4

TRANSPORTATION ELEMENT

This chapter describes San Bruno's existing transportation network, including roadway and highway system, scenic corridors, transit systems, and pedestrian and bicycle facilities. Guiding and implementing policies address all modes of transportation, as well as the interrelationship between the modes.

San Bruno's transportation system consists of streets and highways, public transit, bicycle routes, sidewalks, and trails. Regional roadway access to and from the city is provided by Highway 101, Interstate 280 (I-280), Interstate 380 (I-380), El Camino Real/State Route 82, and Skyline Boulevard/State Route 35. Caltrain provides commuter rail service north and south along the San Francisco Peninsula, providing a direct link to San Francisco, Silicon Valley, and San Jose. The BART extension to SFO, which includes a new BART station in San Bruno, began operations in June 2003 and provides direct commuter rail service to San Francisco, northern San Mateo County, and the East Bay. Local bus service, as well as bus service to San Francico, is provided by SamTrans. San Bruno's bicycle facilities are generally limited to signed bike routes that share roadways with vehicles. Existing bike routes include El Camino Real, Huntington Avenue, Jenevein Avenue, Crystal Springs Road, Crestmoor Drive, Skyline Boulevard, and Sneath Lane. There is a bike lane on Sharp Park Road and sidewalks are generally provided along all public streets.

Overall, there is a significant amount of work-related commuting into and out of San Bruno. The majority of San Bruno residents work in other locations in San Mateo County or in San Francisco. In contrast to work-related trips, most non-work trips begin and end within San Bruno, or are made between San Bruno and other locations in San Mateo County.

San Bruno's street system includes arterial streets such as Sneath Lane (top) and collector streets such as Cherry Avenue (bottom).

Vision

The Transportation Element places emphasis on El Camino Real as the primary automobile and transit corridor within San Bruno, with special linkages to the San Bruno BART station and planned San Bruno Avenue Caltrain station. The City focuses on integration of the various transportation modes, with safe, efficient, and convenient routes provided for transit users, bicyclists, and pedestrians.

Provision of a roadway network that supports efficient vehicular movement within and through the community is a key priority, while the City keeps traffic congestion and related impacts away from residential neighborhoods. San Bruno also preserves the unique and scenic features along Sneath Lane, Skyline Boulevard, and Crystal Springs Road. Improved connections to the San Bruno BART station and planned San Bruno Avenue Caltrain station include expansion of the SamTrans bus routes and new shuttle services. A comprehensive network of bicycle routes and pedestrian paths is developed, leading to local activity centers—Downtown, Tanforan District, the BART and Caltrain stations, Bayhill Office Park, schools, and park facilities, as well as connections to the regional park system (Bay Trail, Sawyer Camp Trail, Sweeney Ridge, etc.). Additionally, connections to adjacent regional multi-use trails are provided, including the Bay Trail, Sweeney Ridge Trail, and Sawyer Camp Trail.

