4 TRANSPORTATION

Transportation has long played a key role in shaping South San Francisco. Like much of the rest of San Mateo County, South San Francisco initially developed as a "railroad suburb" to San Francisco. The Caltrain service that now uses the Union Pacific (formerly Southern Pacific Railroad) tracks continues that early commute pattern; the earlier train route is paralleled by El Camino Real (State Route 82), the first highway and automobile route through the Peninsula. Since World War II, these early commute routes have been replaced by freeways – first, U.S. 101 (the Bayshore Freeway) east of El Camino Real and Caltrain and, later, I–280, which defines much of the western edge of the City.

South San Francisco has extraordinary access to all transportation modes, including air, water, rail, bus, and automobiles, though capacity and access to the principal route—U.S. 101—is constrained. With the BART extension, the soon to be constructed Airport Rail Transit (ART) System, and ferry service on the horizon, access to the City has been enhanced even further in the last decade. (Amended by Resolution 26-2014. Adopted February 12, 2014)

The Transportation Element includes policies, programs, and standards to enhance capacity and provide new linkages to further an integrated multi-modal transportation system that encourages transit and meets the needs of pedestrians and bicyclists, as well as programs to help reduce transportation demand. Issues from a citywide to a neighborhood- and block-level scale are addressed. The relationship between the local and the regional system and agencies is also examined. The element contains policies to ensure that existing uses and neighborhoods are not unduly impacted as the city grows.

The Transportation Element identifies future circulation needs for a long-range planning horizon. The City is implementing these long-range objectives through numerous near-term, strategic planning documents. The South San Francisco Bicycle Master Plan and Pedestrian Master Plan (PMP) are two examples, both providing detailed recommendations and concept plans that support General Plan objectives. Building on the General Plan's overarching vision for safe and conve-

Light congestion on Miller Avenue, an alternative route to Grand Avenue in Downtown.

nient pedestrian facilities, the PMP provides tools that respond to the City's current pedestrian challenges. Similarly, the Bicycle Master Plan supports the General Plan, identifying actionable, near-term objectives to expand and enhance the City's network of bicycle paths. In addition, the City Council adopted a Citywide Complete Streets policy (Resolution 86-2012, October 24, 2012) in accordance with the guidelines provided by MTC (Metropolitan Transportation Commission). (Amended by Resolution 26-2014. Adopted February 12, 2014)

Many of the improvements identified will be studied later in greater detail, and funding and implementation sources will be identified. Some of these projects, in order to be funded, must be part of local and regional programs, including the City's Capital Improvement Program and the County Congestion Management Program (CMP). Strategic plans such as the Bicycle Master Plan and PMP assist the City with project prioritization for funding and implementation. (Amended by Resolution 26-2014. Adopted February 12, 2014)

Policies related to the physical framework for development that the circulation system is designed to serve are included in Chapter 2: Land Use Element and Chapter 3: Planning Sub-Areas Element. Included in these elements are policies to promote transit-supportive land uses, creation of pedestrian-friendly environments, and design to promote alternate modes.

4.1 TRAVEL CHARACTERISTICS AND REGIONAL FRAMEWORK

COMMUTE MODES

Residents and workers use a variety of modes for travel. Census data from 1990, presented in Table 4-1, show most people traveling to jobs in South San Francisco using single-occupant vehicles (77 percent), with carpools garnering the second highest mode share at 16 percent. Approximately four percent of South San Francisco workers used transit as their mode of travel to work. Bicycles accounted for only 0.5 percent of travel while walking represented a 1.5 percent share in 1990. These figures represent an increase in single-occupant vehicle travel and a decrease in carpool and transit usage from 1980. A 1998 survey of employees by the Peninsula Congestion Relief Alliance (PCRA) of 375 employees in South San Francisco found a higher transit use, with about 30 percent of South San Francisco employees using non-drive alone commute modes. The reported increase in bus and rail usage is a reflection of the improved shuttle bus service from the Caltrain and BART stations to area employment sites.

WORK TRIP PATTERNS

While South San Francisco is part of the larger Bay Area commutershed, in 1990 over half of the city's residents worked in either San Francisco (35 percent) or South San Francisco (23 percent). However, as city residents continue to take advantage of emerging job opportunities in other San Mateo County cities, the proportion of residents working in the city or in San Francisco has declined by ten percent since 1980. Most city workers live in distant locations, partly due to the presence of large high-technology employers such as Genentech (the largest employer in the North County region, with 45 percent of the workforce residing outside of San Mateo County), that attract employees from a wide region. In effect, more San Francisco and San Mateo residents work in South San Francisco than South San Franciscans.

Table 4.I-1
Model Shares of South San Francisco Residents and Employees and North San Mateo County Employees

Transportation Mode	Share (%) 1990		1998[3]
	Residents[1]	Workers[2]	Workers[2]
Drive Alone	69.7	77.0	70.5
Carpool/Vanpool	16.6	16.0	15.8
Bus and Rail	9.2	4.0	14.1
Bicycle	0.3	0.5	(included in other)
Walk	2.0	1.5	(included in other)
Other	2.2	1.0	2.4

1 Residents of South San Francisco 16 and over; may work in the City or elsewhere.
2 People employed in South San Francisco; may live in the City or elsewhere.
3 Motorcycle 0.5%; worked at home 1.2%; other 0.5%.
4 Survey of South San Francisco employees by the Multi-city TSM Agency (PCRA).

Source: US Census, 1990; 1990 CTPP Statewide Element, Part C; PCRA

Table 4.I-2
South San Francisco Residents and Workers (in percent of total)

	Top Places of Work of South San Francisco Residents	Top Places of Residences of South San Francisco Workers	
	1990[1]	1990[1]	1998[2]
San Francisco	35	19	23
South San Francisco	23	18	7
San Bruno	5	6	4
San Mateo	4	7	10
Burlingame	4	3	4
Daly City	4	9	6

1 Metropolitan Transportation Commission
2 Multi-City Transportation Systems Management Agency

REGULATORY FRAMEWORK

The City of South San Francisco has jurisdiction over all City streets and City-operated traffic signals. The freeways, freeway ramps, and State routes (such as El Camino Real) are under the jurisdiction of the State of California Department of Transportation (CalTrans). The transit service providers have jurisdiction over their services. These include San Mateo County Transit District (SamTrans) fixed-route bus service and the Peninsula Corridor Joint Powers Board (JPB) commuter rail service (Caltrain).

There are several regional agencies that oversee and coordinate transportation improvement programs affecting South San Francisco, including:

- San Mateo County Transportation Authority, which oversees improvements contained in the County Measure A Strategic Plan. Improvements affecting South San Francisco include auxiliary lanes on U.S. 101;
- The City/County Association of Governments of San Mateo County (C/CAG), which is the Congestion Management Agency that sets State and federal funding priorities for improvements affecting the CMP Roadway System. The CMP roadway system components in South San Francisco include U.S. 101, I-280, and SR 82 (El Camino Real). C/CAG also reviews transportation impact analyses included in environmental clearance documents for land use applications prepared by jurisdictions in San Mateo County to ensure that impacts to the CMP Roadway System are adequately addressed. State law no longer requires congestion management programs. San Mateo County, like all other counties in the Bay Area, has opted to continue with its CMP; and
- Metropolitan Transportation Commission (MTC), which is the regional clearinghouse for both State and federal funds for transportation improvements.

4.2 STREET NETWORK, CLASSIFICATION, AND OPERATIONS

Two north-south freeways, U.S. 101 and I-280, form the backbone of the street system in South San Francisco, carrying regional traffic between San Francisco and Santa Clara County. I-380, an east-west connector between these two freeways, lies just south of the city. A network of arterial, collector, and local streets provides mobility within South San Francisco.

STREET CLASSIFICATION SYSTEM

Figure 4-1 illustrates the street system serving South San Francisco and identifies the roadway classifications. This classification system includes:

- *Freeways.* Freeways are limited-access, high-speed travelways included in the State and federal highway systems. These roads carry regional through traffic and access is provided by interchanges at intervals of one-mile or greater. No access is provided to adjacent land uses. There are two freeways in South San Francisco – U.S. 101 and I-280.
- *Arterials.* Arterials are major streets that primarily serve through traffic and provide access to abutting properties as a secondary function. Arterials are generally designed with four to six travel lanes and major intersections are signalized. In South San Francisco, there are two types of arterials: major arterials and minor arterials. Major arterials are typically divided (have raised medians), have more travel lanes, and carry more traffic than minor arterials. Major arterials in the city include El Camino Real, Sisters Cities Boulevard, Junipero Serra Boulevard, and East Grand Avenue. Minor arterials include Mission Road and Orange Avenue.
- *Collectors.* Collectors connect arterials with local streets, and provide access and circulation within neighborhoods. Collectors are typically designed with two travel lanes, parking lanes, planter strips, and sidewalks. Examples of collectors in South San Francisco are Commercial Avenue and Del Monte Avenue.
- *Local Streets.* Local streets provide direct access to abutting properties as their primary function. Local streets have no more than two travel lanes.

