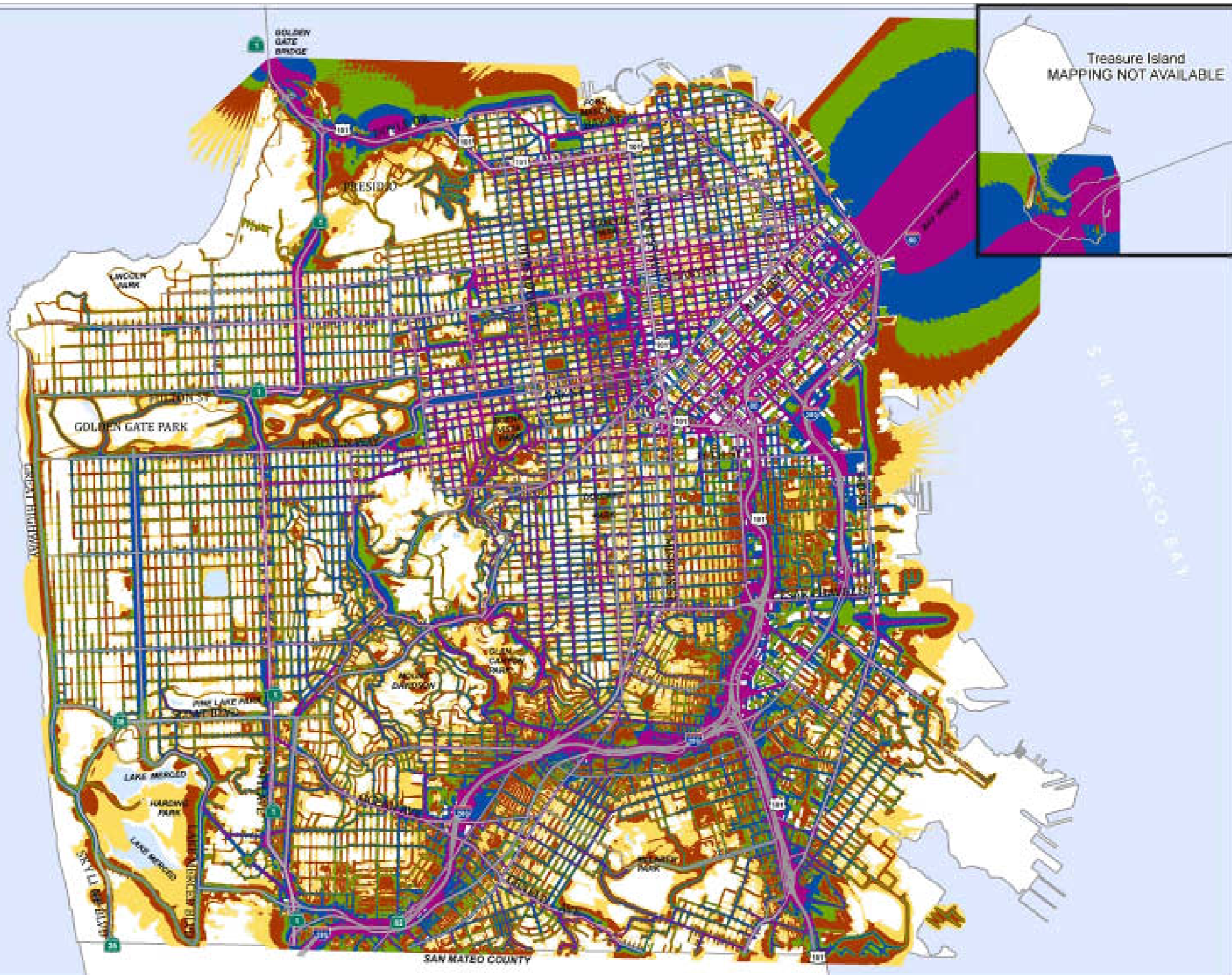
Notes:

1. The model is in decibels A weighted (dBA) averaged over 24 hours and penalized for night yielding - what is called a Ldn.

2. Model excludes Treasure Island and Yerba Buena Island.



Source: CCSF Department of Public Health, March 2009.



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**Table V.G-3
HUD Site Acceptability Standards**

	Day-night Average Sound Level (dB)	Special Approvals and Requirements
Acceptable	< 65 dB	None
Normally Unacceptable	65-75 dB	Special Approvals Environmental Review Attenuation Features
Unacceptable	>75 dB	Special Approvals Environmental Review Attenuation Features
<i>Source: 24 CFR, Part 51, Section 51.100-51.105.</i>		

The Federal Transit Administration (FTA) has also developed guidance on how to assess noise impacts from the construction and operation of proposed mass transit projects: *Transit Noise and Vibration Impact Assessment*. This guidance is used by project sponsors seeking funding from FTA to evaluate these impacts during the environmental review process. The guidance contains procedures for assessing impacts at different stages of project development, from early planning through preliminary engineering and final design. With regard to noise exposure and workers, the Office of Occupational Safety and Health Administration (OSHA) regulation safeguard the hearing of workers exposed to occupational noise.

Vibration Standards

The FTA has adopted vibration standards that are used to evaluate potential building damage impacts related to construction activities. The vibration damage criteria adopted by the FTA are shown in Table V.G-4.

**Table V.G-4
Construction Vibration Damage Criteria**

Building Category	PPV (in/sec)
I. Reinforced-concrete, steel or timber (no plaster)	0.5
II. Engineered concrete and masonry (no plaster)	0.3
III. Non-engineered timber and masonry buildings	0.2
IV. Buildings extremely susceptible to vibration damage	0.12
<i>Source: Federal Transit Administration, Transit Noise and Vibration Impact Assessment, May 2006.</i>	

In addition, the FTA has also adopted standards associated with human annoyance for groundborne vibration impacts for the following three land-use categories: Vibration Category 1 – High Sensitivity, Vibration Category 2 – Residential, and Vibration Category 3 – Institutional. The FTA defines Category 1 as buildings where vibration would interfere with operations within the building, including vibration-sensitive research and manufacturing facilities, hospitals with vibration-sensitive equipment, and university research operations. Vibration-sensitive equipment includes, but is not limited to, electron microscopes, high-resolution lithographic equipment, and normal optical microscopes. Category 2 refers to all residential land uses and any buildings where people sleep, such as hotels and hospitals. Category 3 refers to institutional land uses such as schools, churches, other institutions, and quiet offices that do not have vibration-sensitive equipment, but still have the potential for activity interference.

Under conditions where there are an infrequent number of events per day, the FTA has established thresholds of 65 VdB for Category 1 buildings, 80 VdB for Category 2 buildings, and 83 VdB for Category 3 buildings.⁸ Under conditions where there are an occasional number of events per day, the FTA has established thresholds of 65 VdB for Category 1 buildings, 75 VdB for Category 2 buildings, and 78 VdB for Category 3 buildings.⁹ No thresholds have been adopted or recommended for commercial and office uses.

State

Noise Standards

Section 65302(f) of the California Government Code requires each county and city in the State to prepare and adopt a comprehensive long-range general plan for its physical development, with Section 65302(g) requiring a noise element to be included in the general plan. The noise element must: (1) identify and appraise noise problems in the community; (2) recognize Office of Noise Control guidelines; and (3) analyze and quantify current and projected noise levels. In addition, California's Guidelines for Noise and Land Use Compatibility Criteria, summarized in Table V.G-5, are to be considered by local governments when setting standards for human exposure to noise and preparing noise elements for general plans.

The State of California also establishes minimum noise insulation performance standards for hotels, motels, dormitories, apartment houses, and dwellings other than detached single-family dwellings as set forth in the 2007 California Building Code (Chapter 12, Appendix Section 1207.11.2) and in Title 24 of the California Code of Regulations. The noise limit is a maximum interior noise level of 45 dBA L_{dn} . Where

⁸ “Infrequent events” is defined by the Federal Transit Administration as being fewer than 30 vibration events of the same kind per day. Federal Transit Administration, Transit Noise and Vibration Impact Assessment, May 2006.

⁹ “Occasional events” is defined by the Federal Transit Administration as between 30 and 70 vibration events of the same source per day. Federal Transit Administration, Transit Noise and Vibration Impact Assessment, May 2006.

exterior noise levels exceed 60 dBA L_{dn} , a report must be submitted with the building plans describing the noise control measures that have been incorporated into the design of the project to meet the noise limit.

**Table V.G-5
Community Noise Exposure (CNEL)**

Land Use	Normally Acceptable ^a	Conditionally Acceptable ^b	Normally Unacceptable ^c	Clearly Unacceptable ^d
Single-family, Duplex, Mobile Homes	50 - 60	55 - 70	70 - 75	above 75
Multi-Family Homes	50 - 65	60 - 70	70 - 75	above 75
Schools, Libraries, Churches, Hospitals, Nursing Homes	50 - 70	60 - 70	70 - 80	above 80
Transient Lodging – Motels, Hotels	50 - 65	60 - 70	70 - 80	above 75
Auditoriums, Concert Halls, Amphitheaters	---	50 - 70	---	above 70
Sports Arena, Outdoor Spectator Sports	---	50 - 75	---	above 75
Playgrounds, Neighborhood Parks	50 - 70	---	67 - 75	above 75
Golf Courses, Riding Stables, Water Recreation, Cemeteries	50 - 75	---	70 - 80	above 80
Office Buildings, Business and Professional Commercial	50 - 70	67 - 77	above 75	---
Industrial, Manufacturing, Utilities, Agriculture	50 - 75	70 - 80	above 75	---

^a *Normally Acceptable:* Specified land use is satisfactory, based upon the assumption that any buildings involved are of normal conventional construction without any special noise insulation requirements.

^b *Conditionally Acceptable:* New construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made and needed noise insulation features included in the design. Conventional construction, but with closed windows and fresh air supply systems or air conditioning will normally suffice.

^c *Normally Unacceptable:* New construction or development should generally be discouraged. If new construction or development does proceed, a detailed analysis of the noise reduction requirements must be made and needed noise insulation features included in the design.

^d *Clearly Unacceptable:* New construction or development should generally not be undertaken.

Source: Office of Planning and Research, State of California General Plan Guidelines, October 2003 (in coordination with the California Department of Health Services).

Table V.G-6 shows correction factors to measured or calculated values in order to account for some of the factors that may cause the noise to be more or less acceptable than the mean response. These factors include seasonal variations in noise source levels, existing outdoor ambient levels (i.e., relative intrusiveness of the source), general societal attitudes towards the noise source, prior history of the noise source, and tonal characteristics of the source. When it is possible to evaluate some or all of these factors, the measured or computed noise exposure values may be adjusted by means of the correction factors listed above in order to more accurately assess local sentiments towards acceptable noise exposure.¹⁰

¹⁰ Office of Planning and Research, State of California General Plan Guidelines, Appendix C: Noise Element Guidelines, October 2003.

**Table V.G-6
Noise Adjustment Factors**

Type of Correction	Description	Amount of Correction to be Added to Measured CNEL in dB
Seasonal Correction	Summer (or year-round operation).	0
	Winter only (or windows always closed).	-5
Correction for Outdoor Residual Noise Level	Quiet Suburban or rural community (remote from large cities and from industrial activity and trucking).	+10
	Quiet suburban or rural community (not located near industrial activity).	+5
	Urban residential community (not immediately adjacent to heavily traveled roads and industrial areas).	0
	Noisy urban residential community (near relatively busy roads or industrial areas).	-5
	Very noisy urban residential community.	-10
Correction for Previous Exposure and Community Attitudes	No prior experience with the intruding noise.	+5
	Community has had some previous exposure to intruding but little effort is being made to control the noise. This correction may also be applied in a situation where the community has not been exposed to the noise previously, but the people are aware that bona fide efforts are being made to control the noise.	0
	Community has had considerable previous exposure to the intruding noise and the noise maker's relations with the community are good.	-5
	Community aware that the operation causing noise is very necessary and it will not continue indefinitely. This correction can be applied for an operation of limited duration and under emergency circumstances.	-10
Pure Tone or Impulse	No pure tone or impulse character.	0
	Pure tone or impulse character present.	+5
<i>Source: Office of Planning and Research, State of California General Plan Guidelines, Appendix C: Noise Element Guidelines, October 2003.</i>		

Vibration Standards

There are no State vibration standards applicable to the proposed Housing Elements. However, the California Department of Transportation (Caltrans) noted in its 2002 technical publication titled "Transportation Related Earthborne Vibrations (Caltrans Experiences)" that an upper PPV criterion level of 0.08 inch per second is recommended for continuous vibrations to which "ruins and ancient

monuments” should be subjected.¹¹ This criterion level may also be used for historical buildings, or buildings that are in poor condition. For normal dwelling houses with plastered walls and ceilings, Caltrans indicates that a PPV criterion level of 0.20 inch per second is the threshold at which there is a risk of “architectural” damage.

Local

San Francisco General Plan

Noise issues within the City are guided by the Environmental Protection Element of San Francisco General Plan. Pursuant to Section 6530(g) of the California Government Code, San Francisco includes the provisions set forth below regarding transportation noise. The provisions are based on an analysis of noise levels at the time that the Environmental Protection Element was drafted as well as 1995 projected noise levels.

- Policy 9.1: Enforce noise emission standards for vehicles.
- Policy 9.2: Impose traffic restrictions to reduce transportation noise.
- Policy 9.3: Limit City purchases of vehicles to models with the lowest noise emissions and adequately maintain City-owned vehicles and travel surfaces.
- Policy 9.4: Regulate use of emergency sirens.
- Policy 9.5: Retain and expand the electric trolley network.
- Policy 9.6: Discourage changes in streets which will result in greater traffic noise in noise-sensitive areas.
- Policy 10.1: Promote site planning, building orientation and design, and interior layout that will lessen noise intrusion.
- Policy 10.2: Promote the incorporation of noise insulation materials in new construction.
- Policy 10.3: Construct physical barriers to reduce noise transmission from heavy traffic carriers.
- Policy 11.1: Discourage new uses in areas in which the noise level exceeds the noise compatibility guidelines for that use.
- Policy 11.2: Consider the relocation to more appropriate areas of those land uses which need more quiet and cannot be effectively insulated from noise in their present location, as well as those land uses which are noisy and are presently in noise-sensitive areas.
- Policy 11.3: Locate new noise-generating development so that the noise impact is reduced.

¹¹ According to Caltrans’ “Transportation Related Earthborne Vibrations (Caltrans Experiences), February 20, 2002” publication, continuous vibrations refer to traffic, train, and most construction vibrations, with the exception of pile driving, blasting, and some other types of construction/demolition.

The San Francisco General Plan also outlines the maximum acceptable noise levels for newly developed land uses. The maximum “satisfactory” noise level is 60 dBA for hotel and residential uses, 65 dBA for school classrooms, libraries, churches, and hospitals, 70 dBA for playgrounds, parks, office buildings, retail commercial uses and noise-sensitive manufacturing/communications uses, and 77 dBA for other commercial uses (e.g., wholesale, retail, industrial/manufacturing, transportation, communications, and utilities). If a proposed project would exceed these noise level guidelines, a detailed analysis of noise reduction requirements would typically be required prior to project approval, pursuant to Title 24 building code regulations (discussed previously).

Article 29 (Regulation of Noise) of the San Francisco Police Code

Article 29 of the San Francisco Police Code sets noise level limits and provides general noise regulations for various sources in an effort to prohibit unwanted, excessive, and avoidable noise. The applicable sections of Article 29 are as follows:

Section 2907: Construction Equipment.

(a) Except as provided for in Subsections (b), (c), and (d) hereof, it shall be unlawful for any person to operate any powered construction equipment if the operation of such equipment emits noise at a level in excess of 80 dBA when measured at a distance of 100 feet from such equipment, or an equivalent sound level at some other convenient distance.

(b) The provisions of Subsections (a) of this Section shall not be applicable to impact tools and equipment, provided that such impact tools and equipment shall have intake and exhaust mufflers recommended by the manufacturers thereof and approved by the Director of Public Works or the Director of Building Inspection as best accomplishing maximum noise attenuation, and that pavement breakers and jackhammers shall also be equipped with acoustically attenuating shields or shrouds recommended by the manufacturers thereof and approved by the Director of Public Works or the Director of Building Inspection as best accomplishing maximum noise attenuation.

(c) The provisions of Subsection (a) of this Section shall not be applicable to construction equipment used in connection with emergency work.

(d) Helicopters shall not be used for construction purposes for more than two hours in any single day or more than four hours in any single week.

Section 2908: Construction Work at Night.

It shall be unlawful for any person, between the hours of 8:00 p.m. of any day and 7:00 a.m. of the following day to erect, construct, demolish, excavate for, alter or repair any building or structure if the noise level created thereby is in excess of the ambient noise level by 5 dBA at the nearest property plane, unless a special permit therefor has been applied for and granted by the Director of Public Works or the Director of Building Inspection. In granting such special permit the Director of Public Works or the Director of Building Inspection shall consider: if construction noise in the vicinity of the proposed work

site would be less objectionable at night than during daytime because of different population levels or different neighboring activities if obstruction and interference with traffic, particularly on streets of major importance, would be less objectionable at night than during daytime; if the kind of work to be performed emits noises at such a low level as to not cause significant disturbance in the vicinity of the work site, if the neighborhood of the proposed work site is primarily residential in character wherein sleep could be disturbed; if great economic hardship would occur if the work were spread over a longer time if the work will abate or prevent hazard to life or property; and if the proposed night work is in the general public interest. The Director of Public Works or the Director of Building Inspection shall prescribe such conditions, working times, types of construction equipment to be used, and permissible noise emissions, as required in the public interest. The provisions of this Section shall not be applicable to emergency work.

Section 2909: Noise Limits.

(a) Residential Property Noise Limits.

(1) No person shall produce or allow to be produced by any machine, or device, music or entertainment or any combination of same, on residential property over which the person has ownership or control, a noise level more than five dBA above the ambient at any point outside of the property plane.

(2) No person shall produce or allow to be produced by any machine, or device, music or entertainment or any combination of same, on multi-unit residential property over which the person has ownership or control, a noise level more than five dBA above the local ambient three feet from any wall, floor, or ceiling inside any dwelling unit on the same property, when the windows and doors of the dwelling unit are closed, except within the dwelling unit in which the noise source or sources may be located.

(b) Commercial And Industrial Property Noise Limits.

No person shall produce or allow to be produced by any machine or device, music or entertainment or any combination of same, on commercial or industrial property over which the person has ownership or control, a noise level more than eight dBA above the local ambient at any point outside of the property plane. With respect to noise generated from a licensed Place of Entertainment, in addition to the above dBA criteria a secondary low frequency dBC¹² criteria shall apply to the definition above. No noise or music associated with a licensed Place of Entertainment shall exceed the low frequency ambient noise level defined in Section 2901(f) by more than 8 dBC.

(c) Public Property Noise Limits.

No person shall produce or allow to be produced by any machine or device, or any combination of same, on public property, a noise level more than ten dBA above the local ambient at a distance of twenty-five

¹² dBc is decibels relative to the carrier. This unit is used to describe, in decibels, how far down signals and noise are relative to a known signal.

feet or more, unless the machine or device is being operated to serve or maintain the property or as otherwise provided in this Article.

(d) Fixed Residential Interior Noise Limits.

In order to prevent sleep disturbance, protect public health and prevent the acoustical environment from progressive deterioration due to the increasing use and influence of mechanical equipment, no fixed noise source may cause the noise level measured inside any sleeping or living room in any dwelling unit located on residential property to exceed 45 dBA between the hours of 10:00 p.m. to 7:00 a.m. or 55 dBA between the hours of 7:00 a.m. to 10:00p.m. with windows open except where building ventilation is achieved through mechanical systems that allow windows to remain closed.

(e) Noise Caused By Activities Subject To Permits From the City and County of San Francisco.

None of the noise limits set forth in this Section apply to activity for which the City and County of San Francisco has issued a permit that contains noise limit provisions that are different from those set forth in this Article.

IMPACTS

Significance Thresholds

The proposed Housing Elements would normally have a significant effect on the environment if they would:

- Result in exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies;
- Result in exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels;
- Result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project;
- Result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project;
- For a project located within an airport land use plan area, or, where such a plan has not been adopted, in an area within two miles of a public airport or public use airport, would the project expose people residing or working in the area to excessive noise levels;
- For a project located in the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels; or
- Be substantially affected by existing noise levels.

Impact Evaluation

As discussed previously, the 2004 Housing Element and 2009 Housing Elements would not change the land use objectives and policies in the City's area and redevelopment plans. According to Part I of the 2009 Housing Element (Data and Needs Analysis), the City has available capacity to meet the RHNA. Therefore, the rezoning of land uses is not required. To meet the City's share of the RHNA, the proposed Housing Elements aim to do the following: 1) preserve and upgrade existing housing units to ensure they do not become dilapidated, abandoned, or unsound, and 2) provide direction for how and where new housing development in the City should occur. With respect to the latter, the 2004 Housing Element encourages new housing in Downtown and in underutilized commercial and industrial areas. The 2004 Housing Element also encourages increased housing in neighborhood commercial districts and mixed-use districts near Downtown. On the other hand, the 2009 Housing Element encourages housing in new commercial or institutional projects and accommodating housing through existing community planning processes.

The City is neither within an airport land use plan area, nor within two miles of a public airport or public use airport, nor within the vicinity of a private airstrip. Therefore, the proposed Housing Elements would have *no impact* with respect to airport noise, or noise within the vicinity of a private airstrip.

Impact NO-1: The proposed Housing Elements would not result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels that would occur without the proposed Housing Elements. (Less than Significant)

New construction could result in impacts related to temporary or periodic increase in new noise above existing levels if new housing would result in increases in noise levels above ambient levels. Activities associated with new housing include demolition, grading, excavation, and construction, all of which could result in a temporary or periodic increase in existing ambient noise levels. The proposed housing elements include policies that would direct growth to certain areas of the City and policies that would allow for incremental increases in residential building densities. Policies that direct growth to certain areas of the City could consolidate new construction to these areas, thereby resulting in temporary or periodic increases in ambient noise levels from housing construction. Policies that relate to building densities could incrementally increase the average construction period for new housing.

2004 Housing Element Analysis

The following 2004 Housing Element policies aim to direct growth to certain areas of the City and promote increased building densities, potentially consolidating new construction activities to those areas of the City and increasing average construction duration.

Impact	2004 Housing Element	Corresponding 1990 Residence Element Policy
<p>Direct growth to certain areas of the City.</p>	<p>Policy 1.1: Encourage higher residential density in areas adjacent to downtown, in underutilized commercial and industrial areas proposed for conversion to housing and in neighborhood commercial districts where higher density will not have harmful effects, especially if the higher density provides a significant number of units that are affordable to lower income households. Set allowable densities in established residential areas at levels which will promote compatibility with prevailing neighborhood scale and character where there is neighborhood support.</p>	<p>Policy 2.1: Set allowable densities in established residential areas at levels which will promote compatibility with prevailing neighborhood character.</p> <p>Policy 2.2: Encourage higher residential density in areas adjacent to downtown, in underutilized commercial and industrial areas proposed for conversion to housing and in neighborhood commercial districts where higher density will not have harmful effects, especially if the higher density provides a significant number of units that are permanently affordable to lower income households.</p>
	<p>Implementation Measure 1.1.1: A Citywide action plan (CAP) should provide a comprehensive framework for the allocation of higher density, mixed-use residential development in transit-rich areas with stable urban amenities in place. In these areas, specific CAP strategies should include: higher densities and reduced parking requirements in downtown areas or through a Better Neighborhoods type planning process; pedestrian-oriented improvements to enhance the attractiveness and use of transit.</p>	
	<p>Policy 1.2: Encourage housing development, particularly affordable housing, in neighborhood commercial areas without displacing existing jobs, particularly blue-collar jobs or discouraging new employment opportunities.</p>	
	<p>Implementation Measure 1.2.1: The Planning Department will develop proposals in neighborhood commercial districts (NCDs) well served by transit to strengthen their functions as a traditional “town center” for the surrounding residential districts.</p>	
	<p>Policy 1.3: Identify opportunities for housing and mixed-use districts near downtown and former industrial portions of the City.</p>	<p>Policy 1.2: Facilitate the conversion of underused industrial and commercial areas to residential use, giving preference to permanently affordable housing uses.</p>

Impact	2004 Housing Element	Corresponding 1990 Residence Element Policy
	<p>Implementation Measure 1.3.1: Downtown areas and areas subject to a Better Neighborhoods type planning process will be expected to absorb major office and residential developments over the next decade. Planning and zoning code changes should include floor-to-area ratio exemptions. These development bonuses would be conferred only in cases where in return the development will provide major public benefits to the community.</p>	<p>Implementation Measure 1.1.3: Inclusion of housing in Downtown.</p>
	<p>Implementation Measure 1.3.2: The Planning Department will introduce zoning changes in the traditionally industrial eastern parts of the City. The areas under study are: Mission, South of Market, Showplace Square/Potrero Hill, Bayview Hunter’s Point, and Visitacion Valley. Housing, especially affordable housing, will be encouraged in former industrial areas where residential neighborhoods are established and urban amenities are in place or feasible.</p>	
	<p>Policy 1.4: Locate in-fill housing on appropriate sites in established residential neighborhoods.</p>	<p>Policy 1.4: Locate in-fill housing on appropriate sites in established neighborhoods.</p>
	<p>Policy 1.6: Create incentives for the inclusion of housing, particularly permanently affordable housing, in new commercial development projects.</p>	
	<p>Implementation Measure 1.6.2: The Planning Department and the Redevelopment Agency will propose increasing height limits, eliminating density requirements and modifying off-street parking requirements in the Transbay/Rincon Hill Redevelopment survey areas. The Mid-Market redevelopment survey area will be rezoning to include mixed-use residential areas and reduced residential parking requirements.</p>	

Impact	2004 Housing Element	Corresponding 1990 Residence Element Policy
	Implementation Measure 1.6.4: The Planning Department will update the Land Use Element to define areas for mixed-use development focused along transit corridors that are determined to be served by sufficient and reliable transit.	
	Implementation Measure 1.8.1: The Board of Supervisors has introduced Planning Code amendments to allow secondary units in new buildings that are in close proximity to neighborhood commercial districts and public transit.	
	Implementation Measure 2.4.2: As part of the Planning Department’s current citywide action plan, planning efforts in the eastern neighborhoods of the City, where housing exists in commercial and industrially zoned districts, should address housing retention as new policies and zoning are established. Mixed use should be encouraged where appropriate.	
	Implementation Measure 4.1.4: The City will work to identify underutilized, vacant, and Brownfield sites that are publicly or privately owned and suitable for affordable housing development. TH City will work with for profit and non-profit housing developers to acquire these sites for permanently affordable housing.	Implementation Measure 1.1.1: Aggressive pursuit of development opportunities [on] underused public sites. Implementation Measure 1.1.4: In-fill housing on vacant or underused sites.
	Implementation Measure 4.1.6: Permanently affordable housing sites will be especially sought out in places where transportation and existing amenities are in place.	
	Policy 11.6: Employ flexible land use controls in residential areas that can regulate inappropriately sized development in new neighborhoods, in downtown areas and in other areas through a Better Neighborhoods type planning process while maximizing the opportunity for housing near transit.	Policy 12.5: Relate land use controls to the appropriate scale for new and existing residential areas.

Impact	2004 Housing Element	Corresponding 1990 Residence Element Policy
	<p>Implementation Measure 11.6.1: The City will continue to promote increased residential densities in areas well served by transit and neighborhood compatible development with the support and input from local neighborhoods.</p>	
<p>Promote increased density-related development standards</p>	<p>Policy 1.1: Encourage higher residential density in areas adjacent to downtown, in underutilized commercial and industrial areas proposed for conversion to housing and in neighborhood commercial districts where higher density will not have harmful effects, especially if the higher density provides a significant number of units that are affordable to lower income households. Set allowable densities in established residential areas at levels which will promote compatibility with prevailing neighborhood scale and character where there is neighborhood support.</p>	<p>Policy 2.1: Set allowable densities in established residential areas at levels which will promote compatibility with prevailing neighborhood character.</p> <p>Policy 2.2: Encourage higher residential density in areas adjacent to downtown, in underutilized commercial and industrial areas proposed for conversion to housing and in neighborhood commercial districts where higher density will not have harmful effects, especially if the higher density provides a significant number of units that are permanently affordable to lower income households.</p>
	<p>Implementation Measure 1.1.1: A Citywide action plan (CAP) should provide a comprehensive framework for the allocation of higher density, mixed-use residential development in transit-rich areas with stable urban amenities in place. In these areas, specific CAP strategies should include: higher densities and reduced parking requirements in downtown areas or through a Better Neighborhoods type planning process; pedestrian-oriented improvements to enhance the attractiveness and use of transit.</p>	
	<p>Implementation Measure 1.3.1: Downtown areas and areas subject to a Better Neighborhoods type planning process will be expected to absorb major office and residential developments over the next decade. Planning and zoning code changes should include floor-to-area ratio exemptions. These development bonuses would be conferred only in cases where in return the development will provide major public benefits to the community.</p>	<p>Implementation Measure 1.1.3: Inclusion of housing in Downtown (allowing housing to exceed permitted Floor-Area-Ratios [FARs] in C-3-G and C-3-S Districts).</p>

Impact	2004 Housing Element	Corresponding 1990 Residence Element Policy
	<p>Policy 1.6: Create incentives for the inclusion of housing, particularly permanently affordable housing, in new commercial development projects.</p>	<p>Policy 1.3: Create incentives for the inclusion of housing, particularly permanently affordable housing, in new commercial development projects.</p>
	<p>Implementation Measure 1.6.2: The Planning Department and the Redevelopment Agency will propose increasing height limits, eliminating density requirements and modifying off-street parking requirements in the Transbay/Rincon Hill Redevelopment survey areas. The Mid-Market redevelopment survey area will be rezoning to include mixed-use residential areas and reduced residential parking requirements.</p>	
	<p>Policy 1.7: Encourage and support the construction of quality, new family housing.</p>	
	<p>Implementation Measure 1.7.1: In response to the increasing number of families in San Francisco, the Planning Department will develop zoning amendments to require a minimum percentage of larger family units ranging from two to four bedrooms, in new major residential projects. The Planning Department will also propose eliminating density requirements within permitted building envelopes in downtown areas and areas subject to a Better Neighborhoods type planning process to maximize family units constructed.</p>	
	<p>Policy 1.8: Allow new secondary units in areas where their effects can be dealt with and there is neighborhood support, especially if that housing is made permanently affordable to lower income households.</p>	<p>Policy 1.5: Allow new secondary units in areas where their effects can be dealt with and there is neighborhood support, especially if that housing is made permanently affordable to lower income households.</p>
	<p>Implementation Measure 1.8.1: The Board of Supervisors has introduced Planning Code amendments to allow secondary units in new buildings that are in close proximity to neighborhood commercial districts and public transit.</p>	

Impact	2004 Housing Element	Corresponding 1990 Residence Element Policy
	Implementation Measure 1.8.3: On-going planning will propose Planning Code amendments to encourage secondary units where appropriate.	
	Policy 4.4: Consider granting density bonuses and parking requirement exemptions for the construction of affordable housing or senior housing.	Policy 7.3: Grant density bonuses for construction of affordable or senior housing.
	Implementation Measure 4.4.1: The Planning Department will look at establishing uniform density bonus standards and equal requirements for affordable and senior housing development. Until then, affordable and senior housing will continue to be granted density bonuses and reduced parking requirements on a case-by-case basis.	
	Policy 4.5: Allow greater flexibility in the number and size of units within established building envelopes, potentially increasing the number of affordable units in multi-family structures.	Policy 2.3: Allow flexibility in the number and size of units within permitted volumes of larger multi unit structures, especially if the flexibility results in creation of a significant number of dwelling units that are permanently affordable to lower income households.
	Policy 11.6: Employ flexible land use controls in residential areas that can regulate inappropriately sized development in new neighborhoods, in downtown areas, and in other areas through a Better Neighborhoods type planning process while maximizing the opportunity for housing near transit.	Policy 12.5 Relate land use controls to the appropriate scale for new and existing residential areas.
	Implementation Measure 11.6.1: The City will continue to promote increased residential densities in areas well served by transit and neighborhood compatible development with the support and input from local neighborhoods.	
	Policy 11.7: Where there is neighborhood support, reduce or remove minimum parking requirements for housing, increasing the amount of lot area available for housing units.	

Impact	2004 Housing Element	Corresponding 1990 Residence Element Policy
	Implementation Measure 11.7.1: The Planning Department will work to reduce parking in older neighborhoods through a Better Neighborhoods type planning process with the support and input from local neighborhoods.	
	Policy 11.8: Strongly encourage project sponsors to take full advantage of allowable building densities in their housing developments while remaining consistent with neighborhood character.	
	Policy 11.9: Set allowable densities and parking standards in residential areas at levels that promote the City's overall housing objectives while respecting neighborhood scale and character.	Policy 2.1: Set allowable densities in established residential areas at levels which will promote compatibility with prevailing neighborhood character.

As shown above, the 2004 Housing Element promotes housing in commercial (Policies 1.1, 1.6) and industrial (Policies 1.1, 1.3) areas, neighborhood commercial districts (Policy 1.2 and Implementation Measure 1.2.1), housing near the Downtown (Policies 1.1, 1.3 and Implementation Measure 1.3.1) and along transit corridors (Policies 1.6, 11.6 and Implementation Measures 1.1.1, 1.6.4, 1.8.1, 4.1.6, and 11.6.1). The 2004 Housing Element also encourages new housing through on-going and future community planning processes (Policies 1.1, 11.6 and Implementation Measures 1.3.1, 1.3.2, 1.6.2, and 2.4.2) and on in-fill sites including underutilized, vacant, surplus lands and on Brownfield sites (Implementation Measure 4.1.4). The 1990 Residence Element similarly directs growth to commercial and industrial areas, neighborhood commercial districts, the Downtown and on infill development sites, although to a lesser degree than the 2004 Housing Element. The 2004 Housing Element also advocates for housing in community plan areas and along transit corridors, both of which are policies that were not included in the 1990 Residence Element. Policies that direct growth to certain areas of the City could increase the amount of new housing occurring in those areas, thereby resulting in temporary and periodic increases in the ambient noise levels from construction activities associated with new housing.

The 2004 Housing Element promotes increased building densities more so than the 1990 Residence Element. The 2004 Housing Element promotes increased density in certain areas of the City (Policy 1.1 and Implementation Measure 1.1.1, 1.8.1 and 11.6.1) and promotes density bonuses (Policy 4.4 and Implementation Measures 1.3.1 and 4.4.1) and the elimination of density requirements (Policy 1.6 and Implementation Measures 1.6.2 and 1.7.1). The 2004 Housing Element also encourages increased density by promoting reduced parking requirements (Policies 4.4, 11.7, 11.9 and Implementation Measures 1.1.1, 1.6.2, 4.4.1, 11.7.1), support for secondary units (Policy 1.8 and Implementation Measures 1.8.1 and 1.8.3) and flexible building envelopes (Policies 4.5 and 11.6). Increased density standards could result in

more units within a given building envelope, thereby requiring longer construction durations. Density bonuses and elimination of density requirements altogether could result in larger building masses as well, also resulting in longer construction durations. Although increased density standards may only incrementally increase construction durations, when combined with policies that also direct growth to certain areas of the City (as discussed above), the 2004 Housing Element policies could not only consolidate new construction to certain areas of the City, but also incrementally increase average construction durations. Therefore, the 2004 Housing Element policies could increase the amount of noise generating activity associated with new construction for certain areas of the City.

A key strategy for meeting the City's housing goals is to maintain the City's existing housing stock. The following 2004 Housing Element policies discourage demolition and encourage the maintenance of the City's existing housing stock, thereby reducing the amount of new housing required to meet the City's housing needs and subsequent noise-related impacts resulting from construction activities.

Impact	2004 Housing Element	Corresponding 1990 Residence Element Policy
Discourage demolition and improve existing housing supply.	Policy 2.1: Discourage the demolition of sound existing housing.	Policy 3.1: Discourage the demolition of sound existing housing.
	Policy 3.3: Maintain and improve the condition of the existing supply of public housing.	Policy 5.4: Maintain and improve the existing supply of public housing.
Promote preservation of residential buildings.	Policy 3.6: Preserve landmark historic residential buildings.	Policy 5.5: Preserve landmark historic residential buildings.
	Implementation Measure 3.6.6: The Planning Department will encourage property owners to use preservation incentives to repair, restore, or rehabilitate historic resources in lieu of demolition. These include federal tax credits for rehabilitation of qualified historical resources, Mills Act property tax abatement programs, the State Historic Building Code, and tax deductions for preservation easements.	

As shown above, the 2004 Housing Element proposes policies that discourage demolition and promote the maintenance of existing public housing (including Policies 2.1, 3.3, and 3.6) to a degree similar to the 1990 Residence Element. The preservation of existing housing would result in less noise from activities associated with demolition and new construction. 2004 Housing Element Policies 2.1, 3.3, and 3.6 are the same as corresponding 1990 Residence Element Policies 3.1, 5.4, and 5.5, respectively. Implementation Measure 3.6.6, which does not have a corresponding 1990 Residence Element Policy, would encourage

property owners to use preservation incentives and no environmental impacts are anticipated. Essentially both the 1990 Residence Element and 2004 Housing Element recognize the need for the retention and maintenance of existing housing, and therefore do not represent a shift in policy.

Although the 2004 Housing Element would not result in the construction of residential units, it would shape how new residential development should occur and ensures that there is adequate land available to meet future housing needs. As discussed previously, policies that direct growth to certain areas of the City and policies that promote increased density could consolidate construction activities to those areas and incrementally increase construction duration. New construction would be required to comply with the previously discussed federal, state, and local regulations, including the Article 29 of the San Francisco Police Code. Article 29 of the Police Code restricts construction activities between the hours of 8:00 pm and 7:00 am and restricts noise levels of impact tools and equipment that does not incorporate noise attenuation devices approved by the Director of Public Works or the Director of Building Inspection. New construction that complies with the City's noise ordinance would generally be determined to have a less than significant impact with respect to temporary or periodic increases in noise levels. The SFDPH, in cooperation with the Police Department, updated the City's noise standards (Article 29 of the Police Code) in 2008. Although the 2008 update did not update construction noise requirements, the City, through the Board of Supervisor's Noise Task Force or other appropriate forum, will continue to update construction noise standards as appropriate, if and when the conditions warrant.¹³ Therefore, the 2004 Housing Element would have a *less than significant* impact with respect to a substantial temporary or periodic increase in ambient noise levels.

2009 Housing Element Analysis

In general, the 2009 Housing Element includes policies that direct growth primarily through community planning processes, but also includes policies that direct housing to commercial areas and sites that are near transit. Overall, the 1990 Residence Element promotes increased density on a broader, citywide, scale to a greater extent than the 2009 Housing Element. However, there are two areas under which the 2009 Housing Element promotes greater density. These include the following themes: increased density for affordable housing projects; and increased density as a strategy to be pursued through the community planning process.

The following Housing Element policies could potentially result in a substantial temporary or periodic increase in ambient noise levels by directing growth to certain areas of the City and promoting increased density standards, thereby consolidating new construction within those areas and incrementally increasing average construction duration.

¹³ Updates to the City's construction noise standards could be modeled after the City of New York's construction noise standards (Title 15, Chapter 28, New York Administrative Code).

Impact	2009 Housing Element	Corresponding 1990 Residence Element Policy
Direct growth to certain areas of the City.	Policy 1.1: Focus housing growth- and the infrastructure necessary to support that growth- according to community plans. Complete planning underway in key opportunity areas such as Treasure Island, Candlestick Park and Hunter's Point Shipyard.	Implementation Measure 1.1.2: Pursuit of housing development opportunities in neighborhood and area plans.
	Policy 1.3: Work proactively to identify and secure opportunity sites for permanently affordable housing.	Policy 1.1: Promote development of permanently affordable housing on surplus, underused and vacant public lands.
	Policy 1.6: Consider greater flexibility in the number and size of units within established building envelopes in community plan areas, especially if it can increase the number of affordable units in multi-family structures.	Policy 2.5: Allow flexibility in the number and size of units within permitted volumes of larger multi-unit structures, especially if the flexibility results in creation of a significant number of dwelling units that are permanently affordable to lower income households.
	Policy 1.7: Consider public health objectives when designating and promoting housing development sites.	Policy 12.1: Assure housing is provided with adequate public improvements, services and amenities.
	Policy 1.8: Promote mixed use development, and include housing, particularly permanently affordable housing, in new commercial, institutional or other single use development projects.	Policy 1.3: Create incentives for the inclusion of housing, including permanently affordable housing in commercial developments.
	Policy 4.6: Encourage an equitable distribution of growth according to infrastructure and site capacity.	Policy 12.1: Assure housing is provided with adequate public improvements, services and amenities.
	Policy 10.3: Support state legislation and programs that promote environmentally favorable projects.	
	Policy 12.1: Encourage new housing that relies on transit use and environmentally sustainable patterns of movement.	
	Policy 12.2: Consider the proximity of quality of life elements, such as open space, child care and neighborhood serves, when development new housing units.	

Impact	2009 Housing Element	Corresponding 1990 Residence Element Policy
	Policy 13.1: Support “smart” regional growth that locates new housing close to jobs and transit.	
	Policy 13.3: Promote sustainable land use patterns that integrate housing with transportation via transit, pedestrian, and bicycle modes.	
	Implementation Measure 3: Consistent with the SFMTA’s Climate Action Plan, MOH shall work with MTA to identify Muni sites that can serve as potential housing sites.	
	Implementation Measure 4: The Mayor’s Office of Housing (MOH) shall continue to actively pursue surplus or underused publicly-owned land for housing potential, working with agencies not subject to the Surplus Property Ordinance such as the San Francisco Public Utilities Commission, SFUSD and the Municipal Transportation Agency to identify site opportunities. City agencies shall continue to survey their properties for affordable housing opportunities or joint use potential.	<p>Implementation Measure 1.1.1: Aggressive pursuit of development opportunities [in] underused public sites.</p> <p>Implementation Measure 1.1.4: In-fill housing on vacant or underused sites.</p>
	Implementation Measure 6: To further smaller scale TOD opportunities, Planning and MTA shall evaluate smaller surplus MTA-owned sites (typically surface parking lots) and identify barriers towards their redevelopment, such as Planning Code issues, neighborhood parking needs and communities sentiment.	

Impact	2009 Housing Element	Corresponding 1990 Residence Element Policy
	<p>Implementation Measure 8: Planning, Redevelopment and Mayor’s Office of Economic and Workforce Development (MOEWD) should complete long range planning processes already underway: Japantown, Glen Park, the Northeast Embarcadero Study, the Bayview Hunters Point Plan, Candlestick/ Hunters Pont, India Basin shoreline community planning process, Treasure Island, and Hunters Point.</p>	
	<p>Implementation Measure 14: Planning staff shall prioritize support for projects which are located within a reasonable walking distance of stops along major transit lines, including BART, Muni rail lines and “Muni’s 24-hour Rapid Network.”</p>	
	<p>Implementation Measure 74: The City shall coordinate with regional entities to complete the necessary planning document for SB 375, including a “Sustainable Community Strategy” which promotes sustainable growth; and corresponding updates to the Housing, Recreation and Open Space, and Land Use Elements of the General Plan.</p>	
	<p>Implementation Measure 80: In development of new community plans, Planning shall include mixed-use design standards for both residential and commercial buildings.</p>	
	<p>Implementation Measure 85: Planning shall ensure community plans for growth are accompanied by capital plans and programs to support both the “hard” and “soft” elements of infrastructure needed by new housing.</p>	<p>Implementation Measure 7.7.1: Acquisition and improvement of open space; facilities and public environmental improvements in six neighborhood strategy areas; street improvements; parking facilities in neighborhoods; transit and street improvements.</p>
	<p>Implementation Measure 90: Planning and SFMTA should coordinate housing development with the ongoing Transit Effectiveness Project.</p>	

Impact	2009 Housing Element	Corresponding 1990 Residence Element Policy
	<p>Implementation Measure 94: Regional planning entities such as ABAG shall continue to prioritize regional transportation decisions and funding to “smart” local land use policies that link housing, jobs and other land uses, including focusing on VMT reduction. The City shall encourage formalization of state policy that similarly prioritizes transportation and infrastructure dollars for “smart growth” areas such as San Francisco, rather than geographic allocation.</p>	
	<p>Implementation Measure 97: On a local level, the City shall prioritize planned growth areas such as Better Neighborhoods, other Area Plans or Redevelopment Areas for regional, state, and federal bond and grants, especially for discretionary funding application processes such as the State’s Prop 1C.</p>	
<p>Promote increased density-related development standards.</p>	<p>Policy 1.4: Ensure changes to land use controls are proposed through neighborhood-supported community planning processes.</p>	<p>Policy 2.1: Set allowable densities in established residential areas at levels which will promote compatibility with prevailing neighborhood character.</p> <p>Policy 2.2: Encourage higher residential density in areas adjacent to downtown, in underutilized commercial and industrial areas proposed for conversion to housing and in neighborhood commercial districts where higher density will not have harmful effects, especially if the higher density provides a significant number of units that are permanently affordable to lower income households.</p>
	<p>Policy 1.5: Consider secondary units in community plans where there is neighborhood support and when other neighborhood goals can be achieved, especially if that housing is made permanently affordable to lower-income households.</p>	<p>Policy 1.5: Allow new secondary units in areas where their effects can be dealt with and there is neighborhood support, especially if that housing is made permanently affordable to lower income households.</p>

Impact	2009 Housing Element	Corresponding 1990 Residence Element Policy
	Policy 1.6: Consider greater flexibility in number and size of units within established building envelopes in community plan areas, especially if it can increase the number of affordable units in multi-family structures.	Implementation Measure 1.1.3: Inclusion of housing in Downtown (allowing housing to exceed permitted Floor-Area-Ratios [FARs] in C-3-G and C-3-S Districts).
	Policy 7.5: Encourage the production of affordable housing through process and zoning accommodations, and prioritize affordable housing in the review and approval processes.	Policy 7.3: Grant density bonuses for construction of affordable or senior housing.
	Policy 11.4: Maintain allowable densities in established residential areas at levels which promote compatibility with prevailing neighborhood character.	Policy 2.1: Set allowable densities in established residential areas at levels which will promote compatibility with prevailing neighborhood scale and character.
	Implementation Measure 12: Planning shall require integration of new technologies that reduce the space required for non-housing functions, such as parking, and shall consider requiring parking lifts to be supplied in all new housing developments seeking approval for parking at a ratio of 1:1 or above.	
	Implementation Measure 13: When considering legalization of secondary units within community planning processes, Planning shall develop a Design Manual that illustrates how secondary units can be developed to be sensitive to the surrounding neighborhood, to ensure neighborhood character is maintained.	
	Implementation Measure 36: Planning shall continue to implement Planning Code Section 209, which allows a density bonus of twice the number of dwelling units otherwise permitted as a principal use in the district, when the housing is specifically designed for and occupied by senior citizens, physically or mentally disabled persons.	Policy 7.3: Grant density bonuses for construction of affordable or senior housing.

Impact	2009 Housing Element	Corresponding 1990 Residence Element Policy
	Strategy for further review: MOH and Planning should continue to consider, within the context of a community planning process, zoning categories which require a higher proportion of affordable housing where increased density or other benefits are granted. Options include Affordable Housing Only Zones (SLI); Affordable Housing Priority Zones (UMU) or Special Use District Opportunities.	
	Implementation Measure 64: Planning staff shall support affordable housing projects in the development review process, including allowing sponsors of permanently affordable housing to take advantage of allowable densities provided their projects are consistent with neighborhood character.	
	Implementation Measure 79: Planning staff shall continue to use community planning processes to develop policies, zoning and standards that are tailored to neighborhood character.	Implementation Measure 2.2.1: Densities compatible with neighborhood character.

As shown above, the 2009 Housing Element promotes housing through community planning processes (Policies 1.1, 1.6, and Implementation Measures 8, 80 and 97), near transit and other infrastructure (Policies 1.8, 4.6, 10.3, 12.1, 13.1 and Implementation Measures 6, 14, 74, 90, and 94), and in proximity to neighborhood services (Policies 1.7, 12.2, 13.1 and Implementation Measure 85). The 2009 Housing Element also promotes housing on underused, vacant and surplus lands (Policy 1.3 and Implementation Measures 3 and 4), and housing within mixed-use areas (Policy 1.8 and Implementation Measure 80), thereby directing housing to commercial areas. As discussed previously, directing new housing to certain areas of the City could result in an increase in new construction associated with that housing, thereby resulting in a temporary or periodic increase in ambient noise levels.

The 2009 Housing Element also promotes increased density through community planning processes (Policies 1.4, 1.5, 1.6, and Implementation Measures 13 and 79) and for affordable housing (Policy 7.5 and Implementation Measures 36 and 64). The 2009 Housing Element also includes a strategy designed to reduce the amount of space required for non-housing functions (Implementation Measure 12). Overall, the 2009 Housing Element does not promote increased density more so than the 1990 Residence Element. However, as discussed in the analysis of the 2004 Housing Element, increased density standards could result in more units within a given building envelope, thereby requiring longer construction durations.

Although increased density standards may only incrementally increase construction durations, when combined with policies that also direct growth to certain areas of the City (as discussed above), the 2009 Housing Element policies could not only consolidate new construction to certain areas of the City, but also incrementally increase average construction durations. Therefore, the 2009 Housing Element policies could increase the amount of noise generating activity associated with new construction for certain areas of the City.

Similar to the 2004 Housing Element, major themes of the 2009 Housing Element include the preservation and maintenance of existing housing. The following 2009 Housing Element policies discourage demolition and encourage the maintenance of the City's existing housing stock, thereby reducing the amount of new housing required to meet the City's housing needs and subsequent noise-related impacts resulting from construction activities.

Impact	2009 Housing Element	Corresponding 1990 Residence Element Policy
Discourage demolition and improve existing housing supply.	Policy 2.3: Prevent the destruction or reduction of housing for parking.	
	Policy 2.4: Promote improvements and continued maintenance of existing units to ensure long term habitation and safety.	Objective 5: To maintain and improve the physical condition of housing while maintaining existing affordability levels. Policy 5.1: Assure that existing housing is maintained in decent, safe sanitary conditions at existing affordability levels. Policy 5.2: Promote and support voluntary housing rehabilitation which does not result in the displacement of lower income occupants.
	Policy 3.1: Preserve rental units, especially rent controlled units, to meet the City's affordable housing needs	Policy 3.1: Discourage the demolition of sound existing housing.
	Policy 3.2: Promote voluntary housing acquisition and rehabilitation to protect affordability for exiting occupants.	Policy 5.2: Promote and support voluntary housing rehabilitation which does not result in the displacement of lower income occupants.
	Policy 3.4: Preserve "naturally affordable" housing types, such as smaller and older ownership units.	
	Policy 3.5: Retain permanently affordable residential hotels and single room occupancy (SRO) units.	Policy 3.7: Preserve the existing stock of residential hotels.