4-1 ROADWAY NETWORK

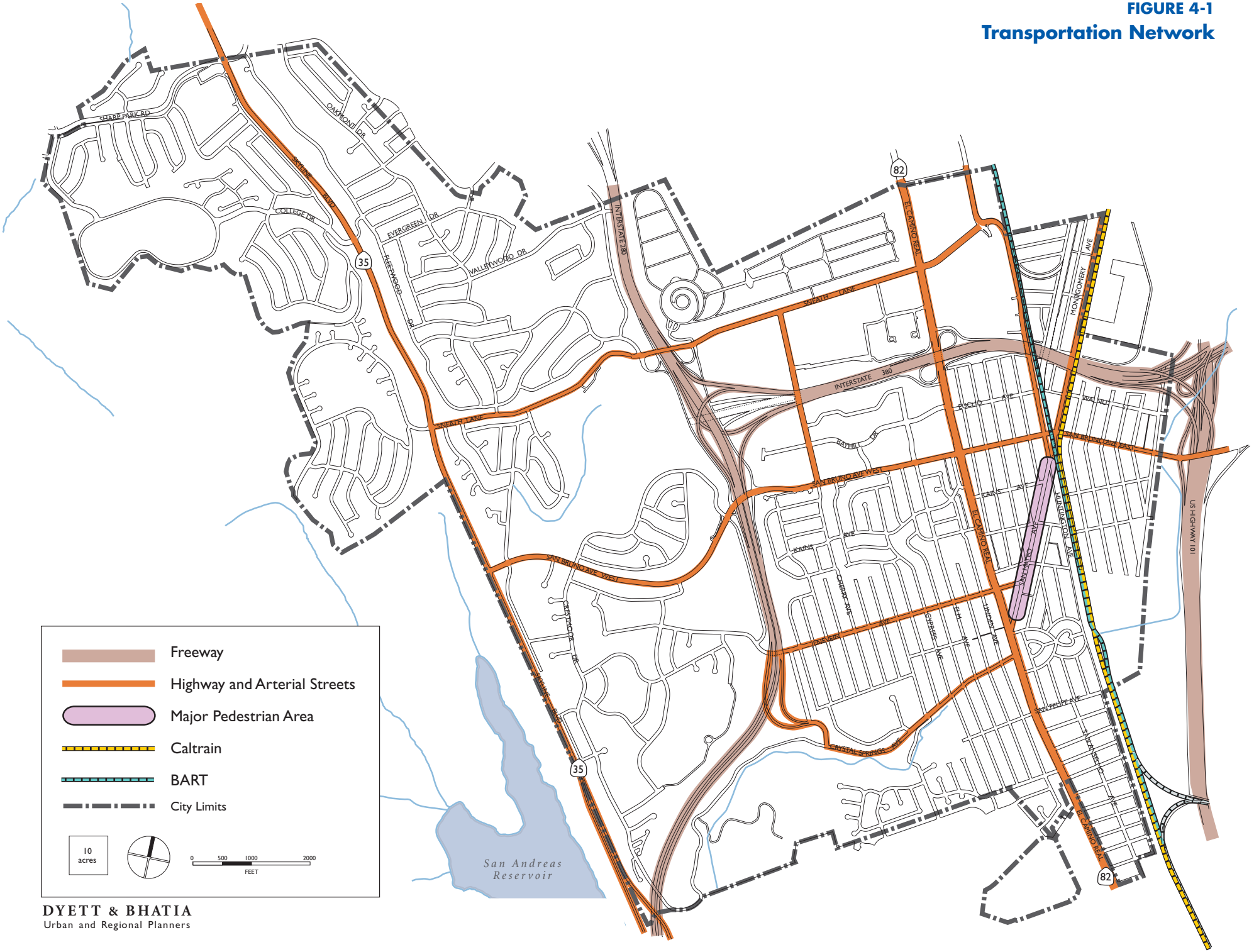
Transportation infrastructure has played a significant role in the city's development, from the construction of El Camino Real in the late 18th century and the railroad in the late 19th century, to the development of SFO and an extensive freeway system in the latter half of the 20th century. San Bruno's current land use pattern is bisected by several important regional and state highways. I-280 divides the city into its eastern and western halves, and is traversed by Sneath Lane, San Bruno Avenue, Crystal Springs Road, and Jenevein Avenue/Whitman Way. I-380 crosses through San Bruno's northeastern corner and connects I-280 with Highway 101. State routes El Camino Real and Skyline Boulevard are the major north-south arterials in the eastern and western halves of San Bruno, respectively.

Street Classification System

Figure 4-1 illustrates the City of San Bruno transportation network, which is comprised of arterials, collector streets, and local streets:

- *Arterial Streets.* Medium-speed (30-40 miles per hour), medium-capacity (10,000-35,000 average daily trips) roadways that provide through passage to and from major commercial centers, community facilities, and regional highways. Access to arterial streets should be provided at collector roads and local streets. However, direct access from parcels to existing arterials is common. Arterial streets in San Bruno include El Camino Real, Sneath Lane and San Bruno Avenue.
- *Collector Streets.* Relatively low-speed (25-30 miles per hour), low-capacity (5,000-20,000 average daily trips) streets that provide connections between neighborhood areas. Collector streets usually serve

FIGURE 4-1
Transportation Network



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short trips, and are intended for collecting vehicles from local streets and distributing them to the arterial network. Collector streets include Cherry Avenue and Fleetwood Drive.