Grand Avenue in Downtown is a minor arterial.

STANDARDS FOR TRAFFIC LEVEL OF SERVICE

Traffic service levels for intersections and roadway segments are characterized by examining peak period and daily operations. The standard used for evaluating traffic flow is called level of service (LOS) (Table 4.2-1). Levels of service are classified by a letter grade that describes the quality of flow, ranging from the best condition (LOS A) through extreme congestion associated with over-capacity conditions (LOS F). One measure of level of service is volume-to-capacity (or demand-to-capacity).

Traffic demand modeling assumes that travel demand is a response to the patterns of land use activity in a city and surrounding region. The transportation analysis process for the Transportation Element uses existing and projected land use to evaluate transportation system improvement and demand management needs.

TRAFFIC OPERATIONS

Existing Operations

The 1995 Congestion Management Program for San Mateo County reports I-280 operating at LOS F and U.S. 101 operating at LOS D in the vicinity of South San Francisco during peak commute hours. Levels of service were calculated for the city's roadway segments with current daily volume counts. The resulting volume-to-capacity ratios are presented in Table 4.2-2.

Current congestion on South San Francisco streets occurs along the Oyster Point Boulevard, East Grand Avenue, Dubuque Avenue, and Airport Boulevard corridors, and on Westborough Boulevard near the I-280 interchange and the Junipero Serra Boulevard intersection. Other locations with congestion include the intersection of El Camino Real with Westborough Boulevard/Chestnut Avenue and the Airport Boulevard/Produce Avenue/U.S. 101 interchange. During the evening peak commute period, East Grand Avenue under the U.S. 101 overpass has some back up.

Projected Operations

The Countywide Transportation Plan projections, recognizing the effects of two major transportation infrastructure improvements—the proposed BART and Cal-

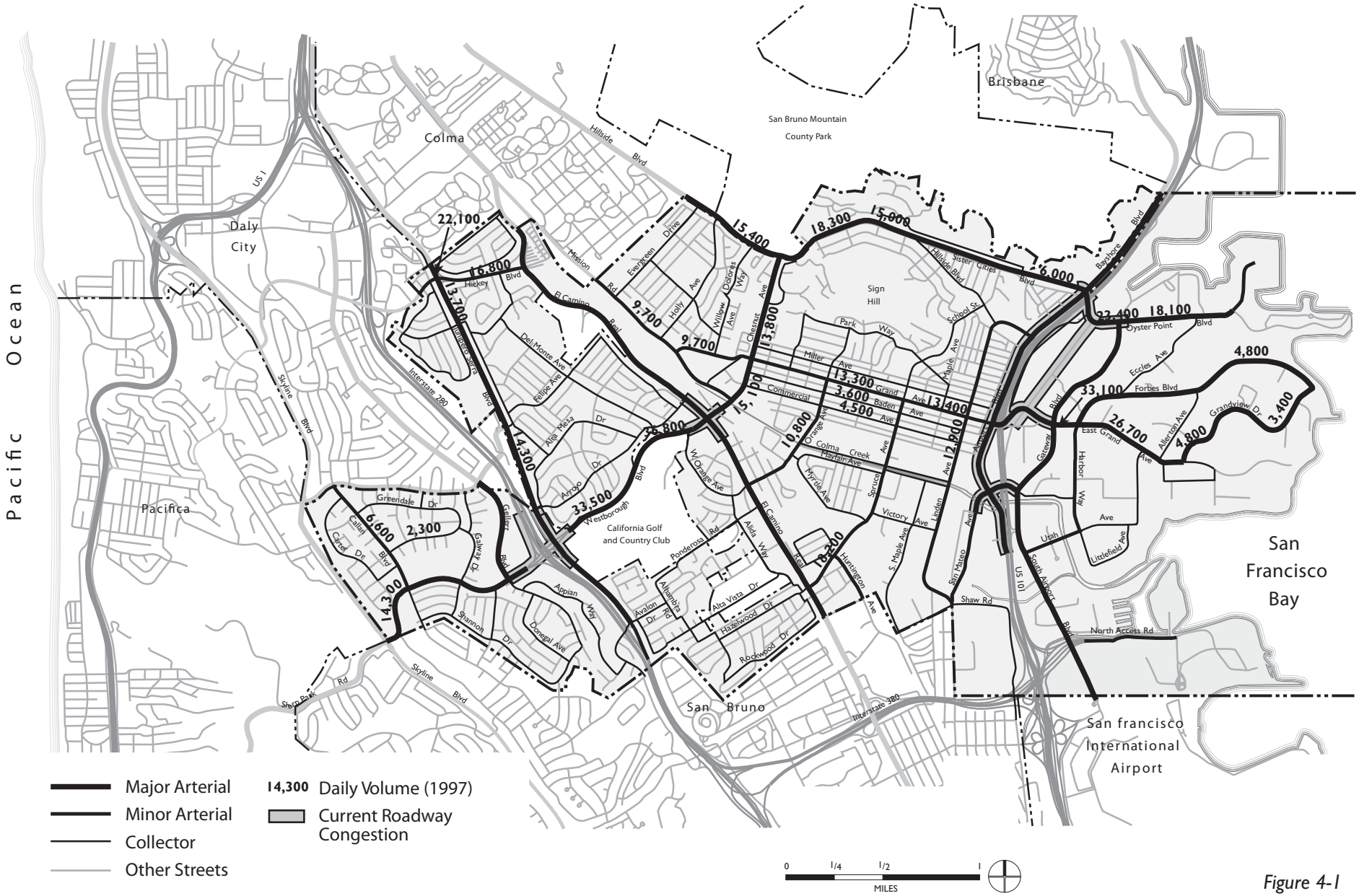


Figure 4-1
Street Classifications and Daily Volumes

Source: City of South SanFrancisco; Fehr & Peers

train extension projects—show projected operations of LOS F on U.S. 101 and LOS E on I-280. Within the City, the transportation system can adequately serve existing travel demand, provided improvements outlined in the General Plan (Figure 4-2; also see Policy 4.2-I-2) are implemented. In general, with the improvements, existing service levels along most roadway segments are expected to be maintained. However, portions of Westborough Boulevard, El Camino Real, East Grand Avenue, and Oyster Point Boulevard are expected to continue operating at congested levels. (See Table 4.2-2)

The East of 101 Area Plan prepared in 1994 presents several intersections operating at unacceptable levels of service (LOS E and F) under future conditions with growth and development in that area. The plan identified improvements to accommodate the traffic generated by the anticipated growth. A transportation analysis of the East of 101 area is currently being prepared to assess land use revisions of the 1994 plan. The results of this updated analysis will be a set of transportation system improvements to accommodate current growth projections in that area of South San Francisco.

For a full evaluation of projected traffic operations, the Environmental Impact Report on the General Plan should be consulted. Because existing development limits the City's ability to undertake improvements in some neighborhoods, a continued emphasis on alternative transportation modes will be needed to maintain mobility in future.

TABLE 4.2-1
Traffic Level of Service Definitions

Level of Service (LOS)	*Traffic Flow Conditions*	*Maximum Volume to Capacity Ratio*
A	Free flow: speed is controlled by drivers' desires, stipulated speed limits, or physical roadway conditions.	0.6
B	Stable flow: operating speeds beginning to be restricted; little or no restrictions on maneuverability from other vehicles.	0.7
C	Stable flow: speeds and maneuverability more closely restricted; occasional backups behind left-turning vehicles at intersections.	0.8
D	Approaching tolerable speeds can be maintained but unstable flow: temporary restrictions may cause extensive delays; little freedom to maneuver; comfort and low; at intersections, some convenience motorists, especially those making left turns, may have to wait through one or more signal changes.	0.9
E	Approaching capacity: unstable flow with stopages of momentary duration; man-ueverability severely limited.	1.0
F	Forced flow: stoppages for long periods; low operating speeds; delays at intersec-tions averaging 60 seconds or more.	>1.0