Impact	2009 Housing Element	Corresponding 1990 Residence Element Policy
	Policy 9.3: Maintain and improve the condition of the existing supply of public housing, through programs such as HOPE SF.	Policy 5.4: Maintain and improve the existing supply of public housing. Policy 7.5: Encourage energy efficiency in new residential development and weatherization in existing housing to reduce overall housing costs.

As shown above, the 2009 Housing Element proposes policies that discourage demolition and promote the maintenance of existing public housing (including Policies 2.4, 3.1, 3.4, and 9.3) to a degree similar to the 1990 Residence Element. The maintenance and preservation of existing housing would help to preserve the existing housing stock, requiring less new development to meet housing goals, thereby resulting in less construction-related noise activities. 2009 Housing Element Policy 2.4, 3.1, 3.4, and 9.3 are essentially the same as their corresponding 1990 Residence Element policies. 2009 Housing Element Policy 13.4 expands upon 1990 Residence Element Policy 7.5 by promoting the preservation of existing buildings. Essentially, both the 1990 Residence Element and 2009 Housing Element recognize the need for the retention and maintenance of existing housing, and therefore do not represent a shift in policy.

Although the 2009 Housing Element would not result in the construction of residential units, it would shape how new residential development should occur and ensures that there is adequate land available to meet future housing needs. Policies that direct growth to certain areas of the City and policies that promote increased density could consolidate construction activities to those areas and incrementally increase construction duration. New construction would be required to comply with the previously discussed federal, state, and local regulations, including the Article 29 of the San Francisco Police Code. Article 29 of the Police Code restricts construction activities between the hours of 8:00 pm and 7:00 am and restricts noise levels of impact tools and equipment that does not incorporate noise attenuation devices approved by the Director of Public Works or the Director of Building Inspection. New construction that complies with the City's noise ordinance would generally be determined to have a less than significant impact with respect to temporary or periodic increases in noise levels. As discussed previously, the City, through the Board of Supervisor's Noise Task Force or other appropriate forum, will continue to update construction noise standards as appropriate, if and when the conditions warrant. Therefore, the 2009 Housing Element would have a *less than significant* impact with respect to a substantial temporary or periodic increase in ambient noise levels.

Impact NO-2: The proposed Housing Elements would not result in exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels. (Less than Significant)

Residential uses typically do not generate excessive groundborne vibration or groundborne noise levels. However, demolition and construction associated with new housing could result in impacts related to groundborne vibration or groundborne noise levels. For example, demolition and construction activities

could generate vibration through the use of drills, jackhammers, pile drivers, operation of compressors and generators, cement mixing, and general truck idling.

Both the 2004 and 2009 Housing Elements direct housing to certain areas of the City. As discussed in the environmental setting, typical sources of vibration in the City occur from heavy-duty vehicular traffic on local roadways. New housing constructed near these roadways could expose persons to groundborne vibration.

2004 Housing Element Analysis

As discussed under Impact NO-1, the 2004 Housing Element policies promote increased density more so than the 1990 Residence Element. (See 2004 Housing Element Policies 1.1, 1.6, 1.7, 1.8, 4.4, 4.5, 11.6, 11.7, 11.8, 11.9 and Implementation Measures 1.1.1, 1.3.1, 1.6.2, 1.8.1, 1.8.3, 4.4.1, 11.6.1 and 11.7.1.) Increased density could result in new construction that requires deeper foundations to support higher net density development, potentially requiring noise-generating equipment and techniques during construction, including pile-driving, which would have the potential to generate groundborne vibration and noise.

The 2004 Housing Element also contains Policies 2.1, 3.3, and 3.6 and Implementation Measure 3.6.6, which could reduce the 2004 Housing Element's effects on the potential for exposure to or generation of excessive groundborne vibration or noise by promoting the maintenance of existing housing and discouraging demolition of the existing housing stock, thereby avoiding the related groundborne vibration and noise that would be generated by demolition and new construction. Essentially, both the 1990 Residence Element and 2004 Housing Element recognize the need for the retention and maintenance of existing housing, and therefore do not represent a shift in policy. Although the 2004 Housing Element would not result in the construction of residential units, it would shape how new residential development should occur and ensures that there is adequate land available to meet future housing needs. Potential impacts related to groundborne noise and vibration resulting from construction activities would be offset by compliance with the previously discussed federal, state, and local regulations including Article 29 of the San Francisco Police Code, which regulates construction-related noise. Therefore, the 2004 Housing Element would have a *less than significant* impact with respect to the generation of excessive groundborne vibration or groundborne noise.

The proposed Housing Element could expose persons to groundborne noise and vibration if the Housing Element including policies directing housing to locations in the City that experience excessive groundborne noise and vibration. Common sources of vibration within the City occur along heavily traveled roadways, including freeways and major arterial roadways. As discussed under impact NO-1, the 2004 Housing Element contains policies that direct growth near transit (Policies 1.6, 11.6 and Implementation Measures 1.1.1, 1.6.4, 1.8.1, 4.1.6, and 2.4.2). Figure V.F-4 in Section V.F (Transportation and Circulation) depicts the existing transit network; many of the City's transit lines occur on heavily traveled roadways, including, for example, Van Ness Avenue. New housing developed in these areas may experience groundborne vibrations, however, any such vibration would not be in excess of levels that are commonly experienced within the City. Therefore, the 2004 Housing Element

would not expose people to excessive groundborne vibration or groundborne noise and this impact would be *less than significant*.

2009 Housing Element Analysis

As discussed under NO-1, the 1990 Residence Element promotes increased density on a broader, citywide, scale to a greater extent than the 2009 Housing Element. However, there are two areas under which the 2009 Housing Element promotes greater density. These include the following themes: increased density for affordable housing projects (Policy 7.5 and Implementation Measures 36 and 64); and increased density as a strategy to be pursued through the community planning process (Policies 1.4, 1.5, 1.6 and Implementation Measures 13 and 79). Increased density could result in new construction that requires deeper foundations to support higher net density development, potentially requiring noise-generating equipment and techniques during construction, including pile-driving, which would have the potential to generate groundborne vibration and noise.

The 2009 Housing Element also contains policies 2.3, 2.4, 3.1, 3.2, 3.4, 3.5, and 9.3, which could reduce the 2004 Housing Element's effects on the potential for exposure to or generation of excessive groundborne vibration or noise by promoting the maintenance of existing housing and discouraging demolition of the existing housing stock, thereby avoiding the related groundborne vibration and noise that would be generated by demolition and new construction. Essentially, both the 1990 Residence Element and 2009 Housing Element recognize the need for the retention and maintenance of existing housing, and therefore do not represent a shift in policy. Although the 2009 Housing Element would not result in the construction of residential units, it would shape how new residential development should occur and ensures that there is adequate land available to meet future housing needs. Potential impacts related to groundborne noise and vibration resulting from construction activities would be offset by compliance with the previously discussed federal, state, and local regulations including Article 29 of the San Francisco Police Code, which regulates construction-related noise. Therefore, the 2004 Housing Element would have a *less than significant* impact with respect to the generation of excessive groundborne vibration or groundborne noise.

The proposed Housing Element could expose persons to groundborne noise and vibration if the Housing Element including policies directing housing to locations in the City that experience excessive groundborne noise and vibration. Common sources of vibration within the City occur along heavily traveled roadways, including freeways and major arterial roadways. As discussed under impact NO-1, the 2009 Housing Element contains policies that direct growth near transit (Policies 1.8, 4.6, 10.3, 12.1, 13.1 and Implementation Measures 6, 14, 74, 90, and 94). New housing developed in these areas may experience groundborne vibrations, however, any such vibration would not be in excess of levels that are commonly experienced within the City. Therefore, the 2009 Housing Element would not expose people to excessive groundborne vibration or groundborne noise and this impact would be *less than significant*.

Impact NO-3: The proposed Housing Elements would not result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the proposed Housing Elements. (Less than Significant)

Residential uses typically do not generate noise levels in excess of established standards or result in a substantial permanent increase in ambient noise above existing levels. However, new sources of noise associated with new housing could include vehicular traffic utilizing local roadways and new stationary noise sources. For example, policies promoting increased density or directing growth to certain areas of the City could result in localized vehicular traffic, potentially increasing ambient noise levels in those areas. In addition, stationary sources of noise would include rooftop heating, ventilation, and air conditioning (HVAC) systems. An increase in HVAC systems would be likely to occur in during redevelopment of an underutilized or vacant site. In other words, incrementally promoting increased density on developed sites generally would not result in an increase in stationary noise sources as those buildings likely already contain HVAC units.

2004 Housing Element and 2009 Housing Element Analysis

As discussed previously, new residential development in the City would occur irrespective of the proposed Housing Elements. The Housing Elements are policy documents that provide direction for accommodating the need for new housing driven by population growth. In providing direction for meeting regional housing needs, ABAG focuses on both the amount of housing and the affordability of housing. To meet the City's share of the RHNA, the proposed Housing Elements aim to do the following: 1) preserve and upgrade existing housing units to ensure they do not become dilapidated, abandoned, or unsound, and 2) provide direction for how new housing development in the City should occur. With respect to the latter, the 2004 Housing Element encourages new housing in Downtown and in underutilized commercial and industrial areas. The 2004 Housing Element also encourages increased housing in neighborhood commercial districts and mixed-use districts near Downtown. On the other hand, the 2009 Housing Element encourages housing in new commercial or institutional projects and accommodating housing through community planning efforts. New residential development could result in increases in ambient noise levels from traffic-related noise and increases in noise levels resulting from mechanical equipment.

Figure IV-5 shows the City has the most housing capacity in the following areas: Western Addition, Market Octavia, Downtown, Mission, Bayview Hunters Point, and South Central. As such, these areas are anticipated to absorb the majority of housing growth that could occur during the planning horizon for the Housing Element. Therefore, it is anticipated that these areas could also experience greater increases in traffic noise compared to districts that do not have a similar capacity for growth (addressed under "Cumulative Impacts").

The 2008 update to Article 29 of the Police Code establishes residential property noise limits (Section 2909 (a)(1)(2)) and fixed residential interior noise limits (Section 2909 (d)). Pursuant to the residential property noise limits of Article 29, HVAC and other machinery would be required to meet specific noise standards (typically no greater than five dBA above the ambient noise). Article 29 also establishes limits

on fixed noise sources, based on zoning districts. New residential development would be required to comply with previously discussed federal, state and local regulations, including Article 29 of the Police Code. As such, new development would generally be determined to have a less than significant impact with respect to a permanent increase in ambient noise levels. Therefore, the 2004 and 2009 Housing Element policies would result in a *less than significant* impact pertaining to permanent increases in ambient noise levels.

Impact NO-4: The proposed Housing Elements would not result in exposure of persons to, or generation of noise levels in excess of, standards established in the local general plan or noise ordinance, or applicable standards of other agencies; nor would the proposed Housing Elements be substantially affected by existing noise levels. (Less than Significant with Mitigation)

Residential uses are considered noise sensitive uses because they may contain noise sensitive receptors, including children and the elderly. Residential development in noisy environments could expose these noise sensitive receptors to noise levels in excess of established standards. As discussed in the Regulatory Setting of this section, HUD has developed minimum national noise standards for land use compatibility. HUD considers noise levels below 65 dB as generally “acceptable” for residential land uses. Noise levels between 65 dB-75 dB are considered “normally unacceptable”, and noise levels in excess of 75 dB are “considered unacceptable”. In instances where noise levels are considered unacceptable or normally unacceptable, HUD recommends special approvals that may require additional environmental review or inclusion of noise attenuation features, if necessary. Similarly, the Office of Planning and Research (OPR) have developed statewide guidelines for noise and land use compatibility, which have largely been incorporated into the Environmental Protection Element of the General Plan. These guidelines, as shown in Table V.G-5, define noise levels between 70 CNEL and 75 CNEL as “normally unacceptable” and noise levels in excess of 75 CNEL as “clearly unacceptable”.

The proposed Housing Elements could expose noise sensitive receptors to noise levels in excess of established standards or be affected by existing noise levels if the housing element policies promoted new residential land uses in areas of the City that experience excessive ambient noise levels.

Ambient noise levels in the City are largely influenced by traffic-related noise. Figure V.G-2 shows that all districts within the City contain housing in areas that are currently affected by traffic noise levels exceeding 60 L_{dn} (the level by which Title 24 building code regulation require additional acoustical analysis), with the exception of the Presidio and India Basin districts. According to this data, approximately 47,879 units in the City’s pipeline occur within areas subjected to traffic noise levels exceeding 60 L_{dn} , with the capacity for another 12,660 units. The areas of the City most affected by traffic noise levels exceeding 60 L_{dn} are, generally, areas located near freeways (I-80, I-280, U.S.101) and heavily traveled roadways within the Downtown, SoMa districts, and the Northeast. Major arterials including 19th Avenue and Geary Boulevard also experience high ambient noise levels as a result of vehicular traffic. As discussed above, the areas of the City with the greatest capacity to absorb new housing are the following areas: Western Addition, Market Octavia, Downtown, Mission, Bayview Hunters Point, and South Central.



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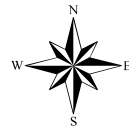
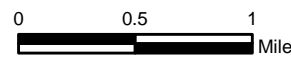
**Figure V.G-2
Potential Housing Units:
Capacity and Pipeline with
Average Traffic Noise Levels
Greater than 60 Ldb**

- Average Traffic Noise > 60 Ldb
- Parks

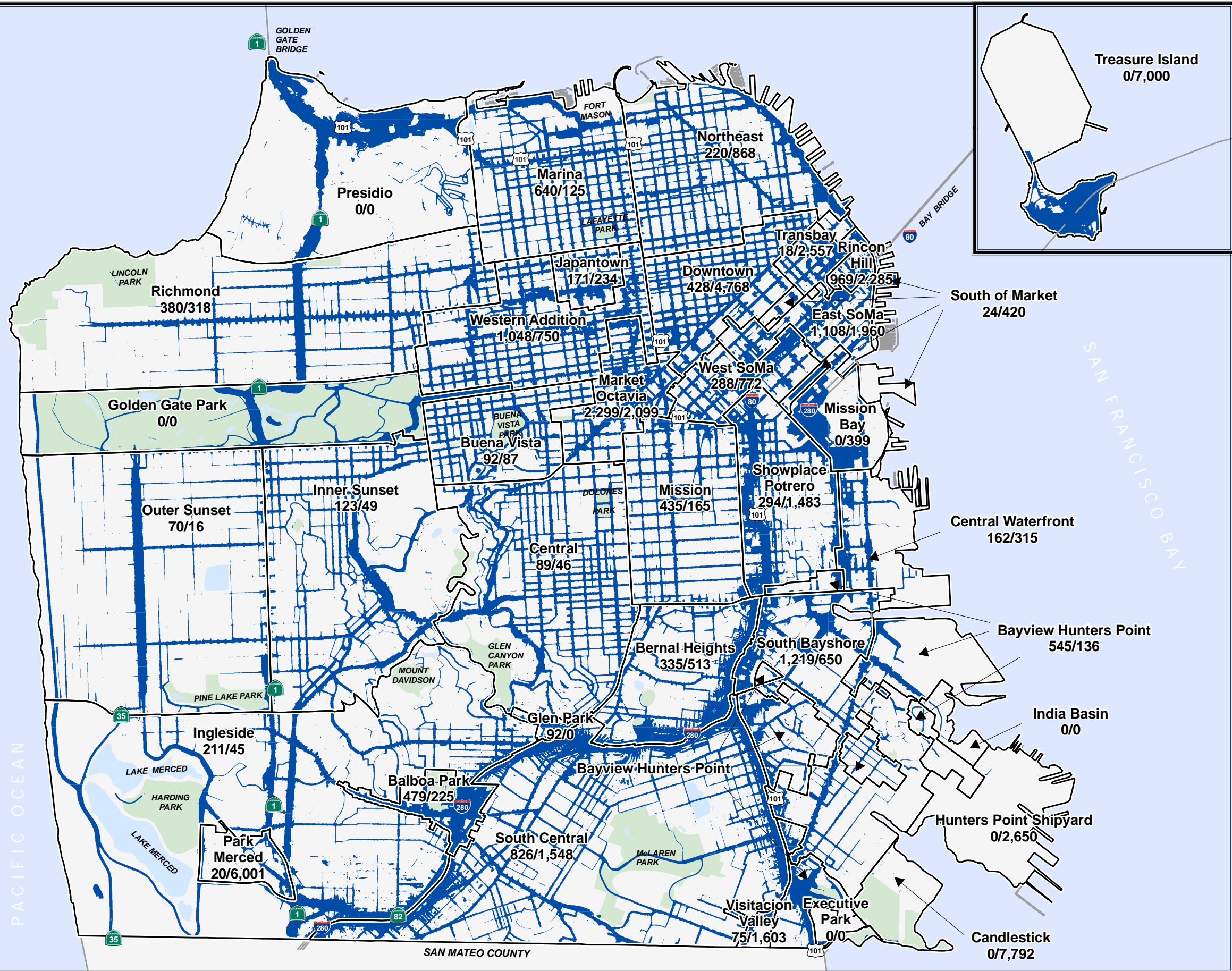
Notes:

1. Numerical values represent housing capacity within areas with average traffic noise levels greater than 60 Ldb followed by net pipeline units within these areas (Housing Unit Capacity/ Pipeline Units), except as noted below.

2. Within the Mission Bay, Hunters Point, Candlestick Point, Visitacion Valley, and Treasure Island Redevelopment Areas, as well as the Park Merced area plan, the specific locations of housing units are unknown, therefore total net units anticipated under those plans are indicated.



Sources:
Capacity and Pipeline: CCSF Planning Department, Q1 2009.
Noise Levels: CCSF Department of Public Health, 2009.



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Additionally, based on Figure IV-6, which shows residential projects in the pipeline, the following districts can expect the most residential growth resulting from pipeline projects: Market Octavia, Downtown, Rincon Hill, Transbay, East SoMa, Showplace Potrero, Hunters Point Shipyard, Candlestick, Park Merced, and Treasure Island. Thus, based on both pipeline and capacity data, future growth within the City could be sited in areas with noise levels above 60 L_{dn}.

Other sources of noise include noise generated from stationary sources. For example, rooftop mechanical equipment consisting of cooling systems, emergency generators and other noise generating sources typical of industrial and commercial facilities could expose residential uses to excessive noise levels in mixed-use residential and commercial/industrial zoning districts.

The policies from the 2004 Housing Element and the 2009 Housing Element that could result in impacts with respect to the exposure of persons to, or generation of, noise levels in excess of established standards or policies that could be substantially affected by existing noise levels are discussed below.

2004 Housing Element Analysis

As discussed in NO-1, the 2004 Housing Element directs residential growth to certain areas of the City. These areas may experience elevated ambient noise levels resulting from roadway-related traffic and fixed-noise sources. The 2004 Housing Element promotes housing in commercial (Policies 1.1, 1.6) and industrial (Policies 1.1, 1.3) areas, neighborhood commercial districts (Policy 1.2 and Implementation Measure 1.2.1), housing near the Downtown (Policies 1.1, 1.3 and Implementation Measure 1.3.1) and along transit corridors (Policies 1.6, 11.6 and Implementation Measures 1.1.1, 1.6.4, 1.8.1, 4.1.6, and 11.6.1).

In San Francisco, Neighborhood Commercial areas are largely located along established transit corridors, which typically experience noise levels above 60 L_{dn}. Commercial zoning districts and the Downtown also experience high ambient noise levels. Therefore, promoting residential development in these areas could expose new residents to excessive noise levels. While 2004 Housing Element policies promote development that ultimately could expose new residents to excessive sources of transportation-related noise, policies that promote residential development near transit are intended to encourage the use of alternative transportation, potentially reducing reliance on vehicles and reducing noise impacts from those vehicles.

Encouraging mixed-use residential development and residential development within commercial zoning districts could also expose new residents to stationary noise sources associated with those uses, although the housing element would not change allowable land uses. As discussed above, commercial operations may include a variety of rooftop mechanical equipment that may generate excessive noise levels. This may be of particular concern in those instances where height limits allow residential development above the roofline of adjacent commercial facilities.

Interior noise levels are typically addressed during the design and review phase for individual development projects. Pursuant to the California Building Code (Chapter 12, Appendix Section 1207.11.2) and Title 24 of the California Code of Regulations, interior noise levels are not to exceed 45

dBA L_{dn}. In instances where exterior noise levels exceed 60 L_{dn}, Title 24 requires an acoustical report to be submitted with the building plans describing the noise control measures that have been incorporated into the design of the project to meet the noise requirements. New construction that complies with the Title 24 building code requirements would generally be determined to have a less than significant impact with respect to exposing sensitive receptors to noise levels in excess of established standards. Potential impacts of the 2004 Housing Element policies that direct new residents to areas of the City that may experience excessive ambient noise levels would be reduced by compliance with Title 24 building code requirements, as enforced by DBI in the permit review process.

It is recognized however, that some areas of the City may be especially noisy. As discussed above, new residential uses are generally discouraged in areas where ambient noise levels exceed 75 dB. Figure V.G-3 shows those areas of the City with ambient traffic-related noise levels in excess of 75 L_{dn}. As shown, land uses located directly next to I-80, I-280, U.S. 101, Van Ness Avenue, Bush Street, Pine Street, Fell Street, Oak Street, and many arterials in the SoMa districts experience noise levels that, as defined by HUD guidelines, would be considered unacceptable and require additional environmental review and special approvals, if necessary. Excessive noise sources (including both traffic-related noise and stationary noise sources) may affect both interior and exterior noise levels. Private open space required pursuant to the Planning Code may be substantially affected in instances where such open space is provided without barriers to the noise-generating source.

The 2004 Housing Element includes policies that promote housing in commercial (Policies 1.1, 1.6) and industrial (Policies 1.1, 1.3) areas, neighborhood commercial districts (Policy 1.2 and Implementation Measure 1.2.1), housing near the Downtown (Policies 1.1, 1.3 and Implementation Measure 1.3.1) and along transit corridors (Policies 1.6, 11.6 and Implementation Measures 1.1.1, 1.6.4, 1.8.1, 4.1.6, and 11.6.1). Some of these areas may also experience noise levels above 75 L_{dn} for which Title 24 compliance may not mitigate exterior noise on private open space or other site-specific conditions may warrant acoustical monitoring and analysis beyond that required for Title 24 compliance. Therefore, the 2004 Housing Element would result in a significant impact with respect to exposing noise sensitive receptors to noise levels in excess of established standards and promoting residential development that may be substantially affected by existing noise levels. Mitigation Measure M-NO-1, as the end of this section, has been identified to reduce the 2004 Housing Element's impact on noise sensitive receptors. Mitigation Measure M-NO-1 would be incorporated in the Housing Element as an implementation measure of the Housing Element. Compliance with Mitigation Measure M-NO-1 would reduce the 2004 Housing Element's impact on noise sensitive receptors to *less than significant with mitigation*.

2009 Housing Element Analysis

As discussed in NO-1, the 2009 Housing Element promotes housing near transit and other infrastructure (Policies 1.8, 4.6, 10.3, 12.1, 13.1 and Implementation Measures 6, 14, 74, 90, and 94), housing in



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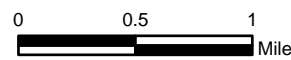
**Figure V.G-3
Potential Housing Units:
Capacity and Pipeline Units
with Average Traffic Noise
Levels Greater than 75 Ldn**

- Average Traffic Noise > 75 Ldn
- Parks
- Water

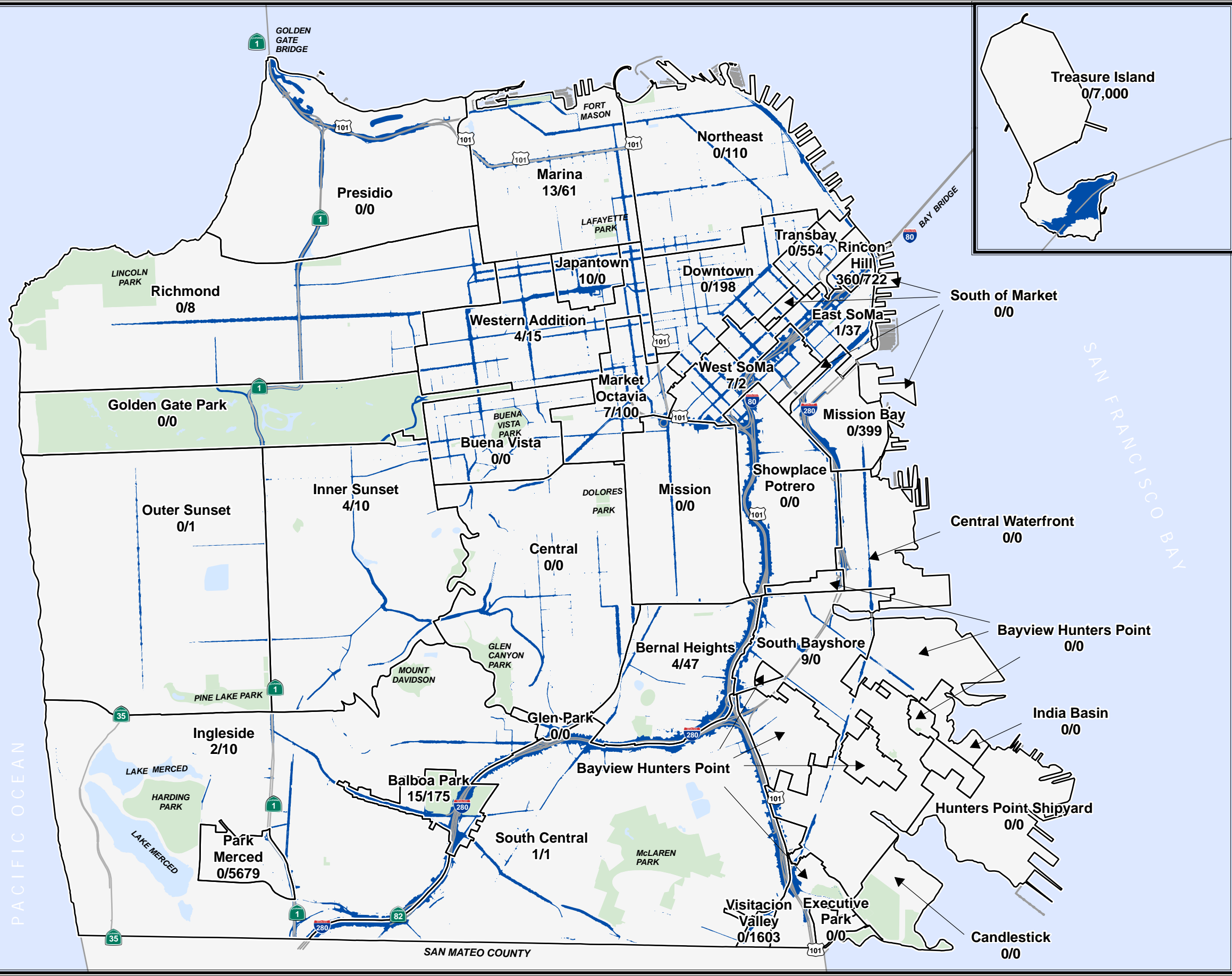
Notes:

1. Numerical values represent housing capacity within areas with average traffic noise levels greater than 75 Ldn followed by net pipeline units within these areas (Housing Unit Capacity/ Pipeline Units), except as noted below.

2. Within the Mission Bay, Hunters Point, Candlestick Point, Visitacion Valley, and Treasure Island Redevelopment Areas, as well as the Park Merced area plan, the specific locations of housing units are unknown, therefore total net units anticipated under those plans are indicated.



Sources:
Capacity and Pipeline: CCSF Planning Department, Q1 2009.
Noise Levels: CCSF Department of Public Health, 2009.



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proximity to neighborhood services (Policies 1.7, 12.2, 13.1 and Implementation Measure 85), and housing within mixed-use areas (Policy 1.8 and Implementation Measure 80).

As discussed in the analysis of the 2004 Housing Element, San Francisco's transit corridors typically experience noise levels above 60 L_{dn} . Commercial zoning districts and the Downtown also experience high ambient noise levels. Therefore, promoting mixed-use development and residential development in proximity to neighborhood services could result in housing within areas of the City that experience high ambient noise levels. While 2009 Housing Element policies promote development that ultimately could expose new residents to excessive sources of transportation-related noise, policies that promote residential development near transit and in proximity to neighborhood services are intended to encourage the use of alternative transportation, potentially reducing reliance on vehicles and reducing noise impacts from those vehicles.

Encouraging mixed-use residential development and residential development within commercial zoning districts could also expose new residents to stationary noise sources associated with those uses, although the housing element would not change allowable land uses. As discussed previously, commercial operations may include a variety of rooftop mechanical equipment that may generate excessive noise levels. This may be of particular concern in those instances where height limits allow residential development above the roofline of adjacent commercial facilities.

As discussed in the analysis of the 2004 Housing Element, interior noise levels are typically addressed through compliance with Title 24 building code requirements, as implemented during the design and review phase for individual development projects. New construction that complies with the Title 24 building code requirements would generally be determined to have a less than significant impact with respect to exposing sensitive receptors to noise levels in excess of established standards. Potential impacts of the 2009 Housing Element policies that direct new residents to areas of the City that may experience excessive ambient noise levels would be reduced by compliance with Title 24 building code requirements, as enforced by DBI in the permit review process.

However, some areas of the City may be especially noisy. Figure V.G-3 shows those areas of the City with ambient traffic-related noise levels in excess of 75 L_{dn} . As shown, land uses located directly next to I-80, I-280, U.S. 101, Van Ness Avenue, Bush Street, Pine Street, Fell Street, Oak Street, and many arterials in the SoMa districts experience noise levels that, as defined by HUD guidelines, would be considered unacceptable and require additional environmental review and special approvals, if necessary. Excessive noise sources (including both traffic-related noise and stationary noise sources) may affect both interior and exterior noise levels (private open space).

The 2009 Housing Element promotes housing near transit and other infrastructure (Policies 1.8, 4.6, 10.3, 12.1, 13.1 and Implementation Measures 6, 14, 74, 90, and 94), housing in proximity to neighborhood services (Policies 1.7, 12.2, 13.1 and Implementation Measure 85), and housing within mixed-use areas (Policy 1.8 and Implementation Measure 80). Some of these areas may also experience noise levels above 75 L_{dn} for which Title 24 compliance may not mitigate exterior noise on private open space or other site-specific conditions may warrant acoustical monitoring and analysis beyond that required for Title 24

compliance. Therefore, the 2009 Housing Element would result in a *significant impact* with respect to exposing noise sensitive receptors to noise levels in excess of established standards and promoting residential development that may be substantially affected by existing noise levels. Mitigation Measure M-NO-1 has been identified to reduce the 2009 Housing Element's impact on noise sensitive receptors. The mitigation measure identified at the end of this section would be incorporated in the Housing Element as an implementation measure of the Housing Element. Compliance with Mitigation Measure M-NO-1 would reduce the 2009 Housing Element's impact on noise sensitive receptors to *less than significant with mitigation*.

CUMULATIVE IMPACTS

The geographic context for cumulative noise impacts is the entire City of San Francisco. Cumulative impacts occur when impacts that are significant or less than significant from a proposed project combine with similar impacts from other past, present, or reasonably foreseeable projects in a similar geographic area. This would include the demolition of existing structures or new construction in the City resulting from past, present and reasonably foreseeable future projects combining with similar impacts from the 2004 Housing Element and 2009 Housing Element. The cumulative effect of development within the City could contribute to impacts related to noise and vibration. As discussed throughout this Draft EIR, growth would occur regardless of implementation of the proposed Housing Elements. The proposed Housing Elements merely guide residential new construction with an emphasis on affordability. Furthermore, any new development within the City would be subject, on a project-by-project basis, to independent CEQA review as well as policies in the San Francisco General Plan, governing area plans, design guidelines, and other applicable land use plans that are intended to reduce impacts related to noise and vibration. Furthermore, new construction would be required to comply with applicable regulations, including Article 29 of the San Francisco Police Code and Title 24 building code regulations. The 2004 Housing Element and 2009 Housing Element policies would not directly or indirectly affect noise or groundborne vibration. New development could affect such issues, but would be evaluated on a project-by-project basis.

With respect to ambient noise, as shown in Figure V.G-1, a large portion of the City, particularly the eastern half, experiences ambient noise levels above 60 L_{dn} while some areas are subject to ambient noise levels greater than 75 L_{dn} . As previously discussed, 60 dBA is the maximum satisfactory exterior noise level for residential areas. For the purpose of the cumulative traffic noise analysis, the road segments that would experience the greatest net increase in traffic volumes from existing conditions to 2025 Cumulative Conditions were calculated and are presented in Table V.G-7.¹⁴ These street segments represent the areas that would experience the greatest increase in ambient noise caused by future projected increases in vehicle trips. Based on the traffic data, the following 20 (10 east-west and 10 north-south) street segments were selected to represent the worst-case scenario.

¹⁴ These intersections were selected by calculating the difference in traffic volumes of east-west and north-south street segments between existing conditions and cumulative conditions. The five intersections that experienced the greatest increase in volume for both east-west and north-south intersections were selected for analysis.

**Table V.G-7
Existing and Cumulative (2025) Traffic Noise Levels**

Street Segments	Existing Noise Levels in dBA L_{dn}	Cumulative (2025) Noise Levels in dBA L_{dn}
<i>Northbound/Southbound Segments</i>		
3 rd Street north of King Street	66.4	68.5
3 rd Street south of King Street	64.7	69.3
3 rd Street north of Evans Avenue	63.1	68.7
3 rd Street south of Evans Avenue	62.1	68.4
3 rd Street north of Cesar Chavez Street	65.0	69.5
3 rd Street south of Cesar Chavez Street	66.1	70.1
Bayshore Boulevard north of Sunnydale Avenue	66.1	70.7
Bayshore Boulevard south of Sunnydale Avenue	65.5	70.2
San Jose Avenue north of Randall Avenue	71.0	72.0
San Jose Avenue south of Randall Avenue	71.3	72.3
<i>Eastbound/Westbound Segments</i>		
Ocean Avenue west of Phelan Avenue/Geneva Avenue	67.0	69.5
Ocean Avenue east of Phelan Avenue/Geneva Avenue	65.9	69.0
16 th Street west of Potrero Avenue	64.6	67.9
16 th Street east of Potrero Avenue	63.8	67.7
Cesar Chavez Street west of Bryant Street	69.6	71.2
Cesar Chavez Street east of Bryant Street	70.4	72.0
Cesar Chavez Street west of Evans Avenue	67.5	69.4
Cesar Chavez Street east of Evans Avenue	67.2	69.0
King Street west of 3 rd Street	69.3	70.1
King Street east of 3 rd Street	68.2	70.4
<i>Traffic Information Source: TJKM, 2010.</i>		
<i>Table Source: Christopher Joseph and Associates, April 2010. Calculation data and results are provided in Appendix D.</i>		

As shown above in Table V.G-8, all of the analyzed street segments currently experience ambient noise levels greater than 60 dBA. Additionally, all of the analyzed street segments would continue to exceed 60 dBA under future 2025 Cumulative Conditions. The Housing Elements themselves would not substantially alter this cumulative condition for the reasons discussed in the analysis of project impacts. Furthermore, any new development within the City would be subject, on a project-by-project basis, to independent CEQA review as well as policies in the San Francisco General Plan, governing area plans, design guidelines, Article 29, Title 24, and other applicable land use plans and regulations that are intended to reduce impacts related to noise. Furthermore, as identified in Impact NO-4, new residential development in areas of the City that experience extremely noisy conditions would be required to comply with Mitigation Measure M-NO-1, requiring detailed acoustical monitoring and site design that reduces interior and exterior (open space) noise levels for new residence. These new developments would be evaluated on a project-by-project basis.

While future growth would contribute to an increase in ambient noise levels through the generation of traffic trips and HVAC equipment contributing to noise levels, the proposed Housing Elements would not contribute to cumulative noise impacts from future development.

With adherence to applicable federal, state, and local regulations governing noise and vibration, and compliance with Mitigation Measure M-NO-1 the potential risks associated with noise and vibration would be *less than significant with mitigation*. The contribution of potential impacts from the proposed Housing Elements to the cumulative noise and vibration impacts would not be cumulatively considerable. As such, cumulative impacts would be *less than significant*.

MITIGATION AND IMPROVEMENT MEASURES

Mitigation Measures

Mitigation Measure M-NO-1: Interior and Exterior Noise

For new residential development located along streets with noise levels above 75 dBA L_{dn} , as shown in Figure V.G-3, the Planning Department shall require the following:

1. The Planning Department shall require the preparation of an analysis that includes, at a minimum, a site survey to identify potential noise-generating uses within two blocks of the project site, and including at least one 24-hour noise measurement (with maximum noise level readings taken at least every 15 minutes), prior to completion of the environmental review. The analysis shall demonstrate with reasonable certainty that Title 24 standards, where applicable, can be met, and that there are no particular circumstances about the proposed project site that appear to warrant heightened concern about noise levels in the vicinity. Should such concerns be present, the Department may require the completion of a detailed noise assessment by person(s) qualified in acoustical analysis and/or engineering prior to the first project approval action, in order to demonstrate that acceptable interior noise levels consistent with those in the Title 24 standards can be attained; and
2. To minimize effects on development in noisy areas, for new residential uses, the Planning Department shall, through its building permit review process, in conjunction with noise analysis required above, require that open space required under the Planning Code for such uses be protected, to the maximum feasible extent, from existing ambient noise levels that could prove annoying or disruptive to users of the open space. Implementation of this measure could involve, among other things, site design that uses the building itself to shield on-site open space from the greatest noise sources, construction of noise barriers between noise sources and open space, and appropriate use of both common and private open space in multi-family dwellings, and implementation would also be undertaken consistent with other principles of urban design.

Compliance with Mitigation Measure NO-1 would reduce the 2004 and 2009 Housing Element's impact on noise sensitive receptors to *less than significant with mitigation*.

Improvement Measures

No improvement measures are warranted by the proposed Housing Elements.

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V. ENVIRONMENTAL SETTING AND IMPACTS

H. AIR QUALITY

INTRODUCTION

This section addresses the potential impacts of the 2004 Housing Element and 2009 Housing Element policies related to the applicable air quality plan, air quality standards, criteria pollutants, sensitive receptors, and objectionable odors.

BACKGROUND

Air pollutant emissions within the Bay Area are generated by stationary and mobile sources. Stationary sources can be divided into two major subcategories: point and area sources. Point sources occur at an identified location and are usually associated with manufacturing and industry. Examples are boilers or combustion equipment that produces electricity or generates heat. Area sources are widely distributed and produce many small emissions. Examples of area sources include residential and commercial water heaters, painting operations, lawn mowers, agricultural fields, landfills, and consumer products such as barbecue lighter fluid and hair spray. Mobile sources refer to emissions from motor vehicles, including tailpipe and evaporative emissions, and are classified as either on-road or off-road. On-road sources may be legally operated on roadways and highways. Off-road sources include aircraft, ships, trains, racecars, and self-propelled construction equipment. Mobile sources account for the majority of the air pollutant emissions within the San Francisco Bay Area Air Basin (Basin). Air pollutants can also be generated by the natural environment, such as when fine dust particles are pulled off the ground surface and suspended in the air during high winds.

Both the federal and state governments have established ambient air quality standards for outdoor concentrations of various pollutants in order to protect public health. The national and state ambient air quality standards have been set at levels where concentrations could be generally harmful to human health and welfare, and to protect the most sensitive persons from illness or discomfort with a margin of safety.

The air pollutants for which national and state standards have been promulgated and which are most relevant to air quality planning and regulation in the Bay Area include ozone (O₃), carbon monoxide (CO), nitrogen dioxide (NO₂), sulfur dioxide (SO₂), respirable particulate matter (PM₁₀), fine particulate matter (PM_{2.5}), and lead (Pb). Both national and state standards are summarized in Table V.H-1. In addition, toxic air contaminants (TAC) and the complex mixture of traffic-related pollutants (TRPs) are of concern. A brief description of each of these pollutants including the associated health effects is described below.

Ozone (O₃). O₃, a colorless toxic gas, is the chief component of urban smog. O₃ enters the blood stream and interferes with the transfer of oxygen, depriving sensitive tissues in the heart and brain of oxygen. Although O₃ is not directly emitted, it forms in the atmosphere through a chemical reaction between reactive organic gas (ROG) and nitrogen oxide (NO) and NO₂, collectively referred to as nitrogen oxides (NO_x) under sunlight. In general, ROG and NO_x are primarily emitted from automobiles and industrial

sources. O₃ is present in relatively high concentrations within the Bay Area, and the damaging effects of photochemical smog are generally related to the concentration of O₃. The highest O₃ concentrations occur during summer and early autumn, on days with low wind speeds or stagnant air, warm temperatures, and cloudless skies.

Carbon Monoxide (CO). CO, a colorless and odorless gas, interferes with the transfer of oxygen to the brain. It can cause dizziness and fatigue, and can impair central nervous system functions. CO is emitted almost exclusively from the incomplete combustion of fossil fuels. Automobile exhaust release approximately 70 percent of the CO in the Bay Area. A substantial amount also comes from burning wood in fireplaces and wood stoves. CO is a non-reactive air pollutant that dissipates relatively quickly, so ambient CO concentrations generally follow the spatial and temporal distributions of vehicular traffic. The highest CO concentrations measured in the Bay Area are typically recorded during the winter.

Nitrogen Dioxide (NO₂). NO₂, a reddish-brown gas, irritates the lungs. It can cause breathing difficulties at high concentrations. According to the U.S. Environmental Protection Agency (US EPA), scientific evidence links short-term N₂O exposures ranging from 30 minutes to 24 hours, with adverse respiratory effects including increased asthma symptoms, respiratory illness, more difficulty controlling asthma, and increased visits to emergency departments and hospital admissions for respiratory illnesses, particularly for at risk populations, including children, the elderly, and asthmatics. As stated earlier, NO and NO₂ are collectively referred to as nitrogen oxides (NO_x) and are major contributors to O₃ formation. NO₂ also contributes to the formation of PM₁₀ (see discussion of PM₁₀ below). Like O₃, NO₂ is not directly emitted, but is formed through a reaction between nitric oxide (NO) and atmospheric oxygen. Vehicle exhaust is the dominant urban emissions source of NO₂, and concentrations of NO₂ near major roads are appreciably higher than those measured at monitors in the current regional monitoring network. On January 22, 2010, the US EPA strengthened the health-based National Ambient Air Quality Standards (NAAQS) for NO₂.

Sulfur Oxides (SO_x). SO_x, primarily SO₂, are a product of high-sulfur fuel combustion. The main sources of SO₂ are coal and oil used in power stations, in industries, and for domestic heating. SO₂ is an irritant gas that attacks the throat and lungs. It can cause acute respiratory symptoms and diminished ventilator function in children. SO₂ concentrations have been reduced to levels well below the state and national standards, but further reductions in emissions are needed to attain compliance with standards for PM₁₀, of which SO₂ is a contributor.

Suspended Particulate Matter (PM_{2.5} and PM₁₀). Particulate matter pollution consists of very small liquid and solid particles suspended in the air, which can include smoke, soot, dust, salts, acids, and metals. Particulate matter also forms when industry and gases emitted from motor vehicles undergo chemical reactions in the atmosphere. PM₁₀ and PM_{2.5} represent fractions of particulate matter. PM₁₀ refers to particulate matter less than 10 microns in diameter, about one-seventh the thickness of a human hair. PM_{2.5} refers to particulate matter that is 2.5 microns or less in diameter. Major sources of PM₁₀ include motor vehicles; wood burning stoves and fireplaces; dust from construction, landfills, and agriculture; wildfires and brush/waste burning; industrial sources; windblown dust from open lands; and atmospheric chemical and photochemical reactions. In addition, PM_{2.5} is formed in the atmosphere from gases such as SO₂, NO_x, and volatile organic compounds (VOCs). PM₁₀ and PM_{2.5} pose a greater health risk than larger-

size particles. Whereas larger particles tend to collect in the upper portions of the respiratory system, PM_{2.5} are so tiny that they can penetrate deeper into the lungs and damage lung tissues. PM₁₀ and PM_{2.5} can increase the number and severity of asthma attacks, cause or aggravate bronchitis and other lung diseases, and reduce the body's ability to fight infections. According to the California Air Resources Board, there is scientific consensus that chronic exposure to particulate matter at current exposure levels shortens life expectancy.¹ Suspended particulates also damage and discolor surfaces on which they settle, as well as produce haze and reduce regional visibility.

Lead (Pb). Pb occurs in the atmosphere as particulate matter. The combustion of leaded gasoline is the primary source of airborne Pb in the Basin. The use of leaded gasoline is no longer permitted for on-road motor vehicles, so the majority of such combustion emissions are associated with off-road vehicles such as race cars. However, because it was emitted in large amounts from vehicles when leaded gasoline was used for on-road motor vehicles, Pb is present in many soils and can get resuspended in the air. Other sources of Pb include the manufacturing and recycling of batteries, paint, ink, ceramics, ammunition, and the use of secondary Pb smelters. Fetuses, infants, and children are more sensitive than others to the adverse effects of Pb exposure. Exposure to low levels of Pb can adversely affect the development and function of the central nervous system, leading to learning disorders, distractibility, inability to follow simple commands, and lower intelligence quotient. In adults, increased Pb levels are associated with increased blood pressure.

State standards have been promulgated for other air pollutants, including SO₄, hydrogen sulfide, and visibility reducing particles. The state also recognizes vinyl chloride as a TAC with an undetermined threshold level of exposure for adverse health effects. Vinyl chloride and hydrogen sulfide emissions are usually generated from mining, milling, refining, smelting, landfills, sewer plants, cement manufacturing, or the manufacturing or decomposition of organic matter. The state standards for sulfate and visibility reducing particles are not exceeded anywhere in the Basin. Table V.H-1 includes the California Ambient Air Quality Standards (CAAQS) currently in effect for each of the criteria pollutants as well as other pollutants recognized by the state. As shown in Table V.H-1, for many pollutants the CAAQS include more stringent standards than the national ambient air quality standards.

Table V.H-1
Ambient Air Quality Standards

Pollutant	Averaging Time	State Standards	Federal Standards ^(a)	
			Primary ^(b,c)	Secondary ^(b,d)
Ozone	8-hour	0.07 ppm (137 µg/m ³)	0.075 ppm (147 µg/m ³)	Same as primary
	1-hour	0.09 ppm (180 µg/m ³)	—	

¹ California Air Resources Board (ARB). 2002. Staff Report: Public Hearing to Consider Amendments to the Ambient Air Quality Standards for Particulate Matter and Sulfates. California Air Resource Board (CARB) Methodology for Estimating Premature Deaths Associated with Long-term Exposure to Fine Airborne Particulate Matter in California: Staff Report. Sacramento: ARB October 24, 2008.

**Table V.H-1
Ambient Air Quality Standards**

Pollutant	Averaging Time	State Standards	Federal Standards ^(a)	
			Primary ^(b,c)	Secondary ^(b,d)
Carbon monoxide	8-hour	9.0 ppm (10 mg/m ³)	9 ppm (10 mg/m ³)	—
	1-hour	20 ppm (23 mg/m ³)	35 ppm (40 mg/m ³)	—
Nitrogen dioxide	Annual	0.030 ppm (57 µg/m ³)	0.053 ppm (100 µg/m ³)	Same as primary
	1-hour	0.18 ppm (339 µg/m ³)	0.10 ppm	
Sulfur dioxide	Annual	—	0.03 ppm (80 µg/m ³)	—
	24-hour	0.04 ppm (105 µg/m ³)	0.14 ppm (365 µg/m ³)	—
	3-hour	—	—	0.5 ppm (1,300 µg/m ³)
	1-hour	0.25 ppm (655 µg/m ³)	—	—
PM ₁₀	Annual	20 µg/m ³	—	Same as primary
	24-hour	50 µg/m ³	150 µg/m ³	
PM _{2.5}	Annual	12 µg/m ³	15 µg/m ³	Same as primary
	24-hour	—	35 µg/m ³	
Lead	Calendar quarter	—	1.5 µg/m ³	Same as primary
	30-day average	1.5 µg/m ³	—	—

Notes: (a) Standards, other than for ozone and those based on annual averages, are not to be exceeded more than once a year. The ozone standard is attained when the expected number of days per calendar year with maximum hourly average concentrations above the standard is equal to or less than one.

(b) Concentrations are expressed first in units in which they were promulgated. Equivalent units given in parentheses.

(c) Primary Standards: The levels of air quality necessary, with an adequate margin of safety to protect the public health. Each state must attain the primary standards no later than 3 years after that state's implementation plan is approved by the U.S. EPA.

(d) Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.

Toxic Air Contaminants

Toxic air contaminants (TACs) collectively refer to a diverse group of air pollutants that are capable of causing chronic (i.e., of long duration) and acute (i.e., severe but of short duration) adverse effects on human health, including carcinogenic effects. They include both organic and inorganic chemical substances that may be emitted from a variety of common sources including gasoline stations, motor vehicles, dry cleaners, industrial operations, paint operations, and research and teaching facilities. Unlike “criteria” pollutants, national or state ambient air quality standards have not been established for TACs. However, regulatory agencies address some sources of TACs through technological emissions controls (e.g., vehicle and industrial controls).

Diesel exhaust is the predominant TAC in urban air and is believed to represent about two-thirds of the estimated cancer risk from all other TACs (based on the statewide average). According to the California ARB, diesel exhaust is a complex mixture of gases, vapors and fine particles. Occupational exposure to

diesel exhaust has been linked to lung cancer in humans through epidemiological studies.^{2 3} Individual chemical constituents in diesel exhaust, such as benzene and formaldehyde, have been previously identified as TACs by the ARB, and are listed as carcinogens either under the State's Proposition 65 or under the federal Hazardous Air Pollutants programs.

The ARB established its statewide comprehensive air toxics program in the early 1980s. ARB created California's program in response to the Toxic Air Contaminant Identification and Control Act (AB 1807, Tanner 1983) to reduce exposure to air toxics. ARB identifies 244 substances as TACs that are known or suspected to be emitted in California and have potential adverse health effects. ARB listed diesel exhaust as a recognized toxic air contaminant in 1999 based on its association with cancer in humans.

Traffic Related Pollutants

Engines exhaust, from both diesel and gasoline engines in roadway vehicles, is a complex mixture of particles and gases. As discussed above, vehicle emissions generate both criteria air pollutants such as CO, PM, and NOx as well as other non-criteria toxic air contaminants, including benzene, 1,3-butadiene, formaldehyde, acetaldehyde, acrolein, naphthalene, and diesel exhaust. Collectively these may be referred to as traffic related pollutants (TRPs).