- *Local Streets.* Extremely low-speed (15-20 miles per hour), low-volume (1,000 average daily trips) streets that provide access to neighborhood areas and internal commercial drives. All local streets provide vehicle, pedestrian and utility access. On-street parking is often present to provide parking and slow traffic.

Highway 101, I-280, I-380, El Camino Real (State Route 82), and Skyline Boulevard (State Route 35) constitute Congestion Management Program (CMP) facilities as outlined in the City/County Association of Governments of San Mateo County Final Congestion Management Program for 2001. According to this document, the purpose of a CMP is to "develop a procedure to alleviate or control anticipated increases in roadway congestion and to ensure that 'federal, state, and local agencies join with transit districts business, private and environmental interests to develop and implement comprehensive strategies needed to develop appropriate responses to transportation needs' (California Government Code Section 65088(e))."

4-2 CIRCULATION AND TRAFFIC ANALYSIS

Roadway and intersection operations are evaluated in terms of "level of service" (LOS), which is a measure of driving conditions and vehicle delay. Levels of service range from A (best) to F (poorest). LOS A, B and C indicate satisfactory conditions where traffic can move relatively freely. LOS D describes conditions where delay is more noticeable. LOS E indicates conditions where traffic volumes are at or close to capacity, resulting in significant delays and average travel speeds that are one-third the uncongested speeds or lower. LOS F characterizes conditions where traffic demand exceeds available capacity, with very slow speeds (stop-and-go), long delays (over a minute) and queuing at signalized intersections. Descriptions of levels of service for signalized intersections, together with their corresponding volume-to-capacity ratios (V/Cs), are presented in Table 4-1. Table 4-2 presents Level of Service definitions for unsignalized intersections.

Overall, relatively few intersections in San Bruno currently experience significant amounts of congestion (LOS E or F, depicted in Table 4-3). During morning peak hours, the intersections of Skyline Boulevard and San Bruno Avenue, Skyline Boulevard and College Drive, and Skyline Boulevard and Westborough Boulevard have experienced severe levels of congestion. During afternoon peak hours, the intersections of Skyline Boulevard and San Bruno Avenue and El Camino Real and Noor Avenue[1] have experienced severe levels of congestion. During weekend morning, midday, and afternoon peak hours, the intersection of El Camino Real and Sneath Lane has suffered from severe traffic congestion.

[1] *This intersection overlaps the boundary between San Bruno and South San Francisco.*

Intersection improvements are proposed in General Plan Policy T-7 for intersections that would worsen to LOS E or F under buildout of the proposed General Plan. These intersections include Skyline Boulevard/Sharp Park Road/Westborough Boulevard, Skyline Boulevard/Sneath Lane, Sequoia Avenue/Sneath Lane, El Camino Real/Noor Avenue, Skyline Boulevard/San Bruno Avenue, Skyline Drive/College Drive/Berkshire Drive, and Huntington Avenue/San Mateo Avenue. With these improvements, all intersections would perform at acceptable levels of service under the buildout scenario.

Table 4-4 presents the LOS standards for CMP roadway segments within the planning area, most of which are freeways. Table 4-5 contains the summary LOS results for roadway segments in the General Plan buildout condition and the No Project buildout condition. In terms of roadway segment LOS, buildout of the General Plan will add no more than .01 to the volume-to-capacity ratio of freeway segments within the study area, compared to the No Project buildout scenario. Thus, the General Plan is not expected to cause a freeway segment that is in conformance with CMP policy in the No Project condition to violate CMP policy in the project condition. There are no new streets or major roadway improvements proposed in the General Plan. For more on this analysis, please refer to the EIR transportation section.