TABLE 4.2-2
Roadway Segment Analysis

Roadway Segment	*Capacity*	*Existing Volume*	*Existing V/C*	*Projected Volume*	*Projected V/C*
Major Arterials					
Hillside Boulevard/Sister Cities Boulevard					
Holly Ave. to Dolores Way	40,000	15,400	0.38	16,100	0.40
Stonegate Drive to S. San Francisco Drive	40,000	18,300	0.46	23,500	0.59
S. San Francisco Drive to Hillside Boulevard	40,000	15,000	0.38	20,200	0.51
Hillside Boulevard to Airport Boulevard	40,000	5,000	0.12	12,600	0.31
El Camino Real					
South of Hickey Boulevard	40,000	24,700	0.62	33,100	0.83
North of Westborough	60,000	33,500	0.56	38,400	0.64
South of Westborough	60,000	45,500	0.76	45,000	0.75
Junipero Serra Boulevard					
North of Hickey Boulevard	40,000	22,100	0.55	22,900	0.57
South of Hickey Boulevard	40,000	13,700	0.34	14,900	0.37
North of Westborough Boulevard	40,000	14,300	0.36	15,500	0.39
Westborough Boulevard/Chestnut Avenue					
East of Skyline Boulevard	40,000	14,300	0.36	15,600	0.39
East of Junipero Serra Boulevard	40,000	33,500	0.84	39,900	1.00
West of W. Orange Avenue	40,000	38,000	0.95	39,400	0.99
South of Commercial Avenue	40,000	15,100	0.38	13,600	0.34
Between Miller Avenue and Sunset Avenue	20,000	13,800	0.69	14,000	0.70
Oyster Point Boulevard					
U.S. 101 to Gateway Boulevard	40,000	23,000	0.58	41,200	1.03
Gateway Boulevard to Eccles Avenue	40,000	18,100	0.45	28,500	0.71
East Grand Avenue					
Gateway Boulevard to Forbes Boulevard	40,000	33,100	0.83	31,300	0.78
East of Forbes Boulevard	40,000	26,700	0.67	24,900	0.62

TABLE 4.2-2 (Continued)
Roadway Segment Analysis

Roadway Segment	*Capacity*	*Existing Volume*	*Existing V/C*	*Projected Volume*	*Projected V/C*
Forbes Boulevard					
Between Allerton Avenue and Gull Rd	40,000	4,800	0.12	12,500	0.31
Grandview Drive					
North of E. Grand Avenue	20,000	4,800	0.24	11,900	0.60
South of Forbes Boulevard	20,000	3,400	0.17	9,300	0.4
Railroad Avenue Extension	40,000	-	-	20,800	0.53
Minor Arterials					
Mission Rd					
West of Holly Avenue	36,000	9,700	0.27	11,500	0.32
Extension	36,000	-	-	14,900	0.41
Grand Avenue					
Mission Rd to Chestnut Avenue	18,000	9,700	0.54	11,100	0.62
Orange Avenue to Spruce Avenue	18,000	13,300	0.74	14,000	0.78
Hickey Boulevard					
Hilton Avenue to Camaritas Avenue	36,000	16,200	0.45	19,900	0.55
Orange Avenue					
N. Canal St to Commercial Avenue	18,000	9,700	0.54	10,900	0.61
Spruce Avenue					
East of El Camino Real	36,000	18,200	0.51	23,800	0.66
South Linden Avenue					
N. Canal St to Commercial Avenue	18,000	12,900	0.72	14,100	0.78
S/O Victory	18,000	9,000	0.50	12,200	0.68
Callan Boulevard					
At Greendale Drive	18,000	6,600	0.37	7,500	0.42
S. Airport Boulevard					
Utah to I-380 Ramps	40,000	22,000	0.55	25,000	0.62
Hillside Connection	18,000	-	-	5,800	0.32
Oak Avenue /Arroyo Drive Connection	18,000	-	-	5,000	0.28

TABLE 4.2-2 (Continued)
Roadway Segment Analysis

Roadway Segment	*Capacity*	*Existing Volume*	*Existing V/C*	*Projected Volume*	*Projected V/C*
Collectors					
Greendale Drive					
Callan Boulevard to Gateway Drive	14,000	2,300	0.16	2,500	0.18
Baden Avenue					
Orange Avenue to Spruce Avenue	14,000	3,600	0.26	4,600	0.33
West of South Linden Avenue	14,000	13,400	0.96	10,400	0.74
Commercial Avenue					
Orange Avenue to Spruce	14,000	4,500	0.32	8,600	0.61

GUIDING POLICIES: STREET SYSTEM AND STANDARDS OF SERVICE

Also see Chapter 3: Planning Sub-Areas Element, for policies related to streets in specific areas. Truck movement issues in Lindenville are addressed in Section 3.2: Lindenville.

Street System

4.2-G-1 *Undertake efforts to enhance transportation capacity, especially in growth and emerging employment areas such as in the East of 101 area.*

4.2-G-2 *Improve connections between different parts of the city.*

These would help integrate different parts of the city. Connections between areas west and east of U.S. 101 (currently limited to streets that provide freeway access) would also free-up capacity along streets such as Grand Avenue and Oyster Point Boulevard that provide access to U.S. 101. Connections are also critical across El Camino Real and Junipero Serra Boulevard and from Westborough to Downtown. Connections should pro-

vide access for multiple modes of transportation including bicycle and pedestrian access. (Amended by Resolution 26-2014. Adopted February 12, 2014)

4.2-G-3 *Where appropriate, use abandoned railroad rights-of-way and the BART right-of-way to establish new streets.*

4.2-G-4 *Use the El Camino Real/Chestnut Area Plan as a guide for detailed implementation of General Plan transportation policies for the El Camino Real/Chestnut Area.*

4.2-G-5 *Use the South San Francisco Downtown Station Area Specific Plan as a guide for detailed implementation of General Plan transportation policies for the Downtown Station Area. (Amended by City Council Resolution 15-2015, Adopted January 28, 2015).*

4.2-G-6 *Use the South San Francisco Downtown Station Area Specific Plan as a guide for General Plan policies for the Downtown Station Area. (Amended by City Council Resolution 15-2015, Adopted January 28, 2015).*

4.2-G-7 *Use Figure 4-1: Street Classifications, to identify, schedule, and implement roadway improvements. Use the El Camino Real/Chestnut Avenue Area Plan to identify, schedule, and implement roadway improvements for the El Camino Real/Chestnut Area and the Downtown Station Area Specific Plan for the Downtown Station Area roadway improvements. (Amended by City Council Resolutions 97-2011 and 99-2011, Adopted July 27, 2011, and City Council Resolution 15-2015, Adopted January 28, 2015).*

4.2-G-8 *Use the Bicycle Master Plan (refer to Figure 4-2) to identify, schedule, and implement roadway improvements that enhance bicycle access. (Amended by Resolution 26-2014. Adopted February 12, 2014)*

4.2-G-9 *Use the Pedestrian Master Plan (refer to Figure 4-3) to identify, schedule, and implement roadway improvements that enhance pedestrian access. (Amended by Resolution 26-2014. Adopted February 12, 2014)*

4.2-G-10 *Make efficient use of existing transportation facilities and, through the arrangement of land uses, improved alternate modes, and enhanced integration of various transportation systems serving South San Francisco, strive to reduce the total vehicle-miles traveled.*

4.2-G-11 Coordinate local actions with regional agencies, and undertake active efforts to undertake transportation improvements.

4.2-G-12 Provide fair and equitable means for paying for future street improvements including mechanisms such as development impact fees. (Amended by City Council Resolution 98-2001, Adopted September 26, 2001)

Traffic Operations and Service Standards

4.2-G-13 Strive to maintain LOS D or better on arterial and collector streets, at all intersections, and on principal arterials in the CMP during peak hours.

4.2-G-14 Accept LOS E or F after finding that:

- There is no practical and feasible way to mitigate the lower level of service; and
- The uses resulting in the lower level of service are of clear, overall public benefit.

4.2-G-15 Exempt development within one-quarter mile of a Caltrain or BART station, or a City-designated ferry terminal, from LOS standards.