While each constituent pollutant in engine exhaust may have a unique toxicological profile, health effects have been associated with proximity or exposure to TRPs *collectively* as a mixture.⁴ Individual epidemiological studies have linked roadway proximity, or vehicle emissions, to impairments of lung function;⁵ asthma symptoms;^{6 7, 8} medical visits for asthma;⁹ asthma prevalence and incidence;^{10 11 12 13}

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- ² Bhatia R, Lopipero P, Smith AH. Diesel exhaust exposure and lung cancer. *Epidemiology*. 1998 Jan;9(1):84-91.
 - ³ Lipsett M, Campleman S. Occupational exposure to diesel exhaust and lung cancer: a meta-analysis. *Am J Public Health*. 1999 Jul;89(7):1009-17.
 - ⁴ Delfino RJ, 2002. Epidemiologic evidence for asthma and exposure to air toxics: linkages between occupational, indoor, and community air pollution research. *Environmental Health Perspectives*, 110(S4):573-589.
 - ⁵ Brunekreef, B. et al. "Air pollution from truck traffic and lung function in children living near motorways." *Epidemiology*. 1997; 8:298-303.
 - ⁶ Venn AJ, Lewis SA, Cooper M, Hubbard R, and Britton J, 2001. Living near a main road and the risk of wheezing illness in children. *American Journal of Respiratory and Critical Care Medicine*, 164:2177-2180.
 - ⁷ Lin, S. *et al.* "Childhood asthma hospitalization and residential exposure to state route traffic." *Environ Res*. 2002;88:73-81.
 - ⁸ Kim, J. *et al.* "Traffic-related air pollution and respiratory health: East Bay Children's Respiratory Health Study." *American Journal of Respiratory and Critical Care Medicine* 2004; Vol. 170. pp. 520-526
 - ⁹ English P., *et al.* "Examining Associations Between Childhood Asthma and Traffic Flow Using a Geographic Information System." (1999) *Environmental Health Perspectives* 107(9): 761-767.
 - ¹⁰ McConnell R, Berhane K, Yao L, Jerrett M, Lurmann F, Gilliland F, Kunzli N, Gauderman J, Avol E, Thomas D, and Peter J, 2006. Traffic, susceptibility, and childhood asthma. *Environmental Health Perspectives*, 114:766-772.

¹⁴ and ischemic heart disease.¹⁵ ¹⁶ A Health Effects Institute (HEI) Report in 2008 concluded that “Evidence was ‘sufficient’ to infer a causal relationship between exposure to traffic-related air pollution and exacerbation of asthma and ‘suggestive’ to infer a causal relationship with onset of childhood asthma, non-asthma respiratory symptoms, impaired lung function, and total and cardiovascular mortality.”¹⁷

The location of transportation facilities determines the spatial patterns of exposure to TRP emissions from vehicle sources in urban areas. A recent meta-analysis, based on 33 exposure studies and four pollutants (carbon dioxide, nitrogen oxides, particulates and ultra-fine particulates), found significant spatial difference exist in multiple traffic related pollutants relative to proximity to busy roadways.¹⁸ ¹⁹

In 2005, ARB issued guidance on preventing roadway related air quality conflicts, suggesting localities “avoid siting new sensitive land uses within 500 feet of a freeway [or other] urban roads with volumes of more than 100,000 vehicles/day.”²⁰ However, there are no existing federal or state regulations to protect sensitive land uses from roadway air pollutants. In 2008, the City of San Francisco adopted amendments to the Health Code (discussed under “Regulatory Setting”), requiring new residential projects near high volume roadways be screened for TRP hazards, and where indicated, conduct an analysis of exposure and

¹¹ Gauderman WJ, Avol E, Lurmann F, Kuenzli N, Gilliland F, Peters J, McConnell R. Childhood asthma and exposure to traffic and nitrogen dioxide. *Epidemiology*. 2005 Nov;16(6):737-43.

¹² Jerrett M, Shankardass K, Berhane K, Gauderman WJ, Künzli N, Avol E, Gilliland F, Lurmann F, Molitor JN, Molitor JT, Thomas DC, Peters J, McConnell R. Traffic-related air pollution and asthma onset in children: a prospective cohort study with individual exposure measurement. *Environ Health Perspect*. 2008 Oct;116(10):1433-8.

¹³ Kim JJ, Huen K, Adams S, Smorodinsky S, Hoats A, Malig B, Lipsett M, Ostro B. Residential traffic and children's respiratory health. *Environ Health Perspect*. 2008 Sep;116(9):1274-9.

¹⁴ McConnell R, Islam T, Shankardass K, Jerrett M, Lurmann F, Gilliland F, Gauderman J, Avol E, Kuenzli N, Yao L, Peters J, Berhane K. Childhood Incident Asthma and Traffic-Related Air Pollution at Home and School. *Environ Health Perspect*. 2010 Mar 22. [Epub ahead of print]

¹⁵ Hoffmann B, Moebus S, Mohlenkamp S, Stang A, Lehmann N, Dragano N, Schmermund A, Memmesheimer M, Mann K, Erbel R, and Jockel KH, 2007. Residential exposure to traffic is associated with coronary atherosclerosis. Heinz Nixdorf Recall Study Investigative Group. *Circulation*, 116:489-496.

¹⁶ Hoffmann B, Moebus S, Stang A, Beck EM, Dragano N, Mohlenkamp S, Schmermund A, Memmesheimer M, Mann K, Erbel R, and Jockel KH, 2006. Residence close to high traffic and prevalence of coronary heart disease. Heinz Nixdorf RECALL Study Investigative Group. *European Heart Journal*, 27:2696-2702.

¹⁷ HEI (Health Effects Institute), 2009. "Traffic-Related Air Pollution: A Critical Review of the Literature on Emissions, Exposure, and Health Effects." Special Report #17. Available: <http://pubs.healtheffects.org/view.php?id=306>.

¹⁸ Zhu, Y et al. “Study of Ultra-Fine Particles Near A Major Highway With Heavy-Duty Diesel Traffic.” *Atmospheric Environment*. 2002 ; 36:4323-4335.

¹⁹ Zhou Y, and Levy JI, 2007. Factors influencing the spatial extent of mobile source air pollution impacts: a meta-analysis. *BMC Public Health*, 89:1-11.

²⁰ California Air Resources Board, 2005 Air Quality and Land Use Handbook: A Community Health Perspective, <http://www.arb.ca.gov/ch/landuse.htm>, accessed September 8, 2008.

mitigate hazards through design and ventilation. However, there are no existing federal or state regulations to protect sensitive land uses from roadway air pollutants.

Sensitive Receptors

Some population groups are considered more sensitive to air pollution than others. Sensitive receptors for air quality include children, the elderly, and the acutely and chronically ill. Land uses such as primary and secondary schools, hospitals, and convalescent homes are considered to be sensitive receptors to poor air quality because the very young, the old, and the infirm are more susceptible to respiratory infections and other air quality-related health problems than the general public. Residential uses are considered sensitive because people spend a majority of time at home, so they could be exposed to pollutants for extended periods. Recreational areas are considered moderately sensitive to poor air quality because vigorous exercise associated with recreation places a high demand on the human respiratory function.

ENVIRONMENTAL SETTING

Existing Air Pollutant Emissions in Local Vicinity

Air pollutant emissions are generated within the City by stationary and area-wide sources, such as space and water heating, landscape maintenance from leaf blowers and lawn mowers, consumer products, mobile sources, and primarily automobile traffic.

Roadways and intersections have the potential to generate localized high levels of CO, NO₂, and other TRPs. Localized areas where ambient concentrations exceed national and/or state standards are termed “hotspots.” The Bay Area Air Quality Management District (BAAQMD) considers CO as a localized problem requiring additional analysis when a project is likely to subject sensitive receptors, described above, to CO hotspots. Recent changes to Clean Air Act regulations will require enhancement of regional air quality monitoring networks to assess levels of NO₂ near roadways, but these changes have not yet been implemented. The San Francisco Department of Public Health (SFDPH) conducts local assessments and monitoring to assess the spatial variation in PM_{2.5}, NO₂, and TACs from roadway sources.

The BAAQMD recommends the use of CALINE4, a dispersion model for predicting CO concentrations, as the preferred method of estimating localized pollutant concentrations at sensitive receptors near congested roadways and intersections. For each intersection analyzed, CALINE4 adds roadway-specific CO emissions calculated from peak-hour turning volumes to ambient CO air concentrations. For this analysis, localized CO concentrations were calculated based on a simplified CALINE4 screening procedure developed by the BAAQMD. The simplified procedure is intended as a screening analysis, which identifies a potential CO hotspot. This methodology assumes worst-case conditions and provides a screening of maximum, worst-case CO concentrations. The emission factors used in the analysis have been updated using EMFAC2007.

Using the simplified CALINE4 screening procedure described above, the maximum 1-hour and 8-hour CO concentrations were calculated for ten of the 60 study intersections that were evaluated in the Transportation Impact Study (TIS).²¹ Due to the large number of intersections, the ten intersections that would be most impacted based on their volume to capacity ratio (V/C) were selected and represent the worst-case traffic scenario. The results of these calculations are presented in Table V.H-2 for representative receptors located at each roadway edge as well as at 25, 50, and 100 feet from each roadway. The distances of 25, 50, and 100 feet from each roadway were selected because they represent locations where a person may be living or working for more than eight hours at a time. The national 1-hour CO ambient air quality standard is 35.0 ppm, and the state 1-hour CO ambient air quality standard is 20.0 ppm. The 8-hour national and state standards for localized CO concentrations are 9.0 ppm.

**Table V.H-2
Existing Localized Carbon Monoxide Concentrations**

Intersection	CO Concentrations in Parts Per Million ^a							
	Roadway Edge		25 feet		50 feet		100 feet	
	1-Hour	8-Hour	1-Hour	8-Hour	1-Hour	8-Hour	1-Hour	8-Hour
6. Geary Boulevard & Van Ness Avenue	7.2	3.4	6.7	3.0	6.6	2.9	6.3	2.7
16. 2 nd Street and Folsom Street	6.8	3.0	6.4	2.8	6.2	2.7	6.1	2.6
17. 2 nd Street and Bryant Street	7.4	3.5	6.8	3.1	6.5	2.9	6.3	2.7
24. 6 th Street and Brannan Street	10.5	5.7	8.9	4.5	8.3	4.1	7.6	3.6
31. 16 th Street and Potrero Street	7.6	3.6	6.9	3.2	6.7	3.0	6.4	2.8
41. Sloat Boulevard and 19 th Avenue	11.0	6.0	9.2	4.8	8.5	4.3	7.8	3.8
42. Winston Drive and 19 th Avenue	9.0	4.6	7.9	3.9	7.5	3.6	7.1	3.2
43. Junipero Serra Boulevard and 19 th Avenue	12.3	7.0	10.3	5.5	9.5	5.0	8.6	4.3
50. Sunnysdale Avenue and Bayshore Boulevard	6.5	2.9	6.2	2.7	6.1	2.6	6.0	2.5
56. Evans Avenue and Cesar Chavez Street	7.4	3.5	6.8	3.1	6.6	2.9	6.4	2.8
57. Bryant Street and Cesar Chavez Street	7.9	3.9	7.1	3.3	6.9	3.1	6.5	2.9

^a The national 1-hour CO ambient air quality standard is 35.0 ppm, and the state 1-hour CO ambient air quality standard is 20.0 ppm. National and state 8-hour standards are 9.0 parts per million.
Traffic Information Source: TJKM Transportation Consultants, 2010.
Source: Christopher A. Joseph & Associates, March 2010. Calculation data and results are provided in Appendix E.

As shown in Table V.H-2, existing CO concentration levels at the study intersections currently do not exceed the national and state 1-hour and 8-hour CO standards. Therefore, CO hotspots do not currently exist near these intersections.

²¹ The TIS is included as Appendix F.

Existing Regional Air Quality

Measurements of ambient concentrations of the criteria pollutants are used by the United States Environmental Protection Agency (EPA) and the ARB to assess and classify the air quality of each air basin, county, or, in some cases, a specific developed area. The classification is determined by comparing actual monitoring data with federal and state standards. If a pollutant concentration in an area is lower than the standard, the area is classified as being in “attainment.” If the pollutant exceeds the standard, the area is classified as a “nonattainment” area. If there are not enough data available to determine whether the standard is exceeded in an area, the area is designated “unclassified.” The attainment status for the Bay Area Air Basin with regard to the state and federal standards is shown in Table V.H-3.

**Table V.H-3
Attainment Status for the Bay Area Air Basin**

Pollutant	Attainment Status	
	California	Federal
Ozone	Non-attainment	Non-attainment
Carbon Monoxide	Attainment	Attainment
Nitrogen Dioxide	Attainment	Attainment
Sulfur Dioxide	Attainment	Attainment
PM ₁₀	Non-attainment	Unclassified
PM _{2.5}	Non-attainment	Non-attainment
Lead	Attainment	Attainment

*Source: Bay Area Air Quality Management District: Ambient Air Quality Standards & Bay Area Attainment Status table, website:
http://hank.baaqmd.gov/pln/air_quality/ambient_air_quality.htm, accessed March 2010.*

Air quality in the basin is monitored by the BAAQMD, which operates a regional network of air pollution monitoring stations to determine if the federal and state standards for criteria air pollutants and emission limits of toxic air contaminants are being achieved. The Bay Area Air Basin is considered “nonattainment” for ozone and PM_{2.5} federal standards, and is considered “nonattainment” for state standards for ozone, PM₁₀, and PM_{2.5}. It is unclassified for the federal standard for PM₁₀, and in “attainment” for both the federal and state ambient air quality standards for SO₂, Pb, and NO₂, which is a pure form of NO_x.

The average daily emissions inventory for the entire Bay Area and San Francisco County is summarized in Table V.H-4. In the Bay Area, motor vehicles generate the majority of ROG, NO_x, and CO emissions; stationary sources generate the most SO_x; and area-wide sources generate the most airborne particulates. San Francisco follows the same trends as the Bay Area with the exception of SO_x where the majority is from motor vehicles instead of stationary sources.

**Table V.H-4
2010 Estimated Average Daily Regional Emissions**

Emissions Source	Emissions in Tons Per Day					
	ROG	CO	NO _x	SO _x	PM ₁₀	PM _{2.5}
Bay Area						
Stationary (Point) Sources	10.71	45.2	51.3	47.1	16.6	12.4
Area-Wide Sources	89.1	163.2	17.2	0.6	179.3	53.6
Mobile Sources	163.1	1,387.4	345.6	14.4	19.8	15.7
Natural (non-anthropogenic) Sources	106.5	49.4	1.6	0.5	5.1	4.3
Total Emissions	465.7	1,645.1	415.8	62.7	220.8	85.9
San Francisco County						
Stationary (Point) Sources	6.4	1.8	2.7	0.1	0.7	0.5
Area-Wide Sources	9.1	4.1	2.0	0.1	11.6	2.9
Mobile Sources	16.4	129.9	72.1	15.8	4.6	4.2
Natural (non-anthropogenic) Sources	1.0	-	-	-	-	-
Total Emissions	32.8	135.8	76.8	16.0	16.9	7.6
"- " represents data not available.						
Source: California Air Resources Board, website: http://www.arb.ca.gov/app/emsinv/emssumcat.php , January 2009.						

Existing Local Air Quality

The BAAQMD monitors ambient air pollutant concentrations through a series of monitoring stations located throughout the Bay Area including the San Francisco Arkansas Street Monitoring Station located in the City of San Francisco. Table V.H-5 identifies the national and state ambient air quality standards for relevant air pollutants along with the ambient pollutant concentrations that have been measured at the Arkansas Street-San Francisco monitoring station through the period of 2006 to 2008. Monitoring was not conducted at this station for the SO₂ maximum 1-hour concentration; therefore, no site-specific data is available for those emission levels.

Monitoring station measurements indicate that air quality in San Francisco performs well against state standards for criteria air pollutants. Ambient PM₁₀ concentrations have violated the state standard and ambient PM_{2.5} concentrations have violated the federal standard on occasion at the Arkansas Street station. Particulate matter in the atmosphere is the result of many dust- and fume-producing industrial and agricultural operations, construction, fugitive sources (such as roadway dust), and atmospheric photochemical reactions involving ROG_s and NO_x. For carbon monoxide, a product of incomplete combustion, the air in San Francisco meets state and federal standards; however, concentrations in the vicinity of congested intersections and highway segments could potentially be higher than the monitoring data indicates.

**Table V.H-5
Ambient Pollutant Concentrations Registered at the San Francisco – Arkansas Street Station**

Pollutant	Standards ^{1, 2}	Year		
		2006	2007	2008
Ozone – 1-hour				
Maximum concentration monitored (ppm)		0.053	0.060	0.082
Number of days exceeding state standard	>0.09 ppm	0	0	0
Ozone – 8-hour				
Maximum concentration monitored (ppm)		0.046	0.049	0.066
Number of days exceeding federal standard	>0.075 ppm	0	0	0
Number of days exceeding state standard	>0.070 ppm	0	0	0
Carbon Monoxide – 1-hour				
Maximum concentration monitored (ppm)		2.7	2.5	5.7
Number of samples exceeding federal standard	>35 ppm	0	0	0
Number of days exceeding state standard	>20 ppm	0	0	0
Carbon Monoxide – 8-hour				
Maximum concentration monitored (ppm)		2.1	1.60	2.3
Number of samples exceeding federal standard	>9 ppm	0	0	0
Number of days exceeding state standard	>9.0 ppm	0	0	0
Nitrogen Dioxide – 1-hour				
Maximum concentration monitored (ppm)		0.107	0.069	0.062
Number of samples exceeding state standard	>0.18 ppm	0	0	0
Suspended Particulate Matter (PM₁₀) – 24-hour				
Maximum concentration monitored (µg/m ³)		61.0	70	41
Number of samples exceeding federal standard	>150 µg/m ³	0	0	0
Number of samples exceeding state standard	>50 µg/m ³	3	2	0
Suspended Particulate Matter (PM_{2.5}) – 24-hour				
Maximum concentration monitored (µg/m ³)		54.3	45.2	29.4
Number of samples exceeding federal standard	>35 µg/m ³	3	5	0

Source: Bay Area Air Quality Management District, <http://www.baaqmd.gov/Divisions/Communications-and-Outreach/Air-Quality-in-the-Bay-Area/Air-Quality-Summaries.aspx>, March 2010.

¹ Parts by volume per million of air (ppm) or micrograms per cubic meter of air (µg/m³).

² Federal and state standards are for the same time period as the maximum concentration measurement unless otherwise indicated.

In 2005 and 2006, air quality monitoring associated with the San Francisco Electric Reliability Project²² was conducted to compare the BAAQMD air quality monitoring data. Several community stations were located in the Potrero Hill and Bayview Hunters Point neighborhoods. This study involved measuring annual average concentrations of PM₁₀ and PM_{2.5} at five locations including Arkansas Street, the Southeast Community Center, the Muni Maintenance Yard, Potrero Recreation Center, and Malcolm X Academy. The measured annual average PM₁₀ concentrations at these five locations ranged from 16.9 to 20 µg/m³, with the minimum and maximum measurements reported at the Potrero Recreation Center and Muni Maintenance Yard, respectively. The measured annual average PM_{2.5} concentrations ranged from 7.6 to 9.3 µg/m³, with the minimum and maximum measurements reported at the Potrero Recreation Center and Southeast Community Center, respectively.

²² Rajiv Bhatia and Thomas Rivard. 2008. Assessment and Mitigation of Air Pollutant Health Effects from Intra-urban Roadways: Guidance for Land Use Planning and Environmental Review.

REGULATORY SETTING

Federal

Federal Ambient Air Quality Standards

The EPA is responsible for setting and enforcing the federal ambient air quality standards for atmospheric pollutants. It regulates emission sources that are under the exclusive authority of the federal government, such as aircraft, ships, and certain locomotives. As part of its enforcement responsibilities, the EPA requires each state with nonattainment areas to prepare and submit a State Implementation Plan (SIP) that demonstrates the means to attain the federal standards. The SIP must integrate federal, state, and local plan components and regulations to identify specific measures to reduce pollution, using a combination of performance standards and market-based programs within the timeframe identified in the SIP.

State

State Ambient Air Quality Standards

Although the federal Clean Air Act established national ambient air quality standards, individual states retained the option to adopt more stringent standards and to include other pollution sources. California had already established its own air quality standards when federal standards were established, and because of the unique meteorological problems in California, there is considerable diversity between the state and national ambient air quality standards, as shown in Table V.H-1. California ambient standards tend to be at least as protective as national ambient standards and are often more stringent.

California Air Resources Board

The ARB is the state agency responsible for regulating air quality. The ARB's responsibilities include establishing state ambient air quality standards, emissions standards, and regulations for mobile emissions sources (e.g., autos, trucks, etc.), as well as overseeing the efforts of countywide and multi-county air pollution control districts, which have primary responsibility over stationary sources.

Regional

Bay Area Air Quality Management District

The BAAQMD is the regional agency responsible for air quality regulation within the Bay Area Air Basin. The BAAQMD regulates air quality through its planning and review activities. The district has permit authority over most types of stationary emission sources and can require stationary sources to obtain permits; it can also impose emission limits, set fuel or material specifications, or establish operational limits to reduce air emissions. The BAAQMD regulates new or expanding stationary sources of toxic air contaminants.

In January 2006, the BAAQMD, in cooperation with the Bay Area Metropolitan Transportation Commission (MTC) and Association of Bay Area Governments (ABAG), adopted the *Bay Area 2005*

Ozone Strategy. The Ozone Strategy is a roadmap showing how the San Francisco Bay Area will achieve compliance with the state 1- hour ozone standard as expeditiously as practicable, and how the region will reduce transport of ozone and ozone precursors to neighboring air basins. The control strategy includes stationary-source control measures to be implemented through BAAQMD regulations; mobile-source control measures to be implemented through incentive programs and other activities; and transportation control measures to be implemented through transportation programs in cooperation with the MTC, local governments, transit agencies, and others. The *2005 Ozone Strategy* also represents the Bay Area's most recent triennial assessment of the region's strategy to attain the state one-hour ozone standard. In this, the *2005 Ozone Strategy* replaces the *2000 Clean Air Plan*. Like the *2000 Clean Air Plan* and prior versions thereof, the *2005 Ozone Strategy* continues to implement and expand key mobile-source emissions control, including 19 transportation control measures. Although an ozone-control plan, the *2005 Ozone Strategy* also includes information concerning particulate matter.

Odors

BAAQMD Regulation 7 places general limitations on odorous substances and specific emission limitations on certain odorous compounds. The limitations of this regulation limit the "discharge of any odorous substance which causes the ambient air at or beyond the property line...to be odorous and to remain odorous after dilution with four parts of odor-free air." The BAAQMD must receive odor complaints from ten or more complainants within a 90-day period in order for the limitations of this regulation to go into effect. If this criterion has been met, an odor violation can be issued by the BAAQMD if a test panel of people can detect an odor in samples collected periodically from the source.

Local

San Francisco General Plan

The San Francisco General Plan provides general policies and objectives to guide land use decisions and development throughout the City. General Plan objectives and policies relevant to air quality are discussed in Section V.A (Plans and Policies) of this Draft EIR. General Plan objectives and policies discussed in this Section are as follows:

Air Quality Element

- Policy 3.1: Take advantage of the high density development in San Francisco to improve the transit infrastructure and also encourage high density and compact development where an extensive transportation infrastructure exists.
- Policy 3.2: Encourage mixed land use development near transit lines and provide retail and other types of service oriented uses within walking distance to minimize automobile dependent development.

- Policy 3.4: Continue past efforts and existing policies to promote new residential development in and close to the downtown area and other centers of employment, to reduce the number of auto commute trips to the city and to improve the housing/job balance within the city.
- Policy 3.7: Exercise air quality modeling in building design for sensitive land uses such as residential developments that are located near the sources of pollution such as freeways and industries.
- Policy 3.8: Promote the development of non-polluting industries and insist on compliance with established industrial emission control regulations by existing industries.
- Policy 3.9: Encourage and require planting of trees in conjunction with new development to enhance pedestrian environment and select species of trees that optimize achievement of air quality goals.
- Policy 3:10: Continue and expand existing efforts to monitor odors that are a public nuisance and are generated by fast food outlets, restaurants, coffee roasteries and other food production establishments.
- Policy 4.3: Minimize exposure of San Francisco's population, especially children and the elderly, to air pollutants.

Transportation Element

- Policy 38.1: Improve the existing regional network of truck routes by making designed routes in San Francisco convenient for non-local freight trips with the aim of making the routes direct and connected to other routes.
- Policy 38.2: Reduce truck trips through San Francisco that have origins and destinations outside the City and the peninsula by promoting viable alternate truck routes and access across bay bridges that are not as subject to traffic congestion as the Bay Bridge and the Golden Gate Bridge.
- Policy 39.1: Establish and maintain advisory truck routes, with clear signage, between industrial areas and freeway interchanges to enhance truck access and to clearly and visibly attract truck traffic away from residential neighborhoods.
- Policy 39.2: Accommodate heavy vehicles with extra-legal loads on major truck routes by ensuring vertical clearances, appropriate intersection design for maneuvering and providing signal timing to allow smooth truck progression.
- Policy 39.3: Implement measures to reduce adverse affects from trucks/service vehicles and rail traffic by enforcing restrictions on certain routes, specific areas or times of day.

San Francisco Green Building Ordinance

In 2008, the City adopted Chapter 13C (Green Building Requirements) into San Francisco Building Code. The purpose of the requirements is to promote the health, safety, and welfare of San Francisco residents, workers, and visitors by minimizing the use and waste of energy, water and other resources in the construction and operation of the City's buildings and by providing a healthy indoor environment. The ordinance includes the requirement that installation of any solar photovoltaic energy system must meet all installation criteria of the California Energy Commission's Guidebook "Eligibility Criteria and Conditions for Incentives for Solar Energy Systems." The Guidebook establishes criteria that require building projects applying for ratepayer-funded incentives for photovoltaic systems meet minimum energy efficiency levels and recommends that photovoltaic system components and installations meet rating standards and specific performance requirements. As a clean renewable energy source, solar energy provides an alternative to fossil fuels.

The ordinance also requires compliance with the applicable LEED® performance standards for New Construction, Version 2.2. Projects proposing new large commercial interiors and major alterations to existing buildings require that permit applicants submit documentation to verify the use of low-emitting materials under LEED® Environmental Quality Credits EQ4.1, 4.2, and 4.3. LEED® EQ4.1, 4.2, and 4.3 are measures intended to maintain and enhance indoor air quality in buildings. EQ4.1 reduces the quantity of indoor air contaminants through compliance measures directed at limiting VOC quantities used in adhesives and sealants. EQ4.2 similarly reduces the quantity of indoor air contaminants by placing VOC content limits on paints and coatings used on the interior of buildings. EQ4.3 requires that all carpet and carpet cushion installed in a building shall meet the requirements of the Carpet and Rug Institute Green Label program, which has associated VOC emission criteria. In addition, EQ4.3 places additional VOC content limits on carpet adhesives to EQ4.1.

San Francisco Health Code Article 38

San Francisco adopted Article 38 of the San Francisco Health Code, approved November 25, 2008, requiring that new residential projects of 10 or more units located in proximity to high-traffic roadways, as mapped by SFDPH, an Air Quality Assessment be prepared to determine whether residents would be exposed to potentially unhealthful levels of TRPs. SFDPH has issued guidance for the identification and assessment of potential air quality hazards and methods for assessing the associated health risks.²³ Consistent with ARB guidance, SFDPH has identified that a potential public health hazard for sensitive land uses exists when such uses are located within a 150-meter (approximately 500-foot) radius of any boundary of a project site that experiences 100,000 vehicles per day. For assessment purposes, vehicle emissions of PM_{2.5} are used as a surrogate measure for traffic related pollutants. Through air quality modeling, an assessment is conducted to determine if the annual average concentration of PM_{2.5} from the

²³ San Francisco Department of Public Health, Assessment and Mitigation of Air Pollutant Health Effects from Intra-urban Roadways: Guidance for Land Use Planning and Environmental Review, May 6, 2008, http://dphwww.sfdph.org/phes/publications/Mitigating_Roadway_AQLU_Conflicts.pdf, accessed September 8, 2009.

roadway sources would exceed a concentration of 0.2 micrograms per cubic meter (annual average).²⁴ If this standard is exceeded, the project sponsor must either relocate the building on the parcel or submit a ventilation proposal which could include relocation of the residential ventilation supply or the installation of a filtered air supply system, with high-efficiency filters, designed to remove at least 80 percent of ambient PM_{2.5} from habitable areas of residential units.

Construction Dust Control

San Francisco Health Code Article 22B, the San Francisco Construction Dust Control Ordinance (Dust Control Ordinance) was adopted in July 2008, and requires that all site preparation work, demolition, and other construction activities within the City and County of San Francisco comply with specific dust control measures. For projects over 0.5-acre, the Dust Control Ordinance requires that the project sponsor submit a Dust Control Plan for approval by the SFPDPH prior to issuance of a building permit by the Department of Building Inspection (DBI).

The Dust Control Ordinance requires project sponsors and contractors responsible for construction activities to control construction dust on the site or implement other practices that result in equivalent dust control that are acceptable to the Director of the SFPDPH. Dust suppression activities may include watering all active construction areas sufficiently to prevent dust from becoming airborne; increased watering frequency may be necessary whenever wind speeds exceed 15 miles per hour. Reclaimed water must be used if required by Article 21, Section 1100 et seq. of the San Francisco Public Works Code.

Project sites that are over 0.5 acre and are located within 1,000 feet of sensitive receptors are required to develop a site-specific dust control plan to be approved by the director of the SFPDPH. The site-specific dust control plan for the proposed project shall require the project sponsor to:

- Submit a map to the Director of Public Health showing all sensitive receptors within 1,000 feet of the site;
- Wet down areas of soil at least three times per day;
- Provide an analysis of wind direction and install upwind and downwind particulate dust monitors;

²⁴ According to SFPDPH, this action level of 0.2 micrograms per cubic meter represents about 8 – 10 percent of the range of ambient PM_{2.5} concentrations in San Francisco based on monitoring data, and is based on epidemiological research that indicates that such a concentration can result in an approximately 0.28 percent increase in non-injury mortality, or an increased mortality at a rate of approximately 20 “excess deaths” per year per one million population in San Francisco. “Excess deaths” (also referred to as premature mortality) refer to deaths that occur sooner than otherwise expected, absent the specific condition under evaluation; in this case, exposure to PM_{2.5}. (San Francisco Department of Public Health, Occupational and Environmental Health Section, Program on Health, Equity, and Sustainability, “Assessment and Mitigation of Air Pollutant Health Effects from Intra-urban Roadways: Guidance for Land Use Planning and Environmental Review, May 6, 2008. Twenty excess deaths per million based on San Francisco’s non-injury, non-homicide, non-suicide mortality rate of approximately 714 per 100,000. Although San Francisco’s population is less than one million, the presentation of excess deaths is commonly given as a rate per million population.)

- Record particulate monitoring results;
- Hire an independent, third party to conduct inspections and keep a record of those inspections;
- Establish shut-down conditions based on wind, soil migration, and other factors;
- Establish a hotline for surrounding community members who may be potentially affected by project-related dust;
- Limit the area subject to construction activities at any one time;
- Install dust curtains and windbreaks on the property lines, as necessary;
- Limit the amount of soil in hauling trucks to the size of the truck bed and secure with a tarpaulin;
- Enforce a 15 mile-per-hour (mph) speed limit for vehicles entering and exiting construction areas;
- Sweep affected streets with water sweepers at the end of the day;
- Install and utilize wheel washers to clean truck tires;
- Terminate construction activities when winds exceed 25 mph;
- Apply soil stabilizers to inactive areas; and,
- Sweep off adjacent streets to reduce particulate emissions.

Project sponsors are required to designate an individual to monitor compliance with dust control requirements.

IMPACTS

Significance Thresholds

The proposed Housing Elements would normally have a significant effect on the environment if they would:

- Conflict with or obstruct implementation of the applicable air quality plan;
- Violate any air quality standard or contribute substantially to an existing or projected air quality violation;
- Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal, state, or regional ambient air quality

standard (including releasing emissions which exceed quantitative thresholds for ozone precursors);

- Expose sensitive receptors to substantial pollutant concentrations; or
- Create objectionable odors affecting a substantial number of people.

CEQA Guidelines Section 15064.7(c) state the following:

“When adopting thresholds of significance, a lead agency may consider thresholds of significance previously adopted or recommended by other public agencies or recommended by experts, provided the decision of the lead agency to adopt such threshold is supported by substantial evidence.”²⁵

The currently applicable *BAAQMD CEQA Guidelines 1999* include adopted thresholds of significance for air pollutant emissions. These thresholds are used in the impact analyses below as a basis for determining whether the proposed 2004 and 2009 Housing Elements would result in significant air quality impacts. The BAAQMD recently adopted revised Thresholds of Significance on June 2, 2010.²⁶ However, according to the BAAQMD, the recently adopted thresholds of significance for criteria air pollutants, health risks from new sources, and greenhouse gases (GHGs), are intended to apply to environmental analyses that have begun on or after adoption of the revised CEQA thresholds. Thresholds pertaining to the health risk impacts of sources upon sensitive receptors are intended to apply to environmental analyses begun on or after January 1, 2011. Therefore, the proposed project would be subject to the thresholds identified in BAAQMD’s *1999 CEQA Guidelines*. However, in anticipation of BAAQMD adopting revised thresholds of significance, an analysis of the proposed project’s impact with respect to the recently adopted CEQA significance thresholds was performed (GHGs are addressed in Section V.I Greenhouse Gas Emissions).

The currently applicable version of *BAAQMD CEQA Guidelines* was released in December 1999 and serves as an advisory document that provides lead agencies, consultants, and project applicants with uniform procedures for addressing air quality in environmental documents. The proposed Housing Elements are an update to the City’s General Plan, and as such, are referred to as plan-level documents, as opposed to specific development projects. For planning level documents, the BAAQMD recommends that the evaluation of a plan’s air quality impacts focus on the analysis of the plan’s consistency with the most recently adopted regional air quality plan. Therefore, significance will be based on the consistency of the proposed project with the *Bay Area 2005 Ozone Strategy*, which is the most recently adopted regional air quality plan. For the potential for odors and the protection of sensitive receptors from localized concentrations of certain pollutants that pose a potential health risk, the BAAQMD recommends the establishment of buffer zones around existing and proposed emission sources. Buffer zones would be

²⁵ California Environmental Quality Act, CEQA Guidelines, Section 15064.7(c). 2010.

²⁶ Bay Area Air Quality Management District, Resolution No. 2010-06, A Resolution of the Board of Directors of the Bay Area Air Quality Management District Adopting Thresholds for Use in Determining Significance of Projects’ Environmental Effects Under the California Environmental Quality Act.

reflected in local plan policies, land use maps, and implementing ordinances. Individual development projects undertaken in the future within the City would be subject to a significance determination based on the BAAQMD's quantitative thresholds for individual projects.

Impact Evaluation

Impact AQ-1: The proposed Housing Elements would not conflict with the applicable air quality plan. (Less than Significant)

2004 Housing Element and 2009 Housing Element Analysis

Consistency of the proposed Housing Elements with regional air quality plans can be determined by comparing the growth factors used for the Housing Element EIR with those used in the most recently adopted regional air quality plan, the *Bay Area 2005 Ozone Strategy*. The *2005 Ozone Strategy* growth assumptions for Bay Area communities are based on ABAG's Projections. The growth projections for the Housing Element EIRs are based on the regional population and employment projections provided by ABAG. As both the Housing Elements and the *2005 Ozone Strategy* utilize ABAG projections, the Housing Elements would not result in a significant impact on regional air quality planning efforts.

BAAQMD's also recommends a significance evaluation compare whether the increase in vehicle miles traveled (VMT) would increase at a rate equal to or lower than the rate of population growth assumed in the regional air quality plan. The ABAG Projections forecasts, on which the *2005 Ozone Strategy* is based, forecast citywide population growth of more than 10.6 percent between 2009 and 2025, the horizon year for the cumulative analysis of the Housing Element EIR. Based on Citywide projections, the VMT is anticipated to increase by 8.4 percent during the same timeframe.²⁷ Thus VMT would increase at a lower rate than the rate of population growth assumed in the *2005 Ozone Strategy*. Additionally, incremental VMT increases resulting from projected growth and development within the City would be less than could result if the same amount of growth occurred in outlying areas of the air basin (where trip lengths would be longer, on average). Residential growth in urban areas and near transit corridors would enable the use of transit and alternative transportation modes more effectively than suburban surroundings. It is also expected that as traffic congestion problems worsen in the region and travel times get longer, people will choose to shorten their commute distance or take public transportation alternatives. Furthermore, the proposed Housing Elements do not propose new development, but rather provide direction for how new development in the City should occur. Therefore the Housing Elements would not result in a significant impact with respect to VMT.

Additionally, the BAAQMD CEQA Guidelines recommend that consistency of a plan be evaluated based on the extent to which it implements Transportation Control Measures (TCMs) outlined in the *Bay Area 2005 Ozone Strategy*. The Housing Elements contain policies that will promote higher residential density and reduction in a per capita VMT, which would be consistent with TCMs outlined in the *Bay Area 2005 Ozone Strategy*; these TCMs are also incorporated into the Transportation Element of the General Plan.

²⁷ Email correspondence between Elizabeth Sall, SFMTA and Gregory Reissen, March 26, 2010.

Therefore, regarding consistency with the applicable air quality plan, the proposed Housing Elements would result in a *less than significant* impact.

Impact AQ-2: The proposed Housing Elements would not violate an air quality standard or contribute substantially to an existing or projected air quality violation. (Less than Significant)

Construction

The subject of this EIR is the proposed revision of the Housing Element of the San Francisco General Plan. The 2004 Housing Element and 2009 Housing Element are updates to the 1990 Residence Element of the San Francisco General Plan. The Housing Elements are public policy documents that comprehensively address issues of housing needs for San Francisco residents and households. As discussed in Section IV (Project Description), this Draft EIR will analyze the potential environmental effects that could occur in the City of San Francisco as a result of implementing the 2004 Housing Element and 2009 Housing Element.

2004 Housing Element Analysis

The following 2004 Housing Element policies could contribute incrementally to an existing or projected air quality violation by promoting increased density and directing residential development to certain areas of the City, thereby consolidating construction-related emissions from residential development to those areas and potentially contributing to localized air quality impacts

Impact	2004 Housing Element	Corresponding 1990 Residence Element Policy
Direct growth to certain areas of the City.	Policy 1.1: Encourage higher residential density in areas adjacent to downtown, in underutilized commercial and industrial areas proposed for conversion to housing and in neighborhood commercial districts where higher density will not have harmful effects, especially if the higher density provides a significant number of units that are affordable to lower income households. Set allowable densities in established residential areas at levels which will promote compatibility with prevailing neighborhood scale and character where there is neighborhood support.	Policy 2.1: Set allowable densities in established residential areas at levels which will promote compatibility with prevailing neighborhood character. Policy 2.2: Encourage higher residential density in areas adjacent to downtown, in underutilized commercial and industrial areas proposed for conversion to housing and in neighborhood commercial districts where higher density will not have harmful effects, especially if the higher density provides a significant number of units that are permanently affordable to lower income households.

Impact	2004 Housing Element	Corresponding 1990 Residence Element Policy
	<p>Implementation Measure 1.1.1: A Citywide action plan (CAP) should provide a comprehensive framework for the allocation of higher density, mixed-use residential development in transit-rich areas with stable urban amenities in place. In these areas, specific CAP strategies should include: higher densities and reduced parking requirements in downtown areas or through a Better Neighborhoods type planning process; pedestrian-oriented improvements to enhance the attractiveness and use of transit.</p>	
	<p>Policy 1.2: Encourage housing development, particularly affordable housing, in neighborhood commercial areas without displacing existing jobs, particularly blue-collar jobs or discouraging new employment opportunities.</p>	
	<p>Implementation Measure 1.2.1: The Planning Department will develop proposals in neighborhood commercial districts (NCDs) well served by transit to strengthen their functions as a traditional “town center” for the surrounding residential districts.</p>	
	<p>Policy 1.3: Identify opportunities for housing and mixed-use districts near downtown and former industrial portions of the City.</p>	<p>Policy 1.2: Facilitate the conversion of underused industrial and commercial areas to residential use, giving preference to permanently affordable housing uses.</p>
	<p>Implementation Measure 1.3.1: Downtown areas and areas subject to a Better Neighborhoods type planning process will be expected to absorb major office and residential developments over the next decade. Planning and zoning code changes should include floor-to-area ratio exemptions. These development bonuses would be conferred only in cases where in return the development will provide major public benefits to the community.</p>	<p>Implementation Measure 1.1.3: Inclusion of housing in Downtown.</p>

Impact	2004 Housing Element	Corresponding 1990 Residence Element Policy
	Implementation Measure 1.3.2: The Planning Department will introduce zoning changes in the traditionally industrial eastern parts of the City. The areas under study are: Mission, South of Market, Showplace Square/Potrero Hill, Bayview Hunter's Point, and Visitacion Valley. Housing, especially affordable housing, will be encouraged in former industrial areas where residential neighborhoods are established and urban amenities are in place or feasible.	
	Policy 1.4: Locate in-fill housing on appropriate sites in established residential neighborhoods.	Policy 1.4: Locate in-fill housing on appropriate sites in established neighborhoods.
	Policy 1.6: Create incentives for the inclusion of housing, particularly permanently affordable housing, in new commercial development projects.	
	Implementation Measure 1.6.2: The Planning Department and the Redevelopment Agency will propose increasing height limits, eliminating density requirements and modifying off-street parking requirements in the Transbay/Rincon Hill Redevelopment survey areas. The Mid-Market redevelopment survey area will be rezoning to include mixed-use residential areas and reduced residential parking requirements.	
	Implementation Measure 1.6.4: The Planning Department will update the Land Use Element to define areas for mixed-use development focused along transit corridors that are determined to be served by sufficient and reliable transit.	
	Implementation Measure 1.8.1: The Board of Supervisors has introduced Planning Code amendments to allow secondary units in new buildings that are in close proximity to neighborhood commercial districts and public transit.	

Impact	2004 Housing Element	Corresponding 1990 Residence Element Policy
	<p>Implementation Measure 2.4.2: As part of the Planning Department’s current citywide action plan, planning efforts in the eastern neighborhoods of the City, where housing exists in commercial and industrially zoned districts, should address housing retention as new policies and zoning are established. Mixed use should be encouraged where appropriate.</p>	
	<p>Implementation Measure 4.1.4: The City will work to identify underutilized, vacant, and Brownfield sites that are publicly or privately owned and suitable for affordable housing development. The City will work with for profit and non-profit housing developers to acquire these sites for permanently affordable housing.</p>	<p>Implementation Measure 1.1.1: Aggressive pursuit of development opportunities [on] underused public sites. Implementation Measure 1.1.4: In-fill housing on vacant or underused sites.</p>
	<p>Implementation Measure 4.1.6: Permanently affordable housing sites will be especially sought out in places where transportation and existing amenities are in place.</p>	
	<p>Policy 11.6: Employ flexible land use controls in residential areas that can regulate inappropriately sized development in new neighborhoods, in downtown areas and in other areas through a Better Neighborhoods type planning process while maximizing the opportunity for housing near transit.</p>	<p>12.5: Relate land use controls to the appropriate scale for new and existing residential areas.</p>
	<p>Implementation Measure 11.6.1: The City will continue to promote increased residential densities in areas well served by transit and neighborhood compatible development with the support and input from local neighborhoods.</p>	

Impact	2004 Housing Element	Corresponding 1990 Residence Element Policy
Promote increased density-related development standards	<p>Policy 1.1: Encourage higher residential density in areas adjacent to downtown, in underutilized commercial and industrial areas proposed for conversion to housing and in neighborhood commercial districts where higher density will not have harmful effects, especially if the higher density provides a significant number of units that are affordable to lower income households. Set allowable densities in established residential areas at levels which will promote compatibility with prevailing neighborhood scale and character where there is neighborhood support.</p>	<p>Policy 2.1: Set allowable densities in established residential areas at levels which will promote compatibility with prevailing neighborhood character.</p> <p>Policy 2.2: Encourage higher residential density in areas adjacent to downtown, in underutilized commercial and industrial areas proposed for conversion to housing and in neighborhood commercial districts where higher density will not have harmful effects, especially if the higher density provides a significant number of units that are permanently affordable to lower income households.</p>
	<p>Implementation Measure 1.1.1: A Citywide action plan (CAP) should provide a comprehensive framework for the allocation of higher density, mixed-use residential development in transit-rich areas with stable urban amenities in place. In these areas, specific CAP strategies should include: higher densities and reduced parking requirements in downtown areas or through a Better Neighborhoods type planning process; pedestrian-oriented improvements to enhance the attractiveness and use of transit.</p>	
	<p>Implementation Measure 1.3.1: Downtown areas and areas subject to a Better Neighborhoods type planning process will be expected to absorb major office and residential developments over the next decade. Planning and zoning code changes should include floor-to-area ratio exemptions. These development bonuses would be conferred only in cases where in return the development will provide major public benefits to the community.</p>	<p>Implementation Measure 1.1.3: Inclusion of housing in Downtown (allowing housing to exceed permitted Floor-Area-Ratios [FARs] in C-3-G and C-3-S Districts).</p>
	<p>Policy 1.6: Create incentives for the inclusion of housing, particularly permanently affordable housing, in new commercial development projects.</p>	<p>Policy 1.3: Create incentives for the inclusion of housing, particularly permanently affordable housing, in new commercial development projects.</p>

Impact	2004 Housing Element	Corresponding 1990 Residence Element Policy
	Implementation Measure 1.6.2: The Planning Department and the Redevelopment Agency will propose increasing height limits, eliminating density requirements and modifying off-street parking requirements in the Transbay/Rincon Hill Redevelopment survey areas. The Mid-Market redevelopment survey area will be rezoning to include mixed-use residential areas and reduced residential parking requirements.	
	Policy 1.7: Encourage and support the construction of quality, new family housing.	
	Implementation Measure 1.7.1: In response to the increasing number of families in San Francisco, the Planning Department will develop zoning amendments to require a minimum percentage of larger family units ranging from two to four bedrooms, in new major residential projects. The Planning Department will also propose eliminating density requirements within permitted building envelopes in downtown areas and areas subject to a Better Neighborhoods type planning process to maximize family units constructed.	
	Policy 1.8: Allow new secondary units in areas where their effects can be dealt with and there is neighborhood support, especially if that housing is made permanently affordable to lower income households.	Policy 1.5: Allow new secondary units in areas where their effects can be dealt with and there is neighborhood support, especially if that housing is made permanently affordable to lower income households.
	Implementation Measure 1.8.1: The Board of Supervisors has introduced Planning Code amendments to allow secondary units in new buildings that are in close proximity to neighborhood commercial districts and public transit.	

Impact	2004 Housing Element	Corresponding 1990 Residence Element Policy
	Implementation Measure 1.8.3: On-going planning will propose Planning Code amendments to encourage secondary units where appropriate.	
	Policy 4.4: Consider granting density bonuses and parking requirement exemptions for the construction of affordable housing or senior housing.	Policy 7.3: Grant density bonuses for construction of affordable or senior housing.
	Implementation Measure 4.4.1: The Planning Department will look at establishing uniform density bonus standards and equal requirements for affordable and senior housing development. Until then, affordable and senior housing will continue to be granted density bonuses and reduced parking requirements on a case-by-case basis.	
	Policy 4.5: Allow greater flexibility in the number and size of units within established building envelopes, potentially increasing the number of affordable units in multi-family structures.	Policy 2.3: Allow flexibility in the number and size of units within permitted volumes of larger multi unit structures, especially if the flexibility results in creation of a significant number of dwelling units that are permanently affordable to lower income households.
	Policy 11.6: Employ flexible land use controls in residential areas that can regulate inappropriately sized development in new neighborhoods, in downtown areas, and in other areas through a Better Neighborhoods type planning process while maximizing the opportunity for housing near transit.	Policy 12.5 Relate land use controls to the appropriate scale for new and existing residential areas.
	Implementation Measure 11.6.1: The City will continue to promote increased residential densities in areas well served by transit and neighborhood compatible development with the support and input from local neighborhoods.	
	Policy 11.7: Where there is neighborhood support, reduce or remove minimum parking requirements for housing, increasing the amount of lot area available for housing units.	

Impact	2004 Housing Element	Corresponding 1990 Residence Element Policy
	Implementation Measure 11.7.1: The Planning Department will work to reduce parking in older neighborhoods through a Better Neighborhoods type planning process with the support and input from local neighborhoods.	
	Policy 11.8: Strongly encourage project sponsors to take full advantage of allowable building densities in their housing developments while remaining consistent with neighborhood character.	
	Policy 11.9: Set allowable densities and parking standards in residential areas at levels that promote the City's overall housing objectives while respecting neighborhood scale and character.	Policy 2.1: Set allowable densities in established residential areas at levels which will promote compatibility with prevailing neighborhood character.

As shown above, the 2004 Housing Element promotes housing in commercial (Policies 1.1, 1.6) and industrial (Policies 1.1, 1.3) areas, neighborhood commercial districts (Policy 1.2 and Implementation Measure 1.2.1), housing near the Downtown (Policies 1.1, 1.3 and Implementation Measure 1.3.1) and along transit corridors (Policies 1.6, 11.6 and Implementation Measures 1.1.1, 1.6.4, 1.8.1, 4.1.6, and 11.6.1). The 2004 Housing Element also encourages new housing through on-going and future community planning processes (Policies 1.1, 11.6 and Implementation Measures 1.3.1, 1.3.2, 1.6.2, and 2.4.2) and on underutilized, vacant, surplus lands and on Brownfield sites (Implementation Measure 4.1.4). Promoting new development in certain areas of the City (e.g., Downtown) could result in a greater proportion of housing, and subsequent construction emissions to those areas of the City, resulting in increases in localized construction emissions.

The 2004 Housing Element also promotes increased density in certain areas of the City (Policy 1.1 and Implementation Measure 1.1.1, 1.8.1 and 11.6.1) and promotes density bonuses (Policy 4.4 and Implementation Measures 1.3.1 and 4.4.1) and the elimination of density requirements (Policy 1.6 and Implementation Measures 1.6.2 and 1.7.1). The 2004 Housing Element also encourages increased density by promoting reduced parking requirements (Policies 4.4, 11.7, 11.9 and Implementation Measures 1.1.1, 1.6.2, 4.4.1, 11.7.1), support for secondary units (Policy 1.8 and Implementation Measures 1.8.1 and 1.8.3) and flexible building envelopes (Policies 4.5 and 11.6). Increased density could result in longer construction durations by promoting buildings that contain a greater number of units, which could result in an increase in construction-related emissions for an individual project.

The following 2004 Housing Element policies could reduce the 2004 Housing Element's effects related to violating air quality standards by discouraging housing demolition and encouraging maintenance of existing housing units.

Impact	2004 Housing Element	Corresponding 1990 Residence Element Policy
Discourage demolition and improve existing housing supply.	Policy 2.1: Discourage the demolition of sound existing housing.	3.1: Discourage the demolition of sound existing housing.
	Policy 3.3: Maintain and improve the condition of the existing supply of public housing.	5.4: Maintain and improve the existing supply of public housing.
Promote preservation of residential buildings.	Policy 3.6: Preserve landmark historic residential buildings.	5.5: Preserve landmark historic residential buildings.
	IM 3.6.6: The Planning Department will encourage property owners to use preservation incentives to repair, restore, or rehabilitate historic resources in lieu of demolition. These include federal tax credits for rehabilitation of qualified historical resources, Mills Act property tax abatement programs, the State Historic Building Code, and tax deductions for preservation easements.	