There are a number of proposed development projects that will affect future traffic conditions. In particular, the redevelopment of the U.S. Navy site (with mixed housing, offices, and retail), new housing adjacent to Skyline College, construction of the planned San Mateo Avenue Caltrain station and grade separation project, and any

TABLE 4-1: Level of Service Definitions – Signalized Intersections

Level of Service	Volume to Capacity Ratio	Description
A	≤0.60	Uncongested operations; all queues clear in a single signal cycle
B	0.61-0.70	Very light congestion; an occasional approach phase is fully utilized.
C	0.71-0.80	Light congestion; occasional backups on critical approaches.
D	0.81-0.90	Significant congestion on critical approaches, but intersection functional. Cars required to wait through more than one cycle during short peaks. No long-standing queues formed.
E	0.91-1.00	Severe congestion with long-standing queues on critical approaches. Blockage of intersection may occur if traffic signal does not provide for protected turning movements. Traffic queue may block nearby intersection(s) upstream of critical approach(es).
F	>1.00	Total breakdown, stop-and-go operation.

Source: San Mateo County Final Congestion Management Program, 2005.

TABLE 4-2: Level of Service Definitions – Unsignalized Intersections

Level of Service	Expected Delay Average	Total Delay (Seconds)
A	Little or no delay	≤5
B	Short traffic delay	>5 and ≤10
C	Average traffic delays	>10 and ≤20
D	Long traffic delays	>20 and ≤30
E	Very long traffic delays	>30 and ≤45
F	Extreme delays potentially affecting other traffic movements in the intersection	>45

Source: Transportation Research Board (TRB), Highway Capacity Manual, Special Report No. 209, 1994.

TABLE 4-3: Intersection Existing Conditions Level of Service Summary

		AM PEAK HOUR		PM PEAK HOUR	
	Intersection	V/C	LOS[1]	V/C	LOS[1]
1	El Camino Real/EB I-380 Ramp	0.36	A	0.50	A
2	El Camino Real/San Bruno Ave	0.44	A	0.63	B
3	El Camino Real/San Mateo Ave/Taylor St	0.33	A	0.44	A
4	El Camino Real/Sneath Lane	0.38	A	0.68	B
5	El Camino Real/WB I-380 Ramp	0.34	A	0.58	A
6	Huntington Ave/Angus Ave[2]	–	B	–	B
7	Huntington Ave/San Bruno Ave	0.16	A	0.31	A
8	Huntington Ave/San Mateo Ave[2]	–	B	–	C
9	Huntington Ave/Sneath Lane	0.17	A	0.29	A
10	3rd Ave/San Bruno Ave	0.39	A	0.51	A
11	Cherry Ave/San Bruno Ave	0.43	A	0.60	B
12	Cherry Ave/Sneath Lane	0.47	A	0.80	D
13	El Camino Real/Noor Ave[2]	–	B	–	E
14	El Camino Real/San Felipe Ave	0.36	A	0.41	A
15	NB I-280 Ramps/San Bruno Ave	0.32	A	0.47	A
16	NB I-280 Ramps/Sneath Lane	0.42	A	0.55	A
17	NB US-101 Ramps/San Bruno Ave	0.37	A	0.34	A
18	San Mateo Ave/San Bruno Ave	0.20	A	0.27	A
19	Skyline Blvd/San Bruno Ave	1.15	F	1.25	F
20	Skyline Blvd/College Dr	0.95	E	0.67	B
21	Skyline Blvd/Sharp Park Rd/Westborough Blvd	1.04	F	0.85	D
22	Skyline Blvd/Sneath Lane	0.91	E	0.95	E
23	SB I-280 Ramps/San Bruno Ave	0.41	A	0.31	A
24	SB I-280 Ramps/Sneath Lane	0.55	A	0.55	A
25	SB US-101 Ramps/San Bruno Ave	0.44	A	0.74	C
26	National Ave/Sneath Lane	0.39	A	0.58	A
27	Pacific Heights Boulevard/Sharp Park Rd	0.61	B	0.41	A
28	Sequoia Avenue/Sneath Lane[2]	–	C	–	C
29	Cunningham Way/I-280 Ramps[2]	–	C	–	C

[1] LOS is the Level of Service.