Implementing policies: street system and standards of service

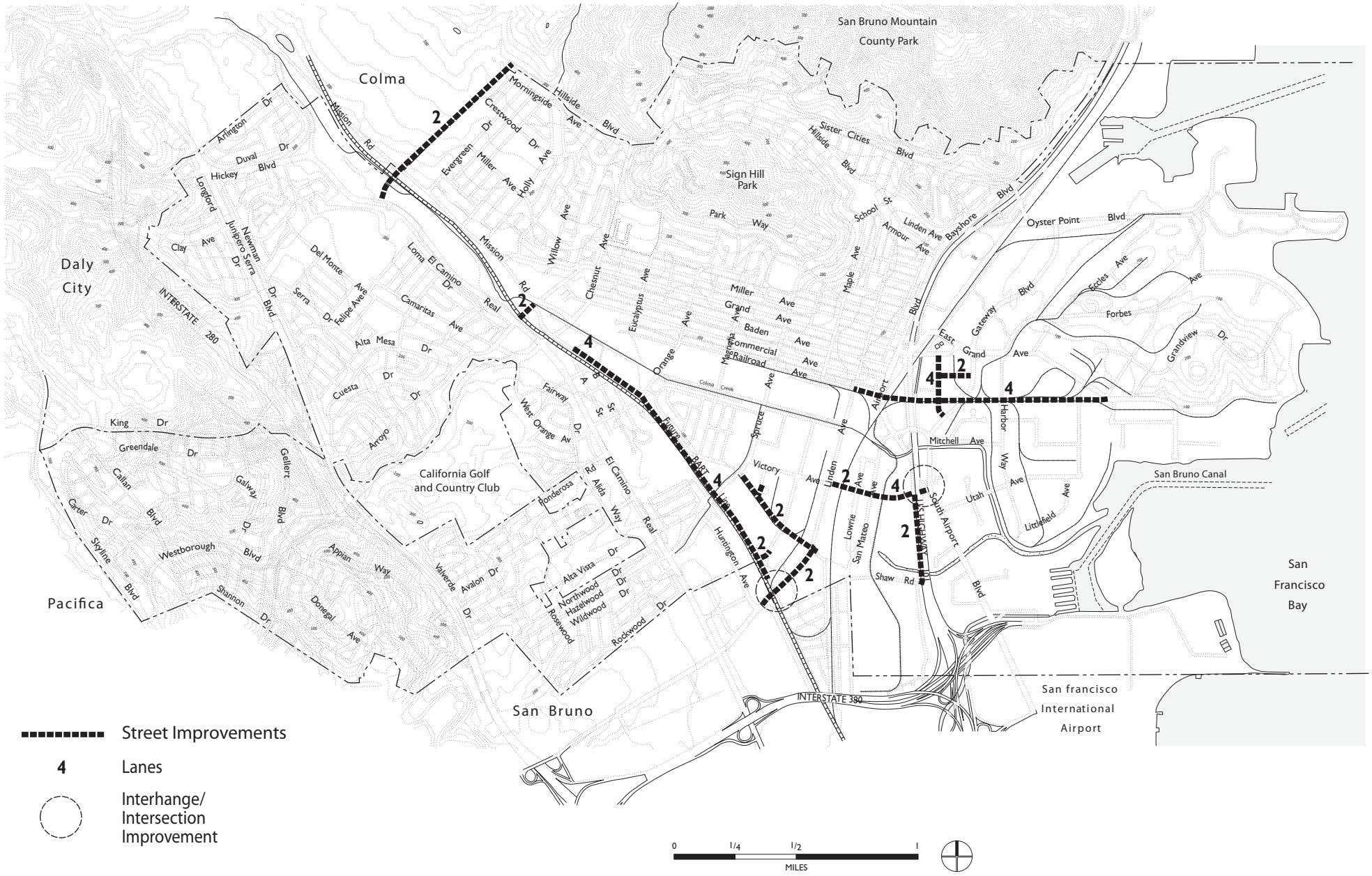
Street System and Improvements

4.2-I-1 Continue using the Capital Improvement Program to program and implement needed improvements to the street system.

4.2-I-2 Undertake street improvements identified in Figures 4-1 and 4-2. (Amended by City Council Resolution 31-2002, Adopted April 24, 2002 & City Council Resolution 15-2015, Adopted January 28, 2015)

Improvements identified include:

- Connection between Hillside Boulevard and El Camino Real near the BART station (see Chapter 3 for policies for pedestrian-oriented nature of the segment near the BART station).



Street Improvements

4 Lanes

Interhange/
Intersection
Improvement

Source: Dyett & Bhatia

Figure 4-2
Street Improvements

Figure 4-3

Citywide Sidewalk Gap Closure Project

Missing Sidewalks Citywide

Concept Plan One

FEHR & PEERS

SF11-0594\GIS

Added by Resolution 26-2014. Adopted February 9, 2011)

- Arroyo Drive/Oak Avenue connection. This short connection will relieve pressure off the Chestnut Avenue/El Camino Real intersection. Signal coordination will help to ensure that El Camino Real traffic flow is not impeded. Use the El Camino Real/Chestnut Area Plan to guide the development of the Arroyo/Oak Avenue connection. (Amended by City Council Resolution 97-2011 and 99-2011, Adopted July 27, 2011)

- Mission Road extension from Chestnut Avenue to South Linden Avenue extension. This will be on the BART right-of-way. The General Plan proposes additional uses for the right-of-way—a bikeway and a linear park as well—a coordinated design strategy and joint efforts by the Public Works and Parks and Recreation departments will be needed.

- Myrtle Avenue extension to South Linden Avenue. This will run parallel (on the north side) of the former Zellerbach Paper plant. Alignment study will be needed, and some small existing structures may need to be removed.

- South Maple Avenue extension to Noor Avenue at Huntington Avenue. While this connection is short and within the City limits, it may be viable only at the time of redevelopment of the site along Browning Way (designated for high-intensity office development, as it is adjacent to the San Bruno BART Station). This connection should be a condition of redevelopment of sites in the area.

- South Linden Avenue extension to Sneath Lane. This would dramatically increase access to Lindenville and enable trucks to get to I-380 without going through Downtown. This connection is also extremely critical to ensure connection between Downtown and the (San Bruno) BART Station.

- Railroad Avenue extension from South Linden Avenue to East Grand Avenue, following the general alignment of an abandoned railroad right-of-way. This would be the first non-freeway related connection between the areas east and west of U.S. 101. The street will go under U.S. 101. Either a depressed intersection at Railroad Avenue or an elevated section that goes above the Caltrain tracks would be needed. This will probably be an expensive improvement ($15-20 million),

requiring detailed studies. However, it is expected to accommodate more than 20,000 trips per day and existing structures will not need to be removed. Consideration should be given to providing a bikeway and pedestrian access in conjunction with the street design. (Revised by resolution 26-2014. Adopted February 12, 2014)

- Victory Avenue extension from South Linden Avenue to South Airport Boulevard. This will need to be undertaken in conjunction with development of the regional commercial facilities designated on the General Plan Diagram.
- New interchange at Victory Avenue and U.S. 101. This will provide direct connection between Lindenville and U.S. 101, and be the primary truck ingress/egress point in South San Francisco, obviating the need for trucks to negotiate Downtown streets. As with Victory Avenue extension, development will need to occur in conjunction with development of regional commercial facilities.
- Produce Avenue extension to Shaw Road. This will run parallel to U.S. 101 on the western side.

4.2-I-3 *Undertake studies to establish precise alignments for streets in order to identify future right-of-way needs. Locate future arterials and collectors according to the general alignments shown in Figure 4-2.*

Minor variation from the depicted alignments will not require a General Plan amendment.

4.2-I-4 *Establish priorities for transportation improvements, and prepare an action program to implement identified street improvements.*

This would require working with other agencies, including BART for the Mission Road extension on the BART right-of-way, Caltrans on the new U.S. 101 interchange, and with C/CAG on several other projects.

4.2-I-5 *Establish accessibility requirements for all streets designated as arterial or collector on Figure 4-1. As part of development review of all projects along these streets, ensure that access to individual sites does not impede through traffic flow.*

The General Plan anticipates development along several arterial and collector streets, including in much of Downtown, and along El Camino Real, Gellert Boulevard, Arroyo Drive, Victory Avenue extension, Hillside Boulevard, Mission Road extension, and East Grand Avenue. Accessibility requirements should ensure that ingress/egress from sites along arterial and collector streets is limited to a few locations, and residential developments do not have driveways lined up along the streets, which would represent a safety hazard and impede traffic flow.

Spruce Avenue looking towards Downtown.

4.2-I-6 *Incorporate as part of the City's Capital Improvement Program (CIP) needed intersection and roadway improvements to enhance mobility in the East of 101 Area. These improvements shall include consideration of bike lanes and pedestrian routes. (Amended by City Council Resolution 98-2001 and 26-2014.)*

The East of 101 traffic study, prepared by the City in April 2001, identifies improvements that would result in better traffic flow and a reduction of congestion during peak hours. The following improvements have been proposed and evaluated:

- Bayshore Boulevard and US 101 South Hook Ramp(s);
- Bayshore Boulevard and Sister Cities/Oyster Point Boulevard;
- Dubuque Avenue and Oyster Point Boulevard;
- Eccles Avenue and Oyster Point Boulevard;
- Gull Drive and Oyster Point Boulevard;
- Airport Boulevard and Miller Avenue/US 101 Southbound off-ramp;
- Airport Boulevard and Grand Avenue;
- Dubuque Avenue and East Grand Avenue;
- Gateway Boulevard and East Grand Avenue
- Forbes Boulevard/Harbor Way and East Grand Avenue;
- East Grand Avenue and Grandview Drive;

El Camino Real, a major arterial, will undergo major development in the future, adding trips and increasing parking demand.

- Airport Boulevard and San Mateo Avenue;
- South Airport Boulevard/Mitchell Avenue and Gateway Boulevard;
- South Airport Boulevard and Utah Avenue;
- Harbor Way;
- Mitchell Avenue.