As shown above, the 2004 Housing Element proposes policies that discourage demolition and promote the maintenance of existing housing (including Policies 2.1, 3.3, and 3.6 and Implementation Measure 3.6.6) to a degree similar to the 1990 Residence Element. Preservation of existing housing units would help maintain the City's housing stock, reducing the need to provide new housing units to meet projected housing needs. Any reduction in the need for new housing could reduce construction-related air quality impacts. Essentially both the 1990 Residence Element and 2004 Housing Element recognize the need for the retention and maintenance of existing housing, and therefore do not represent a shift in policy.

Although the 2004 Housing Element would not result in the construction of residential units, it would shape how new residential development should occur and ensure that there is adequate land available to meet future housing needs. The 2004 Housing Element includes policies that encourage increased density, potentially increasing the duration of construction activities. Any such incremental increases in construction duration from marginal increases in allowable density would be negligible. The 2004 Housing Element also includes policies that promote residential uses in certain areas of the City more so than the 1990 Residence Element. Directing residential development to certain areas of the City would result in localized construction-related air quality impacts.

According to BAAQMD, PM₁₀ is the pollutant of greatest concern with respect to construction-related emissions. Although heavy-duty equipment, material transport, and employee commutes result in emissions of criteria air pollutants (e.g., CO) and ozone precursors (e.g., ROG and NO_x), these emissions are included in the regional emissions inventory, which serves as the basis for the air quality plans, and are not expected to impede attainment of the ozone standard or maintenance of the CO standard in the SFBAAB.²⁸ Consequently, BAAQMD has not identified currently applicable mass emissions thresholds for construction-related emissions of ROG, NO_x, or CO, and bases its determination of significance on implementation of fugitive PM₁₀ dust control measures.²⁹ The BAAQMD's approach to CEQA analyses of construction-related fugitive PM₁₀ dust emissions is to require implementation of effective and comprehensive control measures rather than a detailed quantification of construction emissions. Although the proposed 2004 Housing Element would not directly result in new construction, as discussed above, new construction would be required to comply with previously discussed regulations including compliance with Article 22B, the Construction Dust Ordinance. The Construction Dust Ordinance incorporates BAAQMD's 1999 dust control measures and would require construction projects within 1,000 feet of sensitive receptors to prepare a site-specific dust control plan. That plan must include a number of equivalent measures to minimize visible dust. Therefore, any construction-related impacts of new construction would be adequately addressed by compliance with Article 22B, and the 2004 Housing Element would have a *less than significant* impact with respect to violating an air quality standard or contributing substantially to an existing or projected air quality violation.

2009 Housing Element Analysis

The following 2009 Housing Element policies could contribute incrementally to an existing or projected air quality violation by directing residential development to certain areas of the City and promoting increased density, thereby consolidating construction-related emissions from residential development within those areas and potentially contributing to localized air quality impacts.

Impact	2009 Housing Element	Corresponding 1990 Residence Element Policy
Direct growth to certain areas of the City.	Policy 1.1: Focus housing growth- and the infrastructure necessary to support that growth- according to community plans. Complete planning underway in key opportunity areas such as Treasure Island, Candlestick Park and Hunter's Point Shipyard.	Implementation Measure 1.1.2: Pursuit of housing development opportunities in neighborhood and area plans.

²⁸ Bay Area Air Quality Management District, BAAQMD CEQA Guidelines: Assessing the Air Quality Impacts of Projects and Plans. December 1999. Available on the Internet at: <http://www.baaqmd.gov/Divisions/Planning-and-Research/CEQA-GUIDELINES/1999-CEQA-Guidelines.aspx>. Accessed June 15, 2010.

²⁹ Ibid, pp. 13–15.

Impact	2009 Housing Element	Corresponding 1990 Residence Element Policy
	Policy 1.3: Work proactively to identify and secure opportunity sites for permanently affordable housing.	Policy 1.1: Promote development of permanently affordable housing on surplus, underused and vacant public lands.
	Policy 1.6: Consider greater flexibility in the number and size of units within established building envelopes in community plan areas, especially if it can increase the number of affordable units in multi-family structures.	Policy 2.5: Allow flexibility in the number and size of units within permitted volumes of larger multi-unit structures, especially if the flexibility results in creation of a significant number of dwelling units that are permanently affordable to lower income households.
	Policy 1.7: Consider public health objectives when designating and promoting housing development sites.	Policy 12.1: Assure housing is provided with adequate public improvements, services and amenities.
	Policy 1.8: Promote mixed use development, and include housing, particularly permanently affordable housing, in new commercial, institutional or other single use development projects.	Policy 1.3: Create incentives for the inclusion of housing, including permanently affordable housing in commercial developments.
	Policy 4.6: Encourage an equitable distribution of growth according to infrastructure and site capacity.	Policy 12.1: Assure housing is provided with adequate public improvements, services and amenities.
	Policy 10.3: Support state legislation and programs that promote environmentally favorable projects.	
	Policy 12.1: Encourage new housing that relies on transit use and environmentally sustainable patterns of movement.	
	Policy 12.2: Consider the proximity of quality of life elements, such as open space, child care and neighborhood serves, when development new housing units.	
	Policy 13.1: Support “smart” regional growth that locates new housing close to jobs and transit.	
	Policy 13.3: Promote sustainable land use patterns that integrate housing with transportation via transit, pedestrian, and bicycle modes.	

Impact	2009 Housing Element	Corresponding 1990 Residence Element Policy
	<p>Implementation Measure 3: Consistent with the SFMTA’s Climate Action Plan, MOH shall work with MTA to identify Muni sites that can serve as potential housing sites.</p>	
	<p>Implementation Measure 4: The Mayor’s Office of Housing (MOH) shall continue to actively pursue surplus or underused publicly-owned land for housing potential, working with agencies not subject to the Surplus Property Ordinance such as the San Francisco Public Utilities Commission, SFUSD and the Municipal Transportation Agency to identify site opportunities. City agencies shall continue to survey their properties for affordable housing opportunities or joint use potential.</p>	<p>Implementation Measure 1.1.1: Aggressive pursuit of development opportunities [in] underused public sites.</p> <p>Implementation Measure 1.1.4: In-fill housing on vacant or underused sites.</p>
	<p>Implementation Measure 6: To further smaller scale TOD opportunities, Planning and MTA shall evaluate smaller surplus MTA-owned sites (typically surface parking lots) and identify barriers towards their redevelopment, such as Planning Code issues, neighborhood parking needs and communities sentiment.</p>	
	<p>Implementation Measure 8: Planning, Redevelopment and Mayor’s Office of Economic and Workforce Development (MOEWD) should complete long range planning processes already underway: Japantown, Glen Park, the Northeast Embarcadero Study, the Bayview Hunters Point Plan, Candlestick/ Hunters Pont, India Basin shoreline community planning process, Treasure Island, and Hunters Point.</p>	

Impact	2009 Housing Element	Corresponding 1990 Residence Element Policy
	Implementation Measure 14: Planning staff shall prioritize support for projects which are located within a reasonable walking distance of stops along major transit lines, including BART, Muni rail lines and “Muni’s 24-hour Rapid Network.”	
	Implementation Measure 74: The City shall coordinate with regional entities to complete the necessary planning document for SB 375, including a “Sustainable Community Strategy” which promotes sustainable growth; and corresponding updates to the Housing, Recreation and Open Space, and Land Use Elements of the General Plan.	
	Implementation Measure 80: In development of new community plans, Planning shall include mixed-use design standards for both residential and commercial buildings.	
	Implementation Measure 85: Planning shall ensure community plans for growth are accompanied by capital plans and programs to support both the “hard” and “soft” elements of infrastructure needed by new housing.	Implementation Measure 7.7.1: Acquisition and improvement of open space; facilities and public environmental improvements in six neighborhood strategy areas; street improvements; parking facilities in neighborhoods; transit and street improvements.
	Implementation Measure 90: Planning and SFMTA should coordinate housing development with the ongoing Transit Effectiveness Project.	

Impact	2009 Housing Element	Corresponding 1990 Residence Element Policy
	<p>Implementation Measure 94: Regional planning entities such as ABAG shall continue to prioritize regional transportation decisions and funding to “smart” local land use policies that link housing, jobs and other land uses, including focusing on VMT reduction. The City shall encourage formalization of state policy that similarly prioritizes transportation and infrastructure dollars for “smart growth” areas such as San Francisco, rather than geographic allocation.</p>	
	<p>Implementation Measure 97: On a local level, the City shall prioritize planned growth areas such as Better Neighborhoods, other Area Plans or Redevelopment Areas for regional, state, and federal bond and grants, especially for discretionary funding application processes such as the State’s Prop 1C.</p>	
<p>Promote increased density-related development standards</p>	<p>Policy 1.4: Ensure changes to land use controls are proposed through neighborhood-supported community planning processes.</p>	<p>Policy 2.1: Set allowable densities in established residential areas at levels which will promote compatibility with prevailing neighborhood character.</p> <p>Policy 2.2: Encourage higher residential density in areas adjacent to downtown, in underutilized commercial and industrial areas proposed for conversion to housing and in neighborhood commercial districts where higher density will not have harmful effects, especially if the higher density provides a significant number of units that are permanently affordable to lower income households.</p>
	<p>Policy 1.5: Consider secondary units in community plans where there is neighborhood support and when other neighborhood goals can be achieved, especially if that housing is made permanently affordable to lower-income households.</p>	<p>Policy 1.5: Allow new secondary units in areas where their effects can be dealt with and there is neighborhood support, especially if that housing is made permanently affordable to lower income households.</p>

Impact	2009 Housing Element	Corresponding 1990 Residence Element Policy
	Policy 1.6: Consider greater flexibility in number and size of units within established building envelopes in community plan areas, especially if it can increase the number of affordable units in multi-family structures.	Implementation Measure 1.1.3: Inclusion of housing in Downtown (allowing housing to exceed permitted Floor-Area-Ratios [FARs] in C-3-G and C-3-S Districts).
	Policy 7.5: Encourage the production of affordable housing through process and zoning accommodations, and prioritize affordable housing in the review and approval processes.	Policy 7.3: Grant density bonuses for construction of affordable or senior housing.
	Policy 11.4: Maintain allowable densities in established residential areas at levels which promote compatibility with prevailing neighborhood character.	Policy 2.1 Set allowable densities in established residential areas at levels which will promote compatibility with prevailing neighborhood scale and character.
	Implementation Measure 12: Planning shall require integration of new technologies that reduce the space required for non-housing functions, such as parking, and shall consider requiring parking lifts to be supplied in all new housing developments seeking approval for parking at a ratio of 1:1 or above.	
	Implementation Measure 13: When considering legalization of secondary units within community planning processes, Planning shall develop a Design Manual that illustrates how secondary units can be developed to be sensitive to the surrounding neighborhood, to ensure neighborhood character is maintained.	
	Implementation Measure 36: Planning shall continue to implement Planning Code Section 209, which allows a density bonus of twice the number of dwelling units otherwise permitted as a principal use in the district, when the housing is specifically designed for and occupied by senior citizens, physically or mentally disabled persons.	Policy 7.3: Grant density bonuses for construction of affordable or senior housing.

Impact	2009 Housing Element	Corresponding 1990 Residence Element Policy
	Strategy for further review: MOH and Planning should continue to consider, within the context of a community planning process, zoning categories which require a higher proportion of affordable housing where increased density or other benefits are granted. Options include Affordable Housing Only Zones (SLI); Affordable Housing Priority Zones (UMU) or Special Use District Opportunities.	
	Implementation Measure 64: Planning staff shall support affordable housing projects in the development review process, including allowing sponsors of permanently affordable housing to take advantage of allowable densities provided their projects are consistent with neighborhood character.	
	Implementation Measure 79: Planning staff shall continue to use community planning processes to develop policies, zoning and standards that are tailored to neighborhood character.	Implementation Measure 2.2.1: Densities compatible with neighborhood character.

As shown above, the 2009 Housing Element promotes housing through community planning processes (Policies 1.1, 1.6, and Implementation Measures 8, 80 and 97), near transit and other infrastructure (Policies 1.8, 4.6, 10.3, 12.1, 13.1 and Implementation Measures 6, 14, 74, 90, and 94), and in proximity to neighborhood services (Policies 1.7, 12.2, 13.1 and Implementation Measure 85). The 2009 Housing Element also promotes housing on underused, vacant and surplus lands (Policy 1.3 and Implementation Measures 3 and 4), and housing within mixed-use areas (Policy 1.8 and Implementation Measure 80). Promoting new development in certain areas of the City (e.g., Downtown) could result in a greater proportion of housing, and subsequent construction emissions to those areas of the City, resulting in increases in localized construction emissions.

Furthermore, the 2009 Housing Element generally promotes increased density through community planning processes (Policies 1.4, 1.5, 1.6, and Implementation Measures 13 and 79) and for affordable housing (Policy 7.5 and Implementation Measures 36 and 64). The 2009 Housing Element also includes a strategy designed to reduce the amount of space required for non-housing functions (Implementation Measure 12). While the 2009 Housing Element contains a policy that advocates for family-sized housing units (Policy 4.1 and Implementation Measure 32), overall density increases from such policy would be speculative as less units would be accommodated within a given building envelope. Increased density

could result in longer construction durations by promoting buildings that contain a greater number of units, which could result in an increase in emissions for an individual construction project.

The following 2009 Housing Element policies could reduce the 2009 Housing Element’s effects related to an existing or projected air quality violation by discouraging housing demolition, and encouraging maintenance activities of existing housing units.

Impact	2009 Housing Element	Corresponding 1990 Residence Element Policy
Discourage demolition and improve existing housing supply.	Policy 2.3: Prevent the removal or reduction of housing for parking.	
	Policy 2.4: Promote improvements and continued maintenance of existing units to ensure long term habitation and safety.	Objective 5: To maintain and improve the physical condition of housing while maintaining existing affordability levels. Policy 5.1: Assure that existing housing is maintained in decent, safe sanitary conditions at existing affordability levels. Policy 5.2: Promote and support voluntary housing rehabilitation which does not result in the displacement of lower income occupants.
	Policy 3.1: Preserve rental units, especially rent controlled units, to meet the City’s affordable housing needs	Policy 3.1: Discourage the demolition of sound existing housing.
	Policy 3.2: Promote voluntary housing acquisition and rehabilitation to protect affordability for exiting occupants.	Policy 5.2: Promote and support voluntary housing rehabilitation which does not result in the displacement of lower income occupants.
	Policy 3.4: Preserve “naturally affordable” housing types, such as smaller and older ownership units.	
	Policy 3.5: Retain permanently affordable residential hotels and single room occupancy (SRO) units.	Policy 3.7: Preserve the existing stock of residential hotels.

	Policy 9.3: Maintain and improve the condition of the existing supply of public housing, through programs such as HOPE SF.	Policy 5.4: Maintain and improve the existing supply of public housing. Policy 7.5: Encourage energy efficiency in new residential development and weatherization in existing housing to reduce overall housing costs.
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As shown above, the 2009 Housing Element proposes policies that discourage demolition and promote the maintenance of existing public housing (including Policies 2.4, 3.1, 3.4, and 9.3) to a degree similar to the 1990 Residence Element. The maintenance and preservation of existing housing would help to preserve the existing housing stock, requiring less new development to meet housing goals, resulting in fewer construction-related air quality impacts. 2009 Housing Element Policies 2.1, 3.1, 3.4, and 9.3 are essentially the same as their corresponding 1990 Residence Element Policies. 2009 Housing Element Policy 13.4 expands upon 1990 Residence Element Policy 7.5 by promoting the preservation of existing buildings. Essentially, both the 1990 Residence Element and 2009 Housing Element recognize the need for the retention and maintenance of existing housing, and therefore do not represent a shift in policy.

Although the 2009 Housing Element would not result in the construction of residential units, it would shape how new residential development should occur and ensure that there is adequate land available to meet future housing needs. As discussed previously, new construction would be required to comply with previously discussed regulations, including compliance with Article 22B, the Construction Dust Ordinance. Any potential impacts from new construction related to air quality violations would be reduced with compliance with Article 22B, and therefore any construction-related impacts of new construction would be adequately addressed by compliance with Article 22B. Therefore, the 2009 Housing Element would have a *less than significant* impact with respect to violating an air quality standard or contributing substantially to an existing or projected air quality violation.

Operation

The potential air pollutant emissions (specifically criteria air pollutants) from future residential development were evaluated quantitatively using the URBEMIS2007 computer model distributed for use by the ARB and recommended for use by the BAAQMD. Table V.H-6 presents the operational emissions associated with the projected population increase between 2009 and 2025.³⁰ As described in Section V.D (Population and Housing), to accommodate projected population growth, approximately 41,651 new units will be required. It was assumed that approximately 1.7 percent of these housing units would be single-family units while the others would be multi-family units.³¹ Emissions evaluated in this EIR include the

³⁰ Development projections provided by John Rahaim, Director of City Planning, to Michael Carlin, Deputy General Manager at the San Francisco Public Utilities Commissions, July 9, 2009.

³¹ This assumption is based on the current ratios of single-family homes and multi-family homes as compared to land available to accommodate new single-family and multi-family homes (housing capacity).

air pollutant emissions from the potential increase in traffic as well as area source emissions. Vehicle exhaust emissions associated with increased traffic is based on analysis year (2025), seasonal temperatures, trip characteristics, and the percentage of travel on paved versus unpaved roads. Default traffic values provided in the URBEMIS2007 model for San Francisco County were used in this analysis. Evaluated area source emissions include the following:

Natural Gas Combustion

URBEMIS2007 was used to estimate fuel combustion emissions associated with water and space heating. Emissions estimates for space and water heating assumes natural gas is used as the primary source of fuel.

Landscape maintenance

Landscape maintenance equipment generates emissions from fuel combustion and from evaporation of unburned fuel. Equipment in the landscape category includes lawn mowers, roto tillers, shredders/grinders, blowers, trimmers, chain saws, and hedge trimmers. Landscape maintenance emissions are assumed to occur only during the summer (i.e., non-winter) days.

Consumer products

Consumer production emissions are generated by a wide range of products including air fresheners, household cleaners, and personal care products.

Architectural coatings

URBEMIS2007 estimates emissions resulting from the evaporation of solvents contained in paints, varnishes, primers, and other surface coatings. This evaluation assumes 10 percent of residences are repainted each year.

**Table V.H-6
Air Pollutant Emissions from
Projected 2025 Residential Development (lbs/day)**

Operational Activity	ROG	NOx	PM₁₀
2025 Summer Emissions			
Area Source Emissions			
Natural Gas	25	318	0.61
Landscape	6	0.38	0.09
Consumer Products	2,038	--	--
Architectural Coatings	285	--	--
<i>Area Source Subtotal</i>	<i>2,353</i>	<i>318</i>	<i>0.70</i>
Vehicle Emissions	1,079	969	4,234
Total Emissions	3,432	1,287	4,235

**Table V.H-6
Air Pollutant Emissions from
Projected 2025 Residential Development (lbs/day)**

Operational Activity	ROG	NOx	PM₁₀
2025 Winter Emissions			
Area Source Emissions			
Natural Gas	25	318	0.61
Landscape - No Winter Emissions	--	--	--
Consumer Products	2,038	--	--
Architectural Coatings	285	--	--
<i>Area Source Subtotal</i>	<i>2,347</i>	<i>318</i>	<i>0.61</i>
Vehicle Emissions	1,018	1,405	4,234
Total Emissions	3,366	1,723	4,235
<i>Note: Numbers have been rounded to the nearest whole number where applicable.</i>			
<i>Source: URBEMIS and Christopher A. Joseph & Associates, 2010. Calculation data can be found in Appendix E.</i>			

The policies from the 2004 Housing Element and the 2009 Housing Element that could result in impacts with respect to violating air quality standards are discussed below. It should be noted that the 2004 and 2009 Housing Elements would not propose new development and would therefore not directly result in air pollutant emissions. New development could affect such issues, but would be evaluated on a project-by-project basis.

2004 Housing Element Analysis

As discussed previously under Impact AQ-2, the 2004 Housing Element promotes housing in commercial and industrial areas, neighborhood commercial districts, housing near the Downtown and along transit corridors to a greater extent than the 1990 Residence Element. The 2004 Housing Element policies that direct growth to certain areas of the City (Downtown, commercial, neighborhood commercial districts, etc.) would promote residential uses in proximity to jobs, neighborhood services and transit. Increased density and policies directing growth to job cores, neighborhood services, and transit (as discussed in Section V.F [Transportation and Circulation] and Section V.I. [Greenhouse Gas Emissions]) could reduce the growth of the City's overall vehicle trips and associated vehicle emissions, relative to regional growth.

The following additional 2004 Housing Element policies could reduce the growth of emissions of projected 2025 housing units by encouraging housing in locations supportive of alternative transportation (near accessible amenities and transit), promoting neighborhood-serving commercial amenities, which could reduce vehicle emissions, and by encouraging energy efficient housing development, which could reduce vehicle and stationary source emissions associated with residential development.

Impact	2004 Housing Element	Corresponding 1990 Residence Element Policy
Encourage housing to be located in areas with existing amenities or access to transit.	Policy 11.2: Ensure housing is provided with adequate public improvements, services, and amenities.	Policy 12.1: Assure housing is provided with adequate public improvements, services and amenities.
Promote neighborhood-serving commercial amenities in residential areas.	Policy 11.3: Encourage appropriate neighborhood-serving commercial activities in residential areas, without causing affordable housing displacement.	Policy 12.2: Allow appropriate neighborhood-serving commercial activities in residential areas.
	Implementation Measure 11.1.1: The new Land Use Element will identify in-fill sites appropriate for mixed-use residential projects. Appropriate neighborhood serving retail, public facilities and supportive amenities should be encouraged.	
Promote energy efficient housing development.	Policy 11.10: Include energy efficient features in new residential development and encourage weatherization in existing housing to reduce overall housing costs and the long-range cost of maintenance.	Policy 7.5: Encourage energy efficiency in new residential development and weatherization in existing housing to reduce overall housing cost.

As shown above, the 2004 Housing Element promotes housing in areas with existing amenities (Policy 11.2), housing in areas with neighborhood-serving commercial amenities (Policy 11.3 and Implementation Measure 11.1.1), and housing with energy efficient features (Policy 11.10). As discussed in detail in Section V.I (Greenhouse Gas Emissions), the increased density of residential uses, as well as locating neighborhood-serving commercial uses in residential areas, would help to reduce the reliance on vehicles and could result in an overall reduction in vehicle emissions within the City. The inclusion of energy efficient features and weatherization would reduce energy required to support heating, cooling, and water/wastewater conveyance. This reduction in the need for energy would result in a corresponding reduction in the generation of associated air quality impacts that result from energy production processes.

Although the 2004 Housing Element would not result in the construction of residential units, it would shape how new residential development should occur and ensure that there is adequate land available to meet future housing needs. The 2004 Housing Element seeks to accommodate new housing by including policies that encourage increased density in proximity to job cores, local-serving transit and neighborhood services. Combined, the effect of vehicle emissions associated with new housing in well-served areas of the City would be less than if new housing is not developed in proximity to transit, services, and jobs.

Additionally, the Air Quality Element of the General Plan includes policies to take advantage of the high density development in San Francisco to improve transit infrastructure (Policy 3.1), to encourage high density and compact development near extensive transportation infrastructure (Policy 3.1), to encourage mixed land use development near transit lines (Policy 3.2), to provide retail and service oriented uses within walking distance, and to promote new residential development close to Downtown and centers of employment (Policy 3.4). While residential development would occur regardless of the policies promoted in the Housing Element, potential impacts to air quality could be reduced with “smart” growth that would achieve the goal of providing increased housing but in locations well served by amenities, near transit and job cores, thereby reducing vehicular emissions. Additionally, the 2004 Housing Element includes policies advocating for energy efficiency, which combined with compliance with the SFGBO, would reduce operational emissions associated with residential uses. The SFGBO contains provisions for the use of solar energy as well as provisions for the use of low-emitting materials on building interiors, provisions that emphasize the use of clean energy and improved air quality. The implementation of the SFGBO for residential buildings requires verification that the energy performance for low-rise residential buildings or high-rise residential buildings shows that the proposed building exceeds Title 24 by at least 15 percent.³² Therefore, the 2004 Housing Element would have a *less than significant* impact with respect to violating an air quality standard or contributing substantially to an existing or projected air quality violation.

2009 Housing Element Analysis

As discussed previously under Impact AQ-2, the 2009 Housing Element promotes housing near transit and other infrastructure, housing in proximity to neighborhood services, and housing within mixed-use areas. As with the 2004 Housing Element, the 2009 Housing Element includes policies that would promote residential uses in proximity to jobs, neighborhood services and transit. Increased density and policies directing growth to mixed-use areas, neighborhood services, and transit (as discussed in Section V.F [Transportation and Circulation] and Section V.I. [Greenhouse Gas Emissions]) could reduce the growth of the City’s overall vehicle trips and associated vehicle emissions, relative to the region.

In accordance with Housing Element policies, the Air Quality Element of the General Plan promotes policies that take advantage of the high density development in San Francisco to improve transit infrastructure, to encourage high density and compact development near extensive transportation infrastructure, to encourage mixed land use development near transit lines, to provide retail and service-oriented uses within walking distance, and to promote new residential development close to Downtown and centers of employment. Therefore, in coordination with these policies, the 2009 Housing Element, which promotes housing in proximity to transit, could potentially reduce anticipated growth in vehicle miles traveled, and could thus result in less vehicle emissions than expected from development not targeted near transportation resources.

³² City and County of San Francisco, Application for a Locally Adopted Energy Standards by the City and County of San Francisco in Accordance with Section 10-106 of the California Code of Regulations, Title 24, Part 1, July 31, 2008, http://www.energy.ca.gov/title24/2005standards/ordinances/2008-09-26_SAN_FRANCISCO.PDF, accessed March 26, 2010.

The following 2009 Housing Element policies could further reduce the effects of new development on air quality by encouraging energy efficient housing development, which could reduce the growth of vehicle emissions and stationary source emissions associated with residential development.

Impact	2009 Housing element	Corresponding 1990 Residence Element Policy
Energy efficient housing development	Policy 12.3: Ensure new housing is sustainably supported by the City's infrastructure systems.	
	Policy 13.4: Promote the highest feasible level of "green" development in both private and municipally-supported housing.	Policy 7.5: Encourage energy efficiency in new residential development and weatherization in existing housing to reduce overall housing costs.

As shown above, the 2009 Housing Element promotes energy-efficient development (Policies 12.3 and 13.4) to a greater extent than the 1990 Residence Element. The inclusion of energy efficient features and weatherization would reduce energy required to support heating, cooling, and water/wastewater conveyance. This reduction in the need for energy would result in a corresponding reduction in the generation of associated air quality impacts that result from energy production processes.

Although the 2009 Housing Element would not result in the construction of residential units, it would shape how new residential development should occur and ensures that there is adequate land available to meet future housing needs. Potential impacts to air quality could be reduced with "smart" growth that would achieve the goal of providing increased housing in locations well served by amenities and in proximity to transit and job cores, thereby reducing the expected growth of vehicular emissions. In addition, the 2009 Housing Element includes policies that advocate for energy efficient development, which when combined with compliance with the SFGBO, would reduce operational emissions associated with residential uses. Therefore, the 2009 Housing Element would have a *less than significant* impact with respect to violating an air quality standard or contributing substantially to an existing or projected air quality violation.

Impact AQ-3: The proposed Housing Elements would not expose sensitive receptors to substantial pollutants. (Less than Significant)

2004 Housing Element and 2009 Housing Element Analysis

Potential Exposures to point sources of air pollution

Potential health-relevant exposures to air pollutants to residents and other sensitive receptors may result from a variety of common urban sources. Industrial facilities such as refineries, chemical plants and chrome platers, commercial facilities such as dry cleaners and gasoline stations, are sources of TACs and regulated criteria air pollutants. These sources are typically regulated to prevent adverse health impacts as

point sources by the BAAQMD. As discussed previously, the BAAQMD's currently applicable *CEQA Guidelines* (1999) recommends the establishment of a buffer zone around existing and proposed emissions sources when evaluating the impacts of a plan in relation to air toxics (TACs).

The BAAQMD, with permitting authority over stationary sources in the City, is in the process of updating its source inventory database.³³ The current database is highly inaccurate in both emissions inventory and location of point source emissions, therefore, at this time it is not possible to generate a buffer zone around all important stationary source emissions. This analysis therefore conservatively assumes that stationary sources could occur throughout the City. While most industrial activities that generate air toxics would be confined to industrial zones of the City, other uses, such as dry cleaners also emit air toxics and are generally allowed throughout the City. The assumption that point sources could occur throughout the City is therefore, intended as a conservative assumption. As such, residential development could occur in proximity to point sources of air pollutants. The potential for the proposed Housing Elements to expose sensitive receptors to stationary sources of air toxics and TRPs is addressed below.

Potential Exposures to Traffic Related Pollutants (TRPs)

As discussed above, roadway vehicles emit both criteria air pollutants such as CO, PM, and NO_x as well as other non-criteria toxic air contaminants, including benzene, 1,3-butadiene, formaldehyde, acetaldehyde, acrolein, naphthalene, and diesel exhaust. Human exposures to TRPs follows the distribution of the traffic circulation systems and is generally proportional to vehicle volume. Residences adjacent to freeways, state highways, and many of San Francisco's arterial roadways experience substantial levels of TRPs.

Figure V.H-1, Potential Housing Units: Capacity and Pipeline Units within the Potential Roadway Exposure Zone, shows locations of the City potentially affected by traffic related pollutants. In the map modeled PM_{2.5} is used as a proxy for TRPs from mobile sources. Figure V.H-1 presents the number of housing units available for residential development, as well as the number of housing units within the City's pipeline that could be developed within the Potential Roadway Exposure Zone. As shown, the areas most affected by TRPs are located in close proximity to I-280, US 101, and I-80, as well as the following planning districts and plan areas: Downtown, Japantown, West SoMa, East SoMa, Western Addition, Market/Octavia, Marina, Northeast, and Transbay. There is citywide capacity for approximately 22,168 housing units within the Potential Roadway Exposure Zone.

Residential development could occur within the Potential Roadway Exposure Zone, potentially exposing residents to existing elevated levels of TRPs including to constituent TACs, PM_{2.5}, and NO₂. As discussed throughout this EIR, residential development in the City would occur irrespective of the proposed Housing Elements. Housing Element law was enacted to ensure that localities plan and make land available for new housing. Part I of the 2009 Housing Element, the Data and Needs Analysis, shows that

³³ According to the BAAQMD website, BAAQMD issued a Request for Proposal (RFP) for the development of a detailed TAC and PM emissions inventory for the Bay Area on March 18, 2010. This RFP closed on April 15, 2010. Accessed June 15, 2010.

the City has available capacity to meet the RHNA, therefore rezoning to accommodate new housing is not required. The proposed Housing Elements are policy documents that provide direction for accommodating new housing driven by population growth. Policies that encourage increased density in areas of the City that are within the Potential Roadway Exposure Zone, could expose sensitive residential receptors to substantial amounts of roadway traffic related pollutants. As discussed in Impact AQ-1, the 2004 Housing Element encourages increased density in the Downtown, mixed-use districts,³⁴ and along transit lines. Many of these areas are within the Potential Roadway Exposure Zone. Similarly, the 2009 Housing Element promotes housing near transit and accommodating housing through community planning processes (anticipated to occur in areas of the City also served by transit). Many of the City's major transit corridors are within the Potential Roadway Exposure Zone, therefore both the 2004 and 2009 Housing Elements could promote new residential uses within the Potential Roadway Exposure Zone to a greater degree than the 1990 Residence Element, potentially exposing residential receptors to substantial roadway TRPs. Some constituents of TRPs, including diesel exhaust are expected to fall substantially over time due to ARB engine, fuel, and emissions regulations.

Increased density could increase some TRPs including, PM_{2.5}, NO₂, and TACs on some roadway within San Francisco. However, at the same time, increased density and associated shifts vehicle trips to alternative modes of transportation (transit, bicycling, and walking) could reduce overall expected growth of vehicle trips and VMT, as discussed extensively in Section V.F Transportation and Circulation. Overall, future growth will continue to contribute some additional TRP emissions, albeit less than a Housing Element without policies encouraging increased density and housing that is supportive of alternative modes of transportation.

As discussed previously, the BAAQMD in the applicable *CEQA Guidelines* (1999), recommends the establishment of a buffer zone around existing and proposed emissions sources when evaluating the impacts of a plan in relation to air pollutants. Residential uses typically do not generate point source air toxics, although the associated vehicle trips would contribute to citywide TRP emissions. The Potential Roadway Exposure Zone Map, codified in Article 38 of the Health Code, provides a buffer around significant TRP emission sources using PM_{2.5} as a proxy for TRP exposures.

New development located within the Potential Roadway Exposure Zone, or in proximity to stationary sources could be adversely affected by roadway TRPs including PM_{2.5}, NO₂, and TACs. However, policies contained in the Air Quality Element and Transportation Element of the General Plan, as well as rules codified in Article 38 of the Health Code, would reduce the impacts of the 2004 and 2009 Housing Element policies that advocate for housing potentially near sources of air pollution. General Plan Air Quality Element policy 3.7 requires that review of new housing projects consider the location of industrial sites or other sources of air pollution in the design of the residential building and to orient air intakes away from sources of pollution. Policy 3.8 promotes non-polluting industries and insists that industry

³⁴ Mixed-use districts include the South of Market areas of East and West SoMa.



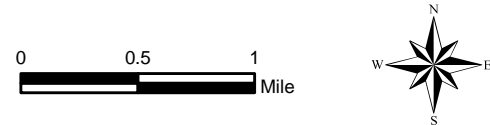
CITY AND COUNTY OF SAN FRANCISCO
PLANNING DEPARTMENT

Figure V.H-1 Potential Housing Units: Capacity and Pipeline Units within the Potential Roadway Exposure Zone

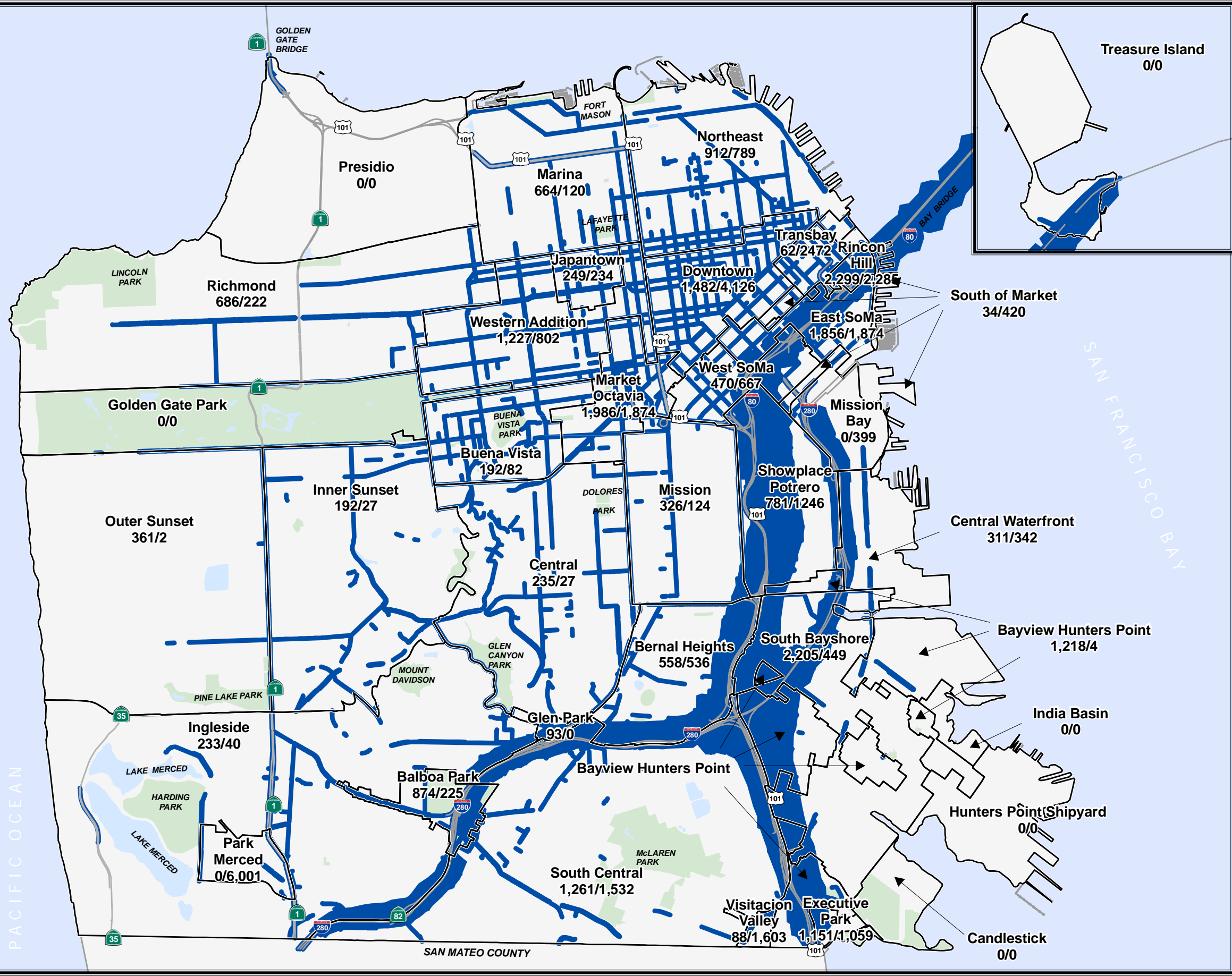
- Roadway Exposure Zone
- Parks
- Water

Notes:

1. Numerical values represent housing capacity within the potential roadway exposure zone followed by net pipeline units within this zone (Housing Unit Capacity/ Pipeline Units), except as noted below.
2. Within the Mission Bay, Hunters Point, Candlestick Point, Visitacion Valley, and Treasure Island Redevelopment Areas, as well as the Park Merced area plan, the specific locations of housing units are unknown, therefore total net units anticipated under those plans are indicated.
3. "Potential Roadway Exposure Zone" refers to those areas within the City and County of San Francisco which, by virtue of their proximity to freeways and major roadways, may exhibit high Particulate Matter (PM) 2.5 concentrations attributable to local roadway traffic sources.



Sources:
Capacity and Pipeline: CCSF Planning Department, Q1 2009.
Potential Roadway Exposure Zone: CCSF Department of Public Health, 2008.



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comply with established emissions control regulations. Policy 3.9 requires the planting of trees in conjunction with new development to optimize air quality (also required by Planning Code Section 143). Additionally, Transportation Element policies 38.1 and 38.2 promote the routing of trucks outside of the City, with the aim of reducing traffic congestion and avoiding neighborhood areas. Policies 39.1, 39.2, and 39.3 similarly encourage truck routing through industrial areas and away from residential neighborhoods. Further, Article 38 of the San Francisco Health Code contains requirements for air quality assessment and mitigation when new residential exposures exceed action levels for acceptable TRP concentrations.

Overall, the City's Air Quality and Transportation Element policies in conjunction with compliance with Article 38 of the Health Code, would reduce the impacts of new residences being exposed to substantial pollutants, including mobile sources (vehicles) and point sources (industry), by reducing exposure of residences to air pollutants and considering the location of new development in relation to existing sources of air pollution. Furthermore, the proposed Housing Elements do not permit any new development. Any new development would be subject to project-level environmental review including an analysis of the project's potential to expose sensitive receptors to air pollutants in accordance with BAAQMD guidance for the analysis of air pollutants and significance thresholds. Finally, the SFPDPH will continue to update Article 38, if and when conditions warrant. Thus, the potential for the proposed 2004 and 2009 Housing Elements to expose sensitive residential receptors to substantial pollutants would be *less than significant*.

Local CO Concentrations

As stated previously, the BAAQMD recommends that CO modeling be performed for projects for which traffic would affect intersections or roadway segments operating at LOS E or F, or would cause a decline to LOS E or F. As discussed throughout this document, the proposed Housing Elements would not generate new vehicle trips beyond those assumed under 2025 Cumulative Conditions. Therefore, this section analyzes future 2025 CO concentrations resulting from residential growth as projected by ABAG. Due to the large number of intersections analyzed as part of the transportation analysis, the ten worst-performing intersections were analyzed to represent the worst case scenarios with respect to CO hotspots under 2025 conditions. CO modeling was performed for the study intersections based on anticipated traffic resulting from 2025 projected housing units and are listed in Table V.H-7.

For this analysis, CO concentrations were calculated based on a simplified CALINE4 screening procedure developed by the BAAQMD. This methodology assumes worst-case conditions (i.e., wind direction is parallel to the primary roadway, 90° to the secondary road; wind speed of less than one meter per second; and a high level of atmospheric stability, or lack of change) and provides a screening of maximum, worst-case CO concentrations. Maximum CO concentrations were calculated for peak-hour traffic volumes at the study intersections noted above. Results are presented below in Table V.H-7.

**Table V.H-7
Localized Carbon Monoxide Concentrations
From Projected 2025 Residential Development**

Intersection	CO Concentrations in Parts per Million ^a							
	Roadway Edge		25 feet		50 feet		100 feet	
	1-Hour	8-Hour	1-Hour	8-Hour	1-Hour	8-Hour	1-Hour	8-Hour
6. Geary Boulevard & Van Ness Avenue	6.6	2.9	6.3	2.7	6.2	2.6	6.1	2.5
16. 2 nd Street and Folsom Street	6.3	2.7	6.1	2.6	6.0	2.5	5.9	2.5
17. 2 nd Street and Bryant Street	6.3	2.7	6.1	2.6	6.0	2.5	5.9	2.5
24. 6 th Street and Brannan Street	7.2	3.4	6.7	3.0	6.5	2.9	6.3	2.7
31. 16 th Street and Potrero Street	6.6	2.9	6.3	2.7	6.2	2.6	6.1	2.5
41. Sloat Boulevard and 19 th Avenue	7.3	3.4	6.8	3.1	6.6	2.9	6.3	2.8
42. Winston Drive and 19 th Avenue	6.9	3.2	6.5	2.9	6.4	2.8	6.2	2.7
43. Junipero Serra Boulevard and 19 th Avenue	7.7	3.7	7.1	3.3	6.8	3.1	6.6	2.9
50. Sunnysdale Avenue and Bayshore Boulevard	6.8	3.1	6.4	2.8	6.3	2.7	6.1	2.6
56. Evans Avenue and Cesar Chavez Street	6.8	3.1	6.4	2.8	6.3	2.7	6.1	2.6
57. Bryant Street and Cesar Chavez Street	7.0	3.2	6.5	2.9	6.4	2.8	6.2	2.6
^a The national 1-hour CO ambient air quality standard is 35.0 ppm, and the state 1-hour CO ambient air quality standard is 20.0 ppm. National and state 8-hour standards are 9.0 parts per million. Traffic Information Source: TJKM Transportation Consultants, 2010. Source: Christopher A. Joseph & Associates, March 2010. Calculation data and results are provided in Appendix E.								

As shown in Table V.H-7, under future 2025 conditions none of the intersections would exceed the CO standards at the ten worst-performing intersections. It can be assumed that if CO levels at the 10 worst-performing intersections do not exceed the CO thresholds, then the remaining 50 intersections analyzed in the traffic study also would not exceed the CO thresholds. Additionally, as discussed under Impact AQ-2, the 2004 Housing Element promotes housing in commercial and industrial areas, neighborhood commercial districts, housing near the Downtown and along transit corridors to a greater extent than the 1990 Residence Element, which could reduce the number of vehicle trips and/or VMT, thus reducing vehicle emissions.

As discussed under Impact AQ-2, the 2009 Housing Element promotes housing near transit and other infrastructure, housing in proximity to neighborhood services, and housing within mixed-use areas. As with the 2004 Housing Element, the 2009 Housing Element includes policies that would promote residential uses in proximity to jobs, neighborhood services and transit to a greater extent than the 1990 Residence Element, which could reduce the number of vehicle trips and/or VMT, thus reducing vehicle emissions. In addition, 2009 Housing Element Implementation Measures 90, 98, 100, and 101, emphasize the coordination of planning for both housing and supporting transit services and providing incentives to residents and employees for utilizing public transit or other alternative modes of transportation, promoting a reduction in vehicle trips.

Although the 2004 Housing Element and 2009 Housing Element would not result in the construction of residential units, they would shape how new residential development should occur and ensure that there is adequate land available to meet future housing needs. Potential impacts related to air quality violations could be reduced with “smart” growth that would achieve the goal of providing increased housing but in locations well served by amenities, near transit and job cores, thereby reducing vehicular emissions. Furthermore, under 2025 Cumulative Conditions, CO standards at the worst-performing intersections are not anticipated to exceed established thresholds. Therefore, the 2004 Housing Element and 2009 Housing Element would have a *less than significant* impact with respect to exposing sensitive receptors to CO hotspots.

Impact AQ-4: The proposed Housing Elements would not create objectionable odors. (Less than Significant)

2004 Housing Element and 2009 Housing Element Analysis

According to the BAAQMD CEQA Guidelines, the types of projects that commonly result in odor impacts include: wastewater treatment plant, sanitary landfills, transfer stations, composting facilities, petroleum refineries, asphalt batch plants, chemical manufacturing, fiberglass manufacturing, auto body shops, rendering plants, and coffee roasters. Residential uses generally do not create objectionable odors. Therefore, the 2004 and 2009 Housing Element policies that promote residential development would not result in objectionable odors. It is possible that new development could occur near sources of odors; however, Air Quality Element policy 3.10 seeks to reduce the effect of odors that are a public nuisance. Furthermore, the proposed 2004 and 2009 Housing Elements would not directly result in new residential units. New construction would be required to undergo a separate environmental review pursuant to CEQA which would address the environmental effects of any new construction with respect its location in proximity to existing sources of odors. Therefore, the 2004 Housing Element and 2009 Housing Element would have a *less than significant* effect with respect to odors, and no further analysis of this issue is required.

Cumulative Impacts

The geographic context for cumulative air quality impacts is the entire City of San Francisco. According to the *BAAQMD CEQA Guidelines*, any project that would individually have a significant air quality impact would also have a significant cumulative air quality impact. As discussed throughout this Draft EIR, residential growth and housing construction would occur regardless of implementation of the proposed Housing Elements. The proposed Housing Elements merely guide how residential development should occur with an emphasis on affordability. Furthermore, any new development within the City would be subject, on a project-by-project basis, to independent CEQA review as well as subject to policies in the San Francisco General Plan, governing area plans, design guidelines, Planning Code, and other applicable land use regulations that are intended to reduce impacts related to air quality (including Article 38 of the Health Code). The 2004 Housing Element and 2009 Housing Element policies would not directly result in emissions affecting air quality. The Housing Element policies promote increased density, residential uses in proximity to jobs, neighborhood services, and transit, which could reduce vehicle-

related emissions. New construction would also be required to comply with Article 22B, the Construction Dust Ordinance, reducing construction-related impacts associated with new development as well as Article 38 of the Health Code, as discussed previously. Therefore, the cumulative air quality impacts from the 2004 Housing Element and 2009 Housing Element policies are considered *less than significant*.

MITIGATION AND IMPROVEMENT MEASURES

Mitigation Measures

No mitigation measures are warranted by the proposed Housing Elements.

Improvement Measures

No improvement measures are warranted by the proposed Housing Elements.

DISCUSSION OF RECENTLY ADOPTED BAAQMD CEQA GUIDELINES

As discussed previously, BAAQMD recently adopted revised CEQA thresholds of significance on June 2, 2010. The BAAQMD has also published a companion document, *California Environmental Quality Act Air Quality Guidelines*,³⁵ which provides recommended methodologies for assessing air quality impacts under CEQA. The BAAQMD's revised CEQA thresholds of significance update the plan-level thresholds for criteria air pollutants and precursors as well as PM_{2.5} and TACs. The thresholds also address greenhouse gases (GHGs) (see Section V.I [Greenhouse Gas Emissions] of this EIR for a discussion of proposed thresholds for GHGs). BAAQMD adopted two sets of thresholds, one that would apply to specific development projects, and another threshold that would apply to plan-level CEQA analyses. According to the BAAQMD, the recently adopted thresholds of significance for criteria air pollutants, PM_{2.5} and TACs associated with both cancer and non-cancer inducing health risks as well as GHGs are intended to apply to environmental analyses that have begun on or after adoption of the revised CEQA thresholds. Thresholds pertaining to the health risk impacts of sources upon sensitive receptors are intended to apply to environmental analyses begun on or after January 1, 2011. Therefore, the proposed project would be subject to the thresholds identified in BAAQMD's *1999 CEQA Guidelines*. However, in anticipation of BAAQMD adopting revised thresholds of significance, an analysis of the proposed project's impact with respect to the recently adopted CEQA significance thresholds was performed.

The proposed 2004 and 2009 Housing Elements are an update to the City's General Plan and therefore, the BAAQMD's plan-level thresholds would be the applicable thresholds to apply to the proposed Housing Elements:

Criteria Air Pollutants and Precursor Emissions

³⁵ Bay Area Air Quality Management District. California Environmental Quality Act Air Quality Guidelines. May 2010. This document is available online at: <http://www.baaqmd.gov/Divisions/Planning-and-Research/CEQA-GUIDELINES/Updated-CEQA-Guidelines.aspx>. Accessed June 15, 2010.

- Consistency with current Clean Air Plan control measures;
- The projected VMT or vehicle trip increase is less than or equal to projected population increases;

Health Risks and Hazards (TACs and PM_{2.5})

- Land use diagrams identifying overlay zones of existing and planned sources of TACs and overlay zones of at least 500 feet from all freeways and high-volume roadways.
- Identification of goals, policies, and objectives to minimize potential impacts of sources of TACs and their impacts on sensitive receptors.

The impacts of the proposed Housing Elements with respect to the recently adopted requirements, which differ from the currently applicable requirements, are described below.

Criteria Air Pollutants and Precursor Emissions

Modifications from 1999 CEQA Guidelines Requirements

The recently adopted guidelines differ from the 1999 guidelines by removing the requirement of comparing the plan's anticipated population growth with the Clean Air Plan growth projections. Instead, the proposed guidelines recommend comparing the anticipated VMT with the plan's growth rate. This proposed threshold achieves the same goals as the Air District's current approach while alleviating the existing analytical difficulties and the inconsistency of comparing a plan update with a Clean Air Plan's growth projections.

Impact Conclusion Based on Recently Adopted Thresholds of Significance

As stated in Impact AQ-1, VMT from future residential growth is anticipated to increase by 8.4 percent between 2000 and 2025. During the same timeframe, ABAG projections forecast a population growth of 10.6 percent in the City. As the increase in VMT is anticipated to be less than the population growth, the proposed Housing Elements impact on criteria air pollutants and precursor emissions would remain *less than significant*.