[2] Unsignalized intersections; delay is reported, not V/C.

Source: DKS Associates, 2006.

TABLE 4-4: Future Condition 2030 Level of Service Summary

	Intersection	AM PEAK HOUR		PM PEAK HOUR	
		LOS[1]	Critical V/C	LOS[1]	Critical V/C
1	El Camino Real/EB I-380 Ramp	A	0.36	A	0.46
2	El Camino Real/San Bruno Ave	A	0.54	B	0.68
3	El Camino Real/San Mateo Ave/Taylor St	A	0.37	A	0.46
4	El Camino Real/Sneath Lane	C	0.71	C	0.75
5	El Camino Real/WB I-380 Ramp	B	0.61	C	0.71
6	Huntington Ave/Angus Ave[2]	B	–	B	–
7	Huntington Ave/San Bruno Ave	A	0.31	A	0.38
8	**Huntington Ave/San Mateo Ave**[2]	**D**	**–**	**E (D)**	**–**
9	Huntington Ave/Sneath Lane	A	0.26	A	0.49
10	3rd Ave/ San Bruno Ave	C	0.74	B	0.68
11	Cherry Ave/San Bruno Ave	A	0.40	A	0.50
12	Cherry Ave/Sneath Lane	A	0.49	A	0.49
13	**El Camino Real/Noor Ave**[2]	**C**	**–**	**F (A)**	**–**
14	El Camino Real/San Felipe Ave	A	0.40	A	0.43
15	NB I-280 Ramps/San Bruno Ave	A	0.27	A	0.47
16	NB I-280 Ramps/Sneath Lane	A	0.60	C	0.77
17	NB US-101 Ramps/ San Bruno Ave	A	0.45	B	0.63
18	San Mateo Ave/San Bruno Ave	A	0.33	A	0.37
19	**Skyline Blvd/San Bruno Ave**	**E (C)**	**0.97**	**D**	**0.85**
20	**Skyline Blvd/College Dr**	**F (C)**	**1.14**	**B**	**0.65**
21	**Skyline Blvd/Sharp Park Rd/Westborough Blvd**	**E (D)**	**0.99**	**C**	**0.79**
22	**Skyline Blvd/Sneath Lane**	**F (C)**	**1.02**	**F (D)**	**1.01**
23	SB I-280 Ramps/San Bruno Ave	A	0.24	A	0.23
24	SB I-280 Ramps/Sneath Lane	C	0.76	D	0.85
25	SB US-101 Ramps/ San Bruno Ave	A	0.52	D	0.83
26	National Ave/Sneath Lane	A	0.37	A	0.46
27	Pacific Heights Boulevard/Sharp Park Rd	B	0.63	A	0.49
28	**Sequoia Ave/Sneath Lane**[2]	**E (C)**	**–**	**F (C)**	**–**
29	Cunningham Way/ I-280 Ramps[2]	C	–	C	–

Bold indicates deficient intersection requiring mitigation.

[1] LOS is Level of Service.

[2] Unsignalized intersections; LOS based on delay, not V/C.

Source: DKS Associates, 2008.

TABLE 4-5: Level of Service Standards For CMP Roadway Segment

Route	Freeway Segment	LOS Standard
US 101	San Francisco County Line to I-380	E
US 101	I-380 to Millbrae Avenue	E
US 101	Millbrae Avenue to Broadway	E
US 101	Broadway to Peninsula Avenue	E
US 101	Peninsula Avenue to SR92	F
US 101	SR92 to Whipple Avenue	E
US 101	Whipple Avenue to Santa Clara County Line	F
I-280	San Francisco County Line to SR 1 (North)	E
I-280	SR 1 (North) to SR 1 (South)	E
I-280	SR 1 (South) to San Bruno Avenue	D
I-280	San Bruno Avenue to SR 92	D
I-280	SR 92 to SR 84	D
I-280	SR 84 to Santa Clara County Line	D
I-380	I-280 to US 101	F
I-380	US 101 to Airport Access Road	C
SR 82	Hickey Boulevard to I-380	E
SR 82	I-380 to Trousdale Drive	E
SR 35	San Francisco County Line to Sneath Lane	E
SR 35	Sneath Lane to I-280	F

Source: City/County Association of Governments of San Mateo County, San Mateo County Congestion Management Program for 2005.