4.2-I-7 *Continue to require that new development pays a fair share of the costs of street and other traffic and transportation improvements, based on traffic generated and impacts on service levels. Explore the feasibility of establishing impact fee, especially for improvements required in the Lindenville area. (Amended by City Council Resolution 98-2001, Adopted September 26, 2001)*

4.2-I-7a *Establish a traffic improvement fee to fund transportation improvements in the East of 101 area. The fee should be updated to also fund enhancements to pedestrian and bicycle infrastructure, consistent with the objectives of the Bicycle Master Plan and Pedestrian Master Plan (Amended by City Council Resolution 98-2001 and 27-2014)*

4.2-I-8 *Develop and implement a standard method to evaluate the traffic impacts of individual developments.*

Currently, the City does not have an adopted LOS calculation method or a traffic analysis procedure. Therefore, it is difficult to ensure that impacts and appropriate mitigation measures are identified and that developers pay their fair-share of the transportation system improvement costs.

4.2-I-9 *Where appropriate, consider upfronting portions of improvement costs where the City's economic development interests may be served.*

This technique may be appropriate for improvements such as the Victory Avenue extension, the Railroad extension and U.S. 101 interchange to facilitate development of a regional commercial center, sales tax revenues from which (potentially in excess of $1 million per year) could help retire the improvement debt.

Level of Service

4.2-I-10 Design roadway improvements and evaluate development proposals based on LOS standards.

4.2-I-11 Implement, to the extent feasible, circulation system improvements illustrated in Figures 4-1, 4-2 and 4-3 prior to deterioration in levels of service below the stated standard.

4.3 ALTERNATIVE TRANSPORTATION SYSTEMS AND PARKING

See Section 4.5 for transit.

Shuttle buses, vanpools, bicycle facilities, pedestrian facilities and informal carpools also serve the travel needs of South San Francisco. These modes provide an alternative to the single-occupant automobile. These modes, plus programs to promote their use, are discussed in this section.

BICYCLE FACILITIES

Classification System

Bicycle facilities include bike paths, bike lanes, and bike routes:

- Bike Paths (Class I facilities) are paved facilities that are physically separated from roadways used by motor vehicles by space or a physical barrier and are designated for bicycle use.
- Bike Lanes (Class II facilities) are lanes on the outside edge of roadways reserved for the exclusive use of bicycles, so designated with special signing and pavement markings.
- Bike Routes (Class III facilities) are roadways recommended for use by bicycles and often connect roadways with bike lanes and bike paths. Bike routes are designated with signs.

Existing and Proposed Bikeways

South San Francisco has few existing bicycle facilities within South San Francisco. Figure 4-4 depicts the locations of the existing and proposed bike lanes and bike paths. General Plan proposals include: Bike Path on linear park on the BART right-of-way, extending between the South San Francisco and San Bruno BART stations; paths or lanes along proposed Bay Trail; and Bike Lanes along the proposed Railroad Avenue extension. Additional facilities, including those connecting portions of the city on either side of El Camino Real, will be delineated as part of the City's Bikeway Master Plan. Future bicycle facilities will focus on abandoned railroad tracks, located in the East of 101 area and throughout the city, which can be converted to bicycle paths as part of a rails-to-trails program.

PEDESTRIAN FACILITIES

Pedestrian facilities include sidewalks, paths, pedestrian bridges, crosswalks, pedestrian signals and resting areas. South San Francisco offers many great walking environments. The Downtown area provides a well-connected street network complete with sidewalks, commercial activity, destinations, and public amenities. Shared multi-use paths run along the waterfront and connect San Bruno and South San Francisco BART stations. Many streets throughout the city and the Downtown have sidewalks, pedestrian signals and crosswalks to accommodate pedestrian circulation. (Amended by City Council resolution 26-2014, Adopted February 12, 2014)

Pedestrian facilities include the following elements:

- Pedestrian right-of-way (sidewalk, bulbout, curb ramp, median islands, etc.);
- Traffic control measures (striping, signs, etc.); and
- Amenities (benches, trash receptacles, water fountains, etc.).

Many streets in the East of 101 area and in Lindenville do not have sidewalks. Busy, car-oriented streets such as El Camino Real, Junipero Serra, South Spruce, South Linden Avenue, Westborough Boulevard, and streets east of U.S. 101 have gaps in the sidewalk network. Pedestrian facility improvements will improve safety for pedestrians and also encourage the use of alternative modes throughout the community. (Amended by City Council resolution 26-2014, Adopted February 12, 2014)

SHUTTLE BUS SERVICE

Another alternative mode is the shuttle bus system. The PCRA coordinates with SamTrans to ensure adequate funding for the shuttle buses. There are three shuttle bus routes that serve employees of the East of 101 area: the Gateway/Genentech Shuttle, the Oyster Point Shuttle, and the Utah/Littlefield Shuttle.

The service is fixed-route, fixed schedule and is provided on weekdays during the commute periods. Currently, the shuttles carry 700 riders per workday. They are free to the riders. The operating costs are borne by the JPB, SamTrans, the Bay Area Air Quality Management District, and the City/County Association of Governments (75 percent) and sponsoring employers (25 percent).

TRANSPORTATION DEMAND MANAGEMENT

Transportation Demand Management (TDM) programs are provided by employers to reduce the amount of peak period traffic by encouraging their employees to use modes other than the single-occupant automobile for transportation to the workplace and to travel during non-peak times. According to PCMA, South San Francisco hosts the region's largest employers and the best-developed TDM programs. The largest increases in work-related trip diversion to alternative modes are likely to be through carpooling and employer shuttle programs, on which TDM efforts should be focused. While mandated requirements for TDM programs have been overturned in the State legislature,[1] the General Plan establishes an incentives-based land use intensity program with bonuses for projects meeting identified TDM objectives (see Table 2.2-3) that does not discriminate between small and large employers.

PARKING

The City's Zoning Ordinance has parking requirements to ensure that adequate numbers of parking spaces are provided on-site for most uses. Downtown has a

1 Bay Area Air Quality Management District's Regulation 13, Rule 1, requiring employers with over 100 employees to decrease the average vehicle ridership was overturned. However, the City can encourage TDM programs and require TDM measures as mitigation measures to transportation and air quality impacts.

parking district as well. Instead of individual property owners providing their own parking, parking is consolidated into City-owned lots. These lots contain 502 spaces. In general, the amount of parking in Downtown is sufficient; however, there are a few locations with capacity shortages.

The industrial areas of the city experience on-street truck parking. The parked trucks and loading/unloading activities associated with many industrial uses interfere with vehicular circulation.

GUIDING POLICIES: ALTERNATIVE TRANSPORTATION SYSTEMS

4.3-G-1 *Develop a comprehensive and integrated system of bikeways that promote bicycle riding for transportation and recreation.*

4.3-G-2 *Provide safe and direct pedestrian routes and bikeways between and through residential neighborhoods, and to transit centers.*

4.3-G-3 *Use the El Camino Real/Chestnut Avenue Area Plan as a guide for detailed implementation of General Plan alternative transportation system policies for the El Camino Real / Chestnut Area. (Amended by City Council Resolution 97-2011 and 99-2011, Adopted July 27, 2011)*