TACs and PM_{2.5}

Modifications from 1999 Guidelines Requirements

The recently adopted BAAQMD guidelines indicate that local plans would have a less-than-significant impact with respect to potential health risks and hazards (TACs) if overlay zones are established around existing and proposed land uses that would emit TACs. Overlay zones that are designed to avoid risk impacts would be reflected in local plan policies, land use maps, and implementing ordinances (e.g., zoning ordinance). BAAQMD would provide guidance as to the methods used to establish the TAC buffers and the standards to be applied for acceptable exposure levels. Special overlay zones of at least 500 feet (or an appropriate distance determined by modeling and approved by the Air District) on each side of all freeways and high volume roadways would be included in this proposed threshold.

Impact Conclusion Based on Recently Adopted Thresholds of Significance

At this time, the BAAQMD has not developed a reliable source inventory database that would be used to develop the overlay zones for point source emissions of either recognized TACs or PM_{2.5}. As discussed previously, the existing inventory of point sources is highly inaccurate in both emissions inventory and location of emissions. Thus, at this time, it is not possible to generate accurate overlay zones. However, as described in Impact AQ-3, this EIR conservatively assumes that stationary sources could occur throughout the City. Further, roadway emissions in the City comprise the majority of TAC emission sources. As discussed above, the SFDPH has modeled roadway PM_{2.5} emissions, and pursuant to Article 38, have developed regulations to address new residential receptors located in impacted areas. Thus, as described in Impact AQ-3, the Air Quality Element and Transportation Element policies in conjunction with compliance with Article 38 would reduce impacts related to TRPs by limiting new receptors from existing sources, such as vehicles, and considering the location of new developments in relation to existing sources of air pollution. These policies would reduce potential impacts not only in areas that would be within overlay zones, but throughout the entire City. Furthermore, any new development would be subject to project-level environmental review including an analysis of the project's potential to expose sensitive receptors to air pollutants in accordance with BAAQMD guidance for the analysis of air pollutants and significance thresholds. Therefore, impacts related to TACs and PM_{2.5} would be *less than significant*.

V. ENVIRONMENTAL SETTING AND IMPACTS

I. GREENHOUSE GAS EMISSIONS

INTRODUCTION

This section provides a discussion of global climate change, existing regulations pertaining to global climate change, and potential greenhouse gas (GHG) emissions resulting from the 2004 Housing Element and 2009 Housing Element policies. Data used to prepare this section were taken from the following source:

- Technical Memorandum from Bryan Chen, Christopher A. Joseph & Associates to Jessica Range, San Francisco Planning Department, Re: Approach to Evaluating Greenhouse Gas Impacts in the 2004 and 2009 Housing Element EIR dated May 28, 2010 (GHG Memorandum) (See Appendix G).

BACKGROUND

The earth's natural warming process is known as the "greenhouse effect." The greenhouse effect compares the Earth and the atmosphere surrounding it to a greenhouse with glass panes. The glass allows solar radiation (sunlight) into the Earth's atmosphere, but prevents radiative heat from escaping, thus warming the Earth's atmosphere. Greenhouse gases (GHGs) keep the average surface temperature of the Earth close to a hospitable 60 degrees Fahrenheit. However, excessive concentrations of GHGs in the atmosphere can result in increased global mean temperatures, with associated adverse climatic and ecological consequences.

Scientists studying the particularly rapid rise in global temperatures have determined that human activity has resulted in increased emissions of GHGs, primarily from the burning of fossil fuels (during motorized transport, electricity generation, consumption of natural gas, industrial activity, manufacturing, etc.) and deforestation, as well as agricultural activity and the decomposition of solid waste.

Scientists refer to the global warming context of the past century as the "enhanced greenhouse effect" to distinguish it from the natural greenhouse effect.¹ While the increase in temperature is known as "global warming," the resulting change in weather patterns is known as "global climate change." Global climate change is evidenced in changes to wind patterns, storms, precipitation, and air temperature.

¹ Climate Change 101: Understanding and Responding to Global Climate Change, published by the Pew Center on Global Climate Change and the Pew Center on the States. http://www.pewclimate.org/global-warming-basics/climate_change_101.

GHG Components

The primary GHGs include carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O) and water vapor. Water vapor is the most abundant GHG in the atmosphere but is not considered a pollutant in the atmosphere as it maintains a climate necessary for life. The main source of water vapor is evaporation from the oceans (approximately 85 percent). Other gases that contribute to the greenhouse effect include ozone,² chlorofluorocarbons (CFCs), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), sulfur hexafluoride (SF₆), and aerosols. However, these latter GHGs are generally emitted during industrial processes. This analysis, therefore, considers those GHGs most likely to be emitted as a result of future residential development: carbon dioxide, methane, and nitrous oxide and are discussed in further detail below:

Carbon dioxide. CO₂ is an odorless, colorless gas, which has both natural and anthropogenic (arising from human activities) sources. Natural sources include decomposition of dead organic matter; respiration of bacteria, plants, animals, and fungus; evaporation from oceans; and volcanic outgassing. Anthropogenic sources of carbon dioxide occur from the burning coal, oil, natural gas, and wood. Sources of CO₂ emissions in California are mainly associated with in-state fossil fuel combustion (including natural gas use, electricity generation, and motor vehicle use) and fossil fuel combustion in out-of-state power plants supplying electricity to California. Other activities that produce CO₂ emissions include mineral production, waste combustion, and land use changes that reduce the geographic extent of vegetation.

Methane. CH₄ is a flammable gas and is the main component of natural gas. When one molecule of methane is burned in the presence of oxygen, one molecule of carbon dioxide and two molecules of water are released. A natural source of methane is from the anaerobic decay of organic matter. Geological deposits, known as natural gas fields, also contain methane, which is extracted for fuel. Other sources are landfills, fermentation of manure, and cattle.

Nitrous oxide. N₂O, also known as laughing gas, is produced naturally by microbial processes in soil and water. Anthropogenic sources of nitrous oxide include agricultural sources, industrial processing, fossil fuel-fired power plants, and vehicle emissions. Nitrous oxide is also used as an aerosol spray propellant and in medical applications.

Global Warming Potential

Global Warming Potentials (GWPs) are one type of simplified index based upon radiative properties that can be used to estimate the potential future impacts of emissions of different gases upon the climate system in a relative sense. GWP is based on a number of factors, including the radiative efficiency (heat-absorbing ability) of each gas relative to that of carbon dioxide, as well as the decay rate of each gas (the

² Ozone is a GHG; however, unlike other GHGs, ozone in the troposphere is relatively short-lived. It is difficult to make an accurate determination of the contribution of ozone precursors (nitrogen oxides and volatile organic compounds) to global climate change. California Environmental Protection Agency, 2004.

amount removed from the atmosphere over a given number of years) relative to that of carbon dioxide. Multiplying the gas-specific GWP by the respective gas' emissions results in the carbon dioxide equivalent (CO₂e). A summary of the atmospheric lifetime and GWP of selected gases is presented in Table V.I-1. As indicated, GWP ranges from 1 to 22,000.

**Table V.I-1
Atmospheric Lifetimes and Global Warming Potentials**

Gas	Atmospheric Lifetime (years)	Global Warming Potential (100 year time horizon)
Carbon Dioxide	50 – 200	1
Methane	12 (+/-3)	23
Nitrous Oxide	120	296
HFC-23	264	12,600
HFC-134a	14.6	1,300
HFC-152a	1.5	120
PFC: Tetrafluoromethane (CF ₄)	50,000	5,700
PFC: Hexafluoroethane (C ₂ F ₆)	10,000	11,900
Sulfur Hexafluoride (SF ₆)	3,200	22,000

Source: United States EPA, 2006.

ENVIRONMENTAL SETTING

Existing State-wide GHG Inventory

The California Energy Commission (CEC) published the *Inventory of California Greenhouse Gas Emissions and Sinks: 1990 to 2004* in December 2006. This report indicates that California emitted between 425,000,000 and 468,000,000 metric tons (MT) CO₂e in 1990. As reported by the CEC, California contributes 1.4 percent of global, and 6.2 percent of national, GHG emissions.³ Approximately 80 percent of GHGs in California are CO₂ produced from fossil fuel combustion. Although California is the second largest contributor of GHG in the U.S, it has the second lowest per capita CO₂ emission rate in the nation. Between 1990 and 2000, California's population grew by 4.1 million people and during the 1990 to 2003 period, California's gross state product grew by 83 percent (in dollars, not adjusted for inflation). However, California's GHG emissions grew by only 12 percent between 1990 and 2003. The report concludes that California's ability to slow the rate of growth of GHG emissions is largely due to the success of its energy efficiency, renewable energy programs, and commitment to clean air and clean energy. The State's programs and commitments lowered its GHG emissions rate of growth by more than half of what it would have been otherwise.

³ California Energy Commission, *Inventory of California Greenhouse Gas Emissions and Sinks: 1990 to 2004*, CEC-600-2006-013, October 2006.

Existing Regional GHG Inventory

In February 2010, the Bay Area Air Quality Management District (BAAQMD) published an update to their December 2008 document entitled, *Source Inventory of Bay Area Greenhouse Gas Emissions*.⁴ This document presents a GHG inventory for the San Francisco Bay Area, which reflects the estimated 2007 GHG emissions for the nine counties located in the jurisdiction of the BAAQMD: Alameda, Contra Costa, Marin, San Francisco, San Mateo, Santa Clara, Napa, and the southern portions of Solano and Sonoma counties. This GHG inventory is based on the standards for criteria pollutant inventories and is intended to support the BAAQMD's climate protection activities.

Table V.I-2 below shows the regional (Bay Area) 2007 GHG emissions from existing direct and indirect GHG sources. The emissions are estimated for existing industrial, commercial, transportation, residential fuel use, forestry, and agriculture activities. The estimated GHG emissions are presented in CO₂e, which weight each GHG by its GWP (as previously discussed).

Table V.I-2
2007 Estimated Regional Greenhouse Gas Emissions

Emissions Source	Emissions in Million MT CO₂e Per Year (Base Year 2007)
Industrial/Commercial	34.86
Residential Fuel	6.82
Electricity/Co-Generation	15.20
Off-Road Equipment	2.92
Transportation	34.87
Agricultural/Farming	1.11
Total Emissions	95.8
<i>Source: Bay Area Air Quality Management District, Source Inventory of Bay Area Greenhouse Gas Emissions, February 2010.</i>	

Existing Local GHG Inventory

In 2008 San Francisco commissioned an independent review of the City's communitywide GHG emissions. The final report, titled *Community GHG Inventory Review*, assessed the emissions inventory for the San Francisco Climate Action Plan (discussed later), base year 1990, and the City's GHG emissions inventory for years 2000 and 2005.⁵ The report found that in 1990, the City's total annual emissions were 7,490,000 MT CO₂e per year,⁶ which constitutes approximately 1.76 percent of the 1990 emissions estimated in the statewide GHG emissions inventory. The two primary sources of emissions

⁴ Bay Area Air Quality Management District, *Source Inventory of Bay Area Greenhouse Gas Emissions*. Updated February 2010.

⁵ City and County of San Francisco: *Community GHG Inventory Review. August 1, 2008. IFC International, 394 Pacific Avenue, 2nd Floor, San Francisco, CA 94111. Prepared for City and County of San Francisco, Department of the Environment.*

⁶ Ibid.

from San Francisco, according to the San Francisco Climate Action Plan (SFCAP), are transportation emissions and natural gas and electricity use. According to the SFCAP, San Francisco generated approximately 1,110,000 tons of solid waste in 2001, which was transported to the Altamont Landfill in eastern Alameda County. More than 75 percent of the methane produced from solid waste disposed of in the Altamont Landfill is recovered and flared off or used as fuel. In addition, as reported in the SFCAP in 2004, approximately 48 percent of solid waste in San Francisco is diverted through recycling (San Francisco currently recovers 72 percent of discarded material).

Projected Impacts of Global Warming in California

According to the 2006 California Climate Action Team (CAT) Report, temperature increases arising from increased GHG emissions could potentially result in a variety of impacts to the people, economy, and environment of California associated with a projected increase in extreme conditions, with the severity of the impacts depending upon actual future emissions of GHGs and associated warming. If emissions from GHGs are not reduced significantly, the increase in warming could have the following consequences in California⁷ and described in further detail below:

- **Decreased Water Supply:** The Sierra snowpack would decline by between 70 and 90 percent, threatening California's water supply;
- **Diminished Air Quality:** Attainment of air quality standards would be impeded by increasing emissions, accelerating chemical processes, and raising inversion temperatures during stagnation episodes;
- **Accelerated Sea Rise and Flooding:** Erosion of California's coastlines would increase as well as increased sea water intrusion; and
- **Stressed Ecosystem:** Pest infestation and vulnerability to fires of the State's forests would increase.

Water Supply

California Health and Safety Code Section 38501(a) recognizes that "[climate change] poses a serious threat to the economic well-being, public health, natural resources, and the environment of California," and notes, "the potential adverse impacts of [climate change] include...reduction in the quality and supply of water to the state from the Sierra snowpack." As most of the State, including San Francisco, depends on surface water supplies originating in the Sierra Nevada this water supply reduction is a concern.

Most of the scientific models addressing climate change show that the primary effect on California's climate would be a reduced snow pack and a shift in stream-flow seasonality. A higher percentage of the winter precipitation in the mountains would likely fall as rain rather than as snow in some locations,

⁷ California Environmental Protection Agency, Climate Action Team Report to Governor Schwarzenegger and the Legislature, March 2006.

reducing the overall snowpack. Further, as temperatures rise, snowmelt is expected to occur earlier in the year, with peak runoff likely to come a month or so earlier. The end result of this would be that the state may not have sufficient surface storage to capture the resulting early runoff, and so, absent construction of additional water storage projects, a portion of the current supplies would be lost to the oceans, rather than be available for use in the state's water delivery systems.

A decrease in snowpack volume is predicted from the current 87 percent of historic averages to 83 percent in 2025 and 76 percent in 2050.⁸ Changing climatic conditions could also shift the timing of snowmelt, so that peak runoff would occur earlier in the spring. This shift could affect the availability of the seasonal water supply, particularly during the hot summer months. However, the San Francisco Public Utility Commission (SFPUC) states that the effect of climate change in 2025 would likely be within range of current annual variation (with a slight shift in runoff timing).⁹

Air Quality

Warming of the atmosphere would be expected to increase smog and particulate pollution, which could adversely affect individuals with heart and respiratory problems, such as asthma. Extreme heat events would also be expected to occur with more frequency, and could adversely affect the elderly, children, and the homeless.

Sea Level Rise and Flooding

The California Climate Change Center predicts that sea level in California would rise between 10.9 to 71.6 centimeters (cm) (0.36 to 2.3 feet) above existing mean sea level (msl) by 2099 as a result of climate change.¹⁰ When combined with astronomical tides, even a one-foot increase in msl would result in the 100-year event high tide peak occurring at the 10-year event frequency.¹¹

⁸ California Environmental Protection Agency, Climate Action Team Report to Governor Schwarzenegger and the Legislature, March 2006.

⁹ San Francisco Public Utilities Commission, 2008. Modeling, Coalition Building, and Adaptation Response: San Francisco's Approach to Climate Change. Presentation made by Michael Carlin, Assistant General Manager, Water Enterprise, April 10, 2008.

¹⁰ Cayan, D., P. Bromirski, K. Hayhoe, M. Tyree, M. Dettinger, and R. Flick. 2006. Projecting Future Sea Level: Table 3 Projected global sea level rise (SLR) (cm) for the SRES A1fi, A2, and B1 greenhouse gas emission scenarios. SLR for A2 and B1 scenarios is estimated by combining output recent global climate change model simulations with MAGICC projections for the ice melt component. SLR estimates for A1fi estimated from MAGICC based on A2 temperature changes scaled according to those in A1fi. A Report from the California Climate Change Center CEC-500-2005-2002-SF. Other sources, such as the Bay Conservation and Development Commission (BCDC), project a 55-inch (approximately 140 cm) sea level rise increase by the end of the century.

¹¹ Floyd, M., M. Anderson, M. Roos, R. Peterson, M. Perrone, and D. Todd. 2006. Chapter 2: Potential Impacts of Climate Change on California's Water Resources, Figure 2.32 Impact of One Foot Sea Level rise on the Relative Effect of Astronomical tides in the Delta. p. 2-53. In Medelin, J., J. Harou, M. Olivares, J. Lund, R.

In the future, precipitation events are predicted to vary in terms of timing, intensity, and volume according to many climate change models.¹² Extreme storm events may occur with greater frequency.¹³ The effect on peak runoff is not known because most climate change models have not used a temporal (or spatial) scale necessary to identify effects on peak flows, and existing precipitation/runoff models for assessing the effects of climate change do not yet adequately predict rainfall/runoff scenarios.¹⁴ Additional discussion regarding Sea Level Rise is presented in Section V.P, Hydrology and Water Quality.

Stressed Ecosystems

Climate change is expected to have effects on diverse types of ecosystems, from alpine to deep-sea habitat. As temperatures and precipitation change, seasonal shifts in vegetation would occur; this could affect the distribution of associated flora and fauna species. As the range of species shifts, habitat fragmentation could occur, with acute impacts on the distribution of certain sensitive species. The Intergovernmental Panel on Climate Change (IPCC) states that “20 percent to 30 percent of species assessed may be at risk of extinction from climate change impacts within this century if global mean temperatures exceed 2 to 3°C (3.6 to 5.4°F) relative to pre-industrial levels.”¹⁵ Shifts in existing biomes could also make ecosystems vulnerable to invasive species encroachment. Wildfires, which are an important control mechanism in many ecosystems, may become more severe and more frequent, making it difficult for native plant species to repeatedly re-germinate. In general terms, climate change is expected to put a number of stressors on ecosystems, with potentially catastrophic effects on biodiversity.

California-Specific Adaptation Strategies

Because climate change is already affecting California and current emissions will continue to drive climate change in the coming decades, regardless of any mitigation measures that may be adopted, the necessity of adaptation to the impacts of climate change is recognized by the State of California. The 2009 California Climate Adaptation Strategy Discussion Draft begins what will be an ongoing process of

Howitt, S. Tanaka, M. Jenkins, K. Madani, and T. Zhu (Eds), Climate Warming and Water Supply Management In California: White Paper. A Report From Climate Change Center CEC-500-2005-195-SF.

¹² EPA, 2008. Climate Change Science: Precipitation and Storm Changes. <http://www.epa.gov/climatechange/science/recentpsc.html> (accessed January 16, 2009).

¹³ EPA, 2008. Climate Change Science: Precipitation and Storm Changes. <http://www.epa.gov/climatechange/science/recentpsc.html> (accessed January 16, 2009).

¹⁴ Anderson. M. 2006. Chapter 6: Climate Change Impacts on Flood Management p. 6-22 and 6-27. In Medelin, J., J. Harou, M. Olivares, J. Lund, R. Howitt, S. Tanaka, M. Jenkins, K. Madani, and T. Zhu (Eds), Climate Warming and Water Supply Management In California: White Paper. A Report From Climate Change Center CEC-500-2005-195-SF.

¹⁵ IPCC, 2007: Climate Change 2007: Impacts, Adaptation, and Vulnerability. Contribution of Working Group II to the Third Assessment Report of the Intergovernmental Panel on Climate Change [Parry, Martin L., Canziani, Osvaldo F., Palutikof, Jean P., van der Linden, Paul J., and Hanson, Clair E. (eds.)]. Cambridge University Press, Cambridge, United Kingdom, 1000 pp.

adaptation, as directed by Gov. Schwarzenegger's Executive Order S-13-08. The goals of the strategy are to analyze risks and vulnerabilities and identify strategies to reduce the risks of climate change. Once the strategies are identified and prioritized, government resources would be identified. Finally, the strategy includes identifying research needs and public education.

Climate change risks are evaluated using two distinct approaches: (1) projecting the amount of climate change that may occur using computer-based global climate models and (2) assessing the natural or human system's ability to cope with and adapt to change by examining past experience with climate variability and extrapolating this to understand how the systems may respond to the additional impact of climate change. The major anticipated climate changes expected in the State of California include increases in temperature, decreases in precipitation, particularly as snowfall, and increases in sea level, as discussed above. These gradual changes will also lead to an increasing number of extreme events, such as heat waves, wildfires, droughts, and floods. This would impact public health, ocean and coastal resources, water supply, agriculture, biodiversity, and the transportation and energy infrastructures.

Key preliminary adaptation recommendations included in the *Strategy* are as follows:

- Appointment of a Climate Adaptation Advisory Panel;
- Improved water management in anticipation of reduced water supplies, including a 20 percent reduction in per capita water use by 2020;
- Consideration of project alternatives that avoid significant new development in areas that cannot be adequately protected from flooding due to climate change;
 - Preparation of agency-specific adaptation plans, guidance or criteria by September 2010;
 - Consideration of climate change impacts for all significant state projects;
 - Assessment of climate change impacts on emergency preparedness;
 - Identification of key habitats and development of plans to minimize adverse effects from climate change;
- Development of guidance by the California Department of Public Health by September 2010 for use by local health departments to assess adaptation strategies;
- Amendment of plans to assess climate change impacts and develop local risk reduction strategies by communities with General Plans and Local Coastal Plans; and
- Inclusion of climate change impact information into fire program planning by state fire fighting agencies.

REGULATORY SETTING

Federal

In the past, the U.S. EPA has not regulated GHGs under the Clean Air Act because it asserted that the Act did not authorize it to issue mandatory regulations to address global climate change. However, the U.S. Supreme Court recently held that the U.S. EPA must consider regulation of motor-vehicle GHG emissions.¹⁶ The Court ruled that GHGs fit within the Clean Air Act's definition of a pollutant and that the U.S. EPA did not have a valid rationale for not regulating GHGs. In December 2009, the U.S. EPA issued an endangerment finding for GHGs under the Clean Air Act. This is the first step in regulating GHGs under the provisions of the Clean Air Act. In September 2009, the U.S. EPA issued the Mandatory GHG Reporting Rule. The regulation formalizes mandatory GHG reporting for a wide range of public and industrial sources and suppliers nationwide that is anticipated to cover approximately 85 percent of the nation's GHG emissions and apply to roughly 10,000 facilities.

In addition, on September 15, 2009, the National Highway Traffic Safety Administration and U.S. EPA announced a proposed joint rule that would explicitly tie fuel economy to GHG emissions reduction requirements. The proposed new Corporate Average Fuel Economy (CAFÉ) Standards would cover automobiles for model years 2012 through 2016, and would require passenger cars and light trucks to meet a combined, per mile, carbon dioxide emissions level. It is estimated that by 2016, this GHG emissions limit could equate to an overall light-duty vehicle fleet average fuel economy of as much as 35.5 miles per gallon.

State

In response to growing scientific and political concern with respect to global climate change, California has adopted a series of laws to reduce GHG emissions from commercial and private activities within the State.

Executive Order S-3-05

California Governor Arnold Schwarzenegger announced, on June 1, 2005, through Executive Order S-3-05, the following GHG emission reduction targets: by 2010, reduce GHG emissions to 2000 levels; by 2020, reduce GHG emissions to 1990 levels; by 2050, reduce GHG emissions to 80 percent below 1990 levels. In response to the Executive Order, the Secretary of Cal/EPA created the Climate Action Team (CAT), which, in March 2006, published the Climate Action Team Report to Governor Schwarzenegger and the Legislature (the 2006 CAT Report). The 2006 CAT Report identifies a recommended list of strategies that the State could pursue to reduce GHG emissions. These are strategies that could be implemented by various State agencies to ensure that the Governor's targets are met and can be met with the existing authority of State agencies.

¹⁶ Massachusetts v. Environmental Protection Agency et al. (127 S. Ct. 1438 (2007)).

Assembly Bill 32

In 2006, the California State Legislature adopted Assembly Bill (AB 32), the California Global Warming Solutions Act of 2006. AB 32 focuses on reducing GHG emissions in California, and requires the California Air Resources Board (ARB), the State agency charged with regulating statewide air quality, to adopt rules and regulations that would achieve GHG emissions equivalent to statewide levels in 1990 by 2020. To achieve this goal, AB 32 mandates that the ARB establish a quantified emissions cap, institute a schedule to meet the cap, implement regulations to reduce statewide GHG emissions from stationary sources, and develop tracking, reporting, and enforcement mechanisms to ensure that reductions are achieved.

As a central requirement of AB 32, the ARB was assigned the task of developing a Scoping Plan that outlines the State's strategy to achieve the 2020 GHG emissions limit. On December 11, 2008, ARB adopted a Scoping Plan to reduce GHG emissions to 1990 levels. The Scoping Plan's recommendations for reducing GHG emissions to 1990 levels by 2020 include a variety of emissions reduction measures, including a cap-and-trade program, strategies to enhance and expand proven cost-saving energy efficiency programs, California's clean cars standards, increases in the amount of clean and renewable energy used to power the State, and a low-carbon fuel standard that will make the fuels used in the State cleaner. Furthermore, the Scoping Plan also proposes full deployment of the California Solar Initiative, high-speed rail, water-related energy efficiency measures, and a range of regulations to reduce emissions from trucks and from ships docked in California ports. ARB has until January 1, 2011, to adopt the necessary regulations to implement that plan. Implementation of individual measures must begin no later than January 1, 2012, so that the emissions reduction target can be fully achieved by 2020.

In addition, the Scoping Plan required ARB to publish a list of discrete early action GHG emission reduction measures to be adopted and enforceable by January 1, 2010. These early action measures that are already being implemented include the following:

- A low-carbon fuel standard to reduce the "carbon intensity" of California fuels at least 10% by 2020;
- Reduction of refrigerant losses from motor vehicle air conditioning systems;
- Increased methane capture from landfills via state-of-the-art capture systems;
- Increased fuel efficiency of heavy-duty tractor trailers by requiring aerodynamic design and low rolling tires;
- Reduction of auxiliary engine emissions of docked ships by requiring port electrification;
- Reduction of perfluorocarbons from the semiconductor industry;

- Reduction of propellants in consumer products (e.g., aerosols, tire inflators, and dust removal products);
- Require that all tune-up, smog check and oil change mechanics ensure proper tire inflation as part of overall service in order to maintain fuel efficiency; and
- Restriction on the use of sulfur hexafluoride (SF₆) from non-electricity sectors if viable alternatives are available.

Senate Bill 97

In August 2007, the Legislature adopted Senate Bill 97 (SB 97), requiring the California Office of Planning and Research (OPR) to prepare and transmit new CEQA guidelines for the mitigation of GHG emissions or the effects of GHG emissions to the Resources Agency by July 1, 2009. Following receipt of these guidelines, the Resources Agency must certify and adopt the guidelines prepared by OPR by January 1, 2010.

OPR submitted its proposed guidelines to the Secretary for Natural Resources on April 13, 2009. The Natural Resources Agency undertook the formal rulemaking process to certify and adopt the amendments as part of the state regulations implementing CEQA and adopted the CEQA Guidelines Amendments on December 30, 2009.

In the CEQA Guideline Amendments, a threshold of significance for GHG emissions was not specified, nor does it prescribe assessment methodologies or specific mitigation measures. Instead, the amendments encourage lead agencies to consider many factors in performing a CEQA analysis of GHG emissions, but rely on the lead agencies in making their own significance threshold determinations based upon substantial evidence. The CEQA amendments also encourage public agencies to make use of programmatic mitigation plans and programs from which to tier from when they perform individual project analyses.

Senate Bill 375

In September of 2008 the California legislature adopted SB 375 legislation which: (1) relaxes CEQA requirements for some housing projects that meet goals for reducing GHG emissions and (2) requires the regional governing bodies in each of the state's major metropolitan areas to adopt, as part of their regional transportation plan, "sustainable community strategies" that will meet the region's target for reducing GHG emissions. SB 375 creates incentives for implementing the sustainable community strategies by allocating federal transportation funds only to projects that are consistent with the sustainable community strategies.

Other State Measures

The Governor and the California legislature have passed additional regulations with the intent of reducing GHG emissions in order to achieve AB 32 goals. These include the following:

- Executive Order S-01-07 establishing the Low Carbon Fuel Standard (LCFS) requires a 10% or greater reduction in the average carbon intensity for transportation fuels in California regulated by ARB (also a discrete early action measure).
- AB 1493 (Pavley Standard) requires ARB to adopt regulations to reduce GHG emissions for noncommercial passenger vehicles and light-duty trucks of model year 2009 and thereafter.
- Under Senate Bill 107, California's Renewable Portfolio Standard (RPS) requires retail suppliers of electric services to increase procurement from eligible renewable energy resources to 20% by 2010.
- California Executive Order S-14-08 mandates retail suppliers of electric services to increase procurement from eligible renewable energy resources to 33% by 2020.
- Senate Bill (SB) 1368 requires the California Public Utilities Commission (PUC) and CEC to establish GHG emission performance standards for the generation of electricity.

Regional

The BAAQMD is the primary agency responsible for comprehensive air pollution control in the entire San Francisco Bay Area Air Basin. As such, the BAAQMD works directly with the Association of Bay Area Governments, the Metropolitan Transportation Commission, and local governments and cooperates actively with all federal and state government agencies. The BAAQMD develops rules and regulations, establishes permitting requirements for stationary sources, inspects emissions sources, and enforces such measures through educational programs or fines, when necessary.

BAAQMD has published a document titled *BAAQMD CEQA Guidelines, Assessing the Air Quality Impacts of Projects and Plans* (BAAQMD CEQA Guidelines, December 1999). In that document BAAQMD provides guidance and recommendations on the methodologies of analysis and suggested thresholds of significance that Lead Agencies can use when analyzing air quality impacts during CEQA review of projects. This document does not address climate change or GHG emissions.

The BAAQMD recently updated their 1999 CEQA Air Quality Guidelines (referenced above) and adopted significance thresholds for GHGs on June 2, 2010. The updated CEQA Air Quality Guidelines includes significance thresholds, assessment methodologies, and mitigation strategies for GHG emissions. The recently adopted GHG thresholds of significance, as discussed in BAAQMD's May 2010 CEQA Air Quality Guidelines, includes two sets of GHG thresholds: one that would apply to specific development projects, and another threshold that would apply to plan-level CEQA analyses. The proposed 2004 and 2009 Housing Elements are an update to the City's General Plan and therefore, the plan-level threshold would be the applicable threshold for the proposed Housing Elements. However, as discussed in Section V.H (Air Quality), according to the BAAQMD, the recently adopted thresholds of significance for GHGs are intended to apply to environmental analyses that have begun on or after adoption of the revised CEQA thresholds (June 2, 2010). Therefore, the proposed project would not be subject to BAAQMD's recently

adopted thresholds of significance. However, in anticipation of BAAQMD adopting revised thresholds of significance, an analysis of the proposed project's impact with respect to the recently adopted CEQA significance thresholds was performed. The BAAQMD plan-level GHG thresholds include the following two CEQA significance thresholds:

- Consistency with a “Qualified GHG Reduction Strategy”; or
- An efficiency metric of 6.6 MT CO₂e per service population [residents + employees] (SP) per year by 2020.¹⁷

If a jurisdiction can demonstrate that it meets the criteria for a Qualified GHG Reduction Strategy, and the plan being evaluated is consistent with such a plan, the plan's GHG emissions could be determined to be less than significant. Similarly, if a plan can be shown to generate GHG emissions below the efficiency threshold, the plan's GHG emissions would not be considered significant.

Local

In addition to the State's GHG reduction strategy (AB 32), the City has developed its own strategy to address GHG emissions on a local level. The vision of the strategy is expressed in the SFCAP, however implementation of the strategy is appropriately articulated within other citywide plans (*General Plan*, *Sustainability Plan*, etc.), policies (Transit-First Policy, Precautionary Principle Policy, etc.), and regulations (Green Building Ordinance, etc.). The following plans, policies and regulations highlight some of the main components of San Francisco's GHG reduction strategy.

Overall GHG Reduction Sector

San Francisco Sustainability Plan. In July 1997 the Board of Supervisors endorsed the Sustainability Plan for the City of San Francisco establishing sustainable development as a fundamental goal of municipal public policy.

The Climate Action Plan for San Francisco. In February 2002, the San Francisco Board of Supervisors passed the Greenhouse Gas Emissions Reduction Resolution (Number 158-02) setting a goal for the City and County of San Francisco to reduce GHG emissions to 20 percent below 1990 levels by the year 2012. In September 2004, the San Francisco Department of the Environment and the Public Utilities Commission published the *Climate Action Plan for San Francisco: Local Actions to Reduce Greenhouse Emissions*.¹⁸ The SFCAP provides the context of climate change in San Francisco and examines strategies to meet the 20 percent GHG reduction target. Although the Board of Supervisors has not formally

¹⁷ Bay Area Air Quality Management District. California Environmental Quality Act Air Quality Guidelines. May 2010. This document is available online at: www.baaqmd.gov. Accessed June 15, 2010.

¹⁸ San Francisco Department of the Environment and San Francisco Public Utilities Commission, *Climate Action Plan for San Francisco, Local Actions to Reduce Greenhouse Emissions*, September 2004.

committed the City to perform the actions addressed in the Plan, and many of the actions require further development and commitment of resources, the Plan serves as a blueprint for GHG emission reductions, and several actions have been implemented or are now in progress.

Greenhouse Gas Reduction Ordinance. In May 2008, San Francisco adopted an ordinance amending the San Francisco Environment Code to establish City GHG emission targets and departmental action plans, to authorize the Department of the Environment to coordinate efforts to meet these targets, and to make environmental findings. The ordinance establishes the following GHG emission reduction limits for San Francisco and the target dates to achieve them:

- Determine 1990 City GHG emissions by 2008, the baseline level with reference to which target reductions are set;
- Reduce GHG emissions by 25 percent below 1990 levels by 2017;
- Reduce GHG emissions by 40 percent below 1990 levels by 2025; and
- Reduce GHG emissions by 80 percent below 1990 levels by 2050.

The ordinance also specifies requirements for City departments to prepare departmental Climate Action Plans that assess, and report to the Department of the Environment, GHG emissions associated with their department's activities and activities regulated by them, and prepare recommendations to reduce emissions. As part of this, the San Francisco Planning Department is required to: (1) update and amend the City's applicable *General Plan* elements to include the emissions reduction limits set forth in this ordinance and policies to achieve those targets; (2) consider a project's impact on the City's GHG reduction limits specified in this ordinance as part of its review under CEQA; and (3) work with other City departments to enhance the "transit first" policy to encourage a shift to sustainable modes of transportation thereby reducing emissions and helping to achieve the targets set forth by this ordinance.

Transportation Sector

Transit First Policy. In 1973 San Francisco instituted the Transit First Policy (Article 8A, Section 8A.115. of the City Charter) with the goal of reducing the City's reliance on freeways and meeting transportation needs by emphasizing mass transportation. The Transit First Policy gives priority to public transit investments; adopts street capacity and parking policies to discourage increased automobile traffic; and encourages the use of transit, bicycling and walking rather than use of single-occupant vehicles.

San Francisco Municipal Transportation Agency's Zero Emissions 2020 Plan. The SFMTA's Zero Emissions 2020 plan focuses on the purchase of cleaner transit buses including hybrid diesel-electric buses. Under this plan hybrid buses will replace the oldest diesel buses, some dating back to 1988. The hybrid buses emit 95 percent less particulate matter (PM, or soot) than the buses they replace, they produce 40 percent less oxides of nitrogen (NOx), and they reduce GHGs by 30 percent.

San Francisco Municipal Transportation Agency's Climate Action Plan. In November 2007 voters passed Proposition A, requiring the SFMTA to develop a plan to reach a 20 percent GHG reduction below 1990 levels by 2012 for the City's entire transportation sector, not just SFMTA's internal operations. SFMTA has prepared a *Draft Climate Action Plan* outlining measures needed to achieve these targets.

Commuter Benefit Ordinance. The Commuter Benefit Ordinance (Environment Code, Section 421), effective January 19, 2009, requires all employers in San Francisco that have 20 or more employees to offer one of the following benefits: (1) A Pre-tax Transit Benefit, (2) Employer Paid Transit Benefits, or (3) Employer Provided Transit.

The City's *Planning Code* reflects the latest smart growth policies and includes: electric vehicle refueling stations in city parking garages, bicycle storage facilities for commercial and office buildings, and zoning that is supportive of high density mixed-use infill development. The City's more recent area plans, such as Rincon Hill and the Market and Octavia Area Plan, provide transit-oriented development policies that allow for neighborhood-oriented retail and services and where off-street parking is limited to accessory parking spaces.¹⁹ At the same time there is also a community-wide focus on ensuring San Francisco's neighborhoods as "livable" neighborhoods, including the Better Streets Plan that would improve San Francisco's streetscape, the Transit Effectiveness Plan, that aims to improve transit service, and the Bicycle Plan, all of which promote alternative transportation options.

Renewable Energy

The Electricity Resource Plan (Revised December 2002). San Francisco adopted the Electricity Resource Plan to help address growing environmental health concerns in San Francisco's southeast community, home of two power plants. The plan presents a framework for assuring a reliable, affordable, and renewable source of energy for the future of San Francisco.

Go Solar SF. On July 1, 2008, the San Francisco Public Utilities Commission (SFPUC) launched their "GoSolarSF" program to San Francisco's businesses and residents, offering incentives in the form of a rebate program that could pay for approximately half the cost of installation of a solar power system, and more to those qualifying as low-income residents. The San Francisco Planning Department and Department of Building Inspection have also developed a streamlining process for Solar Photovoltaic (PV) Permits and priority permitting mechanisms for projects pursuing LEED® Gold Certification.

Green Building

LEED® Silver for Municipal Buildings. In 2004, the City amended Chapter 7 of the Environment code, requiring all new municipal construction and major renovation projects to achieve LEED® Silver Certification from the US Green Building Council.

¹⁹ See *Planning Code* Sections 206.4 and 155.1.

City of San Francisco's Green Building Ordinance. On August 4, 2008, Mayor Gavin Newsom signed into law San Francisco's Green Building Ordinance for newly constructed residential and commercial buildings and renovations to existing buildings. The ordinance specifically requires newly constructed commercial buildings over 5,000 square feet (sq. ft.), residential buildings over 75 feet in height, and renovations on buildings over 25,000 sq. ft. to be subject to an unprecedented level of LEED® and green building certifications, which makes San Francisco the city with the most stringent green building requirements in the nation. Cumulative benefits of this ordinance includes reducing CO₂ emissions by 60,000 tons, saving 220,000 megawatt hours of power, saving 100 million gallons of drinking water, reducing waste and stormwater by 90 million gallons of water, reducing construction and demolition waste by 700 million pounds, increasing the valuations of recycled materials by \$200 million, reducing automobile trips by 540,000, and increasing green power generation by 37,000 megawatt hours.²⁰

Waste Reduction

Zero Waste. In 2004, the City of San Francisco committed to a goal of diverting 75 percent of its' waste from landfills by 2010, with the ultimate goal of zero waste by 2020. San Francisco currently recovers 72 percent of discarded material.

Construction and Demolition Debris Recovery Ordinance. In 2006 the City of San Francisco adopted Ordinance No. 27-06, requiring all construction and demolition debris to be transported to a registered facility that can divert a minimum of 65% of the material from landfills. This ordinance applies to all construction, demolition and remodeling projects within the City.

Universal Recycling and Composting Ordinance. Signed into law on June 23, 2009, this ordinance requires all residential and commercial building owners to sign up for recycling and composting services. Any property owner or manager who fails to maintain and pay for adequate trash, recycling, and composting service is subject to liens, fines, and other fees.

The City has also passed ordinances to reduce waste from retail and commercial operations. Ordinance 295-06, the Food Waste Reduction Ordinance, prohibits the use of polystyrene foam disposable food service ware and requires biodegradable/compostable or recyclable food service ware by restaurants, retail food vendors, City Departments and City contractors. Ordinance 81-07, the Plastic Bag Reduction Ordinance, requires many stores located within the City and County of San Francisco to use compostable plastic, recyclable paper and/or reusable checkout bags.

Each of the policies and ordinances discussed above include measures that would decrease the amount of GHGs emitted into the atmosphere and decrease San Francisco's overall contribution to climate change.

²⁰ These findings are contained within the final Green Building Ordinance, signed by the Mayor August 4, 2008.

IMPACTS

Significance Thresholds

The proposed Housing Elements would normally have a significant effect on the environment if they would:

- Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment; or
- Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of GHGs.

As climate change is an irreversible, significant cumulative impact on a global scale, consideration of an impact to climate change is essentially an analysis of the contribution to a cumulatively significant global impact through its emission of GHGs and therefore addressed in the cumulative evaluation.

As discussed previously, the 2004 Housing Element and 2009 Housing Element would not change the land use objectives and policies in the City's area and redevelopment plans. According to Part I of the 2009 Housing Element (Data and Needs Analysis), the City has available capacity to meet the RHNA. Therefore, the rezoning of land uses is not required. To meet the City's share of the RHNA, the proposed Housing Elements aim to do the following: 1) preserve and upgrade existing housing units to ensure they do not become dilapidated, abandoned, or unsound, and 2) provide direction for how new housing development in the City should occur. With respect to the latter, the 2004 Housing Element encourages new housing in Downtown and in underutilized commercial and industrial areas. The 2004 Housing Element also encourages increased housing in neighborhood commercial districts and mixed-use districts near Downtown. On the other hand, the 2009 Housing Element encourages housing in new commercial or institutional projects and accommodating housing through existing community planning processes.

Cumulative Impacts

Impact GH-1: The proposed Housing Elements would not generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment and would not conflict with any applicable plan, policy or regulation adopted for the purpose of reducing the emissions of GHGs. (Less than Significant)

The subject of this EIR is the proposed revision of the Housing Element of the San Francisco General Plan. The 2004 and 2009 Housing Elements are updates to the 1990 Residence Element of the San Francisco General Plan, a public policy document that addresses issues of housing needs for San Francisco residents and households. As discussed above, new residential development would occur regardless of the proposed Housing Elements; the proposed Housing Elements provide direction for how new housing should occur.

The most common GHGs resulting from human activity are CO₂, CH₄, and N₂O.²¹ State law defines GHGs to also include hydrofluorocarbons, perfluorocarbons and sulfur hexafluoride. These latter GHG compounds are usually emitted in industrial processes, and therefore not applicable to the proposed project. Residential uses contribute to the cumulative effects of climate change by emitting GHGs during construction and operational phases. Residential uses emit both direct and indirect GHG emissions during operations. Operational emissions include GHG emissions from new vehicle trips and area sources (natural gas combustion). Indirect emissions include emissions from electricity providers, energy required to pump, treat, and convey water, and emissions associated with landfill operations. As described in Section V.D (Population and Housing), approximately 41,651 housing units are projected to be developed between 2009 and 2025 to accommodate projected population growth. A GHG analysis was conducted to determine increased GHG emissions from anticipated population and housing growth as determined by ABAG projections.²² GHG emissions were calculated for the years 2009, the baseline of existing conditions, the year 2020, California's interim target year for GHG reductions as codified by AB 32 and the year 2025, the horizon year for which cumulative effects are analyzed in this EIR. GHG emissions for the long-term target year of 2050 established in Executive Order S-3-05 is beyond the timeframe of the Housing Elements and was not evaluated. The GHG calculation presented in this analysis includes an estimate of emissions from CO₂, N₂O, and CH₄. The GHG analysis assumed approximately 1.7 percent of the projected new housing units would be single-family units, while the remaining would be multi-family units.²³ Results of this analysis are discussed below.

Construction

During construction activities at individual development sites, the consumption of fuel by on-site construction equipment would generate GHG emissions. URBEMIS 2007 v.9.2.4 was used to model the annual amount of CO₂ emissions generated by on-site equipment during construction activities. Methane and nitrous oxide emissions for construction were obtained from the California Climate Action Registry (CCAR) Protocol, as URBEMIS provides only CO₂ emissions. The emissions accounted for include the use of construction equipment during grading, construction and paving, haul truck trips associated with construction, construction worker trips, and construction vendor trips. The construction schedule and specific building types of potential future new construction are unknown. For computational simplicity, construction emissions for all projected future housing units were calculated within a one-year timeframe and averaged over the total period for this projection to determine average construction emissions of new housing units over the projection periods.

²¹ Governor's Office of Planning and Research. Technical Advisory- CEQA and Climate Change: Addressing Climate Change through California Environmental Quality Act (CEQA) Review. June 19, 2008. Available at the Office of Planning and Research's website at: <http://www.opr.ca.gov/ceqa/pdfs/june08-ceqa.pdf>. Accessed March 3, 2010.

²² GHG Memorandum dated May 28, 2010.

²³ This assumption is based on the current ratios of single-family homes and multi-family homes as compared to land available to accommodate new single-family homes and multi-family homes (housing capacity).

Operations

During operation of future projected housing development, the consumption of fossil fuels is necessary to generate electricity, provide heating and hot water for residential uses, propel landscaping equipment, convey, transport, and treat water, and operate on-road motor vehicles. The consumption of these fossil fuels creates GHG emissions. Additionally, solid waste generation will result in GHG emissions from landfill operations.

Natural Gas Use

CO₂ emissions resulting from residential natural gas use can also be modeled using URBEMIS 2007 v.9.2.4. However, the default consumption rates are based on data from the South Coast Air Quality Management District. Therefore, natural gas use by census tract for the City and County of San Francisco was obtained from Pacific Gas and Electric (PG&E)²⁴. Mean annual natural gas use was obtained for both single-family and multifamily units. The GHG emission factors from the CCAR Protocol for natural gas were then applied to the respective consumption rates, to calculate annual GHG emissions in metric tons.

Electricity Use

Electricity use data was obtained from the same source as for natural gas use. Mean annual electricity use was obtained for both single-family and multifamily units. The CO₂ emission factor was based on the 2007 PG&E Power/Utility Reporting Protocol report obtained from the CCAR database. Methane and nitrous oxide emissions for electricity were obtained from the CCAR Protocol, as no PG&E-specific emission factors for these GHGs were available.

Water Use

Water consumption was based on data from the SFPUC, *City and County of San Francisco Retail Water Demands and Conservation Potential* report²⁵. Daily water use was calculated for single-family and multifamily units for each of the evaluated years. A water-related energy intensity relationship value of 4,000 kilowatt hours per million gallon was used as identified in the CEC's California's Water-Energy Relationship document for Northern California²⁶. This energy intensity factor accounts for the energy required to convey, pump and treat water and wastewater. The GHG emission factors associated with the energy required for the conveyance, treatment, and distribution of the water are the same as those used for electricity use.

²⁴ PG&E data provided by San Francisco Planning Department, March 16, 2010.

²⁵ SFPUC. *City and County of San Francisco Retail Water Demands and Conservation Potential*. November 2004.

²⁶ CEC. *California's Water-Energy Relationship*, November 2005.

Waste Generation

Residential waste disposal rates were based on a per capita value of 0.42 tons of waste per resident per year based on disposal information for San Francisco County obtained from the California Integrated Waste Management Board's Residential Waste Disposal Rates. A diversion rate of 72 percent was used to estimate the amount of solid waste that would not be diverted to landfills. GHG emissions from the Altamont Landfill were obtained from the BAAQMD for the year 2005.

Vehicle Travel

The on-road mobile vehicle miles per day and vehicle fleet mix from future residential development were estimated using the URBEMIS 2007 v.9.2.4 computer model. The assumed fuel efficiency was based upon the Bureau of Transportation Statistics for passenger cars and light trucks and the CCAR Protocol for medium and heavy-duty trucks. The GHG emission factors from the CCAR Protocol for motor vehicles were applied to calculate annual GHG emissions in metric tons.

Landscaping Equipment

GHG emissions from landscape equipment use were estimated using the URBEMIS 2007 v.9.2.4 computer model. Results were converted to metric tons for reporting consistency.

Table V.I-3, below, presents the GHG emissions from operational sources associated with projected growth in new housing units for the baseline year, 2009. As shown in Table V.I-3, the vast majority of GHG emissions are associated with motor vehicle use, with energy consumption (natural gas and electricity) the second largest source of GHG emissions.

**Table V.I-3
Baseline Greenhouse Gas Emissions from Residential
Development (2009)**

Emissions Source		GHG Emissions (MT CO ₂ e per year)
Operational Emissions	Natural Gas Consumption	324,452
	Electricity Use	207,709
	Water Consumption	17,435
	Waste Generation	9,961
	Motor Vehicle Use	3,791,396
	Landscape Equipment Use	36
	Total Operational	4,350,988
<i>Source: Christopher A. Joseph & Associates, May 2010. Calculation data and results provided in GHG Memorandum dated May 28, 2010.</i>		

Table V.I-4 presents the GHG emissions resulting from anticipated growth in new housing units for construction and operational sources for the years 2020 and 2025.

**Table V.I-4
Projected Greenhouse Gas Emissions from Residential Development (2020 and 2025)**

Emission Source		GHG Emissions (MT CO ₂ e per year)	
		2020	2025
Construction Emissions		3,670	3,702
Operational Emissions	Natural Gas Consumption	349,572	360,989
	Electricity Use	223,790	231,099
	Water Consumption	17,378	17,499
	Waste Generation	10,687	11,017
	Motor Vehicle Use	4,088,369	4,219,837
	Landscape Equipment Use	39	40
	Total Operational	4,689,835	4,840,481
<p><i>Note: Construction emissions include housing units constructed between 2009-2020 and 2009-2025 and are annualized over the projection period (11 years and 16 years, respectively).</i></p> <p><i>Source: Christopher A. Joseph & Associates, May 2010. Calculation data and results provided in GHG Memorandum dated May 28, 2010.</i></p>			

As shown in Table V.I-4 annual construction GHG emissions were estimated to be 3,670 MT CO₂e per year for 2020 and 3,702 MT CO₂e per year for 2025. The construction emissions are substantially less than those estimated for operational emissions. Annual operation GHG emissions would result in 4,689,835 MT CO₂e in 2020 and 4,840,481 MT CO₂e in 2025. As with the baseline emissions, the vast majority of operational GHG emissions are associated with motor vehicle use.

Reductions from AB 32 Scoping Plan Measures

The estimates presented in Table V.I-4 do not account for anticipated State measures that would further reduce GHG emissions. The BAAQMD estimated the GHG emission reductions within the land use-driven sectors that are anticipated to occur from statewide implementation of the AB 32 Scoping Plan measures. GHG emission reductions associated with key AB 32 measures quantified by the BAAQMD include measures such as the Renewable Portfolio Standard, improvements in energy efficiency through periodic updates to Title 24, AB 1493 (Pavley), and the Low Carbon Fuel Standard (LCFS). Table V.I-5 presents the percent reduction for each measure as estimated by BAAQMD.²⁷ Tables V.I-6 and V.I-7 present the reduction in GHG emissions from future residential development with implementation of AB 32 reduction measures.