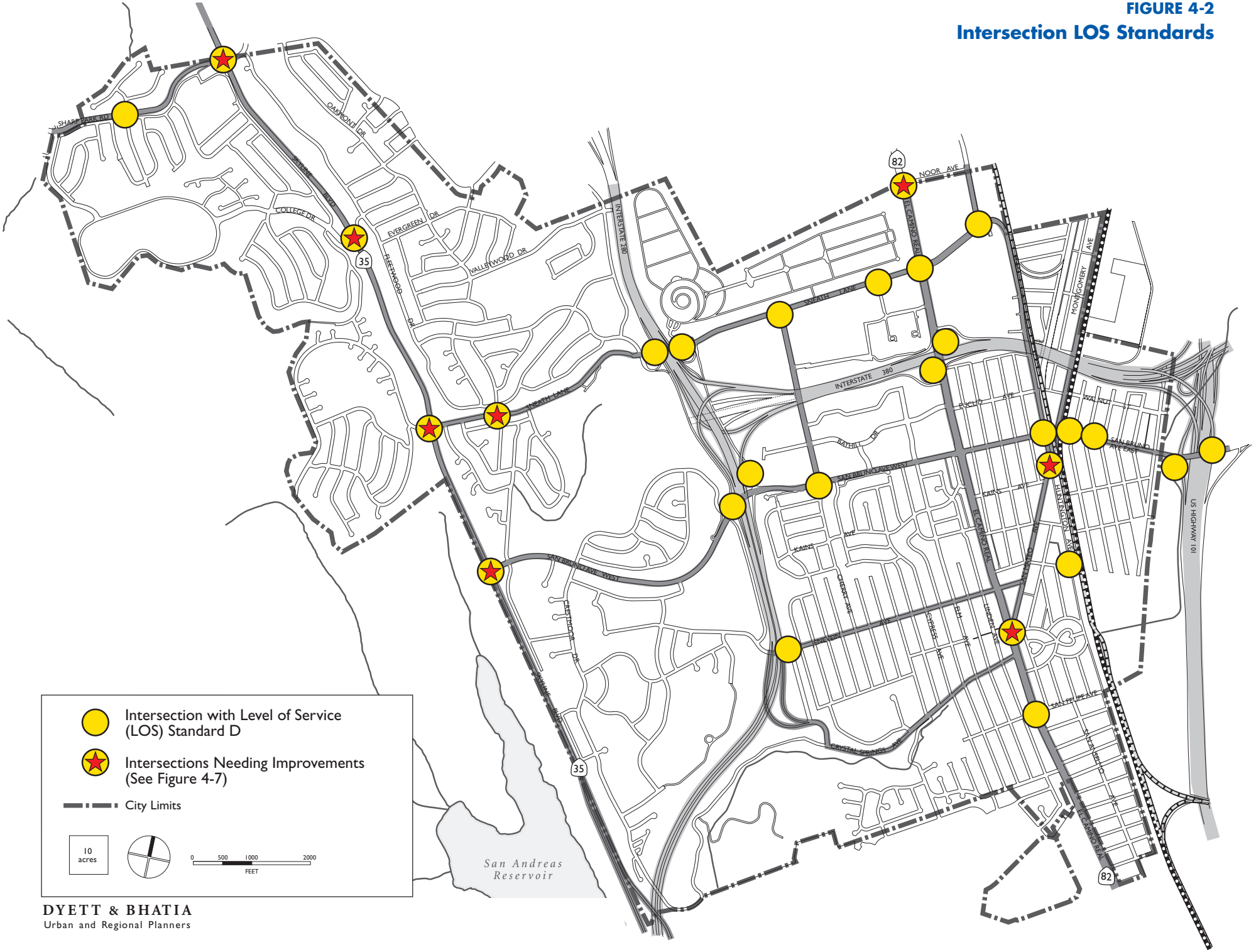
TABLE 4-6: Freeway Segment Level of Service Summary