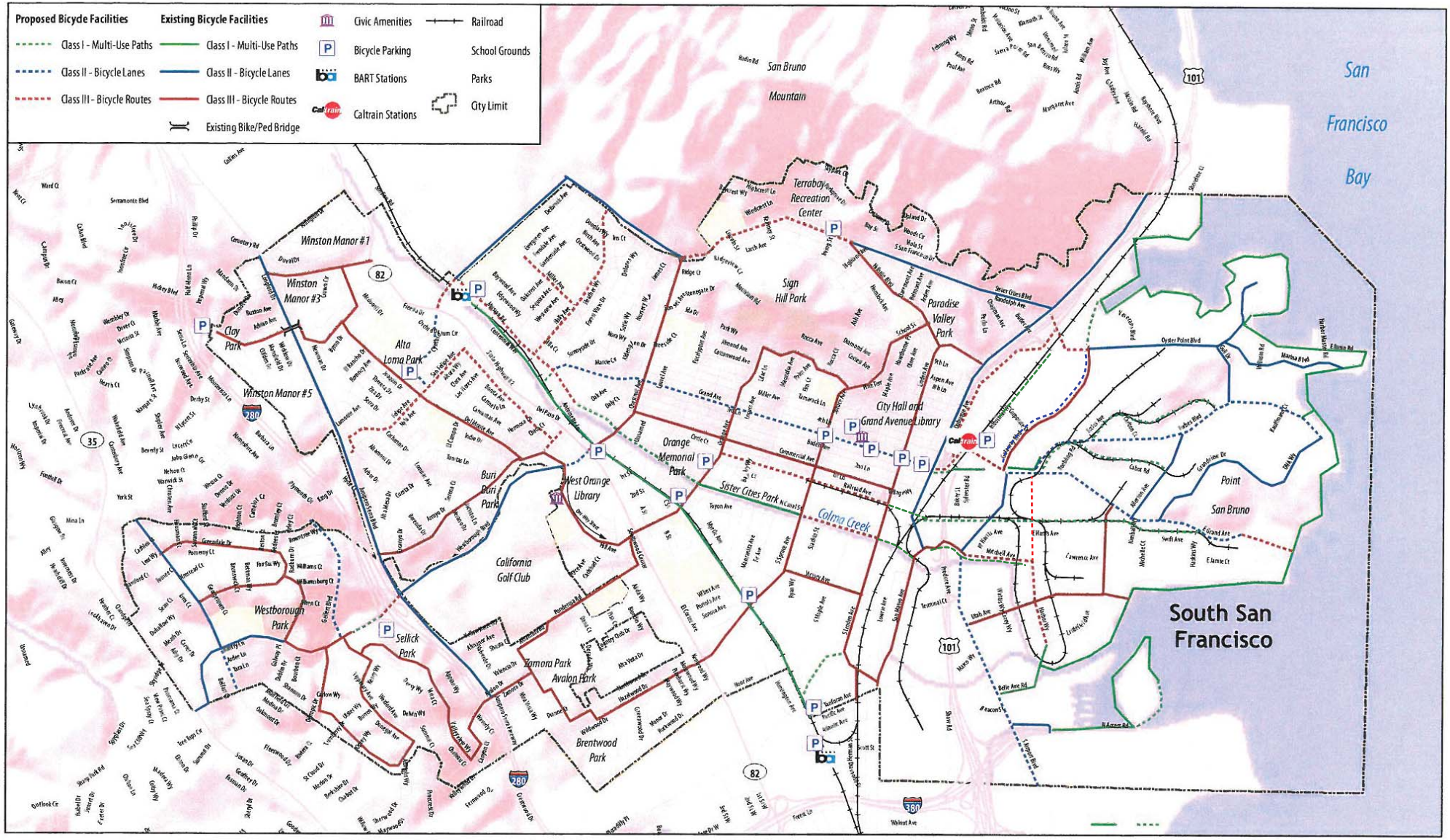
4.3-G-4 *Use the South San Francisco Downtown Station Area Specific Plan as a guide for detailed implementation of General Plan alternative transportation system policies for the South San Francisco Downtown Station Area Specific Plan Area. (Amended by City Council Resolution 15-2015, Adopted January 28, 2015.)*

4.3-G-5 *In partnership with employers, continue efforts to expand shuttle operations.*

4.3-G-6 *In partnership with the local business community, develop a transportation systems management plan with identified trip-reduction goals, while continuing to maintain a positive and supportive business environment.*

TABLE 4.3-1
Bikeway Classifications

	Function	*Access Control*	*Right-of-Way*
Bike Paths (Class I facilities)	Provide exclusive right-of-way for bicyclists with cross flows by motorists minimized.	Where crossing or access from the bicycle path is required, the crossing should be grade-separated or occur at pedestrian crossings. Mid-block crossings should assign right-of-way through signing or signalization.	Minimum of 8 feet for a two-way facility. The minimum paved width for a one-way bike path is 5 feet. A minimum 2-foot wide graded area shall be provided adjacent to the pavement, but a 3-foot graded area is recommended. Where pedestrian activity is expected, a minimum of 12 feet for a two-way facility should be provided.
Bike Lanes (Class II facilities)	To provide preferential use of the paved area of roadway for bicyclists by establishing specific lines of demarcation between areas reserved for bicycles and motorists.	Access is similar to that recommended for roadways. At intersections where there is a bike lane and an actuated signal, it is desirable to install bicycle-sensitive detectors. Push button detectors force the bicyclists to stop and actuate the push button. Because most accidents for bicyclists occur at intersections, clear bikeway design at intersections should be implemented through the use of signing and striping.	Class II bike lanes are one-way facilities. On roadways with parking, the bike lane is located between the parking area and the traffic lane with 5-foot minimums for the bike lane. Where parking is permitted and not marked, minimum width is 12 feet. On roadways where parking is prohibited, a minimum of 5 feet is required, including a 2-foot gutter.
Bike Routes (Class III facilities)	Facilities shared with automobiles and other vehicles. Roadways demarcated by signage.	Access is similar to that recommended for roadways.	No exclusive right-of-way.



New General Plan

City of South San Francisco
South San Francisco Bicycle Master Plan
Source: Data obtained from the City of South San Francisco, BART and Caltrain
Author: Tony Salomone

0 1,000 2,000 Feet

Figure 4-4
Bicycle Facilities

(Amended by Resolution 23, 2011, Adopted February 9, 2011)

IMPLEMENTING POLICIES: ALTERNATIVE TRANSPORTATION SYSTEMS

Bikeways

4.3-I-1 *Prepare and adopt a Bikeways Master Plan that includes goals and objectives, a list or map of improvements, a signage program, detailed standards, and an implementation program. Once adopted, the Bicycle Master Plan shall be the guiding policy document regarding bicycling matters that are within the scope of the adopted Bicycle Master Plan. (Amended by City Council Resolution 23-2011, Adopted February 9, 2011)*

A Bikeways Committee that includes citizens, officials, and staff may be appointed for the purpose. The Bikeways Master Plan should be consistent with the General Plan; if necessary, the General Plan can be amended at the time of adoption of the Bikeway Master Plan to ensure this consistency. An approved Bikeway Master Plan is needed to be eligible for State and federal funding programs.

4.3-I-2 *As part of the Bikeways Master Plan, include improvements identified in Figure 4-4 in the General Plan and in the El Camino Real/Chestnut Avenue Area Plan, and the South San Francisco Downtown Station Area Specific Plan identify additional improvements that include abandoned railroad rights-of-way and other potential connections. (Amended by City Council Resolution 97-2011 and 99-2011, Adopted July 27, 2011), and City Council Resolution 15-2015, Adopted January 15, 2015.)*

Improvements identified on Figure 4-4 include:

- Bike Path on linear park on the BART right-of-way, extending from the South San Francisco BART Station to the San Bruno BART station;
- Paths or lanes along proposed Bay Trail, with continuous shoreline access; and

- Bike Lane along the proposed Railroad Avenue extension, which would provide the first bikeway connection linking the eastern and western parts of the city and provide shoreline bikeway access from residential neighborhoods west of U.S. 101.

Improvements identified in the El Camino Real/Chestnut Avenue Area Plan include: (Amended by City Council Resolution 97-2011 and 99-2011, Adopted July 27, 2011)

- Bike connections between Mission Road and El Camino Real; and
- Bike connection between Camaritas Avenue and El Camino Real

Improvements identified in the Downtown Station Area Specific Plan include: (Amended by City Council Resolution xx-2015, Adopted (date)

- Gateway Boulevard bicycle lanes north of East Grand Avenue;
- Colma Creek Canal Trail East-West Bikeway connecting western neighborhoods with east side employment and the waterfront;
- Executive Drive bicycle path between Corporate Drive and Oyster Point Boulevard;
- Railroad Avenue bicycle path extension to the west under the US101; and
- Harbor Way bicycle boulevard south of East Grand Avenue.

4.3-I-3 *Make bikeway improvements a funding priority by:*

- Continuing to consider financing bikeway design and construction as part of the City's annual construction and improvement fund;
- Incorporating bikeway improvements as part of Capital Improvement Program; and
- Pursuing regional funding and other sources for new bikeways to the extent possible under federal and State law.

4.3-I-4 *Require provision of secure covered bicycle parking at all existing and future multifamily residential, commercial, industrial, and office/ institutional uses.*

Secure parking means areas where bicycles can be secured to a non-movable rack to prevent theft.