²⁷ For example, the Low Carbon Fuel Standard (LCFS) anticipates that a portion of the emissions reductions would occur over the life cycle of the transportation fuel product, rather than from mobile source emissions factors. The emissions reduction accounts only for the GHG reductions anticipated from reduced emissions factors. Similarly, the Renewable Portfolio Standard (RPS) will require the renewable energy portion of the retail electricity portfolio to be 33 percent in 2020. Pacific Gas and Electric's (PG&E) current renewable portfolio is 12 percent, therefore to meet the RPS, PG&E will need to increase their renewable energy by 21 percent (not 33 percent).

**Table V.I-5
GHG Emission Reductions from AB 32 Scoping Plan Measures**

Category	Affected Emission Sources	Measure	Reduction from 2020 GHG Sector Inventory (%)
Mobile	On-road passenger vehicles	AB 1493 Pavley	19.7%
		LCFS	7.2%
		Passenger Vehicle Efficiency	2.8%
	Heavy/Medium Duty Vehicles	LCFS	7.2%
		Heavy Duty Vehicle Efficiency	2.9%
Area	Natural Gas	Energy Efficiency Measures	9.5%
Indirect	Electricity	RPS	21.0%
		Energy Efficiency Measures	15.7%

Notes: AB = Assembly Bill; LCFS = Low Carbon Fuel Standard; RPS = Renewable Portfolio Standard
Sources: Bay Area Air Quality Management District. California Environmental Quality Act Guidelines Update, Proposed Thresholds of Significance. December 7, 2009. Data compiled by ICF Jones & Stokes

**Table V.I-6
Predicted Greenhouse Gas Emissions from Future Residential Development (2020)**

Emissions Source	CO ₂ e Emissions in Metric Tons per Year (MTCO ₂ e/yr)		
	Project without Reduction Measures	Project with Reduction Measures	Reduction Percentage
Construction	3,670	3,670	0%
Natural Gas Consumption	349,572	316,363	9.5%
Electricity Generation	223,790	146,802	34%
Water Consumption	17,378	13,729	21%
Waste Generation	10,687	10,687	0%
Motor Vehicles	4,088,369	3,142,497	23%
Landscape Equipment	39	39	0%
Total Emissions	4,693,505	3,633,786	23%
Population	863,457		
Per Service Population Emissions	5.44	4.21	

Note: Per service population value is calculated by dividing the total annual construction and operational emissions by future residential population.

Source: Christopher A. Joseph & Associates, May 2010. Calculation data and results provided in GHG Memorandum dated May 28, 2010.

As shown in Table V.I-6, with implementation of state regulations and AB 32 GHG reduction measures, the construction and operational emissions would decrease 23 percent from 4,693,505 MT CO₂e per year to 3,633,786 MT CO₂e per year. On a per service population basis, emissions would be reduced from 5.44 MT CO₂e per year to 4.21 MT CO₂e per year.

Table V.I-7
Predicted Greenhouse Gas Emissions from Future Residential Development (2025)

Emissions Source	CO ₂ e Emissions in Metric Tons per Year (MTCO ₂ e/yr)		
	Project without Reduction Measures	Project with Reduction Measures	Reduction Percentage
Construction	3,702	3,702	0%
Natural Gas Consumption	360,989	326,695	9.5%
Electricity Generation	231,099	151,597	34%
Water Consumption	17,499	13,824	21%
Waste Generation	11,017	11,017	0%
Motor Vehicles	4,219,837	3,243,641	23%
Landscape Equipment	40	40	0%
Total Emissions	4,844,183	3,750,516	23%
Population	890,129		
Per Service Population Emissions	5.44	4.21	
<i>Note: Per service population value is calculated by dividing the total annual construction and operational emissions by future residential population.</i>			
<i>Source: Christopher A. Joseph & Associates, May 2010. Calculation data and results provided in GHG Memorandum dated May 28, 2010.</i>			

As shown in Table V.I-7, with implementation of state regulations and AB 32 GHG reduction measures, the construction and operational emissions would decrease 23 percent from 4,844,183 MT CO₂e per year to 3,750,516 MT CO₂e per year. On a per service population basis, emissions would be reduced from 5.44 MT CO₂e per year to 4.21 MT CO₂e per year.

Reductions from City Measures

Additional reductions in construction and operational GHG emissions associated with operational emissions would be achieved through compliance with City regulations and ordinances. Table V.I-8 presents measures that would further reduce GHG emissions from residential development on a project-by-project basis.

**Table V.I-8
Applicable GHG Emission Reductions from City Measures**

Regulation	Project Requirement
Bicycle Parking in Residential Buildings (Planning Code, Section 155.5)	For projects up to 50 dwelling units, one Class 1 space is required for every 2 dwelling units. For projects over 50 dwelling units, 25 Class 1 spaces is required plus one Class 1 space is required for every 4 dwelling units over 50.
Car Sharing Requirements (Planning Code, Section 166)	New residential projects or renovation of buildings being converted to residential uses larger than 50 dwelling units within most of the City's mixed-use and transit-oriented residential districts are required to provide car share parking spaces.
San Francisco Green Building Requirements for Energy Efficiency (SF Building Code, Chapter 13C)	Under the Green Point Rated system, all new residential buildings would be required to be at a minimum 15% more energy efficient than Title 24 energy efficiency requirements.
San Francisco Green Building Requirements for Stormwater Management (SF Building Code, Chapter 13C)	Most projects in San Francisco are required to comply with the SFPUC's stormwater design guidelines, which emphasize low impact development using a variety of Best Management Practices for managing stormwater runoff and reducing impervious surfaces, thereby reducing the volume of combined stormwater and sanitary sewage requiring treatment.
San Francisco Green Building Requirements for water reduction (SF Building Code, Chapter 13C)	High-rise residential projects would be required to reduce potable water use for landscaping by 50% and reduce total potable water use by 30% by 2012.
San Francisco Green Building Requirements for solid waste (SF Building Code, Chapter 13C)	Pursuant to Section 1304C.0.4 of the Green Building Ordinance, all new construction, renovation and alterations subject to the ordinance are required to provide recycling, composting and trash storage, collection, and loading that is convenient for all users of the building.
San Francisco Green Building Requirements for construction and demolition debris recycling (SF Building Code, Chapter 13C)	High-rise residential projects proposing demolition are required to divert at least 75% of the project's construction and demolition debris to recycling.
Construction Demolition and Debris Recovery Ordinance (Environment Code, Chapter 14)	Requires that projects proposing demolition divert 65% of their construction & demolition debris from landfills to reuse/recycling. This would apply to small (4 or fewer units) and midsized (5+ units) residential projects.
Street Tree Planting Requirements for New Construction (Planning Code Section 143)	Planning Code Section 143 requires new construction, significant alterations or relocation of buildings within many of San Francisco's zoning districts to plant one 24-inch box tree for every 20 feet along the property street frontage.

San Francisco has been actively pursuing cleaner energy, alternative transportation and solid waste policies, many of which have been codified into regulations as shown above. In an independent review of San Francisco's communitywide emissions it was reported that San Francisco has achieved a 5%

reduction in community-wide GHG emissions below the Kyoto Protocol 1990 baseline levels. The 1997 Kyoto Protocol sets a greenhouse gas reduction target of 7% below 1990 levels by 2012. The "community-wide inventory" includes GHG emissions generated by San Francisco by residents, businesses, and commuters, as well as municipal operations. The inventory also includes emissions from both transportation and building energy sources.²⁸

Although future population and subsequent housing construction could increase citywide GHG emissions, new construction would be required to comply with GHG reduction regulations as discussed above, as well as applicable AB 32 Scoping Plan measures that are ultimately adopted and become effective during implementation of individual development projects.

The 2004 and 2009 Housing Element do not propose new construction, rather the housing elements provide direction for how new housing should be constructed. Both the 2004 and 2009 Housing Elements generally seek to accommodate new housing by increasing density and preserving the City's existing housing stock. The 2004 Housing Element primarily does this through policies that promote increased density or housing in neighborhood commercial districts, industrial and downtown areas of the city. The 2009 Housing Element seeks to promote housing near transit, encouraging commercial and institutional uses to include housing in their developments and promotes increased density through community planning processes and zoning accommodations for affordable housing projects. These policies could reduce the amount of GHGs emitted citywide. Other policies that could reduce GHG emissions include policies that promote adaptive reuse of existing buildings, preservation of existing housing units, weatherization of housing units, and green building strategies. The implications for citywide GHG emissions from these policies are discussed below. None of the policies in the 2004 or 2009 Housing Elements would be expected to increase GHG emissions.

2004 Housing Element Analysis

The following 2004 Housing Element policies would be expected to reduce citywide housing-related GHG emissions by increasing density; encouraging housing near jobs, services, and/or transit; preserving housing stock; and encouraging energy efficient practices.

²⁸ City and County of San Francisco: Community GHG Inventory Review. August 1, 2008. IFC International, 394 Pacific Avenue, 2nd Floor, San Francisco, CA 94111. Prepared for City and County of San Francisco, Department of the Environment.

Impact	2004 Housing Element	Corresponding 1990 Residence Element Policy
<p>Direct growth to certain areas of the City.</p>	<p>Policy 1.1: Encourage higher residential density in areas adjacent to downtown, in underutilized commercial and industrial areas proposed for conversion to housing and in neighborhood commercial districts where higher density will not have harmful effects, especially if the higher density provides a significant number of units that are affordable to lower income households. Set allowable densities in established residential areas at levels which will promote compatibility with prevailing neighborhood scale and character where there is neighborhood support.</p>	<p>Policy 2.1: Set allowable densities in established residential areas at levels which will promote compatibility with prevailing neighborhood character.</p> <p>Policy 2.2: Encourage higher residential density in areas adjacent to downtown, in underutilized commercial and industrial areas proposed for conversion to housing and in neighborhood commercial districts where higher density will not have harmful effects, especially if the higher density provides a significant number of units that are permanently affordable to lower income households.</p>
	<p>Implementation Measure 1.1.1: A Citywide action plan (CAP) should provide a comprehensive framework for the allocation of higher density, mixed-use residential development in transit-rich areas with stable urban amenities in place. In these areas, specific CAP strategies should include: higher densities and reduced parking requirements in downtown areas or through a Better Neighborhoods type planning process; pedestrian-oriented improvements to enhance the attractiveness and use of transit.</p>	
	<p>Policy 1.2: Encourage housing development, particularly affordable housing, in neighborhood commercial areas without displacing existing jobs, particularly blue-collar jobs or discouraging new employment opportunities.</p>	
	<p>Implementation Measure 1.2.1: The Planning Department will develop proposals in neighborhood commercial districts (NCDs) well served by transit to strengthen their functions as a traditional “town center” for the surrounding residential districts.</p>	

Impact	2004 Housing Element	Corresponding 1990 Residence Element Policy
	Policy 1.3: Identify opportunities for housing and mixed-use districts near downtown and former industrial portions of the City.	Policy 1.2: Facilitate the conversion of underused industrial and commercial areas to residential use, giving preference to permanently affordable housing uses.
	Implementation Measure 1.3.1: Downtown areas and areas subject to a Better Neighborhoods type planning process will be expected to absorb major office and residential developments over the next decade. Planning and zoning code changes should include floor-to-area ratio exemptions. These development bonuses would be conferred only in cases where in return the development will provide major public benefits to the community.	Implementation Measure 1.1.3: Inclusion of housing in Downtown.
	Implementation Measure 1.3.2: The Planning Department will introduce zoning changes in the traditionally industrial eastern parts of the City. The areas under study are: Mission, South of Market, Showplace Square/Potrero Hill, Bayview Hunter’s Point, and Visitacion Valley. Housing, especially affordable housing, will be encouraged in former industrial areas where residential neighborhoods are established and urban amenities are in place or feasible.	
	Policy 1.4: Locate in-fill housing on appropriate sites in established residential neighborhoods.	Policy 1.4: Locate in-fill housing on appropriate sites in established neighborhoods.
	Policy 1.6: Create incentives for the inclusion of housing, particularly permanently affordable housing, in new commercial development projects.	

Impact	2004 Housing Element	Corresponding 1990 Residence Element Policy
	<p>Implementation Measure 1.6.2: The Planning Department and the Redevelopment Agency will propose increasing height limits, eliminating density requirements and modifying off-street parking requirements in the Transbay/Rincon Hill Redevelopment survey areas. The Mid-Market redevelopment survey area will be rezoning to include mixed-use residential areas and reduced residential parking requirements.</p>	
	<p>Implementation Measure 1.6.4: The Planning Department will update the Land Use Element to define areas for mixed-use development focused along transit corridors that are determined to be served by sufficient and reliable transit.</p>	
	<p>Implementation Measure 1.8.1: The Board of Supervisors has introduced Planning Code amendments to allow secondary units in new buildings that are in close proximity to neighborhood commercial districts and public transit.</p>	
	<p>Implementation Measure 2.4.2: As part of the Planning Department's current citywide action plan, planning efforts in the eastern neighborhoods of the City, where housing exists in commercial and industrially zoned districts, should address housing retention as new policies and zoning are established. Mixed use should be encouraged where appropriate.</p>	
	<p>Implementation Measure 4.1.4: The City will work to identify underutilized, vacant, and Brownfield sites that are publicly or privately owned and suitable for affordable housing development. The City will work with for-profit and non-profit housing developers to acquire these sites for permanently affordable housing.</p>	<p>Implementation Measure 1.1.1: Aggressive pursuit of development opportunities [on] underused public sites. Implementation Measure 1.1.4: In-fill housing on vacant or underused sites.</p>

Impact	2004 Housing Element	Corresponding 1990 Residence Element Policy
	<p>Implementation Measure 4.1.6: Permanently affordable housing sites will be especially sought out in places where transportation and existing amenities are in place.</p>	
	<p>Policy 11.6: Employ flexible land use controls in residential areas that can regulate inappropriately sized development in new neighborhoods, in downtown areas and in other areas through a Better Neighborhoods type planning process while maximizing the opportunity for housing near transit.</p>	<p>Policy 12.5: Relate land use controls to the appropriate scale for new and existing residential areas.</p>
	<p>Implementation Measure 11.6.1: The City will continue to promote increased residential densities in areas well served by transit and neighborhood compatible development with the support and input from local neighborhoods.</p>	
<p>Promote increased density-related development standards</p>	<p>Policy 1.1: Encourage higher residential density in areas adjacent to downtown, in underutilized commercial and industrial areas proposed for conversion to housing and in neighborhood commercial districts where higher density will not have harmful effects, especially if the higher density provides a significant number of units that are affordable to lower income households. Set allowable densities in established residential areas at levels which will promote compatibility with prevailing neighborhood scale and character where there is neighborhood support.</p>	<p>Policy 2.1: Set allowable densities in established residential areas at levels which will promote compatibility with prevailing neighborhood character.</p> <p>Policy 2.2: Encourage higher residential density in areas adjacent to downtown, in underutilized commercial and industrial areas proposed for conversion to housing and in neighborhood commercial districts where higher density will not have harmful effects, especially if the higher density provides a significant number of units that are permanently affordable to lower income households.</p>

Impact	2004 Housing Element	Corresponding 1990 Residence Element Policy
	<p>Implementation Measure 1.1.1: A Citywide action plan (CAP) should provide a comprehensive framework for the allocation of higher density, mixed-use residential development in transit-rich areas with stable urban amenities in place. In these areas, specific CAP strategies should include: higher densities and reduced parking requirements in downtown areas or through a Better Neighborhoods type planning process; pedestrian-oriented improvements to enhance the attractiveness and use of transit.</p>	
	<p>Implementation Measure 1.3.1: Downtown areas and areas subject to a Better Neighborhoods type planning process will be expected to absorb major office and residential developments over the next decade. Planning and zoning code changes should include floor-to-area ratio exemptions. These development bonuses would be conferred only in cases where in return the development will provide major public benefits to the community.</p>	<p>Implementation Measure 1.1.3: Inclusion of housing in Downtown (allowing housing to exceed permitted Floor-Area-Ratios [FARs] in C-3-G and C-3-S Districts).</p>
	<p>Policy 1.6: Create incentives for the inclusion of housing, particularly permanently affordable housing, in new commercial development projects.</p>	<p>Policy 1.3: Create incentives for the inclusion of housing, particularly permanently affordable housing, in new commercial development projects.</p>
	<p>Implementation Measure 1.6.2: The Planning Department and the Redevelopment Agency will propose increasing height limits, eliminating density requirements and modifying off-street parking requirements in the Transbay/Rincon Hill Redevelopment survey areas. The Mid-Market redevelopment survey area will be rezoning to include mixed-use residential areas and reduced residential parking requirements.</p>	

Impact	2004 Housing Element	Corresponding 1990 Residence Element Policy
	Policy 1.7: Encourage and support the construction of quality, new family housing.	
	Implementation Measure 1.7.1: In response to the increasing number of families in San Francisco, the Planning Department will develop zoning amendments to require a minimum percentage of larger family units ranging from two to four bedrooms, in new major residential projects. The Planning Department will also propose eliminating density requirements within permitted building envelopes in downtown areas and areas subject to a Better Neighborhoods type planning process to maximize family units constructed.	
	Policy 1.8: Allow new secondary units in areas where their effects can be dealt with and there is neighborhood support, especially if that housing is made permanently affordable to lower income households.	Policy 1.5: Allow new secondary units in areas where their effects can be dealt with and there is neighborhood support, especially if that housing is made permanently affordable to lower income households.
	Implementation Measure 1.8.1: The Board of Supervisors has introduced Planning Code amendments to allow secondary units in new buildings that are in close proximity to neighborhood commercial districts and public transit.	
	Implementation Measure 1.8.3: On-going planning will propose Planning Code amendments to encourage secondary units where appropriate.	
	Policy 4.4: Consider granting density bonuses and parking requirement exemptions for the construction of affordable housing or senior housing.	Policy 7.3: Grant density bonuses for construction of affordable or senior housing.

Impact	2004 Housing Element	Corresponding 1990 Residence Element Policy
	<p>Implementation Measure 4.4.1: The Planning Department will look at establishing uniform density bonus standards and equal requirements for affordable and senior housing development. Until then, affordable and senior housing will continue to be granted density bonuses and reduced parking requirements on a case-by-case basis.</p>	
	<p>Policy 4.5: Allow greater flexibility in the number and size of units within established building envelopes, potentially increasing the number of affordable units in multi-family structures.</p>	<p>Policy 2.3: Allow flexibility in the number and size of units within permitted volumes of larger multi unit structures, especially if the flexibility results in creation of a significant number of dwelling units that are permanently affordable to lower income households.</p>
	<p>Policy 11.6: Employ flexible land use controls in residential areas that can regulate inappropriately sized development in new neighborhoods, in downtown areas, and in other areas through a Better Neighborhoods type planning process while maximizing the opportunity for housing near transit.</p>	<p>Policy 12.5 Relate land use controls to the appropriate scale for new and existing residential areas.</p>
	<p>Implementation Measure 11.6.1: The City will continue to promote increased residential densities in areas well served by transit and neighborhood compatible development with the support and input from local neighborhoods.</p>	
	<p>Policy 11.7: Where there is neighborhood support, reduce or remove minimum parking requirements for housing, increasing the amount of lot area available for housing units.</p>	
	<p>Implementation Measure 11.7.1: The Planning Department will work to reduce parking in older neighborhoods through a Better Neighborhoods type planning process with the support and input from local neighborhoods.</p>	

Impact	2004 Housing Element	Corresponding 1990 Residence Element Policy
	Policy 11.8: Strongly encourage project sponsors to take full advantage of allowable building densities in their housing developments while remaining consistent with neighborhood character.	
	Policy 11.9: Set allowable densities and parking standards in residential areas at levels that promote the City's overall housing objectives while respecting neighborhood scale and character.	Policy 2.1: Set allowable densities in established residential areas at levels which will promote compatibility with prevailing neighborhood character.
Discourage demolition and improve existing housing supply.	Policy 2.1: Discourage the demolition of sound existing housing.	Policy 3.1: Discourage the demolition of sound existing housing.
	Policy 3.3: Maintain and improve the condition of the existing supply of public housing.	Policy 5.4: Maintain and improve the existing supply of public housing.
Promote preservation of residential buildings.	Policy 3.6: Preserve landmark historic residential buildings.	Policy 5.5: Preserve landmark historic residential buildings.
	Implementation Measure 3.6.6: The Planning Department will encourage property owners to use preservation incentives to repair, restore, or rehabilitate historic resources in lieu of demolition. These include federal tax credits for rehabilitation of qualified historical resources, Mills Act property tax abatement programs, the State Historic Building Code, and tax deductions for preservation easements.	
Promote energy efficient housing development.	Policy 11.10: Include energy efficient features in new residential development and encourage weatherization in existing housing to reduce overall housing costs and the long-range cost of maintenance.	Policy 7.5: Encourage energy efficiency in new residential development and weatherization in existing housing to reduce overall housing cost.

The 2004 Housing Element does not contain any policies that would result in substantial increases in the amount of GHGs emitted from new housing construction or from meeting the City's housing goals. Both the 1990 Residence Element and the 2004 Housing Element include policies that would result in reduced GHG emissions by: (1) promoting housing in proximity to job cores, neighborhood services, or along transit routes; (2) promoting increased housing density; (3) promoting infill development; (4) preserving

the City's existing housing stock; and (5) encouraging energy efficiency in new development. The effects of these policies with respect to GHG emissions are discussed below.

Housing in Proximity to Job Cores, Neighborhood Services, and Transit

Both the 1990 Residence Element and 2004 Housing Element promote housing in proximity to job cores and neighborhood services. The 2004 Housing Element also emphasizes housing near transit. The 2004 Housing Element includes an additional policy (Policy 1.2), which specifically encourages housing in neighborhood commercial districts. Housing that is provided in the downtown, commercial or industrial areas encourage housing near places of employment, increasing the likelihood that individuals will utilize alternative modes of transportation including bicycling, walking and transit. Any mode shift away from single-occupancy vehicles would reduce the city's overall vehicle miles traveled, reducing the amount of GHGs from vehicle trips. It also follows that housing in proximity to neighborhood services, meaning housing in mixed-use districts or near commercial districts with a variety of neighborhood serving retail, could reduce vehicle trips and promote walking, biking or transit to such destinations. The proximity of neighborhood services to new housing could also reduce vehicle miles traveled (VMT) by providing those services closer to the home. Housing in proximity to transit is another strategy that is used to reduce single occupancy vehicle trips and encourage a portion of the City's trip mode to shift to transit. Altogether, these strategies could reduce the City's overall GHG emissions by encouraging a reduction in vehicle trips and VMT.

Increased Housing Density

Increased housing density is a strategy that is used to reduce VMT and can have added benefits of reduced energy consumption. A considerable amount of research has been conducted on the links between residential density and travel behavior; studies have shown that a doubling of residential density could lower auto ownership and VMT by 16%.²⁹ A reduction in VMT translates to an overall GHG reduction from less vehicle emissions and energy savings from avoided gasoline consumption. 2004 Housing Element policy 11.7, not included in the 1990 Residence Element, would seek to reduce or remove minimum parking requirements for housing, increasing the amount of lot area available for housing units, incrementally increasing the density of the site.

Infill Development

In general terms, infill development describes the use of land within a built up area. In San Francisco, opportunities for infill development are generally characterized as having a combination of higher density, and/or efficient location in terms of proximity to job cores, neighborhood services, and/or transit

²⁹ Holtzclaw, 2004. Oral Presentation: Location Efficiency as the Missing Piece of the Energy Puzzle: How Smart Growth Can Unlock Trillion Dollar Consumer Cost Savings. Presented at the 2004 ACEEE Summer Study on Energy Efficiency in Buildings, Asilomar, California. Available online at: www.nrdc.org.

services. As discussed above, these features (density and proximity to other uses) could result in GHG reductions from reduced vehicle trips and VMT.

Preservation of Existing Housing Stock

Reuse of existing buildings (also termed adaptive reuse) and preservation of existing buildings also have added GHG benefits. Preservation of existing buildings reduces the need for construction of new housing units, as units are maintained and therefore have less opportunity to become dilapidated, abandoned, or unsafe. The ability of the City to maintain its existing housing stock through maintenance and reuse of existing buildings preserves the embodied energy of these buildings. Embodied energy refers to the sum total of the energy necessary for a product's lifecycle. This lifecycle includes raw material extraction, transportation, manufacture, assembly, installation, disassembly, deconstruction and/or decomposition. Each building material has embodied energy, therefore the degree to which the embodied energy of an existing building or housing unit can be preserved, maintained, or reused is directly related to a reduced need for new building materials and the associated GHG emissions.

Energy Efficiency

As discussed previously, residential uses emit GHG emissions from natural gas required for heating and electricity. Electricity emissions are indirect emissions that are generated from power plants, while natural gas emissions are direct emissions. Increased energy efficiency translates into reduced energy consumption and reduced GHG emissions.

As shown above, both the 1990 Residence Element and the 2004 Housing Element include policies that would ultimately result in reduced GHG emissions by encouraging: (1) housing in proximity to job cores, neighborhood services, and/or transit; (2) increased housing density; (3) infill development; (4) preservation of existing housing stock; and (5) energy efficiency. The 2004 Housing Element includes at least two additional policies not included in the 1990 Residence Element (Policies 1.2 and 11.7). Policy 1.2 further encourages housing in proximity to neighborhood services, and Policy 11.7 encourages increased density by removing parking requirements and increasing the amount of lot area available for residential use.

AB 32 contains a comprehensive approach for developing regulations to reduce statewide GHG emissions. ARB acknowledges that decisions on how land is used will have large effects on the GHG emissions that will result from the transportation, housing, industry, forestry, water, agriculture, electricity, and natural gas sectors. Many of the measures in the Scoping Plan—such as implementation of increased fuel efficiency for vehicles (the “Pavley” standards), increased efficiency in utility operations, and development of more renewable energy sources—require statewide action by government, industry, or both. The City has already implemented several of these measures that require local government action, such as a Green Building Ordinance, a Zero Waste strategy, a Construction and Demolition Debris Recovery Ordinance, and a solar energy generation subsidy program, to realize meaningful reductions in GHG emissions. These programs (and including others not listed) collectively comprise San Francisco's GHG reduction strategy and continue San Francisco's efforts to reduce the City's GHG emissions to 20

percent below 1990 levels by the year 2012, a goal outlined in the City's 2004 Climate Action Plan. The City's GHG reduction strategy also furthers the State's efforts to reduce statewide GHG emissions as mandated by AB 32.

Given that the 2004 Housing Element does not contain any policies that would result in substantial increases in the amount of GHGs emitted from new housing construction or from meeting the City's housing goals and that the 2004 Housing Element contains policies which may further reduce citywide GHG emissions, the 2004 Housing Element would not result in GHG emissions that would have a significant effect on the environment, nor would the 2004 Housing Element conflict AB 32 or the City's GHG reduction strategy. Therefore, the contribution of potential GHG impacts from the 2004 Housing Element would not be cumulatively considerable. As such, the 2004 Housing Element's cumulative GHG impacts would be *less than significant*.

2009 Housing Element Analysis

The following 2009 Housing Element policies would be expected to reduce citywide housing-related GHG emissions by directing growth to certain areas of the City, promoting increased density standards, promoting the preservation of residential buildings, and promoting energy-efficient housing development.

Impact	2009 Housing Element	Corresponding 1990 Residence Element Policy
Direct growth to certain areas of the City.	Policy 1.1: Focus housing growth- and the infrastructure necessary to support that growth- according to community plans. Complete planning underway in key opportunity areas such as Treasure Island, Candlestick Park and Hunter's Point Shipyard.	Implementation Measure 1.1.2: Pursuit of housing development opportunities in neighborhood and area plans.
	Policy 1.3: Work proactively to identify and secure opportunity sites for permanently affordable housing.	Policy 1.1: Promote development of permanently affordable housing on surplus, underused and vacant public lands.
	Policy 1.6: Consider greater flexibility in the number and size of units within established building envelopes in community plan areas, especially if it can increase the number of affordable units in multi-family structures.	Policy 2.5: Allow flexibility in the number and size of units within permitted volumes of larger multi-unit structures, especially if the flexibility results in creation of a significant number of dwelling units that are permanently affordable to lower income households.
	Policy 1.7: Consider public health objectives when designating and promoting housing development sites.	Policy 12.1: Assure housing is provided with adequate public improvements, services and amenities.

Impact	2009 Housing Element	Corresponding 1990 Residence Element Policy
	Policy 1.8: Promote mixed use development, and include housing, particularly permanently affordable housing, in new commercial, institutional or other single use development projects.	Policy 1.3: Create incentives for the inclusion of housing, including permanently affordable housing in commercial developments.
	Policy 4.6: Encourage an equitable distribution of growth according to infrastructure and site capacity.	Policy 12.1: Assure housing is provided with adequate public improvements, services and amenities.
	Policy 10.3: Support state legislation and programs that promote environmentally favorable projects.	
	Policy 12.1: Encourage new housing that relies on transit use and environmentally sustainable patterns of movement.	
	Policy 12.2: Consider the proximity of quality of life elements, such as open space, child care and neighborhood serves, when development new housing units.	
	Policy 13.1: Support “smart” regional growth that locates new housing close to jobs and transit.	
	Policy 13.3: Promote sustainable land use patterns that integrate housing with transportation via transit, pedestrian, and bicycle modes.	
	Implementation Measure 3: Consistent with the SFMTA’s Climate Action Plan, MOH shall work with MTA to identify Muni sites that can serve as potential housing sites.	

Impact	2009 Housing Element	Corresponding 1990 Residence Element Policy
	<p>Implementation Measure 4: The Mayor’s Office of Housing (MOH) shall continue to actively pursue surplus or underused publicly-owned land for housing potential, working with agencies not subject to the Surplus Property Ordinance such as the San Francisco Public Utilities Commission, SFUSD and the Municipal Transportation Agency to identify site opportunities. City agencies shall continue to survey their properties for affordable housing opportunities or joint use potential.</p>	<p>Implementation Measure 1.1.1: Aggressive pursuit of development opportunities [in] underused public sites.</p> <p>Implementation Measure 1.1.4: In-fill housing on vacant or underused sites.</p>
	<p>Implementation Measure 6: To further smaller scale TOD opportunities, Planning and MTA shall evaluate smaller surplus MTA-owned sites (typically surface parking lots) and identify barriers towards their redevelopment, such as Planning Code issues, neighborhood parking needs and communities sentiment.</p>	
	<p>Implementation Measure 8: Planning, Redevelopment and Mayor’s Office of Economic and Workforce Development (MOEWD) should complete long range planning processes already underway: Japantown, Glen Park, the Northeast Embarcadero Study, the Bayview Hunters Point Plan, Candlestick/ Hunters Pont, India Basin shoreline community planning process, Treasure Island, and Hunters Point.</p>	
	<p>Implementation Measure 14: Planning staff shall prioritize support for projects which are located within a reasonable walking distance of stops along major transit lines, including BART, Muni rail lines and “Muni’s 24-hour Rapid Network.”</p>	

Impact	2009 Housing Element	Corresponding 1990 Residence Element Policy
	<p>Implementation Measure 74: The City shall coordinate with regional entities to complete the necessary planning document for SB 375, including a “Sustainable Community Strategy” which promotes sustainable growth; and corresponding updates to the Housing, Recreation and Open Space, and Land Use Elements of the General Plan.</p>	
	<p>Implementation Measure 80: In development of new community plans, Planning shall include mixed-use design standards for both residential and commercial buildings.</p>	
	<p>Implementation Measure 85: Planning shall ensure community plans for growth are accompanied by capital plans and programs to support both the “hard” and “soft” elements of infrastructure needed by new housing.</p>	<p>Implementation Measure 7.7.1: Acquisition and improvement of open space; facilities and public environmental improvements in six neighborhood strategy areas; street improvements; parking facilities in neighborhoods; transit and street improvements.</p>
	<p>Implementation Measure 90: Planning and SFMTA should coordinate housing development with the ongoing Transit Effectiveness Project.</p>	
	<p>Implementation Measure 94: Regional planning entities such as ABAG shall continue to prioritize regional transportation decisions and funding to “smart” local land use policies that link housing, jobs and other land uses, including focusing on VMT reduction. The City shall encourage formalization of state policy that similarly prioritizes transportation and infrastructure dollars for “smart growth” areas such as San Francisco, rather than geographic allocation.</p>	

Impact	2009 Housing Element	Corresponding 1990 Residence Element Policy
	<p>Implementation Measure 97: On a local level, the City shall prioritize planned growth areas such as Better Neighborhoods, other Area Plans or Redevelopment Areas for regional, state, and federal bond and grants, especially for discretionary funding application processes such as the State’s Prop 1C.</p>	
<p>Promote increased density-related development standards</p>	<p>Policy 1.4: Ensure changes to land use controls are proposed through neighborhood-supported community planning processes.</p>	<p>Policy 2.1: Set allowable densities in established residential areas at levels which will promote compatibility with prevailing neighborhood character.</p> <p>Policy 2.2: Encourage higher residential density in areas adjacent to downtown, in underutilized commercial and industrial areas proposed for conversion to housing and in neighborhood commercial districts where higher density will not have harmful effects, especially if the higher density provides a significant number of units that are permanently affordable to lower income households.</p>
	<p>Policy 1.5: Consider secondary units in community plans where there is neighborhood support and when other neighborhood goals can be achieved, especially if that housing is made permanently affordable to lower-income households.</p>	<p>Policy 1.5: Allow new secondary units in areas where their effects can be dealt with and there is neighborhood support, especially if that housing is made permanently affordable to lower income households.</p>
	<p>Policy 1.6: Consider greater flexibility in number and size of units within established building envelopes in community plan areas, especially if it can increase the number of affordable units in multi-family structures.</p>	<p>Implementation Measure 1.1.3: Inclusion of housing in Downtown (allowing housing to exceed permitted Floor-Area-Ratios [FARs] in C-3-G and C-3-S Districts).</p>
	<p>Policy 7.5: Encourage the production of affordable housing through process and zoning accommodations, and prioritize affordable housing in the review and approval processes.</p>	<p>Policy 7.3: Grant density bonuses for construction of affordable or senior housing.</p>

Impact	2009 Housing Element	Corresponding 1990 Residence Element Policy
	<p>Policy 11.4: Maintain allowable densities in established residential areas at levels which promote compatibility with prevailing neighborhood character.</p>	<p>Policy 2.1: Set allowable densities in established residential areas at levels which will promote compatibility with prevailing neighborhood scale and character.</p>
	<p>Implementation Measure 12: Planning shall require integration of new technologies that reduce the space required for non-housing functions, such as parking, and shall consider requiring parking lifts to be supplied in all new housing developments seeking approval for parking at a ratio of 1:1 or above.</p>	
	<p>Implementation Measure 13: When considering legalization of secondary units within community planning processes, Planning shall develop a Design Manual that illustrates how secondary units can be developed to be sensitive to the surrounding neighborhood, to ensure neighborhood character is maintained.</p>	
	<p>Implementation Measure 36: Planning shall continue to implement Planning Code Section 209, which allows a density bonus of twice the number of dwelling units otherwise permitted as a principal use in the district, when the housing is specifically designed for and occupied by senior citizens, physically or mentally disabled persons.</p>	<p>Policy 7.3: Grant density bonuses for construction of affordable or senior housing.</p>
	<p>Strategy for further review: MOH and Planning should continue to consider, within the context of a community planning process, zoning categories which require a higher proportion of affordable housing where increased density or other benefits are granted. Options include Affordable Housing Only Zones (SLI); Affordable Housing Priority Zones (UMU) or Special Use District Opportunities.</p>	

Impact	2009 Housing Element	Corresponding 1990 Residence Element Policy
	Implementation Measure 64: Planning staff shall support affordable housing projects in the development review process, including allowing sponsors of permanently affordable housing to take advantage of allowable densities provided their projects are consistent with neighborhood character.	
	Implementation Measure 79. Planning staff shall continue to use community planning processes to develop policies, zoning and standards that are tailored to neighborhood character.	Implementation Measure 2.2.1: Densities compatible with neighborhood character.
Promote preservation of residential buildings.	Policy 2.3: Prevent the destruction or reduction of housing for parking.	
	Policy 2.4: Promote improvements and continued maintenance of existing units to ensure long term habitation and safety.	Objective 5: To maintain and improve the physical condition of housing while maintaining existing affordability levels. Policy 5.1: Assure that existing housing is maintained in decent, safe sanitary conditions at existing affordability levels. Policy 5.2: Promote and support voluntary housing rehabilitation which does not result in the displacement of lower income occupants.
	Policy 3.1: Preserve rental units, especially rent controlled units, to meet the City’s affordable housing needs	Policy 3.1: Discourage the demolition of sound existing housing.
	Policy 3.2: Promote voluntary housing acquisition and rehabilitation to protect affordability for exiting occupants.	Policy 5.2: Promote and support voluntary housing rehabilitation which does not result in the displacement of lower income occupants.
	Policy 3.4: Preserve “naturally affordable” housing types, such as smaller and older ownership units.	
	Policy 3.5: Retain permanently affordable residential hotels and single room occupancy (SRO) units.	Policy 3.7: Preserve the existing stock of residential hotels.

Impact	2009 Housing Element	Corresponding 1990 Residence Element Policy
	Policy 9.3: Maintain and improve the condition of the existing supply of public housing, through programs such as HOPE SF.	Policy 5.4: Maintain and improve the existing supply of public housing. Policy 7.5: Encourage energy efficiency in new residential development and weatherization in existing housing to reduce overall housing costs.
Promote energy efficient housing development.	Policy 12.3: Ensure new housing is sustainably supported by the City's infrastructure systems.	
	Policy 13.4: Promote the highest feasible level of "green" development in both private and municipally-supported housing.	Policy 7.5: Encourage energy efficiency in new residential development and weatherization in existing housing to reduce overall housing costs.

As shown above, both the 1990 Residence Element and the 2009 Housing Element include policies that would ultimately result in reduced GHG emissions. The 2009 Housing Element and 1990 Residence Element policies seek to provide housing: (1) in proximity to job cores, neighborhood services, and/or transit; (2) by increasing housing density; (3) by encouraging infill development; (4) through preservation of the existing housing stock or adaptive reuse of existing buildings; and (5) promoting energy efficiency. As previously discussed, each of these strategies could result in GHG emissions reductions. The 2009 Housing Element includes a number of additional policies that speak to housing in proximity to job cores, neighborhood services and along transit. However, the 1990 Residence Element contains additional policies that promote increased density more generally throughout the City, while the 2009 Housing Element includes increased density as a strategy to pursue during community planning processes and for affordable housing projects. Both the 1990 Residence Element and 2009 Housing Element include policies that promote infill development, preservation the City's existing housing stock, and energy efficient development.

Given that the 2009 Housing Element does not contain any policies that would result in substantial increases in the amount of GHGs emitted from new housing construction or from meeting the City's housing goals and that the 2009 Housing Element contains additional policies which may further reduce citywide GHG emissions, the 2009 Housing Element would not result in GHG emissions that would have a significant effect on the environment, nor would the 2009 Housing Element conflict AB 32 or the City's GHG reduction strategy. Therefore, the contribution of potential GHG impacts from the 2009 Housing Element would not be cumulatively considerable. As such, the 2009 Housing Element's cumulative GHG impacts would be *less than significant*.

MITIGATION AND IMPROVEMENT MEASURES

Mitigation Measures

No mitigation measures are warranted by the proposed Housing Elements.

Improvement Measures

No improvement measures are warranted by the proposed Housing Elements.

DISCUSSION OF RECENTLY ADOPTED BAAQMD CEQA THRESHOLDS

As discussed previously, BAAQMD recently adopted updated air quality CEQA thresholds of significance, including significance thresholds for GHG emissions. BAAQMD adopted two sets of GHG thresholds: one that would apply to specific development projects, and another threshold that would apply to plan-level CEQA analyses. The proposed 2004 and 2009 Housing Elements are an update to the City's General Plan and therefore, the plan-level threshold would be the applicable threshold for the proposed Housing Elements. However, as discussed in Section V.H (Air Quality), according to the BAAQMD, the recently adopted thresholds of significance for GHGs are intended to apply to environmental analyses that have begun on or after adoption of the revised CEQA thresholds (June 2, 2010). Therefore, the proposed project would not be subject to BAAQMD's recently adopted thresholds of significance. However, in anticipation of BAAQMD adopting revised thresholds of significance, an analysis of the proposed project's impact with respect to the recently adopted CEQA significance thresholds was performed. The BAAQMD plan-level GHG thresholds include the following two CEQA significance thresholds:

- Consistency with a "Qualified GHG Reduction Strategy"; or
- An efficiency metric of 6.6 MT CO₂e per service population [residents + employees] (SP) per year by 2020.³⁰

With regards to the Qualified GHG Reduction Strategy, the City's 2004 Climate Action Plan identifies a strategy to reduce San Francisco's GHG emissions by 20 percent below 1990 levels by 2012. This plan includes an emissions inventory, a forecast of projected emissions, a reduction target, actions needed to meet the reduction target and an implementation strategy. Many of the GHG reduction actions proposed in the Climate Action Plan have been codified into City regulations. Table V.I-8 lists GHG reduction regulations that could apply to new residential development. As discussed previously, the proposed 2004 and 2009 Housing Elements do not include any policies that would result in substantial increases in the amount of GHGs emitted from new housing construction or from meeting the City's housing goals. In fact, many policies would result in GHG reductions. Therefore, the proposed 2004 and 2009 Housing

³⁰ Bay Area Air Quality Management District. California Environmental Quality Act Air Quality Guidelines. May 2010. This document is available online at: www.baaqmd.gov. Accessed June 15, 2010.

elements would further the City's GHG reduction goals and would not be inconsistent with the City's Climate Action Plan.

Although the 2004 and 2009 Housing Elements would not result in new residential construction, ABAG projects that the City's housing stock and population will increase between 2009 and 2025. A GHG analysis was prepared to determine the amount of GHGs that could be emitted from future residential development in the years 2020 and 2025. This analysis determined that future 2020 and 2025 residential development would result in approximately 5.44 MTCO₂e/SP/year. Implementation of AB 32 GHG reduction measures would reduce 2020 and 2025 emissions to 4.21 MTCO₂e/SP/year, and compliance with the City's regulations would further reduce GHGs from future development. These estimates show that GHG emissions from future development would be less than BAAQMD's proposed efficiency metric threshold of 6.6 MT CO₂e/SP/year. Therefore, future residential growth in the City would not result in cumulatively considerable GHG impacts, and the proposed 2004 and 2009 Housing Elements' contribution to cumulative GHG impacts would continue to be *less than significant*.

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V. ENVIRONMENTAL SETTING AND IMPACTS

J. WIND AND SHADOW

INTRODUCTION

This section addresses the potential impacts of the 2004 Housing Element and 2009 Housing Element policies related to wind and shadow. The San Francisco Planning Code contains provisions pertaining to wind and shadow minimization. Because wind and shadow contribute substantially to the San Francisco environment and can be highly susceptible to an impact from development, these issues are analyzed as part of CEQA review in San Francisco.

ENVIRONMENTAL SETTING

Wind

Wind impacts are generally caused by large building masses extending substantially above neighboring buildings, and by buildings oriented such that a new large wall catches a prevailing wind, particularly if such a wall includes little or no articulation.

Long-term wind data in San Francisco is available from historical wind records from the U.S. Weather Bureau weather station located above the old Federal Building at 50 United Nations Plaza. Table V.J-1 shows that average wind speeds are greatest in the summer and least in the fall. Winds also exhibit a diurnal variation with the strongest winds occurring in the afternoon, and lightest winds occurring in the early morning.

**Table V.J-1
Seasonal Wind Direction Frequency and Average Speed in Knots (%)**

Prevailing Wind Direction	January		April		July		October		Annual	
	Freq	Speed	Freq	Speed	Freq	Speed	Freq	Speed	Freq	Speed
North	12.5	7.9	2.2	11.0	0.3	6.0	3.3	6.6	5.0	7.2
North-northeast	1.3	5.6	0.7	6.1	0.3	6.8	0.7	6.6	0.8	6.0
Northeast	4.5	5.3	1.3	4.7	1.1	7.4	2.2	5.8	1.9	5.6
East-northeast	1.4	6.3	0.6	4.8	0.2	5.1	0.8	5.1	0.8	5.6
East	11.9	4.8	2.6	4.5	0.1	3.9	4.8	4.5	4.8	5.0
East-southeast	2.1	6.4	0.3	5.2	0.1	2.5	0.6	5.8	0.8	5.8
Southeast	9.1	6.4	2.4	7.8	0.2	5.0	3.7	6.6	4.2	6.8
South-southeast	2.8	5.6	0.3	3.8	0.1	3.0	1.3	9.0	1.2	6.4
South	6.7	5.0	4.2	7.1	1.1	4.9	4.5	7.5	4.1	6.4
South-southwest	1.0	4.8	0.4	4.1	0.1	3.0	1.7	12.8	0.9	8.6
Southwest	4.5	8.0	7.7	9.2	15.6	10.1	7.8	9.1	9.3	9.3
West-southwest	1.0	5.9	1.7	7.7	1.2	8.1	2.8	8.8	2.4	8.6
West	13.2	7.2	43.0	10.9	53.0	13.1	34.6	9.1	35.7	10.9
West-northwest	7.5	11.1	20.7	14.1	14.9	14.5	15.2	10.9	13.8	12.7
Northwest	11.5	7.7	9.3	10.7	10.7	11.4	10.8	8.5	10.0	9.7
North-northwest	1.2	5.7	0.6	10.8	0.6	8.5	0.5	7.5	0.7	8.3
Calm ¹	7.7	-	2.1	-	0.3	-	4.6	-	3.7	-

Table V.J-1
Seasonal Wind Direction Frequency and Average Speed in Knots (%)

Prevailing Wind Direction	January		April		July		October		Annual	
	Freq	Speed	Freq	Speed	Freq	Speed	Freq	Speed	Freq	Speed
TOTAL	100.0		100.0		100.0	100.0	100.0	100.0	100.0	100.0
¹ The calm category represents the percent of time during the month when wind conditions are calm and no prevailing wind direction is discernable. Source: Market and Octavia Neighborhood Plan, Final EIR, Adopted September 2007, at page 4-142. Original Source: U.S. Weather Bureau data collected at the U.S. Weather Bureau station above the old Federal Building in United Nations Plaza; Donald Ballanti, 2004.										

Winds in the City occur most frequently from the west to northwest directions, reflecting the persistence of sea breezes. Wind direction is most variable in the winter.¹ The approach of winter storms often results in southerly winds. Although not as frequent as westerly winds, these southerly winds are often strong. The strongest winds in the City are typically from the south during the approach of a winter storm.

Winds vary at pedestrian levels within a city. In San Francisco wind strength is generally greater, on average, along streets that run east-west as buildings tend to channel westerly winds along these streets.² Streets running north-south tend to have lighter winds, on average, due to the shelter offered by buildings on the west side of the street. Within the City, the streets systems north of Market Street and portions of the systems south of Market Street (including those in the Mission District, Potrero Hill, Mission Bay, and Central Waterfront) are mainly on a north/south and east/west grid. However, portions of the street systems south of Market Street (including those in South of Market, South Beach, Bayview Hunters Point, and Visitacion Valley) are mainly northwest/southeast and southwest/northeast, which results in a less predictable pattern of wind variation at the pedestrian level.

The Planning Department evaluates potential wind impacts on a project-level basis. The Planning Department generally refers to the wind hazard criterion (discussed further below under Regulatory Setting) to determine the significance for CEQA purposes and to evaluate wind effects of new development in all areas of the City. Any new building or addition that would cause wind speeds to exceed the hazard level of 26-mph-equivalent wind speed (as defined in the Planning Code) more than one hour of any year must be modified and is subject to the relevant wind hazard criterion.³ Buildings below 85 feet generally do not have the potential to affect wind speeds. Buildings that extend in height above surrounding development have more impact than those of similar height to surroundings. Figure IV-4 is a generalized Citywide Height Map that shows the locations where allowable heights could exceed 85 feet.

¹ Market and Octavia Neighborhood Plan, Final EIR, Adopted September 2007, at page 4-141.

² Id.

³ "Equivalent wind speed" is defined as an hourly mean wind speed adjusted to incorporate the effects of gustiness or turbulence on pedestrians. San Francisco Planning Code Section 148(b).

Shadow

Shading is an important environmental issue because the users or occupants of certain land uses, such as residential, recreational/parks, churches, schools, outdoor restaurants, and pedestrian areas have some reasonable expectations for direct sunlight and warmth from the sun. These land uses are termed “shadow-sensitive”. For a discussion of parks and open space in San Francisco, refer to Section V.K (Recreation).

Shadow lengths are dependent on the height and size of the building or object from which they are cast and the angle of the sun. The angle of the sun varies with respect to the rotation of the earth (i.e., time of day) and elliptical orbit (i.e., change in seasons). The longest shadows are cast during the winter months and the shortest shadows are cast during the summer months.

In the City, the presence of the sun’s warming rays is essential to enjoying open space. This is because climatic factors, including ambient temperature, humidity, and wind, often combine to create a comfortable climate only when direct sunlight is present. Therefore, the shadows created by new development nearby can critically diminish the utility of the open space. This is particularly a problem in the Downtown area and in adjacent neighborhoods, where there is a limited amount of open space, pressure for new development, and zoning controls that allow tall buildings. Neighborhoods that experience shading issues include the Downtown area and many of the adjacent areas, including Civic Center, Nob Hill, Financial District, Mission Bay, and South of Market. Together these areas could accommodate approximately 12 percent of the City’s pipeline housing units and approximately five percent of the overall capacity for new housing within the City.⁴ Refer to Figure IV-4 in Section IV. Project Description, which shows the Citywide Height Map.

The City of San Francisco is densely developed with urban uses. As discussed in Section V.K (Recreation), the City is served by over 200 neighborhood park, recreation, and open space facilities. These facilities are considered “shadow-sensitive”.

In general, all applications for new construction or additions to existing buildings above 40 feet in height must be reviewed to determine whether a project would cast additional shadows on properties under the jurisdiction of, or designated to be acquired by the Recreation and Park Department. The Planning Department staff develops a “shadow fan” diagram that shows the maximum extent of the shadows cast by a proposed building throughout the year, between one hour after sunrise and one hour before sunset. If the shadow fan indicates a project shadow does not reach any property protected by Planning Code Section 295 (the sunlight ordinance), no further review is required. If the shadow fan shows that a project has potential to shade such properties, further analysis is required.

⁴ This calculation used the entire Downtown District to represent the Civic Center, Nob Hill, and Financial District areas. The aforementioned areas do not encompass the entire Downtown District. Therefore, the percentage of pipeline housing units and overall capacity that are in areas with shading issues are likely overstated.

REGULATORY SETTING

Federal / State

No federal or state regulations related to wind and shadow are applicable to the proposed Housing Elements.

Local

San Francisco General Plan

As part of the City's goal to create and preserve high-quality public open spaces, the Recreation and Open Space Element of the General Plan includes a policy to preserve sunlight in public open spaces, particularly in downtown districts and in neighborhoods immediately adjacent to the downtown core, where there is a limited amount of open space, where there is pressure for new development, and where zoning controls allow tall buildings. But the problem of new shadow potentially exists wherever tall buildings near open space are permitted.

San Francisco Planning Code

The San Francisco Planning Code contains a number of provisions to reduce wind currents in the City and ensure sunlight in parks and on sidewalks.

Wind

Section 148

Planning Code Section 148 establishes two comfort criteria and one hazard criterion for assessing wind impacts of projects in San Francisco. The comfort criteria are based on pedestrian-level wind speeds that include the effects of turbulence and are known as "equivalent wind speeds." Section 148 of the Planning Code establishes an equivalent wind speed of seven miles per hour (mph) for seating areas and 11 mph for areas of substantial pedestrian use. New buildings and additions to buildings may not cause ground-level winds to exceed these levels more than 10 percent of the time year round between 7:00 AM and 6:00 PM. If existing wind speeds exceed the comfort level, new buildings and additions in these areas must be designed to reduce ambient wind speeds to meet the requirements. Section 148 and Section 249 (c)(9) also establish a hazard criterion, which is an equivalent wind speed of 26 mph for a single full hour, not to be exceeded more than once during the year. New buildings in governed areas cannot exceed this standard.

To provide a comfortable wind environment for people in San Francisco, development projects would be subject to specific comfort criteria. The Planning Code specifically outlines these criteria for areas that typically experience wind exceedances, specifically the Downtown Commercial (C-3) District and each of the following special use districts: Folsom and Main, Van Ness Avenue, and South of Market [Sections 249.1(b)(2), 243(c)(9), 263.11(c)]. These criteria are shown in Table V.J-2.

**Table V.J-2
San Francisco Planning Code Wind Criteria for Specific Areas**

Special Use District	Section	Requirement
Folsom and Main Residential/Commercial Special Use District	249.1(b)(2)	New buildings and additions to existing buildings shall be shaped, or other wind-baffling measures shall be adopted, so that the developments will not cause ground-level wind currents to exceed, more than 10 percent of the time year-round, between 7:00 a.m. and 6:00 p.m., the comfort level of 11 m.p.h. equivalent wind speed in areas of substantial pedestrian use and seven m.p.h. equivalent wind speed in public seating areas. The term "equivalent wind speed" shall mean an hourly mean wind speed adjusted to incorporate the effects of gustiness or turbulence on pedestrians.
Van Ness Special Use District	243(c)(9)	<p>(A) New buildings and additions to existing buildings shall be shaped, or other wind baffling measures shall be adopted, so that the development will not cause year-round ground level wind currents to exceed, more than 10 percent of the time, between 7:00 a.m. and 6:00 p.m., the comfort level of 11 m.p.h. equivalent wind speed in areas of pedestrian use and seven m.p.h. equivalent wind speed in public seating areas. When pre-existing ambient wind speeds exceed the comfort levels specified above, the building shall be designed to reduce the ambient wind speeds in efforts to meet the goals of this requirement.</p> <p>(B) An exception to this requirement may be permitted but only if and to the extent that the project sponsor demonstrates that the building or addition cannot be shaped or wind baffling measures cannot be adopted without unduly restricting the development potential of the building site in question.</p> <p style="padding-left: 40px;">(i) The exception may permit the building or addition to increase the time that the comfort level is exceeded, but only to the extent necessary to avoid undue restriction of the development potential of the site.</p> <p style="padding-left: 40px;">(ii) Notwithstanding the above, no exception shall be allowed and no building or addition shall be permitted that causes equivalent wind speeds to reach or exceed the hazard level of 26 m.p.h. for a single hour of the year.</p> <p>(C) For the purposes of this Section, the term "equivalent wind speed" shall mean an hourly wind speed adjusted to incorporate the effects of gustiness or turbulence on pedestrians.</p>
South of Market RSD 40-X/85-B Height District	263.11(c)	New buildings or additions subject to this Section shall be shaped, or other wind baffling measures shall be adopted, so that the development will not cause ground level wind currents to exceed, more than 10 percent of the time year-round, between 7:00 a.m. and 6:00 p.m., the comfort level of 11 m.p.h. equivalent wind speed in areas of substantial pedestrian use and seven m.p.h. equivalent wind speed in public seating areas. When pre-existing ambient wind speeds exceed the comfort level, the building or addition shall be designed to reduce the ambient wind speeds to meet the requirements.

*Shade/Shadow*Section 146(a)

Planning Code Section 146(a) includes sunlight access criteria to allow direct sunlight to reach sidewalk areas of designated streets during critical hours of the day. In the case of sidewalks, the critical hours are considered to be the hours around noon. The Code designates 18 streets within the project area (all near the Downtown) as subject to Section 146(a). Individual new development projects within the project site must comply with Section 146(a) requirements, or obtain an allowable exception under Section 309 of the Planning Code.

Section 146(c)

Planning Code Section 146(c) includes sunlight access criteria to reduce substantial shadow impacts on public sidewalks in the C-3 Districts other than those protected by Section 146(a). New buildings and additions to existing structures must minimize any substantial shadow impacts in the C-3 (Downtown) Districts not protected under Subsection (a), as long as this can be accomplished without the creation of unattractive building design and the undue restriction of development potential.

Section 147

Planning Code Section 147 states that new buildings and additions to existing buildings in C-3, South of Market Mixed Use, and Eastern Neighborhoods Mixed Use Districts where the building height exceeds 50 feet shall be shaped, consistent with the dictates of good design and without unduly restricting the development potential of the site in question, to reduce substantial shadow impacts on public plazas and other publicly accessible spaces other than those protected under Section 295.

Section 295

Section 295 of the Planning Code, the Sunlight Ordinance, was adopted through voter approval of Proposition K in November 1994 to protect certain public open spaces from shadowing by new structures. Section 295 prohibits the issuance of building permits for structures or additions to structures greater than 40 feet in height that would shade property under the jurisdiction of, or designated to be acquired by, the Recreation and Park Commission, during the period from one hour after sunrise to one hour before sunset on any day of the year. An exception is permitted if both the Planning and Recreation and Park Commissions determine that the shadow would have an insignificant impact on the use of such property. All of the open spaces in the City under Recreation and Park Department control are now protected by the Section 295. Private open spaces that are required under the Planning Code as part of an individual development proposal are not protected by Section 295.

IMPACTS

Significance Thresholds

The proposed Housing Elements would normally have a significant effect on the environment if they would:

- Alter wind in a manner that substantially affects public areas; or
- Create new shadow in a manner that substantially affects outdoor recreation facilities or other public areas.

Impact Evaluation

As discussed previously, the 2004 Housing Element and 2009 Housing Elements would not change the land use objectives and policies in the City's area and redevelopment plans. According to Part I of the 2009 Housing Element (Data and Needs Analysis), the City has available capacity to meet the Regional Housing Needs Allocation (RHNA) as determined by the Association of Bay Area Governments (ABAG). Therefore, the rezoning of land uses is not required. To meet the City's share of the RHNA, the proposed Housing Elements aim to do the following: 1) preserve and upgrade existing housing units to ensure they do not become dilapidated, abandoned, or unsound, and 2) provide direction for how and where new housing development in the City should occur. With respect to the latter, the 2004 Housing Element encourages new housing in Downtown and in underutilized commercial and industrial areas. The 2004 Housing Element also encourages increased housing in neighborhood commercial districts and mixed-use districts near Downtown. On the other hand, the 2009 Housing Element encourages housing in new commercial or institutional projects and accommodating housing through existing community planning processes.

Impact WS-1: The proposed Housing Elements would not alter wind in a manner that substantially affects public areas. (Less than Significant)

New construction could result in wind impacts if new housing would be constructed in a manner that would increase ground-level wind speeds. Typically, new development greater than 85 feet in height could potentially affect ground level wind speeds. Buildings that would result in wind speeds that exceed the hazard criterion of 26 miles per hour (mph) for one hour of the year would result in a significant wind impact.

2004 Housing Element Analysis

The following 2004 Housing Element policies could result in the exposure of people to wind impacts by encouraging new development to build to maximum allowable height and bulk, potentially increasing building height and mass, thereby altering ground-level wind speeds.

Impact	2004 Housing Element	Corresponding 1990 Residence Element Policy
<p>Direct growth to certain areas of the City.</p>	<p>Policy 1.1: Encourage higher residential density in areas adjacent to downtown, in underutilized commercial and industrial areas proposed for conversion to housing and in neighborhood commercial districts where higher density will not have harmful effects, especially if the higher density provides a significant number of units that are affordable to lower income households. Set allowable densities in established residential areas at levels which will promote compatibility with prevailing neighborhood scale and character where there is neighborhood support.</p>	<p>Policy 2.1: Set allowable densities in established residential areas at levels which will promote compatibility with prevailing neighborhood character.</p> <p>Policy 2.2: Encourage higher residential density in areas adjacent to downtown, in underutilized commercial and industrial areas proposed for conversion to housing and in neighborhood commercial districts where higher density will not have harmful effects, especially if the higher density provides a significant number of units that are permanently affordable to lower income households.</p>
	<p>Implementation Measure 1.1.1: A Citywide action plan (CAP) should provide a comprehensive framework for the allocation of higher density, mixed-use residential development in transit-rich areas with stable urban amenities in place. In these areas, specific CAP strategies should include: higher densities and reduced parking requirements in downtown areas or through a Better Neighborhoods type planning process; pedestrian-oriented improvements to enhance the attractiveness and use of transit.</p>	
	<p>Policy 1.2: Encourage housing development, particularly affordable housing, in neighborhood commercial areas without displacing existing jobs, particularly blue-collar jobs or discouraging new employment opportunities.</p>	
	<p>Implementation Measure 1.2.1: The Planning Department will develop proposals in neighborhood commercial districts (NCDs) well served by transit to strengthen their functions as a traditional “town center” for the surrounding residential districts.</p>	

Impact	2004 Housing Element	Corresponding 1990 Residence Element Policy
	<p>Policy 1.3: Identify opportunities for housing and mixed-use districts near downtown and former industrial portions of the City.</p>	<p>Policy 1.2: Facilitate the conversion of underused industrial and commercial areas to residential use, giving preference to permanently affordable housing uses.</p>
	<p>Implementation Measure 1.3.1: Downtown areas and areas subject to a Better Neighborhoods type planning process will be expected to absorb major office and residential developments over the next decade. Planning and zoning code changes should include floor-to-area ratio exemptions. These development bonuses would be conferred only in cases where in return the development will provide major public benefits to the community.</p>	<p>Implementation Measure 1.1.3: Inclusion of housing in Downtown.</p>
	<p>Implementation Measure 1.3.2: The Planning Department will introduce zoning changes in the traditionally industrial eastern parts of the City. The areas under study are: Mission, South of Market, Showplace Square/Potrero Hill, Bayview Hunter's Point, and Visitacion Valley. Housing, especially affordable housing, will be encouraged in former industrial areas where residential neighborhoods are established and urban amenities are in place or feasible.</p>	
	<p>Policy 1.4: Locate in-fill housing on appropriate sites in established residential neighborhoods.</p>	<p>Policy 1.4: Locate in-fill housing on appropriate sites in established neighborhoods.</p>
	<p>Policy 1.6: Create incentives for the inclusion of housing, particularly permanently affordable housing, in new commercial development projects.</p>	

Impact	2004 Housing Element	Corresponding 1990 Residence Element Policy
	Implementation Measure 1.6.2: The Planning Department and the Redevelopment Agency will propose increasing height limits, eliminating density requirements and modifying off-street parking requirements in the Transbay/Rincon Hill Redevelopment survey areas. The Mid-Market redevelopment survey area will be rezoning to include mixed-use residential areas and reduced residential parking requirements.	
	Implementation Measure 1.6.4: The Planning Department will update the Land Use Element to define areas for mixed-use development focused along transit corridors that are determined to be served by sufficient and reliable transit.	
	Implementation Measure 1.8.1: The Board of Supervisors has introduced Planning Code amendments to allow secondary units in new buildings that are in close proximity to neighborhood commercial districts and public transit.	
	Implementation Measure 2.4.2: As part of the Planning Department's current citywide action plan, planning efforts in the eastern neighborhoods of the City, where housing exists in commercial and industrially zoned districts, should address housing retention as new policies and zoning are established. Mixed use should be encouraged where appropriate.	
	Implementation Measure 4.1.4: The City will work to identify underutilized, vacant, and Brownfield sites that are publicly or privately owned and suitable for affordable housing development. TH City will work with for profit and non-profit housing developers to acquire these sites for permanently affordable housing.	Implementation Measure 1.1.1: Aggressive pursuit of development opportunities [on] underused public sites. Implementation Measure 1.1.4: In-fill housing on vacant or underused sites.

Impact	2004 Housing Element	Corresponding 1990 Residence Element Policy
	<p>Implementation Measure 4.1.6: Permanently affordable housing sites will be especially sought out in places where transportation and existing amenities are in place.</p>	
	<p>Policy 11.6: Employ flexible land use controls in residential areas that can regulate inappropriately sized development in new neighborhoods, in downtown areas and in other areas through a Better Neighborhoods type planning process while maximizing the opportunity for housing near transit.</p>	<p>Policy 12.5: Relate land use controls to the appropriate scale for new and existing residential areas.</p>
	<p>Implementation Measure 11.6.1: The City will continue to promote increased residential densities in areas well served by transit and neighborhood compatible development with the support and input from local neighborhoods.</p>	
<p>Promote increased density-related development standards</p>	<p>Policy 1.1: Encourage higher residential density in areas adjacent to downtown, in underutilized commercial and industrial areas proposed for conversion to housing and in neighborhood commercial districts where higher density will not have harmful effects, especially if the higher density provides a significant number of units that are affordable to lower income households. Set allowable densities in established residential areas at levels which will promote compatibility with prevailing neighborhood scale and character where there is neighborhood support.</p>	<p>Policy 2.1: Set allowable densities in established residential areas at levels which will promote compatibility with prevailing neighborhood character.</p> <p>Policy 2.2: Encourage higher residential density in areas adjacent to downtown, in underutilized commercial and industrial areas proposed for conversion to housing and in neighborhood commercial districts where higher density will not have harmful effects, especially if the higher density provides a significant number of units that are permanently affordable to lower income households.</p>

Impact	2004 Housing Element	Corresponding 1990 Residence Element Policy
	<p>Implementation Measure 1.1.1: A Citywide action plan (CAP) should provide a comprehensive framework for the allocation of higher density, mixed-use residential development in transit-rich areas with stable urban amenities in place. In these areas, specific CAP strategies should include: higher densities and reduced parking requirements in downtown areas or through a Better Neighborhoods type planning process; pedestrian-oriented improvements to enhance the attractiveness and use of transit.</p>	
	<p>Implementation Measure 1.3.1: Downtown areas and areas subject to a Better Neighborhoods type planning process will be expected to absorb major office and residential developments over the next decade. Planning and zoning code changes should include floor-to-area ratio exemptions. These development bonuses would be conferred only in cases where in return the development will provide major public benefits to the community.</p>	<p>Implementation Measure 1.1.3: Inclusion of housing in Downtown (allowing housing to exceed permitted Floor-Area-Ratios [FARs] in C-3-G and C-3-S Districts).</p>
	<p>Policy 1.6: Create incentives for the inclusion of housing, particularly permanently affordable housing, in new commercial development projects.</p>	<p>Policy 1.3: Create incentives for the inclusion of housing, particularly permanently affordable housing, in new commercial development projects.</p>
	<p>Implementation Measure 1.6.2: The Planning Department and the Redevelopment Agency will propose increasing height limits, eliminating density requirements and modifying off-street parking requirements in the Transbay/Rincon Hill Redevelopment survey areas. The Mid-Market redevelopment survey area will be rezoning to include mixed-use residential areas and reduced residential parking requirements.</p>	

Impact	2004 Housing Element	Corresponding 1990 Residence Element Policy
	Policy 1.7: Encourage and support the construction of quality, new family housing.	
	Implementation Measure 1.7.1: In response to the increasing number of families in San Francisco, the Planning Department will develop zoning amendments to require a minimum percentage of larger family units ranging from two to four bedrooms, in new major residential projects. The Planning Department will also propose eliminating density requirements within permitted building envelopes in downtown areas and areas subject to a Better Neighborhoods type planning process to maximize family units constructed.	
	Policy 1.8: Allow new secondary units in areas where their effects can be dealt with and there is neighborhood support, especially if that housing is made permanently affordable to lower income households.	Policy 1.5: Allow new secondary units in areas where their effects can be dealt with and there is neighborhood support, especially if that housing is made permanently affordable to lower income households.
	Implementation Measure 1.8.1: The Board of Supervisors has introduced Planning Code amendments to allow secondary units in new buildings that are in close proximity to neighborhood commercial districts and public transit.	
	Implementation Measure 1.8.3: On-going planning will propose Planning Code amendments to encourage secondary units where appropriate.	
	Policy 4.4: Consider granting density bonuses and parking requirement exemptions for the construction of affordable housing or senior housing.	Policy 7.3: Grant density bonuses for construction of affordable or senior housing.

Impact	2004 Housing Element	Corresponding 1990 Residence Element Policy
	<p>Implementation Measure 4.4.1: The Planning Department will look at establishing uniform density bonus standards and equal requirements for affordable and senior housing development. Until then, affordable and senior housing will continue to be granted density bonuses and reduced parking requirements on a case-by-case basis.</p>	
	<p>Policy 4.5: Allow greater flexibility in the number and size of units within established building envelopes, potentially increasing the number of affordable units in multi-family structures.</p>	<p>Policy 2.3: Allow flexibility in the number and size of units within permitted volumes of larger multi unit structures, especially if the flexibility results in creation of a significant number of dwelling units that are permanently affordable to lower income households.</p>
	<p>Policy 11.6: Employ flexible land use controls in residential areas that can regulate inappropriately sized development in new neighborhoods, in downtown areas, and in other areas through a Better Neighborhoods type planning process while maximizing the opportunity for housing near transit.</p>	<p>Policy 12.5: Relate land use controls to the appropriate scale for new and existing residential areas.</p>
	<p>Implementation Measure 11.6.1: The City will continue to promote increased residential densities in areas well served by transit and neighborhood compatible development with the support and input from local neighborhoods.</p>	
	<p>Policy 11.7: Where there is neighborhood support, reduce of remove minimum parking requirements for housing, increasing the amount of lot area available for housing units.</p>	
	<p>Implementation Measure 11.7.1: The Planning Department will work to reduce parking in older neighborhoods through a Better Neighborhoods type planning process with the support and input from local neighborhoods.</p>	

Impact	2004 Housing Element	Corresponding 1990 Residence Element Policy
	Policy 11.8: Strongly encourage project sponsors to take full advantage of allowable building densities in their housing developments while remaining consistent with neighborhood character.	
	Policy 11.9: Set allowable densities and parking standards in residential areas at levels that promote the City's overall housing objectives while respecting neighborhood scale and character.	Policy 2.1: Set allowable densities in established residential areas at levels which will promote compatibility with prevailing neighborhood character.

As shown above, the 2004 Housing Element promotes housing in commercial (Policies 1.1, 1.6) and industrial (Policies 1.1, 1.3) areas, neighborhood commercial districts (Policy 1.2 and Implementation Measure 1.2.1), housing near the Downtown (Policies 1.1, 1.3 and Implementation Measure 1.3.1) and along transit corridors (Policies 1.6, 11.6 and Implementation Measures 1.1.1, 1.6.4, 1.8.1, 4.1.6, and 11.6.1). The 2004 Housing Element also encourages new housing through on-going and future community planning processes (Policies 1.1, 11.6 and Implementation Measures 1.3.1, 1.3.2, 1.6.2, and 2.4.2) and on underutilized, vacant, surplus lands and on Brownfield sites (Implementation Measure 4.1.4). The 1990 Residence Element similarly directs growth to commercial and industrial areas, neighborhood commercial districts, the Downtown and on infill development sites, although to a lesser degree than the 2004 Housing Element. The 2004 Housing Element also advocates for housing in community plan areas and along transit corridors, both of which are policies that were not included in the 1990 Residence Element. Policies that direct growth to certain areas of the City could increase the amount of new housing occurring in those areas, thereby resulting in new development built to maximum allowable height and bulk, potentially increasing building height and mass, and altering ground-level wind speeds.

The 2004 Housing Element promotes increased building densities more so than the 1990 Residence Element. The 2004 Housing Element promotes increased density in certain areas of the City (Policy 1.1 and Implementation Measure 1.1.1, 1.8.1 and 11.6.1) and promotes density bonuses (Policy 4.4 and Implementation Measures 1.3.1 and 4.4.1) and the elimination of density requirements (Policy 1.6 and Implementation Measures 1.6.2 and 1.7.1). The 2004 Housing Element also encourages increased density by promoting reduced parking requirements (Policies 4.4, 11.7, 11.9 and Implementation Measures 1.1.1, 1.6.2, 4.4.1, 11.7.1), support for secondary units (Policy 1.8 and Implementation Measures 1.8.1 and 1.8.3) and flexible building envelopes (Policies 4.5 and 11.6). Increased density standards could result in more units within a given building envelope, which could be partially achieved by the construction of multi-family housing built to maximum allowable height and bulk limits, potentially increasing building height and mass, and altering ground-level wind speeds.

2004 Housing Element Policy 11.6 and 11.8 could encourage project sponsors to build to maximum building heights allowed by the Planning Code. 2004 Housing Element Policy 11.8 advocates for

community planning processes to accommodate growth. Some strategies that could be considered may include increasing height limits. While the planning process itself would not have direct effects related to wind, specific development criteria proposed through such a process could affect wind patterns. The effects of development or increased height limits on ground level wind speeds are development-specific. A determination of wind impacts would be made at a project level, based on an analysis of ground-level wind currents, as specific development proposals or proposals to change allowable height and bulk are made. For instance, at the project level, project proponents could be required to utilize building forms that would minimize the creation of surface winds near the base of buildings.

Ground-level wind accelerations are controlled by exposure (a measure of the extent that the building extends above surrounding structures into the wind stream), massing (slab-shaped buildings have greater potential for wind acceleration effects than do buildings with unusual shapes, round faces, or where accompanied by appropriate setbacks), and orientation. These factors would be evaluated on a project-by-project basis. 2004 Housing Element Policy 11.8 encourages full buildout of projects to the maximum allowable building envelope. While this does not change allowable heights, the encouragement of full-buildout could encourage buildings to be constructed to the maximum allowable building height. Similar to 2004 Housing Element Policy 11.6, this policy could potentially impact wind speeds in areas of the city that experience wind exceedances. However, as with 2004 Housing Element Policy 11.6, individual projects would be subject to review regarding wind impacts as well as subject to applicable Planning Code requirements that mitigate wind impacts.

Regarding 2004 Housing Element Implementation Measure 1.6.2, increased height limits and elimination of density requirements have been studied as part of the Transbay/Rincon Hill Area Plan. The Transbay/Rincon Hill Area Plan EIR concluded that full-buildout development in the plan area could result in wind impacts related to pedestrian-comfort criterion at nine public locations in the area. One of these locations could also experience wind hazard criterion exceedances. However, the Transbay/Rincon Hill Area Plan EIR concluded that during the environmental review process for individual projects, potential wind effects would be considered, including through wind tunnel testing, and if wind hazard exceedances occurred, design modifications or other project-tailored mitigation measures would be required, such as articulation of building sides and softening of sharp building edges, to mitigate or eliminate these exceedances.

The Mid-Market redevelopment area has been studied in an EIR as well. Several buildings over 100 feet in height could be planned in the Mid-Market planning area, which contains some of the most windy locations in the City. Within and near the Mid-Market planning area, wind speed has been found to be at times unpleasant and even hazardous. As with the Transbay/Rincon Hill Area Plan, the Mid-Market EIR noted that wind evaluation would be required as part of building design and review for specific projects and projects would not be approved without mitigation for hazardous wind effects. The Mid-Market Plan is currently on hold.

While, the 2004 Housing Element encourages projects to be developed to their maximum height and bulk allowances and, in certain areas, encourages greater height limits, a key strategy for meeting the City's housing goals is to maintain the City's existing housing stock. The following 2004 Housing Element

policies discourage demolition and encourage the maintenance of the City's existing housing stock, thereby reducing the amount of new housing required to meet the City's housing needs and subsequent wind-related impacts resulting from development at maximum allowable height and bulk limits, potentially increasing building height and mass.

Impact	2004 Housing Element	Corresponding 1990 Residence Element Policy
Discourage demolition and improve existing housing supply.	Policy 2.1: Discourage the demolition of sound existing housing.	Policy 3.1: Discourage the demolition of sound existing housing.
	Policy 3.3: Maintain and improve the condition of the existing supply of public housing.	Policy 5.4: Maintain and improve the existing supply of public housing.
Promote preservation of residential buildings.	Policy 3.6: Preserve landmark historic residential buildings.	Policy 5.5: Preserve landmark historic residential buildings.
	Implementation Measure 3.6.6: The Planning Department will encourage property owners to use preservation incentives to repair, restore, or rehabilitate historic resources in lieu of demolition. These include federal tax credits for rehabilitation of qualified historical resources, Mills Act property tax abatement programs, the State Historic Building Code, and tax deductions for preservation easements.	

As shown above, the 2004 Housing Element proposes policies that discourage demolition and promote the maintenance of existing public housing (including Policies 2.1, 3.3, and 3.6) to a degree similar to the 1990 Residence Element, which could reduce the amount of new housing required to meet the City's housing needs. The preservation of existing housing retains reduces the need for new development to maximum allowable height and bulk limits, thus altering ground-level wind speed impacts. The 2004 Housing Element would not in and of itself result in the construction of substantially taller buildings. The required environmental review for any changes in land use controls would analyze potential impacts to ground-level wind speeds. Furthermore, wind impacts are project-specific and individual projects would be subject to the Planning Department's procedures requiring modification of any new building or addition that exceeds the wind hazard criterion. New residential development would be required to comply with the previously discussed regulations, including Sections 147, 148, 243(c)(9), 249.1(b)(2), and 263.11(c) of the San Francisco Planning Code. Therefore, the 2004 Housing Element would have a

less than significant impact with respect to the alteration of wind patterns that could exceed the City's hazard criterion.

2009 Housing Element Analysis

In general, the 2009 Housing Element includes policies that direct growth primarily through community planning processes, but also includes policies that direct housing to commercial areas and sites that are near transit. Overall, the 1990 Residence Element promotes increased density within the same allowable densities on a broader, citywide, scale to a greater extent than the 2009 Housing Element. However, there are two areas under which the 2009 Housing Element promotes greater density. These include the following themes: increased density for affordable housing projects; and increased density as a strategy to be pursued through the community planning process.

The following 2009 Housing Element policies could result in the exposure of people to wind impacts by encouraging new development to maximum allowable height and bulk limits, potentially increasing building height and mass and thereby altering ground-level wind speeds.

Impact	2009 Housing Element	Corresponding 1990 Residence Element Policy
Direct growth to certain areas of the City.	Policy 1.1: Focus housing growth- and the infrastructure necessary to support that growth- according to community plans. Complete planning underway in key opportunity areas such as Treasure Island, Candlestick Park and Hunters Point Shipyard.	Implementation Measure 1.1.2: Pursuit of housing development opportunities in neighborhood and area plans.
	Policy 1.3: Work proactively to identify and secure opportunity sites for permanently affordable housing.	Policy 1.1: Promote development of permanently affordable housing on surplus, underused and vacant public lands.
	Policy 1.6: Consider greater flexibility in the number and size of units within established building envelopes in community plan areas, especially if it can increase the number of affordable units in multi-family structures.	Policy 2.5: Allow flexibility in the number and size of units within permitted volumes of larger multi-unit structures, especially if the flexibility results in creation of a significant number of dwelling units that are permanently affordable to lower income households.
	Policy 1.7: Consider public health objectives when designating and promoting housing development sites.	Policy 12.1: Assure housing is provided with adequate public improvements, services and amenities.

Impact	2009 Housing Element	Corresponding 1990 Residence Element Policy
	Policy 1.8: Promote mixed use development, and include housing, particularly permanently affordable housing, in new commercial, institutional or other single use development projects.	Policy 1.3: Create incentives for the inclusion of housing, including permanently affordable housing in commercial developments.
	Policy 4.6: Encourage an equitable distribution of growth according to infrastructure and site capacity.	Policy 12.1: Assure housing is provided with adequate public improvements, services and amenities.
	Policy 10.3: Support state legislation and programs that promote environmentally favorable projects.	
	Policy 12.1: Encourage new housing that relies on transit use and environmentally sustainable patterns of movement.	
	Policy 12.2: Consider the proximity of quality of life elements, such as open space, child care and neighborhood serves, when development new housing units.	
	Policy 13.1: Support “smart” regional growth that locates new housing close to jobs and transit.	
	Policy 13.3: Promote sustainable land use patterns that integrate housing with transportation via transit, pedestrian, and bicycle modes.	
	Implementation Measure 3: Consistent with the SFMTA’s Climate Action Plan, MOH shall work with MTA to identify Muni sites that can serve as potential housing sites.	

Impact	2009 Housing Element	Corresponding 1990 Residence Element Policy
	<p>Implementation Measure 4: The Mayor’s Office of Housing (MOH) shall continue to actively pursue surplus or underused publicly-owned land for housing potential, working with agencies not subject to the Surplus Property Ordinance such as the San Francisco Public Utilities Commission, SFUSD and the Municipal Transportation Agency to identify site opportunities. City agencies shall continue to survey their properties for affordable housing opportunities or joint use potential.</p>	<p>Implementation Measure 1.1.1: Aggressive pursuit of development opportunities [in] underused public sites.</p> <p>Implementation Measure 1.1.4: In-fill housing on vacant or underused sites.</p>
	<p>Implementation Measure 6: To further smaller scale TOD opportunities, Planning and MTA shall evaluate smaller surplus MTA-owned sites (typically surface parking lots) and identify barriers towards their redevelopment, such as Planning Code issues, neighborhood parking needs and communities sentiment.</p>	
	<p>Implementation Measure 8: Planning, Redevelopment and Mayor’s Office of Economic and Workforce Development (MOEWD) should complete long range planning processes already underway: Japantown, Glen Park, the Northeast Embarcadero Study, the Bayview Hunters Point Plan, Candlestick/ Hunters Pont, India Basin shoreline community planning process, Treasure Island, and Hunters Point.</p>	
	<p>Implementation Measure 14: Planning staff shall prioritize support for projects which are located within a reasonable walking distance of stops along major transit lines, including BART, Muni rail lines and “Muni’s 24-hour Rapid Network.”</p>	

Impact	2009 Housing Element	Corresponding 1990 Residence Element Policy
	Implementation Measure 74: The City shall coordinate with regional entities to complete the necessary planning document for SB 375, including a “Sustainable Community Strategy” which promotes sustainable growth; and corresponding updates to the Housing, Recreation and Open Space, and Land Use Elements of the General Plan.	
	Implementation Measure 80: In development of new community plans, Planning shall include mixed-use design standards for both residential and commercial buildings.	
	Implementation Measure 85: Planning shall ensure community plans for growth are accompanied by capital plans and programs to support both the “hard” and “soft” elements of infrastructure needed by new housing.	Implementation Measure 7.7.1: Acquisition and improvement of open space; facilities and public environmental improvements in six neighborhood strategy areas; street improvements; parking facilities in neighborhoods; transit and street improvements.
	Implementation Measure 90: Planning and SFMTA should coordinate housing development with the ongoing Transit Effectiveness Project.	
	Implementation Measure 94: Regional planning entities such as ABAG shall continue to prioritize regional transportation decisions and funding to “smart” local land use policies that link housing, jobs and other land uses, including focusing on VMT reduction. The City shall encourage formalization of state policy that similarly prioritizes transportation and infrastructure dollars for “smart growth” areas such as San Francisco, rather than geographic allocation.	

Impact	2009 Housing Element	Corresponding 1990 Residence Element Policy
	<p>Implementation Measure 97: On a local level, the City shall prioritize planned growth areas such as Better Neighborhoods, other Area Plans or Redevelopment Areas for regional, state, and federal bond and grants, especially for discretionary funding application processes such as the State’s Prop 1C.</p>	
<p>Promote increased density-related development standards</p>	<p>Policy 1.4: Ensure changes to land use controls are proposed through neighborhood-supported community planning processes.</p>	<p>Policy 2.1: Set allowable densities in established residential areas at levels which will promote compatibility with prevailing neighborhood character.</p> <p>Policy 2.2: Encourage higher residential density in areas adjacent to downtown, in underutilized commercial and industrial areas proposed for conversion to housing and in neighborhood commercial districts where higher density will not have harmful effects, especially if the higher density provides a significant number of units that are permanently affordable to lower income households.</p>
	<p>Policy 1.5: Consider secondary units in community plans where there is neighborhood support and when other neighborhood goals can be achieved, especially if that housing is made permanently affordable to lower-income households.</p>	<p>Policy 1.5: Allow new secondary units in areas where their effects can be dealt with and there is neighborhood support, especially if that housing is made permanently affordable to lower income households.</p>
	<p>Policy 1.6: Consider greater flexibility in number and size of units within established building envelopes in community plan areas, especially if it can increase the number of affordable units in multi-family structures.</p>	<p>Implementation Measure 1.1.3: Inclusion of housing in Downtown (allowing housing to exceed permitted Floor-Area-Ratios [FARs] in C-3-G and C-3-S Districts).</p>
	<p>Policy 7.5: Encourage the production of affordable housing through process and zoning accommodations, and prioritize affordable housing in the review and approval processes.</p>	<p>Policy 7.3: Grant density bonuses for construction of affordable or senior housing.</p>

Impact	2009 Housing Element	Corresponding 1990 Residence Element Policy
	<p>Policy 11.4: Maintain allowable densities in established residential areas at levels which promote compatibility with prevailing neighborhood character.</p>	<p>Policy 2.1: Set allowable densities in established residential areas at levels which will promote compatibility with prevailing neighborhood scale and character.</p>
	<p>Implementation Measure 12: Planning shall require integration of new technologies that reduce the space required for non-housing functions, such as parking, and shall consider requiring parking lifts to be supplied in all new housing developments seeking approval for parking at a ratio of 1:1 or above.</p>	
	<p>Implementation Measure 13: When considering legalization of secondary units within community planning processes, Planning shall develop a Design Manual that illustrates how secondary units can be developed to be sensitive to the surrounding neighborhood, to ensure neighborhood character is maintained.</p>	
	<p>Implementation Measure 36: Planning shall continue to implement Planning Code Section 209, which allows a density bonus of twice the number of dwelling units otherwise permitted as a principal use in the district, when the housing is specifically designed for and occupied by senior citizens, physically or mentally disabled persons.</p>	<p>Policy 7.3: Grant density bonuses for construction of affordable or senior housing.</p>
	<p>Strategy for further review: MOH and Planning should continue to consider, within the context of a community planning process, zoning categories which require a higher proportion of affordable housing where increased density or other benefits are granted. Options include Affordable Housing Only Zones (SLI); Affordable Housing Priority Zones (UMU) or Special Use District Opportunities.</p>	

Impact	2009 Housing Element	Corresponding 1990 Residence Element Policy
	Implementation Measure 64: Planning staff shall support affordable housing projects in the development review process, including allowing sponsors of permanently affordable housing to take advantage of allowable densities provided their projects are consistent with neighborhood character.	
	Implementation Measure 79. Planning staff shall continue to use community planning processes to develop policies, zoning and standards that are tailored to neighborhood character.	Implementation Measure 2.2.1: Densities compatible with neighborhood character.

As shown above, the 2009 Housing Element promotes housing through community planning processes (Policies 1.1, 1.6, and Implementation Measures 8, 80 and 97), near transit and other infrastructure (Policies 1.8, 4.6, 10.3, 12.1, 13.1 and Implementation Measures 6, 14, 74, 90, and 94), and in proximity to neighborhood services (Policies 1.7, 12.2, 13.1 and Implementation Measure 85). The 2009 Housing Element also promotes housing on underused, vacant and surplus lands (Policy 1.3 and Implementation Measures 3 and 4), and housing within mixed-use areas (Policy 1.8 and Implementation Measure 80), thereby directing housing to commercial areas. As discussed previously, directing new housing to certain areas of the City could increase the amount of new housing occurring in those areas, thereby resulting in new development built to maximum allowable height and bulk, potentially increasing building height and mass, and altering ground-level wind speeds.

The 2009 Housing Element generally promotes increased density through community planning processes (Policies 1.4, 1.5, 1.6, and Implementation Measures 13 and 79) and for affordable housing (Policy 7.5 and Implementation Measures 36 and 64). The 2009 Housing Element also includes a strategy designed to reduce the amount of space required for non-housing functions (Implementation Measure 12). Overall, the 2009 Housing Element does not promote increased density more so than the 1990 Residence Element. While the 2009 Housing Element contains a policy that advocates for family-sized housing units (Policy 4.1 and Implementation Measure 32), overall density increases from such policy would be speculative as less units would be accommodated within a given building envelope. However, as discussed in the analysis of the 2004 Housing Element, increased density standards could result in more units within a given building envelope, which could be partially achieved by the construction of multi-family housing built to maximum allowable height and bulk, potentially increasing building height and mass, altering ground-level wind speeds.

Similar to the 2004 Housing Element, major themes of the 2009 Housing Element include the preservation and maintenance of existing housing. The following 2009 Housing Element policies discourage demolition and encourage the maintenance of the City's existing housing stock, thereby

reducing the amount of new housing required to meet the City’s housing needs and subsequent wind-related impacts resulting from development at maximum allowable height and bulk limits, potentially increasing building height and mass.

Impact	2009 Housing Element	Corresponding 1990 Residence Element Policy
Discourage demolition and improve existing housing supply.	Policy 2.3: Prevent the destruction or reduction of housing for parking.	
	Policy 2.4: Promote improvements and continued maintenance of existing units to ensure long term habitation and safety.	Objective 5: To maintain and improve the physical condition of housing while maintaining existing affordability levels. Policy 5.1: Assure that existing housing is maintained in decent, safe sanitary conditions at existing affordability levels. Policy 5.2: Promote and support voluntary housing rehabilitation which does not result in the displacement of lower income occupants.
	Policy 3.1: Preserve rental units, especially rent controlled units, to meet the City’s affordable housing needs	Policy 3.1: Discourage the demolition of sound existing housing.
	Policy 3.2: Promote voluntary housing acquisition and rehabilitation to protect affordability for exiting occupants.	Policy 5.2: Promote and support voluntary housing rehabilitation which does not result in the displacement of lower income occupants.
	Policy 3.4: Preserve “naturally affordable” housing types, such as smaller and older ownership units.	
	Policy 3.5: Retain permanently affordable residential hotels and single room occupancy (SRO) units.	Policy 3.7: Preserve the existing stock of residential hotels.
	Policy 9.3: Maintain and improve the condition of the existing supply of public housing, through programs such as HOPE SF.	Policy 5.4: Maintain and improve the existing supply of public housing. Policy 7.5: Encourage energy efficiency in new residential development and weatherization in existing housing to reduce overall housing costs.

As shown above, the 2009 Housing Element proposes policies that discourage demolition and promote the maintenance of existing public housing (including Policies 2.4, 3.1, 3.2, 3.4, 3.5 and 9.3) to a degree similar to the 1990 Residence Element. The maintenance and preservation of existing housing would help

to preserve the existing housing stock, requiring less new development to meet housing goals, thereby resulting in less development at maximum allowable height and bulk limits. 2009 Housing Element Policy 2.4, 3.1, 3.2, 3.4, 3.5 and 9.3 are essentially the same as their corresponding 1990 Residence Element policies. 2009 Housing Element Policy 13.4 expands upon 1990 Residence Element Policy 7.5 by promoting the preservation of existing buildings. Essentially, both the 1990 Residence Element and 2009 Housing Element recognize the need for the retention and maintenance of existing housing, and therefore do not represent a shift in policy.

Although the 2009 Housing Element would not result in the construction of residential units, it would shape how new residential development should occur and ensures that there is adequate land available to meet future housing needs. Some of the changes to the land use controls that could be explored through community planning processes include increasing height limits. Therefore, the 2009 Housing Element could encourage changes to allowable heights more so than the 1990 Residence Element. As with the 2004 Housing Element, the 2009 Housing Element would not in and of itself result in the construction of substantially taller buildings. Furthermore, wind impacts are project-specific and individual projects would be subject to the Planning Department's procedures requiring modification of any new building or addition that exceeds the wind hazard criterion. New residential development would be required to comply with the previously discussed regulations, including Sections 147, 148, 243(c)(9), 249.1(b)(2), and 263.11(c) of the San Francisco Planning Code. Therefore, the 2009 Housing Element would have a *less than significant* impact with respect to the alteration of wind patterns.

Impact WS-2: The proposed Housing Elements would not create new shadow in a manner that substantially affects outdoor recreation facilities or other public areas. (Less than Significant)

New construction could result in impacts related to shadow if new housing would increase shadows on nearby open spaces and parks. Figure V.K-1 in Section V.K (Recreation) identifies open spaces, including community gardens, in the City. As shown, a majority of the City's open spaces are located in the western half of the City, with the exception of (but not limited to) McLaren Park in the South Central neighborhood, Bayview Park in the Candlestick neighborhood, and community gardens located throughout the eastern portion of the City. The proposed Housing Elements could encourage housing on vacant or underutilized sites, which currently do not contribute to existing shadow impacts on adjacent or nearby open space. The City's potential for new residential development is greatest in the following neighborhoods: Western Addition, Market Octavia, Bayview Hunters Point, Mission, Downtown, and South Central, each of which have capacity for over 3,000 housing units.

2004 Housing Element Analysis

As discussed under Impact WS-1, the 2004 Housing Element policies promote increased density more so than the 1990 Residence Element. (See 2004 Housing Element Policies 1.1, 1.6, 1.7, 1.8, 4.4, 4.5, 11.6, 11.7, 11.8, 11.9 and Implementation Measures 1.1.1, 1.3.1, 1.6.2, 1.8.1, 1.8.3, 4.4.1, 11.6.1 and 11.7.1.) Directing growth to certain areas of the City and increased density could increase the amount of new housing occurring in those areas, thereby resulting in new development built to maximum allowable height and bulk, potentially increasing building height and mass. New construction could result in

shadow impacts if a new building is proposed in proximity to an open space and if the building would cast a shadow on the open space that would substantially affect the use of that open space.

The extent of shadow impacts would depend on the height of a building; taller buildings have a greater effect on open spaces by casting longer shadows. Therefore, because shadow impact varies with building height, it is not possible to determine a boundary beyond which a park would not be impacted by building shadows. Promoting development to full build out could result in taller buildings, but those buildings would be allowed under the existing height limits and so could occur regardless of the 2004 Housing Element Policies. The potential for new development to affect public open spaces is appropriately addressed at the project-level, where the development proposal, site characteristics, and proximity to public open spaces are taken into account when determining the effects of shadow on public open spaces. Because the 2004 Housing Element does not propose increased height limits in any areas, the effect of shadows would be less than significant. Although promoting full build out to maximum allowable height limits could incrementally increase actual building heights, new construction would be allowed to build to those heights regardless of the 2004 Housing Element.

A key strategy for meeting the City's housing goals is to maintain the City's existing housing stock. The 2004 Housing Element proposes policies that discourage demolition and promote the maintenance of existing public housing (including Policies 2.1, 3.3, and 3.6) to a degree similar to the 1990 Residence Element. The preservation of existing housing reduces the need for new development to maximum allowable height and bulk limits. All applications for new construction or additions to existing buildings above 40 feet in height are reviewed by the Planning Department to determine whether such shading might occur. If a project would result in new shadow, that shadow is evaluated for significance under CEQA. New residential development would be required comply with the previously discussed regulations, including Sections 146(a), 146(c), and 295 of the San Francisco Planning Code. Therefore, the 2004 Housing Element would have a *less than significant* impact with respect to the creation of new shadows.

2009 Housing Element Analysis

In general, the 2009 Housing Element includes policies that direct growth primarily through community planning processes, but also includes policies that direct housing to commercial areas and sites that are near transit. Overall, the 1990 Residence Element promotes increased density on a broader, citywide, scale to a greater extent than the 2009 Housing Element. However, there are two areas under which the 2009 Housing Element promotes greater density. These include the following themes: increased density for affordable housing projects; and increased density as a strategy to be pursued through the community planning process.

As discussed under Impact WS-1, 2009 Housing Element Policies 2.1, 7.5, and 1.4 could promote development to the maximum building envelope, potentially resulting in greater building heights by directing growth to certain areas of the City and promoting increased density standards. New construction could result in shadow impacts if a new building is proposed in proximity to an open space and if the building would cast a shadow on the open space that would substantially affect the use of that open space.

The extent of shadow impact would depend on the height of a building; taller buildings could have a greater effect on open spaces by casting longer shadows.

The 2009 Housing Element also contains policies 2.3, 2.4, 3.1, 3.2, 3.4, 3.5 and 9.3, which could reduce the 2004 Housing Element's effects on the potential for new development at maximum allowable height and bulk limits by promoting the maintenance of existing housing and discouraging demolition of the existing housing stock, thereby avoiding the potential shadow impacts that could be generated. Essentially, both the 1990 Residence Element and 2009 Housing Element recognize the need for the retention and maintenance of existing housing, and therefore do not represent a shift in policy. Although the 2009 Housing Element would not result in the construction of residential units, it would shape how new residential development should occur and ensures that there is adequate land available to meet future housing needs. Therefore, because shadow impact varies with building height, it is not possible to determine a boundary beyond which a park would not be impacted by building shadows. Promoting development to full build out could result in taller buildings, but those buildings would be allowed under the existing height limits and so could occur regardless of the 2009 Housing Element Policies. The potential for new development to affect public open spaces is appropriately addressed at the project level, where the development proposal, site characteristics, and proximity to public open spaces can be taken into account. These factors can determine whether the shadow substantially affects the use of an open space.

Because the 2009 Housing Element does not propose increased height limits in any areas, the effect of shadows would be less than significant. Although promoting full buildout could incrementally increase actual building heights, new construction would be allowed to build to those heights regardless of the 2009 Housing Element. All applications for new construction or additions to existing buildings above 40 feet in height are reviewed by the Planning Department to determine whether such shading might occur. If a project would result in a new shadow, that shadow is evaluated for significance under CEQA. Furthermore, new residential development would be required to comply with the previously discussed regulations, including Sections 146(a), 146(c), and 295 of the San Francisco Planning Code. Therefore, the 2009 Housing Element would have a *less than significant* impact with respect to the creation of new shadows.

Cumulative Impacts

The geographic context for cumulative wind and shadow impacts is limited to the area immediately surrounding a specific project. Cumulative impacts occur when impacts that are significant or less than significant from a proposed project combine with similar impacts from other past, present, or reasonably foreseeable projects in a similar geographic area. This would include the demolition of existing structures or new construction in the project area or immediately adjacent to its project boundaries resulting from past, present and reasonably foreseeable future projects combining with similar impacts from the 2004 Housing Element and 2009 Housing Element. The cumulative effect of development within the City could contribute to impacts related to wind and shadow. As discussed throughout this Draft EIR, growth would occur regardless of implementation of the proposed Housing Elements. Furthermore, any new development within the City would be subject, on a project-by-project basis, to independent CEQA

review as well as policies in the San Francisco General Plan, governing area plans, design guidelines, the planning codes, and other applicable land use plans that are intended to reduce impacts related to wind and shadow. The 2004 Housing Element and 2009 Housing Element policies would not directly or indirectly affect wind and shadow in the cumulative context. New development could affect such resources, but would be evaluated on a project-by-project basis. The 2004 Housing Element and 2009 Housing Element are public policy documents and would not result in direct significant impacts.

Changes to the existing wind and shadow environment in the area could occur through a shift from lower building heights to higher building heights either from height limit changes or from more intensive development of sites under existing height limits. However, it is assumed that future development would be consistent with the adopted General Plan as well as Planning Code requirements. New development is anticipated to undergo CEQA review and apply appropriate mitigation requirements, and undergo design review within the Planning Department. For this reason, cumulative impacts on wind and shadow would be *less than significant*. The contribution of the Housing Elements to cumulative wind and shadow impacts is *less than significant* and is thus not cumulatively considerable.

MITIGATION AND IMPROVEMENT MEASURES

Mitigation Measures

No mitigation measures are warranted by the proposed Housing Elements.

Improvement Measures

No improvement measures are warranted by the proposed Housing Elements.

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V. ENVIRONMENTAL SETTING AND IMPACTS

K. RECREATION

INTRODUCTION

This section addresses the potential impacts of the 2004 Housing Element and 2009 Housing Element policies related to parks and recreational facilities as well as other existing recreational resources.

ENVIRONMENTAL SETTING

For purposes of this analysis, parks are generally defined as areas of land set aside for various recreational opportunities for the public. Recreational facilities are those structures and/or improvements that are built at parks (e.g., benches, picnic tables, tennis courts, etc.). Open space areas are typically unimproved parkland. Therefore, parks and recreational facilities are typically used interchangeably, whereas open space areas refer to those areas where the land is either kept in its natural state or enhanced in order to return the land to its natural state. However, when calculating the City's overall park acreage, open space areas are considered part of the overall total. Open space, while not a part of this analysis, can also be used when referring to the requirements specified in the City's Planning Code with regard to outdoor areas required in residential development.

Regional

Regional recreational facilities are provided by the East Bay Regional Park District in Alameda and Contra Costa counties; the National Park System in Marin, San Francisco, and San Mateo counties; and several State Park recreation facilities located throughout the Bay Area. In addition, thousands of acres of watershed and agricultural lands are preserved as open spaces by water and utility districts or in private ownership. The Bay Trail is a planned recreational corridor that, when complete, will encircle San Francisco and San Pablo Bays with a continuous 400-mile network of bicycling and hiking trails. It will connect the shoreline of all nine Bay Area counties, link 47 cities, and cross the major toll bridges in the region. To date, approximately 210 miles of the alignment, slightly more than half the Bay Trail's ultimate length, have been completed.¹

City of San Francisco

Property in San Francisco that is permanently dedicated to publicly-accessible park and recreational uses totals approximately 5,886 acres.² The provisional population estimate for San Francisco as of July 1,

¹ Association of Bay Area Governments, About the Bay Trail, Overview, website: <http://www.abag.ca.gov/abag/test/baytrail/overview.html>, accessed December 15, 2009.

² Sue Exline, Planner, San Francisco Planning Department, personal communication, December 15, 2009.

2009, was 851,485,³ yielding a ratio of approximately 7.0 acres of open space per 1,000 San Francisco residents. The City has not established a citywide target ratio of parkland to residents, nor has it adopted a Quimby Act ordinance requiring land dedications or in-lieu fees, because San Francisco's population density, small land mass, and other development constraints make such policies infeasible.