Pedestrian Circulation

4.3-I-5 *Prepare, adopt, and maintain a PMP as a long-term vision for supporting and improving pedestrian access in South San Francisco, including goals, policies, and strategic near-term implementation measures that encourage pedestrian activity and prioritizes pedestrian improvements for funding. (Amended by City Council Resolution 26-2014, Adopted February 26, 2014)*

4.3-I-6 *Expand pedestrian facilities in new development, using the PMP for pedestrian design guidelines and to identify other improvements that should be considered for projects proposed in areas that are identified in PMP concept plans. (Amended by City Council Resolution 26-2014, Adopted February 26, 2014)*

4.3-I-7 *Continue to work with the Bicycle and Pedestrian Advisory Committee (or other advisory committee) to monitor progress toward the City's pedestrian objectives identified in the PMP, with annual reviews to evaluate progress, effectiveness of implementation, and the efficient use of local resources. (Amended by City Council Resolution 26-2014, Adopted February 26, 2014)*

4.3-I-8 *Track and implement pedestrian improvements through municipal projects and operations on an ongoing basis, including monitoring and updating of the PMP for project prioritization, funding opportunities, and project readiness. (Amended by City Council Resolution 26-2014, Adopted February 26, 2014)*

4.3-I-9 *Promote pedestrian safety and access through education, collaboration with C/CAG, and regular public awareness efforts that advocate walking. (Amended by City Council Resolution 26-2014, Adopted February 26, 2014)*

4.3.I-10 *As part of redesign of South Linden Avenue (see Section 3.2), provide continuous sidewalks on both sides of the street, extending through the entire stretch of the street from San Bruno BART Station to Downtown.*

4.3-I-11 *As part of any development in Lindenville or East of 101, require project proponents to provide sidewalks and street trees as part of frontage improvements for new development and redevelopment projects.*

4.3-I-12 *Use the El Camino Real/Chestnut Avenue Area Plan to identify, schedule, and implement pedestrian improvements for the El Camino Real/ Chestnut Area. (Amended by City Council Resolution 97-2011 and 99-2011, Adopted July 27, 2011)*

4.3-I-13 *Use the South San Francisco Downtown Station Specific Plan to identify, schedule, and implement pedestrian improvements for the South San Francisco Downtown Station Specific Plan Area. (Amended by City Council Resolution 15-2015, Adopted January 28, 2015).*

4.3-I-14 *Undertake a program to improve pedestrian connections between the rail stations—South San Francisco and San Bruno BART stations and the Caltrain Station—and the surroundings. Components of the program should include:*

- *Installing handicapped ramps at all intersections as street improvements are being installed;*
- *Constructing wide sidewalks where feasible to accommodate increased pedestrian use;*
- *Providing intersection "bulbing" to reduce walking distances across streets in Downtown, across El Camino Real and Mission Road, and other high use areas;*
- *Continuing with the City's current policy of providing pedestrian facilities at all signalized intersections; and*
- *Providing landscaping that encourages pedestrian use.*

Transportation Demand Management

4.3-I-15 *Adopt a TDM program or ordinance which includes, but is not limited to, the following components:*

- Methodology to determine eligibility for land use intensity bonuses for TDM programs identified in the Land Use Element
- Procedures to ensure continued maintenance of measures that result in intensity bonuses
- Requirements for off site improvements (such as bus shelters and pedestrian connections) that are directly necessary as a result of development

- Establishment of baseline TDM requirements for all new projects generating more than 100 peak period trips.
- Establishment of additional requirements for all new projects seeking a FAR bonus.
- An ongoing monitoring and enforcement program to ensure TDM measures are actually implemented.
- Reduce parking requirements for new projects implementing a TDM Program in proximity to fixed guide way transit or those with demonstrated measures that would reduce trip generation.

(Amended by City Council Resolution 98-2001, Adopted September 26, 2001)

4.3-I-16 *Favor Transportation Systems Management programs that limit vehicle use over those that extend the commute hour.*

This would have added air quality benefits.

4.3-I-17 *Undertake efforts to promote the City as a model employer and further alternative transportation use by City employees by providing:*

- A designated commute coordinator/manager;
- A carpool/vanpool match program;
- Preferential parking for carpools and vanpools at City Hall;
- Secure bicycle storage facilities;
- On-site shower facilities at City Hall for employees;
- A commitment to future shuttle service to BART stations;
- Guaranteed ride home program;
- Transit subsidies;
- On-site transit pass sales; and
- Incentives/educational program.

Parking

4.3-I-18 *Establish parking standards to support trip reduction goals by:*

- Allowing parking reductions for projects that have agreed to implement trip reduction methods, such as paid parking, and for mixed use development.
- Requiring projects larger than 25 employees to provide preferential parking for carpools and vanpools.

(Amended by City Council Resolution 98-2001, Adopted September 26, 2001)

4.3-I-19 *Amend the Zoning Ordinance to reduce minimum parking requirements for projects proximate to transit stations and for projects implementing a TDM program.*

Periodically examine these standards as transit service changes. Parking above a minimum amount should be allowed only if additional amenities for bicyclists, pedestrians, transit and/or landscaping are provided. (Amended by City Council Resolution 98-2001, Adopted September 26, 2001)

4.3-I-20 *Investigate opportunities for shared parking facilities whenever possible to reduce the number of new parking stalls required.*

Potential for this exists for the area near the South San Francisco BART Station and in the El Camino Real/Chestnut Area, and within the South San Francisco Downtown Station Area Specific Plan. (Amended by City Council Resolution 15-2015, Adopted January 28, 2015.)

4.3-I-21 *Establish off-street truck parking standards for industrial developments.*

While the City maintains loading requirements for industrial and warehousing uses, truck parking on streets continues to be a problem in many areas. Some neighboring cities, such as Burlingame, maintain off-street truck parking standards. Stricter enforcement of on-street parking measures, especially during the peak hours, would also further mobility.

Parking is limited in many areas of the city - especially in industrial areas with auto repair facilities or freight forwarding.

4.4 TRANSIT AND PUBLIC TRANSPORTATION

Figure 4-5 shows existing and planned transit improvements in South San Francisco.

SAMTRANS BUS SERVICE

SamTrans operates six express routes and ten local bus routes in South San Francisco. The local bus routes have an average weekly ridership of approximately 3,220 people. These bus routes serve areas of South San Francisco west of U.S. 101. Areas east of U.S. 101 are not served by fixed bus-route service but by shuttle buses.

SamTrans bus routes in South San Francisco will be modified to provide feeder bus service to the new BART station at Hickey Boulevard. This will improve accessibility to the station and help reduce the amount of automobile traffic in the vicinity of the station, but may result in reduced service on local residential routes. Current plans do not include expanding fixed-route service to the East of 101 area.

CALTRAIN

The South San Francisco station is located on the east side of U.S. 101 on Dubuque Avenue, under the East Grand Avenue overpass. Caltrain, operated by the Peninsula Corridor Joint Powers Board (JPB), has 68 weekday trains between San Francisco and San Jose/Gilroy. Currently, 55 trains serve the South San Francisco Station each weekday. Approximately 1,000 passengers use the station daily.

Pedestrian and bicycle access to the station is difficult due to its location. SamTrans fixed bus route service does not serve the station, as the standard buses cannot negotiate the tight curve on the driveway from Dubuque Avenue to the station. Connection between Downtown and the station is extremely poor and there is also no direct eastern access to the station.

In 1998, the City prepared a concept plan to move the station and the platforms further south, move track sidings, provide shuttle drop-off on the eastside and direct bus and pedestrian connection on the west (Figure 4-5).

The Downtown Station Area Specific Plan furthered the concept of extending the Caltrain Station platforms to the south, opposite Grand Avenue and the Downtown. By lengthening the station platforms and reconfiguring the southern leg of Airport Boulevard at Grand Avenue, pedestrians and bicyclists will have convenient access from the Downtown to the station. With a well-designed, wide, well-lighted, and attractive undercrossing, access to the station will be greatly improved.

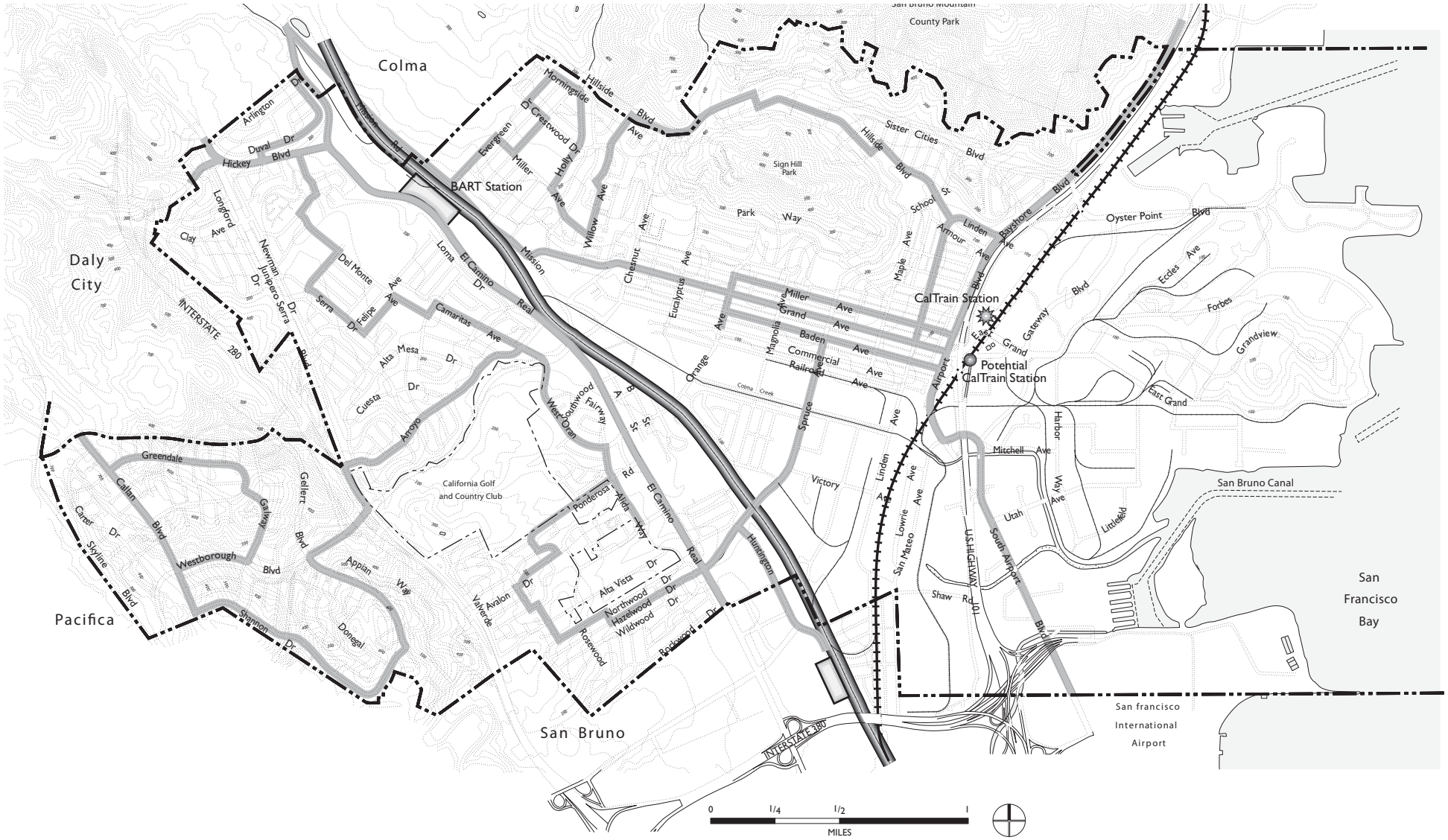
The undercrossing will also connect the Downtown with Grand Avenue east of the freeway along the north edge of the Eastern Neighborhood. This extension can be a location for dining and other amenities that can serve workers in the area. An improved Grand Avenue here will provide a direct pedestrian and bicycle connection to the Downtown from the rest of the East of 101 area of the City. Plazas, configured with space for special events, art or other gateway elements, will be possible at either end of the undercrossing and will improve the image of Downtown to visitors.