A majority of local-serving parks and recreation facilities within San Francisco are owned and operated by the San Francisco Recreation and Park Department (SFRPD). The SFRPD maintains over 200 parks, playgrounds, and open spaces throughout the City, which function mainly for neighborhood use. The park system also includes 15 large, full-complex recreation centers, nine swimming pools, five golf courses, as well as hundreds of tennis courts, baseball diamonds, athletic fields and basketball courts. The SFRPD also manages the Marina Yacht Harbor, Candlestick Park, the San Francisco Zoo, and the Lake Merced Community Complex.⁴ The SFRPD currently owns and manages a total of approximately 3,317 acres of parkland and open space.⁵ Table V.K-1 shows the recreation facilities managed by SFRPD available in the City. In addition, the State owns approximately 171 acres at Candlestick Point State Recreation Area and the federal government owns approximately 619 acres primarily at the Presidio, which are managed by the National Park Service (NPS) as part of the Golden Gate National Recreation Area (GGNRA).⁶ Figure V.K-1 illustrates Open Spaces within the City. This figure includes the City's community gardens, land owned by SFRPD and other open space areas (such as the Presidio, which is comprised of National Park land).

Table V.K-1
Recreation Facilities in San Francisco

Facilities	Quantity
Parks and Playgrounds	230
Recreation Centers	22
Neighborhood Parks	94
Golf Courses	6
<i>Source: San Francisco Neighborhood Parks Council, "Green Envy: Achieving Equity in Open Space", November 2007, Table 5: page 1.</i>	

³ State of California, Department of Finance, California County Population Estimates and Components of Change by Year, July 1, 2000-2009. Sacramento, California, December 2009, website: <http://www.dof.ca.gov/research/demographic/reports/estimates/e-2/2000-09/>. accessed April 16, 2010.

⁴ San Francisco Recreation and Park Department, Welcome, website: http://www.sfgov.org/site/recpark_index.asp?id=24168, accessed February 18, 2009.





⁵ San Francisco Neighborhood Parks Council, "Green Envy: Achieving Equity in Open Space", November 2007, Table 5: page 1.

⁶ San Francisco General Plan, Recreation and Open Space Element.



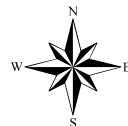
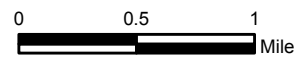
CITY AND COUNTY OF SAN FRANCISCO
PLANNING DEPARTMENT

Figure V.K-1 San Francisco Open Spaces

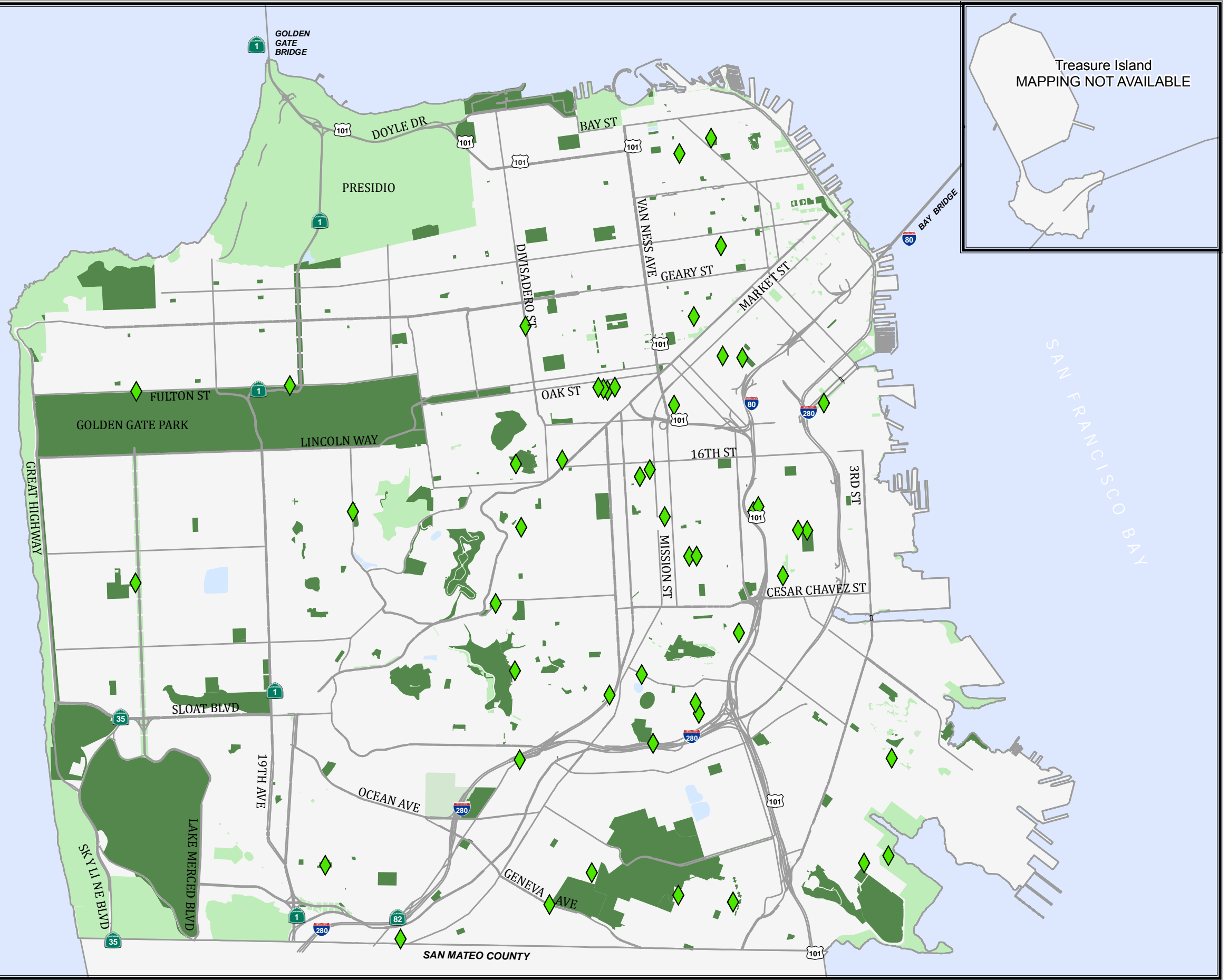
-  Community Gardens
-  Owned by the CCSF Recreation & Parks Department
-  Other
-  Water

Notes:

1. "Other" refers to open spaces that are under the jurisdiction of state or federal agencies, open spaces that are maintained by other City Departments (Port, Dept. of Public Works, etc.), and privately-owned publicly-accessible open spaces.



Source: CCSF Recreation and Parks Department, November 2009.



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Within San Francisco, publicly accessible open spaces and recreational facilities are categorized according to their size and particular amenities as serving the City, district, neighborhood, or sub-neighborhood. Several larger open space areas, including Golden Gate Park (1,017 acres), the Lake Merced complex (700 acres; 368-acre lake) and John McLaren Park (317 acres) compose about one-half of the total City-owned acreage of recreational use. These larger areas provide programs, activities or recreation opportunities that serve the City as a whole. These spaces, in addition to smaller areas with unique attributes such as water features or hilltop vista points, function as city-serving open spaces because they attract residents from the entire City.

Smaller recreational facilities are primarily used by residents in the immediate surrounding area and are categorized by size and intended service area. District-serving parks are generally larger than ten acres and have a service area consisting of a three-eighths-mile radius around the park, while neighborhood-serving parks are generally one to ten acres and have a service area of one-quarter of a mile. Sub-neighborhood-serving open spaces, often referred to as mini parks, are too small to accommodate athletic facilities. These parks tend to include seating areas, small landscaped spaces, tot-lots targeting pre-school age children, and playgrounds with amenities generally for elementary school age children. The service area for sub-neighborhood parks is one-eighth of a mile.

REGULATORY SETTING

Federal

Americans with Disabilities Act

The Americans with Disabilities Act (ADA) of 1990 (42 United States Code Section 12181) prohibits discrimination on the basis of disability in public accommodation and state and local government services. Under the ADA, the Architectural and Transportation Barriers Compliance Board issues guidelines to ensure that facilities, public sidewalks, and street crossings are accessible to individuals with disabilities. Typical ADA improvements include creating handicap parking spaces, restroom modifications, door hardware requirements, and lighting upgrades. Play areas, meeting rooms, park restrooms, and other buildings and park structures are required to meet ADA compliance requirements.

National Park and Recreation Association

As discussed in the City's Recreation and Open Space Element, although the National Park and Recreation Association (NPRA) formerly called for 10 acres of open space per 1,000 city residents, the association no longer recommends a single absolute "average" of park acreage per population, in recognition of the fact that it is more relevant that each area plan and program facilities based upon community need. More important than raw acreage is accessibility (location, walking distance) and whether the facility provides needed services to the population in question. Furthermore, the San Francisco Recreation and Open Space Element (ROSE) states that the most critical provision of open space is its distribution. All types of open space activity – from sports fields to playgrounds – should be accessible to and within walking distance of every resident of the City. One-half mile is commonly accepted as a distance that can be comfortably walked in 10 minutes, and as a distance most people are

willing to walk to access community uses. For most open space activities, including active ones such as hiking, biking and sports activities; or for passive ones, like picnicking, this walking distance is acceptable. However, for activities that involve small children, such as a playground, or require moving through denser areas, a ¼ mile, or five minute, walk is more appropriate.⁷

State

Quimby Act

The Quimby Act (California Government Code Section 66477) was established by the California Legislature in 1965 to preserve open space and parkland in the rapidly urbanizing areas of the state. This legislation was in response to California's increased rate of urbanization and the need to preserve open space and provide parks and recreation facilities for California's growing communities. The Quimby Act authorizes local governments to establish ordinances requiring developers of new subdivisions to dedicate land for parks, pay an in-lieu fee, or perform a combination of the two.

The Quimby Act provides two standards for the dedication of land for use as parkland. If the existing area of parkland in a community is three acres per 1,000 persons, then the community may require dedication based on a standard of five acres per 1,000 persons residing in the subdivision. If the existing amount of parkland in a community is less than three acres per 1,000 persons, then the community may require dedication based on a standard of only three acres per 1,000 persons residing in the subdivision. The Quimby Act requires a city or county to adopt standards for recreational facilities in its general plan recreation element if it is to adopt a parkland dedication/fee ordinance. As stated previously, the City has not established a citywide target ratio of parkland to residents, nor has it adopted a Quimby Act ordinance. However, as noted below, the City has adopted requirements for the payment of impact fees to provide parks and recreation facilities in designated areas throughout the City.

Local

San Francisco General Plan

The San Francisco General Plan provides general policies and objectives to guide land use decisions and development throughout the City. General Plan objectives and policies relevant to recreation and public space are discussed in Section V.A (Plans and Policies) of this Draft EIR. As discussed therein, the Recreation & Open Space Element is currently undergoing an update process. A draft of the Recreation & Open Space Element was prepared and released for public review in May 2009. General Plan objectives and policies discussed in this Section are as follows:

Objective 4: Provide opportunities for recreation and the enjoyment of open space in every San Francisco neighborhood.

⁷ Draft Recreation and Open Space Element, San Francisco General Plan, May 2009.

Policy 4.5: Require private usable outdoor open space in new residential development.

Policy 4.6: Assure the provision of adequate public open space to serve new residential development.

San Francisco Park Code

The San Francisco Park Code regulates public use of the city parks including vehicle use within the parks, permit requirements, and regulations concerning the use of United Nations Plaza, Hallidie Plaza, and Yerba Buena Gardens, all located in the City.

Proposition C and the Recreation and Park Acquisition Policy

In 2000, San Francisco voters approved Proposition C, extending the Open Space Fund that is used to finance acquisitions and capital improvements for the SFRPD. The legislation created an annual set-aside of two and one-half cents for each one hundred dollars assessed valuation from the property tax levy. The Open Space Fund is funded through Fiscal Year 2030-2031. The legislation stipulates that at least five percent of the revenue raised through the set-aside be allocated to new land acquisition. In 2006, the SFRPD, at the request of the Recreation and Park Commission, published the Recreation and Park Acquisition Policy to provide clear guidelines for the expenditure of acquisition funds under the Recreation and Park Commission's jurisdiction.

The first objective stated in this policy is to align SFRPD acquisition priorities with Map 9 of the General Plan Recreation and Open Space Element, which identifies high need areas based on population, density, age, and income. However, the SFRPD ultimately used a separate map modeled after Map 9 using updated demographic statistics (high residential, senior, and children densities per net acre, as well as and low household incomes relative to the city median household income) from Census 2000 data to determine high and highest priority need areas. In addition, using neighborhood service areas, the SFRPD conducted a gap analysis for the policy report. Ultimately, the SFRPD produced Neighborhood Recreation and Open Space Improvement Priority Plan Maps showing the areas of highest need according to demographic statistics and areas that are also underserved in terms of existing recreational resources.

While not under the purview of SFRPD, it should be noted that the city also contains several privately-owned public open spaces (POPOS). POPOS include publicly accessible spaces owned that are typically maintained by the owner of an office building and can consist of plazas, roof gardens, greenhouses, or atriums.

San Francisco Planning Code

The Planning Code requires usable open space in conjunction with development projects. As a part of the permitting process, project sponsors are required to incorporate certain amounts of open space, dependant on a proposed project's use and size as well as the zoning district in which the site is located, to serve future project residents and/or employees. Planning Code Section 135 indicates the square footage of open space required for new residential units, ranging from 36 to 300 square feet per unit. The requirement is generally higher in single-use residential districts than in mixed-use residential districts.

Commonly accessible open space (designed for use jointly by two or more units) is permitted at a ratio typically 1.33 square feet of the required amount of private open space. Open space is not generally required for non-residential uses outside the South of Market districts (and the C-3, Downtown districts). Tables V.K-2 and V.K-3 provide the minimum usable open space for dwelling units and group housing inside and outside the Eastern Neighborhoods Mixed Use District, respectively. The Eastern Neighborhoods is made up of the Mission, Showplace/Potrero, East SoMa, and Central Waterfront.

The Planning Code also requires payment of impact fees in designated areas throughout the City and a percent of those impact fees are intended to mitigate impact of new development on open space.

**Table V.K-2
Minimum Usable Open Space for Dwelling Units and Group Housing Outside the Eastern
Neighborhoods Mixed Use District**

District	Square Feet Of Usable Open Space Required For Each Dwelling Unit If All Private	Ratio of Common Usable Open Space That May Be Substituted for Private
RH-1(D), RH-1	300	1.33
RH-1(S)	300 for first unit; 100 for minor second unit	1.33
RH-2	125	1.33
RH-3	100	1.33
RM-1, RC-1, RTO, RTO-M	100	1.33
RM-2, RC-2, SPD	80	1.33
RM-3, RC-3, RED	60	1.33
RM-4, RC-4, RSD	36	1.33
C-3, C-M, SLR, SLI, SSO, M-1, M-2	36	1.33
C-1, C-2	Same as for the R District establishing the dwelling unit density ratio for the C-1 or C- 2 District property	1.33
NC-1, NC-2, NCT-1, NCT-2, NC-S, Inner Sunset, Sacramento Street, West Portal Avenue, Ocean Avenue	100	1.33
NC-3, Castro Street, Inner Clement Street, Outer Clement Street, Upper Fillmore Street, Haight Street, Union Street, Valencia Street, 24th Street- Mission, 24th Street-Noe Valley, NCT-3, SoMa, Mission Street	80	1.33
Broadway, Hayes-Gough, Upper Market Street, North Beach, Polk Street	60	1.33
Chinatown Community Business, Chinatown Residential Neighborhood Commercial, Chinatown Visitor Retail	48	1.00
DTR	This table not applicable. 75 square feet per dwelling. See Sec. 135(d)(4).	

Source: Table 135A in the San Francisco Planning Code.

**Table V.K-3
Minimum Usable Open Space for Dwelling Units and Group Housing Inside the Eastern
Neighborhoods Mixed Use District**

Square feet of usable open space per dwelling unit, if not publicly accessible	Square feet of usable open space per dwelling unit, if publicly accessible	Percent of open space that may be provided off site
80 square feet	54 square feet	50%
<i>Source: Table 135B in the San Francisco Planning Code.</i>		

IMPACTS

Significance Thresholds

The proposed Housing Elements would normally have a significant effect on the environment if they would:

- Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facilities would occur or be accelerated;
- Include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment;
- Physically degrade existing recreational resources; or
- Result in substantial adverse physical impacts associated with the provision of, or the need for, new or physically altered park or recreational facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios or other performance objectives.

Impact Evaluation

As discussed previously, the 2004 Housing Element and 2009 Housing Elements would not change the land use objectives and policies in the City's area and redevelopment plans. According to Part I of the 2009 Housing Element (Data and Needs Analysis), the City has available capacity to meet the RHNA. Therefore, the rezoning of land uses is not required. To meet the City's share of the RHNA, the proposed Housing Elements aim to do the following: 1) preserve and upgrade existing housing units to ensure they do not become dilapidated, abandoned, or unsound, and 2) provide direction for how and where new housing development in the City should occur. With respect to the latter, the 2004 Housing Element encourages new housing in Downtown and in underutilized commercial and industrial areas. The 2004 Housing Element also encourages increased housing in neighborhood commercial districts and mixed-use districts near Downtown. On the other hand, the 2009 Housing Element encourages housing in new commercial or institutional projects and accommodating housing through existing community planning processes.

Impact RE-1: The proposed Housing Elements would not result in significant impacts related to the substantial deterioration of parks or recreational facilities, inclusion of recreational facilities or require the construction or expansion of recreational facilities, or adverse physical impacts with the provision of, or the need for, new or physically altered park or recreational facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios or other performance objectives. (Less than Significant)

New construction could result in impacts related to an adverse physical effect on the environment if new housing would require the construction or expansion of recreational facilities in underserved areas. The proposed Housing Elements do not propose any recreational facilities nor would they directly result in new construction. As discussed previously, the City currently has a ratio of 7.0 acres of open space per 1,000 San Francisco residents and the City has not established a citywide target ratio of parkland to residents, nor has it adopted a Quimby Act ordinance. The proposed Housing Elements would not result in new development; new residential development would be required to comply with the previously discussed regulations including Proposition C, which ultimately resulted in the Neighborhood Recreation and Open Space Improvement Priority Plan Maps showing the areas of highest need according to demographic statistics and areas underserved in terms of existing recreational resources. New housing development could include recreational facilities or require the construction or expansion of recreational facilities in order to comply with the City's Planning Code. Specific proposals for the development of park space or recreation facilities would be subject to subsequent project-level environmental review. The proposed Housing Elements include policies that would direct growth to certain areas of the City and policies that would allow for incremental increases in residential building densities within the same allowable densities. Policies that direct growth to certain areas of the City could consolidate new construction to these areas, which could increase residents in areas that may currently be underserved by neighborhood parks. Policies that relate to building densities could incrementally increase the number of residents using neighborhood parks.

Figure V.K-2 shows the housing unit capacity and pipeline units that are not within the service area of an existing or proposed open space area. According to this data, approximately 436 units in the City's pipeline and capacity for approximately 2,310 units occur outside areas served by an existing open space. The areas of the City with the greatest amount of pipeline and capacity units not served by existing open space include South Bayshore, Bayview Hunters Point, and Downtown. The Planning Department has been working on open space planning concepts for the Eastern Neighborhoods Planning Areas, and many open space acquisitions/expansion have been identified as part of that process.⁸ In addition, there are potential open space acquisitions associated with the Balboa Park Station Area Plan. Once funds have been identified for park improvements, the SFRPD has one planned park to be located at 4-8 Guy Place, a 3,500-square foot lot in the Rincon Hill Planning Area. Approximately 3,111 units in the City's pipeline

⁸ Daniel LaForte, San Francisco Recreation & Parks, response to service letter request, December 21, 2009.

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2004 Housing Element Analysis

The following 2004 Housing Element policies could result in impacts related to the construction or expansion of recreational facilities or the need for new or expanded park or recreational facilities by directing growth to certain areas of the City and promote increased building densities within the same allowable densities, potentially consolidating new construction activities to non-residential areas of the City and increasing the number of residents using recreational facilities.

Impact	2004 Housing Element	Corresponding 1990 Residence Element Policy
<p>Direct growth to certain areas of the City.</p>	<p>Policy 1.1: Encourage higher residential density in areas adjacent to downtown, in underutilized commercial and industrial areas proposed for conversion to housing and in neighborhood commercial districts where higher density will not have harmful effects, especially if the higher density provides a significant number of units that are affordable to lower income households. Set allowable densities in established residential areas at levels which will promote compatibility with prevailing neighborhood scale and character where there is neighborhood support.</p>	<p>Policy 2.1: Set allowable densities in established residential areas at levels which will promote compatibility with prevailing neighborhood character.</p> <p>Policy 2.2: Encourage higher residential density in areas adjacent to downtown, in underutilized commercial and industrial areas proposed for conversion to housing and in neighborhood commercial districts where higher density will not have harmful effects, especially if the higher density provides a significant number of units that are permanently affordable to lower income households.</p>
	<p>Implementation Measure 1.1.1: A Citywide action plan (CAP) should provide a comprehensive framework for the allocation of higher density, mixed-use residential development in transit-rich areas with stable urban amenities in place. In these areas, specific CAP strategies should include: higher densities and reduced parking requirements in downtown areas or through a Better Neighborhoods type planning process; pedestrian-oriented improvements to enhance the attractiveness and use of transit.</p>	
	<p>Policy 1.2: Encourage housing development, particularly affordable housing, in neighborhood commercial areas without displacing existing jobs, particularly blue-collar jobs or discouraging new employment opportunities.</p>	

Impact	2004 Housing Element	Corresponding 1990 Residence Element Policy
	Implementation Measure 1.2.1: The Planning Department will develop proposals in neighborhood commercial districts (NCDs) well served by transit to strengthen their functions as a traditional “town center” for the surrounding residential districts.	
	Policy 1.3: Identify opportunities for housing and mixed-use districts near downtown and former industrial portions of the City.	Policy 1.2: Facilitate the conversion of underused industrial and commercial areas to residential use, giving preference to permanently affordable housing uses.
	Implementation Measure 1.3.1: Downtown areas and areas subject to a Better Neighborhoods type planning process will be expected to absorb major office and residential developments over the next decade. Planning and zoning code changes should include floor-to-area ratio exemptions. These development bonuses would be conferred only in cases where in return the development will provide major public benefits to the community.	Implementation Measure 1.1.3: Inclusion of housing in Downtown.
	Implementation Measure 1.3.2: The Planning Department will introduce zoning changes in the traditionally industrial eastern parts of the City. The areas under study are: Mission, South of Market, Showplace Square/Potrero Hill, Bayview Hunter’s Point, and Visitacion Valley. Housing, especially affordable housing, will be encouraged in former industrial areas where residential neighborhoods are established and urban amenities are in place or feasible.	
	Policy 1.4: Locate in-fill housing on appropriate sites in established residential neighborhoods.	Policy 1.4: Locate in-fill housing on appropriate sites in established neighborhoods.
	Policy 1.6: Create incentives for the inclusion of housing, particularly permanently affordable housing, in new commercial development projects.	

Impact	2004 Housing Element	Corresponding 1990 Residence Element Policy
	<p>Implementation Measure 1.6.2: The Planning Department and the Redevelopment Agency will propose increasing height limits, eliminating density requirements and modifying off-street parking requirements in the Transbay/Rincon Hill Redevelopment survey areas. The Mid-Market redevelopment survey area will be rezoning to include mixed-use residential areas and reduced residential parking requirements.</p>	
	<p>Implementation Measure 1.6.4: The Planning Department will update the Land Use Element to define areas for mixed-use development focused along transit corridors that are determined to be served by sufficient and reliable transit.</p>	
	<p>Implementation Measure 1.8.1: The Board of Supervisors has introduced Planning Code amendments to allow secondary units in new buildings that are in close proximity to neighborhood commercial districts and public transit.</p>	
	<p>Implementation Measure 2.4.2: As part of the Planning Department’s current citywide action plan, planning efforts in the eastern neighborhoods of the City, where housing exists in commercial and industrially zoned districts, should address housing retention as new policies and zoning are established. Mixed use should be encouraged where appropriate.</p>	
	<p>Implementation Measure 4.1.4: The City will work to identify underutilized, vacant, and Brownfield sites that are publicly or privately owned and suitable for affordable housing development. TH City will work with for profit and non-profit housing developers to acquire these sites for permanently affordable housing.</p>	<p>Implementation Measure 1.1.1: Aggressive pursuit of development opportunities [on] underused public sites.</p> <p>Implementation Measure 1.1.4: In-fill housing on vacant or underused sites.</p>

Impact	2004 Housing Element	Corresponding 1990 Residence Element Policy
	<p>Implementation Measure 4.1.6: Permanently affordable housing sites will be especially sought out in places where transportation and existing amenities are in place.</p>	
	<p>Policy 11.6: Employ flexible land use controls in residential areas that can regulate inappropriately sized development in new neighborhoods, in downtown areas and in other areas through a Better Neighborhoods type planning process while maximizing the opportunity for housing near transit.</p>	<p>Policy 12.5: Relate land use controls to the appropriate scale for new and existing residential areas.</p>
	<p>Implementation Measure 11.6.1: The City will continue to promote increased residential densities in areas well served by transit and neighborhood compatible development with the support and input from local neighborhoods.</p>	
<p>Promote increased density-related development standards.</p>	<p>Policy 1.1: Encourage higher residential density in areas adjacent to downtown, in underutilized commercial and industrial areas proposed for conversion to housing and in neighborhood commercial districts where higher density will not have harmful effects, especially if the higher density provides a significant number of units that are affordable to lower income households. Set allowable densities in established residential areas at levels which will promote compatibility with prevailing neighborhood scale and character where there is neighborhood support.</p>	<p>Policy 2.1: Set allowable densities in established residential areas at levels which will promote compatibility with prevailing neighborhood character.</p> <p>Policy 2.2: Encourage higher residential density in areas adjacent to downtown, in underutilized commercial and industrial areas proposed for conversion to housing and in neighborhood commercial districts where higher density will not have harmful effects, especially if the higher density provides a significant number of units that are permanently affordable to lower income households.</p>

Impact	2004 Housing Element	Corresponding 1990 Residence Element Policy
	<p>Implementation Measure 1.1.1: A Citywide action plan (CAP) should provide a comprehensive framework for the allocation of higher density, mixed-use residential development in transit-rich areas with stable urban amenities in place. In these areas, specific CAP strategies should include: higher densities and reduced parking requirements in downtown areas or through a Better Neighborhoods type planning process; pedestrian-oriented improvements to enhance the attractiveness and use of transit.</p>	
	<p>Implementation Measure 1.3.1: Downtown areas and areas subject to a Better Neighborhoods type planning process will be expected to absorb major office and residential developments over the next decade. Planning and zoning code changes should include floor-to-area ratio exemptions. These development bonuses would be conferred only in cases where in return the development will provide major public benefits to the community.</p>	<p>Implementation Measure 1.1.3: Inclusion of housing in Downtown (allowing housing to exceed permitted Floor-Area-Ratios [FARs] in C-3-G and C-3-S Districts).</p>
	<p>Policy 1.6: Create incentives for the inclusion of housing, particularly permanently affordable housing, in new commercial development projects.</p>	<p>Policy 1.3: Create incentives for the inclusion of housing, particularly permanently affordable housing, in new commercial development projects.</p>
	<p>Implementation Measure 1.6.2: The Planning Department and the Redevelopment Agency will propose increasing height limits, eliminating density requirements and modifying off-street parking requirements in the Transbay/Rincon Hill Redevelopment survey areas. The Mid-Market redevelopment survey area will be rezoning to include mixed-use residential areas and reduced residential parking requirements.</p>	

Impact	2004 Housing Element	Corresponding 1990 Residence Element Policy
	Policy 1.7: Encourage and support the construction of quality, new family housing.	
	Implementation Measure 1.7.1: In response to the increasing number of families in San Francisco, the Planning Department will develop zoning amendments to require a minimum percentage of larger family units ranging from two to four bedrooms, in new major residential projects. The Planning Department will also propose eliminating density requirements within permitted building envelopes in downtown areas and areas subject to a Better Neighborhoods type planning process to maximize family units constructed.	
	Policy 1.8: Allow new secondary units in areas where their effects can be dealt with and there is neighborhood support, especially if that housing is made permanently affordable to lower income households.	Policy 1.5: Allow new secondary units in areas where their effects can be dealt with and there is neighborhood support, especially if that housing is made permanently affordable to lower income households.
	Implementation Measure 1.8.1: The Board of Supervisors has introduced Planning Code amendments to allow secondary units in new buildings that are in close proximity to neighborhood commercial districts and public transit.	
	Implementation Measure 1.8.3: On-going planning will propose Planning Code amendments to encourage secondary units where appropriate.	
	Policy 4.4: Consider granting density bonuses and parking requirement exemptions for the construction of affordable housing or senior housing.	Policy 7.3: Grant density bonuses for construction of affordable or senior housing.

Impact	2004 Housing Element	Corresponding 1990 Residence Element Policy
	<p>Implementation Measure 4.4.1: The Planning Department will look at establishing uniform density bonus standards and equal requirements for affordable and senior housing development. Until then, affordable and senior housing will continue to be granted density bonuses and reduced parking requirements on a case-by-case basis.</p>	
	<p>Policy 4.5: Allow greater flexibility in the number and size of units within established building envelopes, potentially increasing the number of affordable units in multi-family structures.</p>	<p>Policy 2.3: Allow flexibility in the number and size of units within permitted volumes of larger multi unit structures, especially if the flexibility results in creation of a significant number of dwelling units that are permanently affordable to lower income households.</p>
	<p>Policy 11.6: Employ flexible land use controls in residential areas that can regulate inappropriately sized development in new neighborhoods, in downtown areas, and in other areas through a Better Neighborhoods type planning process while maximizing the opportunity for housing near transit.</p>	<p>Policy 12.5 Relate land use controls to the appropriate scale for new and existing residential areas.</p>
	<p>Implementation Measure 11.6.1: The City will continue to promote increased residential densities in areas well served by transit and neighborhood compatible development with the support and input from local neighborhoods.</p>	
	<p>Policy 11.7: Where there is neighborhood support, reduce or remove minimum parking requirements for housing, increasing the amount of lot area available for housing units.</p>	
	<p>Implementation Measure 11.7.1: The Planning Department will work to reduce parking in older neighborhoods through a Better Neighborhoods type planning process with the support and input from local neighborhoods.</p>	

Impact	2004 Housing Element	Corresponding 1990 Residence Element Policy
	Policy 11.8: Strongly encourage project sponsors to take full advantage of allowable building densities in their housing developments while remaining consistent with neighborhood character.	
	Policy 11.9: Set allowable densities and parking standards in residential areas at levels that promote the City's overall housing objectives while respecting neighborhood scale and character.	Policy 2.1: Set allowable densities in established residential areas at levels which will promote compatibility with prevailing neighborhood character.
Study reduced parking and private open space provisions.	IM 11.8.1: The Planning Department, with the support and input from local neighborhoods, study the impacts of reduced parking and private open space provisions and will consider revising the Planning Code accordingly.	

As shown above, the 2004 Housing Element promotes housing in commercial (Policies 1.1, 1.6) and industrial (Policies 1.1, 1.3) areas, neighborhood commercial districts (Policy 1.2 and Implementation Measure 1.2.1), housing near the Downtown (Policies 1.1, 1.3 and Implementation Measure 1.3.1) and along transit corridors (Policies 1.6, 11.6 and Implementation Measures 1.1.1, 1.6.4, 1.8.1, 4.1.6, and 11.6.1). The 2004 Housing Element also encourages new housing through on-going and future community planning processes (Policies 1.1, 11.6 and Implementation Measures 1.3.1, 1.3.2, 1.6.2, and 2.4.2) and on underutilized, vacant, surplus lands and on Brownfield sites (Implementation Measure 4.1.4). Policies that direct growth to certain areas of the City could increase the amount of new housing occurring in those areas, which could increase the number of residents using recreational facilities in these areas. Policies that encourage development in the City's former industrial or commercial areas could increase residents in these areas which may currently be underserved by neighborhood parks. This could ultimately cause the need for construction or expansion of parks to accommodate increased demand.

The 2004 Housing Element promotes increased density in certain areas of the City (Policy 1.1 and Implementation Measure 1.1.1, 1.8.1 and 11.6.1) and promotes density bonuses (Policy 4.4 and Implementation Measures 1.3.1 and 4.4.1) and the elimination of density requirements (Policy 1.6 and Implementation Measures 1.6.2 and 1.7.1). The 2004 Housing Element also encourages increased density by promoting reduced parking requirements (Policies 4.4, 11.7, 11.9 and Implementation Measures 1.1.1, 1.6.2, 4.4.1, 11.7.1), support for secondary units (Policy 1.8 and Implementation Measures 1.8.1 and 1.8.3) and flexible building envelopes (Policies 4.5 and 11.6). Increased density standards could result in more units within a given building envelope, thereby incrementally increasing the number of residents within a given building using recreational facilities. Although increased density standards may only incrementally increase the number of residents in each building, when combined with policies that also

direct growth to certain areas of the City (as discussed above), the 2004 Housing Element policies could not only consolidate new construction to certain areas of the City, but also incrementally increase the average number of residents using recreational facilities. Therefore, the 2004 Housing Element policies could increase the average number of residents using recreational facilities in certain areas of the City.

2004 Housing Element Implementation Measure 11.8.1, which calls for studying reduced private open space and potential revisions to the Planning Code, could result in revisions to the Planning Code, allowing for reduced open space requirements in already underserved areas of the City. New residents in areas currently underserved by inadequate recreation facilities and reduced open space could put additional demands on existing parks, thereby facilitating the need for construction or expansion of recreational facilities. However, as illustrated in Figure V.K-2, because limited portions of the City are not served by open space areas these changes would only potentially affect a very small area of the City. Furthermore, any potential reduction in open space would be incremental and, combined with the limited geographical scope of the affected area, would not result in a significant environmental impact. As discussed previously, many open space acquisitions/expansions have been identified by the Planning Department and SFRPD, independent of the proposed 2004 Housing Element. Furthermore, SFRPD would continue to acquire new open space/recreation facilities pursuant to Proposition C. Therefore, the 2004 Housing Element would have a *less than significant* impact with respect to the construction or expansion of recreational facilities or the need for new or expanded park or recreational facilities.

2009 Housing Element Analysis

In general, the 2009 Housing Element includes policies that direct growth primarily through community planning processes, but also includes policies that direct housing to commercial areas and sites that are near transit. Overall, the 1990 Residence Element promotes increased density within the same allowable densities on a broader, citywide, scale to a greater extent than the 2009 Housing Element. However, there are two areas under which the 2009 Housing Element promotes greater density. These include the following themes: increased density for affordable housing projects; and increased density as a strategy to be pursued through the community planning process.

The following 2009 Housing Element policies could result in impacts related to the construction or expansion of recreational facilities or the need for new or expanded park or recreational facilities by directing growth to certain areas of the City, promoting increased density standards, and potentially reducing open space requirements for affordable housing, thereby consolidating new construction within those areas and increasing the number of residents using recreational facilities in certain areas.

Impact	2009 Housing Element	Corresponding 1990 Residence Element Policy
Direct growth to certain areas of the City.	Policy 1.1: Focus housing growth- and the infrastructure necessary to support that growth- according to community plans. Complete planning underway in key opportunity areas such as Treasure Island, Candlestick Park and Hunter’s Point Shipyard.	Implementation Measure 1.1.2: Pursuit of housing development opportunities in neighborhood and area plans.
	Policy 1.3: Work proactively to identify and secure opportunity sites for permanently affordable housing.	Policy 1.1: Promote development of permanently affordable housing on surplus, underused and vacant public lands.
	Policy 1.6: Consider greater flexibility in the number and size of units within established building envelopes in community plan areas, especially if it can increase the number of affordable units in multi-family structures.	Policy 2.5: Allow flexibility in the number and size of units within permitted volumes of larger multi-unit structures, especially if the flexibility results in creation of a significant number of dwelling units that are permanently affordable to lower income households.
	Policy 1.7: Consider public health objectives when designating and promoting housing development sites.	Policy 12.1: Assure housing is provided with adequate public improvements, services and amenities.
	Policy 1.8: Promote mixed use development, and include housing, particularly permanently affordable housing, in new commercial, institutional or other single use development projects.	Policy 1.3: Create incentives for the inclusion of housing, including permanently affordable housing in commercial developments.
	Policy 4.6: Encourage an equitable distribution of growth according to infrastructure and site capacity.	Policy 12.1: Assure housing is provided with adequate public improvements, services and amenities.
	Policy 10.3: Support state legislation and programs that promote environmentally favorable projects.	
	Policy 12.1: Encourage new housing that relies on transit use and environmentally sustainable patterns of movement.	

Impact	2009 Housing Element	Corresponding 1990 Residence Element Policy
	Policy 12.2: Consider the proximity of quality of life elements, such as open space, child care and neighborhood serves, when development new housing units.	
	Policy 13.1: Support “smart” regional growth that locates new housing close to jobs and transit.	
	Policy 13.3: Promote sustainable land use patterns that integrate housing with transportation via transit, pedestrian, and bicycle modes.	
	Implementation Measure 3: Consistent with the SFMTA’s Climate Action Plan, MOH shall work with MTA to identify Muni sites that can serve as potential housing sites.	
	Implementation Measure 4: The Mayor’s Office of Housing (MOH) shall continue to actively pursue surplus or underused publicly-owned land for housing potential, working with agencies not subject to the Surplus Property Ordinance such as the San Francisco Public Utilities Commission, SFUSD and the Municipal Transportation Agency to identify site opportunities. City agencies shall continue to survey their properties for affordable housing opportunities or joint use potential.	Implementation Measure 1.1.1: Aggressive pursuit of development opportunities [in] underused public sites. Implementation Measure 1.1.4: In-fill housing on vacant or underused sites.
	Implementation Measure 6: To further smaller scale TOD opportunities, Planning and MTA shall evaluate smaller surplus MTA-owned sites (typically surface parking lots) and identify barriers towards their redevelopment, such as Planning Code issues, neighborhood parking needs and communities sentiment.	

Impact	2009 Housing Element	Corresponding 1990 Residence Element Policy
	<p>Implementation Measure 8: Planning, Redevelopment and Mayor’s Office of Economic and Workforce Development (MOEWD) should complete long range planning processes already underway: Japantown, Glen Park, the Northeast Embarcadero Study, the Bayview Hunters Point Plan, Candlestick/ Hunters Pont, India Basin shoreline community planning process, Treasure Island, and Hunters Point.</p>	
	<p>Implementation Measure 14: Planning staff shall prioritize support for projects which are located within a reasonable walking distance of stops along major transit lines, including BART, Muni rail lines and “Muni’s 24-hour Rapid Network.”</p>	
	<p>Implementation Measure 74: The City shall coordinate with regional entities to complete the necessary planning document for SB 375, including a “Sustainable Community Strategy” which promotes sustainable growth; and corresponding updates to the Housing, Recreation and Open Space, and Land Use Elements of the General Plan.</p>	
	<p>Implementation Measure 80: In development of new community plans, Planning shall include mixed-use design standards for both residential and commercial buildings.</p>	
	<p>Implementation Measure 85: Planning shall ensure community plans for growth are accompanied by capital plans and programs to support both the “hard” and “soft” elements of infrastructure needed by new housing.</p>	<p>Implementation Measure 7.7.1: Acquisition and improvement of open space; facilities and public environmental improvements in six neighborhood strategy areas; street improvements; parking facilities in neighborhoods; transit and street improvements.</p>

Impact	2009 Housing Element	Corresponding 1990 Residence Element Policy
	<p>Implementation Measure 90: Planning and SFMTA should coordinate housing development with the ongoing Transit Effectiveness Project.</p>	
	<p>Implementation Measure 94: Regional planning entities such as ABAG shall continue to prioritize regional transportation decisions and funding to “smart” local land use policies that link housing, jobs and other land uses, including focusing on VMT reduction. The City shall encourage formalization of state policy that similarly prioritizes transportation and infrastructure dollars for “smart growth” areas such as San Francisco, rather than geographic allocation.</p>	
	<p>Implementation Measure 97: On a local level, the City shall prioritize planned growth areas such as Better Neighborhoods, other Area Plans or Redevelopment Areas for regional, state, and federal bond and grants, especially for discretionary funding application processes such as the State’s Prop 1C.</p>	
<p>Promote increased density-related development standards</p>	<p>Policy 1.4: Ensure changes to land use controls are proposed through neighborhood-supported community planning processes.</p>	<p>Policy 2.1: Set allowable densities in established residential areas at levels which will promote compatibility with prevailing neighborhood character.</p> <p>Policy 2.2: Encourage higher residential density in areas adjacent to downtown, in underutilized commercial and industrial areas proposed for conversion to housing and in neighborhood commercial districts where higher density will not have harmful effects, especially if the higher density provides a significant number of units that are permanently affordable to lower income households.</p>

Impact	2009 Housing Element	Corresponding 1990 Residence Element Policy
	<p>Policy 1.5: Consider secondary units in community plans where there is neighborhood support and when other neighborhood goals can be achieved, especially if that housing is made permanently affordable to lower-income households.</p>	<p>Policy 1.5: Allow new secondary units in areas where their effects can be dealt with and there is neighborhood support, especially if that housing is made permanently affordable to lower income households.</p>
	<p>Policy 1.6: Consider greater flexibility in number and size of units within established building envelopes in community plan areas, especially if it can increase the number of affordable units in multi-family structures.</p>	<p>Implementation Measure 1.1.3: Inclusion of housing in Downtown (allowing housing to exceed permitted Floor-Area-Ratios [FARs] in C-3-G and C-3-S Districts).</p>
	<p>Policy 7.5: Encourage the production of affordable housing through process and zoning accommodations, and prioritize affordable housing in the review and approval processes.</p>	<p>Policy 7.3: Grant density bonuses for construction of affordable or senior housing.</p>
	<p>Policy 11.4: Maintain allowable densities in established residential areas at levels which promote compatibility with prevailing neighborhood character.</p>	<p>Policy 2.1: Set allowable densities in established residential areas at levels which will promote compatibility with prevailing neighborhood scale and character.</p>
	<p>Implementation Measure 12: Planning shall require integration of new technologies that reduce the space required for non-housing functions, such as parking, and shall consider requiring parking lifts to be supplied in all new housing developments seeking approval for parking at a ratio of 1:1 or above.</p>	
	<p>Implementation Measure 13: When considering legalization of secondary units within community planning processes, Planning shall develop a Design Manual that illustrates how secondary units can be developed to be sensitive to the surrounding neighborhood, to ensure neighborhood character is maintained.</p>	

Impact	2009 Housing Element	Corresponding 1990 Residence Element Policy
	Implementation Measure 36: Planning shall continue to implement Planning Code Section 209, which allows a density bonus of twice the number of dwelling units otherwise permitted as a principal use in the district, when the housing is specifically designed for and occupied by senior citizens, physically or mentally disabled persons.	Policy 7.3: Grant density bonuses for construction of affordable or senior housing.
	Strategy for further review: MOH and Planning should continue to consider, within the context of a community planning process, zoning categories which require a higher proportion of affordable housing where increased density or other benefits are granted. Options include Affordable Housing Only Zones (SLI); Affordable Housing Priority Zones (UMU) or Special Use District Opportunities.	
	Implementation Measure 64: Planning staff shall support affordable housing projects in the development review process, including allowing sponsors of permanently affordable housing to take advantage of allowable densities provided their projects are consistent with neighborhood character.	
	Implementation Measure 79. Planning staff shall continue to use community planning processes to develop policies, zoning and standards that are tailored to neighborhood character.	Implementation Measure 2.2.1: Densities compatible with neighborhood character.

As shown above, the 2009 Housing Element promotes housing through community planning processes (Policies 1.1, 1.6, and Implementation Measures 8, 80 and 97), near transit and other infrastructure (Policies 1.8, 4.6, 10.3, 12.1, 13.1 and Implementation Measures 6, 14, 74, 90, and 94), and in proximity to neighborhood services (Policies 1.7, 12.2, 13.1 and Implementation Measure 85). The 2009 Housing Element also promotes housing on underused, vacant and surplus lands (Policy 1.3 and Implementation Measures 3 and 4), and housing within mixed-use areas (Policy 1.8 and Implementation Measure 80), thereby directing housing to commercial areas. As discussed previously, directing new housing to certain areas of the City could result in an increase in number of residents using recreational facilities in certain

areas and could increase residents in areas that may currently be underserved by neighborhood parks. This could ultimately cause the need for construction or expansion of parks to accommodate increased demand.

The 2009 Housing Element also promotes increased density through community planning processes (Policies 1.4, 1.5, 1.6, and Implementation Measures 13 and 79) and for affordable housing (Policy 7.5 and Implementation Measures 36 and 64). The 2009 Housing Element also includes a strategy designed to reduce the amount of space required for non-housing functions (Implementation Measure 12). Overall, the 2009 Housing Element does not promote increased density more so than the 1990 Residence Element. However, as discussed in the analysis of the 2004 Housing Element, increased density standards could result in more units within a given building envelope, thereby incrementally increasing the number of residents within a given building using recreational facilities. Although increased density standards may only incrementally increase the number of residents in each building, when combined with policies that also direct growth to certain areas of the City (as discussed above), the 2009 Housing Element policies could not only consolidate new construction to certain areas of the City, but also incrementally increase the average number of residents using recreational facilities. Similar to 2004 Housing Element Implementation Measure 11.8.1, 2009 Housing Element Policy 7.5 could allow for reduced open space requirements for development potentially within areas not adequately served by existing facilities. Therefore, the 2004 Housing Element policies could increase the average number of residents using recreational facilities in certain areas that may currently be underserved by recreational facilities.

The following 2009 Housing Element policy and implementation measure could reduce the 2009 Housing Element’s potential need for construction or expansion of recreational facilities by encouraging quality of life elements in residential developments.

Impact	2009 Housing Element	Corresponding 1990 Residence Element Policy
Ensure new development is adequately served by recreational facilities.	Policy 12.2: Consider the proximity of quality of life elements such as open space, child care and neighborhood services, when developing new housing units.	Policy 12.1: Assure housing is provided with adequate public improvements, services and amenities.
	Implementation Measure 85: Planning shall ensure community plans for growth are accommodated by capital plans and programs to support both the “hard” and “soft” elements of infrastructure needed by new housing.	
	Implementation Measure 86: Planning shall formalize an “Implementation Group” in the Planning Department, to manage the implementation of planned growth areas after Plan adoption, including programming impact fee revenues and coordinating with other City agencies to ensure that needed infrastructure improvements are built.	

As shown above, the 2009 Housing Element would ensure that new development resulting from community planning processes would be accompanied by capital plans for supporting infrastructure, including recreational facilities (Policy 12.2 and Implementation Measures 85 and 86). Because the 2009 Housing Element includes measures to ensure community plans are adequately served by recreation facilities, the 2009 Housing Element could indirectly promote the construction or expansion of recreational facilities. However, the need for new facilities would be determined based on additional recreational needs and location of the community plan and is, therefore, most appropriately addressed with respect to a specific community plan proposal. Given that there are limited portions of the City not currently served by open spaces and that the Planning Department and SFRPD have identified open space acquisitions/expansions, independent of the 2009 Housing Element, and pursuant to Proposition C and previous community planning efforts, the 2009 Housing Element would have a *less than significant* impact with respect to the construction or expansion of recreational facilities or the need for new or expanded park or recreational facilities.

Impact RE-2: The proposed Housing Elements would not physically degrade existing recreational resources. (Less than Significant)

New construction could result in impacts related to the degradation of existing recreational resources if new housing would convert existing recreational uses to residential uses, adversely affect specific recreational opportunities, or otherwise physically degrade recreational resources. The proposed Housing Elements do not propose any zoning changes and Public Districts, where much of the City's open space and recreational facilities are located, and would therefore not be at risk for conversion to residential uses.

In the City, which has high housing costs, there exists a tradeoff between open space and affordable housing. Vacant lots, some of which provide open space, can provide opportunity for affordable housing due to their location or previous uses being less desirable than lots already developed with residential units. Also, private recreational resources could potentially be identified as opportunity or soft sites. Therefore, a balance between the preservation of open space and the development of affordable housing should be reached.

2004 Housing Element

As discussed under Impact RE-1, the 2004 Housing Element and 2009 Housing Element directs growth to certain areas of the City and promotes increased density-related development standards, which could potentially increase demands on existing recreational facilities. There exists limited portions of the City that are not currently served by open space/recreational facilities. Furthermore, both the Planning Department and the SFRPD have identified open space acquisition/expansion, independent of the proposed Housing Elements, and pursuant to Proposition C or previous community planning efforts. Therefore, 2004 and 2009 Housing Element policies that increase density and/or direct growth to certain areas of the City would result in a *less than significant* impact with respect to the degradation of recreational resources.

Cumulative Impacts

The geographic context for cumulative recreation impacts is the entire City of San Francisco. Cumulative impacts occur when impacts that are significant or less than significant from a proposed project combine with similar impacts from other past, present, or reasonably foreseeable projects in a similar geographic area. This would include the demolition of existing structures or new construction in the project area or immediately adjacent to its project boundaries resulting from past, present and reasonably foreseeable future projects combining with similar impacts from the 2004 Housing Element and 2009 Housing Element. The cumulative effect of development within the City could contribute to impacts related to recreation. Cumulative impacts could result from policies that promote increased density or direct growth to certain areas of the City, primarily those areas that are currently underserved by recreational facilities. Increased density in certain areas could place increased demands on existing facilities, thereby contributing to the need for new or expanded facilities or resulting in degradation of existing facilities. However, as discussed throughout this Draft EIR, growth would occur regardless of implementation of the Housing Elements. The proposed Housing Elements provide direction for how new development in the City should occur, with an emphasis on affordability. New development within the City would be subject, on a project-by-project basis, to independent CEQA review as well as policies in the San Francisco General Plan, governing area plans, design guidelines, zoning codes (including development standards), and other applicable land use plans that are intended to reduce impacts to recreation. The proposed Housing Element are public policy documents and would not directly affect recreation. New development could affect such resources, but would be evaluated on a project-by-project basis.

Changes to the existing recreation environment in the area could occur through the conversion of open space or recreational facilities to residential uses, population growth in an area that is underserved by recreational resources, or otherwise degrade recreational resources. However, it is assumed that future housing development would be consistent with Planning Code requirements for open space and, pursuant to Proposition C, SFRPD would continue the acquisition and expansion of recreational facilities. New development is also anticipated to be consistent with CEQA review, mitigation requirements, and design review. For this reason, cumulative impacts on recreation as a result of increasing the use of recreational facilities and potential deterioration of these resources would be *less than significant*. The Housing Elements would not contribute to such cumulative recreation impacts because they would not directly result in population growth. The proposed Housing Elements would have a *less than significant* impact with respect to the cumulative impacts to recreation from increased use of recreation facilities or potential deterioration of these resources.

It is also anticipated that housing development would comply with Section 135 of the Planning Code. Cumulative impacts on recreation as a result of the construction or expansion of recreational facilities or the degradation of recreational facilities would be *less than significant*. The contribution of the Housing Elements would be *less than significant* and is not cumulatively considerable because ultimately the Housing Elements do not propose any specific projects, zoning changes, or directly result in increases to population. This cumulative impact would be *less than significant*.

MITIGATION AND IMPROVEMENT MEASURES

Mitigation Measures

No mitigation measures are warranted by the proposed Housing Elements.

Improvement Measures

No improvement measures are warranted by the proposed Housing Elements.

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