BART EXTENSION

The Bay Area Rapid Transit (BART) system provides rail service between San Francisco, East Bay locations, Daly City, and Colma. BART will be extended from its current terminus at the Colma Station to the San Francisco International Airport and Millbrae. The tracks will be underground through their stretch in South San Francisco. The South San Francisco Station will be located between El Camino Real and Mission Road to the south of the new Hickey Boulevard Extension. The San Bruno BART Station will also be within a few hundred feet of South San Francisco, and about a mile south of Downtown.

ART SYSTEM

An Airport Rail Transit (ART) System, to move people and luggage between buildings, terminals, major employment locations, and parking areas within San Francisco International Airport (SFO) is being designed as part of the current SFO Expansion Plan. The ART system would loop around the main terminal and garage area and extend approximately four miles north along McDonnell Road to the future rental car facility. Phase II will extend from McDonnell Road to South Airport Boulevard (near the United Airlines maintenance facility) and terminate along



Future BART Extension
CalTrain
SamTrans Bus Route
Future BART Station
Existing CalTrain Station
Potential CalTrain Station

Figure 4-5 **Existing Transit Routes and Planned Improvements**

Source: City of South San Francisco, Fehr & Peers

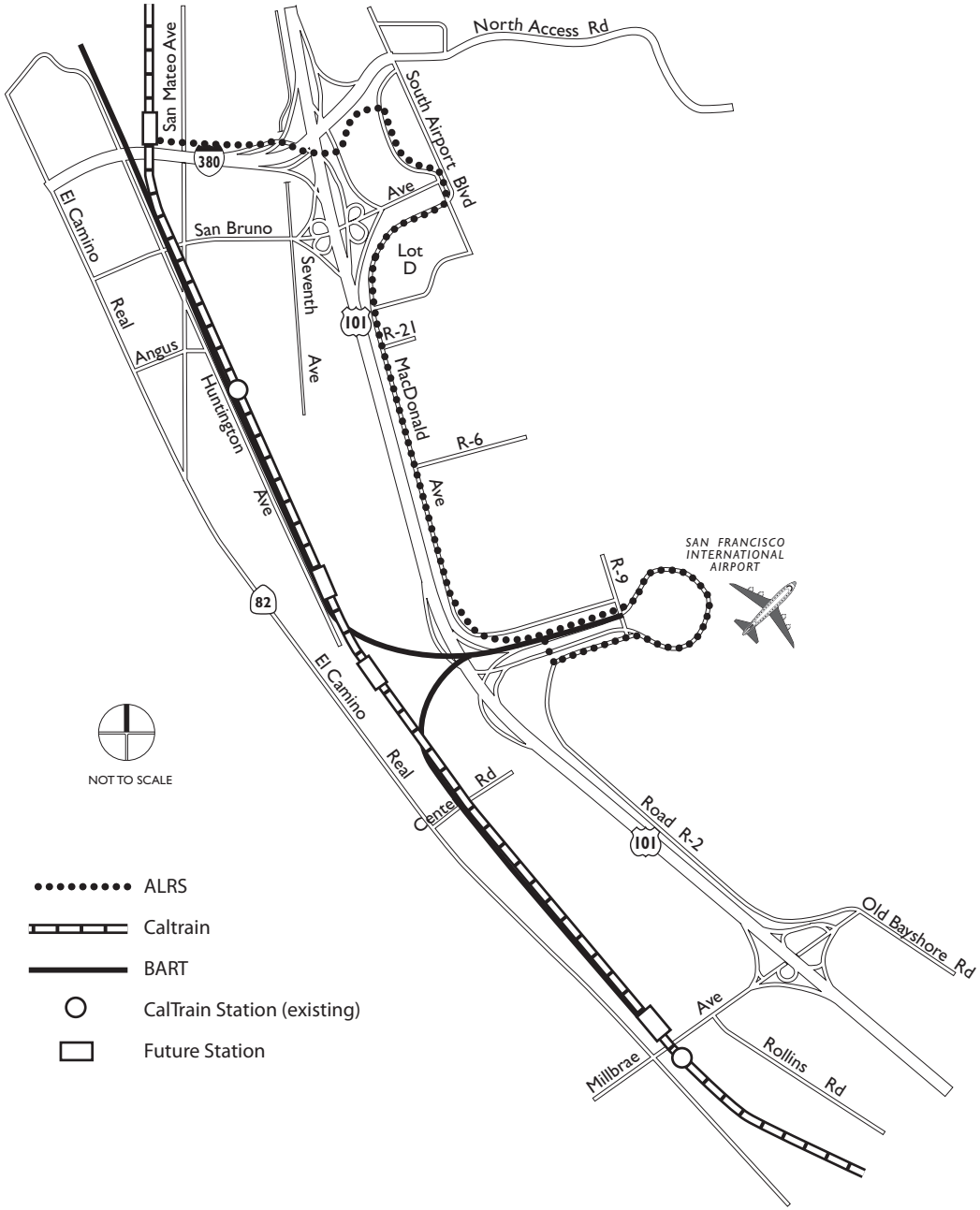


Figure 4-6

Figure 4-6 **Existing Transit Routes and Planned Improvements**

the North Access Road. Construction of Phase I started in September 1997. These routes are illustrated in Figure 4-6. The potential for extending ART to Downtown South San Francisco along Airport Boulevard was examined as part of the General Plan sketch planning process. Costs are prohibitive ($60 to $85 million for capital and $10 to $15 annually for operations), and currently not justifiable based on expected ridership.

FERRY SERVICE

While there is no scheduled ferry service to South San Francisco, potential for a terminal at Oyster Point Marina exists. The recently released Bay Ferry Plan by the Bay Area Council identifies Oyster Point as a site for a potential ferry terminal.

GUIDING POLICIES: TRANSIT

For policies related to shuttle service, see Section 4.3.

4.4-G-1 *Promote local and regional public transit serving South San Francisco.*

4.4-G-2 *Explore mechanisms to integrate various forms of transit.*

IMPLEMENTING POLICIES: TRANSIT

4.4-I-1 *Develop a Downtown multi-modal transit center southeast of the Grand Avenue/Airport Boulevard intersection, with a relocated Caltrain Station as its hub.*

4.4-I-2 *Ensure that detailed plans for the multi-modal center include:*

- Direct pedestrian access from Downtown;
- Shuttle drop-offs and pedestrian access from businesses east of the station;
- Sam-Trans bus and taxi drop-off patrons from bus routes along Airport Boulevard; and
- Clear visibility from Downtown and Grand Avenue.

4.4-I-3 *Explore the feasibility a shuttle system between the Downtown/multi-modal station and South San Francisco and San Bruno stations. Explore mechanisms to provide the shuttle service free to riders.*