		2030 NO PROJECT		PROJECTED BUILDOUT OF GENERAL PLAN LAND USE	
	Highway Link	AM	PM	AM	PM
US 101 (South to North)	SR 92 / 3rd Avenue	F	F	F	F
	3rd Avenue / Peninsula Avenue	F	F	F	F
	Peninsula Avenue / Broadway	F	F	F	F
	Broadway / Millbrae	F	F	F	F
	Millbrae / SFIA	F	F	F	F
	SFIA / I-380	F	F	F	F
	I-380 / Grand Avenue	F	F	F	F
	Oyster Pt / Monster Park	F	F	F	F
I-280 (South to North)	Bunker Hill / Hayne Road	F	F	F	F
	Hayne / Trousdale	F	F	F	F
	Trousdale / Hillcrest	F	F	F	F
	Hillcrest / Larkspur	F	F	F	F
	Larkspur / Crystal Springs	F	F	F	F
	Crystal Springs / San Bruno Avenue	F	F	F	F
	Sneath / Westborough	F	F	F	F
	Westborough / Hickey	F	F	F	F
	Hickey / Serramonte	F	F	F	F
	Serramonte / SR1	F	F	F	F
I-380 (West to East)	I-280 / El Camino Real	D	E	D	E
	El Camino Real / US 101	E	F	E	F

Source: DKS Associates, 2003.

FIGURE 4-2

Intersection LOS Standards



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Tall, shady Eucalyptus trees are generally identified as the "scenic" characteristic along Crystal Springs Road (top) and Skyline Boulevard (bottom).

changes to The Shops at Tanforan and Towne Center shopping areas are likely to have the greatest impacts on traffic conditions.

Access and Parking

Both on- and off-street parking is provided within San Bruno. On-street parking is provided along most of the major arterials and is allowed on most residential streets. In general, there is adequate on-street parking available in most areas; however, on-street parking is in strong demand along the retail-oriented corridors of San Mateo Avenue and San Bruno Avenue. There are currently eight off-street public parking facilities operated by the City of San Bruno, providing a total of 446 off-street parking spaces near the city's Downtown along San Mateo Avenue.

Scenic Corridors

A scenic corridor can be described as a roadway or highway with unique or distinctive physical or cultural features. According to the State (Caltrans' Scenic Highway Guidelines), a scenic highway should go through an area of outstanding scenic quality, containing striking views, flora, geology, and other unique natural attributes. The following three visual concepts are considered during identification of scenic highways:

- *Vividness* - The extent to which the landscape is memorable. This is associated with the distinctiveness, diversity and contrast of visual elements. A vivid landscape makes an immediate and lasting impression on the viewer.
- *Intactness* - The integrity of visual order in the landscape and the extent to which the natural landscape is free from visual intrusions.
- Not more than one third of the proposed scenic highway should be impacted by major intrusions (e.g., buildings, unsightly land uses, noise barriers).
- *Unity* - The extent to which intrusions are sensitive to and in visual harmony with the natural landscape.

The tall, shady trees along San Bruno roadways are generally considered the "scenic" characteristic identified for designation on the following scenic corridors:

- *Skyline Boulevard.* The entire length of Skyline Boulevard (Highway 35) is eligible to be designated by Caltrans as a State Scenic Highway. Skyline Boulevard, which lies along the eastern ridge of the coastal range, features mature Eucalyptus trees and views of the San Francisco Bay.
- *Interstate 280.* I-280 is designated by Caltrans as a State Scenic Highway. Most of the San Bruno segment is lined with tall, shady trees, with partial views of San Francisco to the north and the Bay to the east.
- *Crystal Springs Road.* Crystal Springs Road is designated by the San Mateo County General Plan as a County Scenic Road. West of San Bruno City Park, this residential street narrows and tall eucalyptus trees on either side of the roadway give the sense of a wooded grove.
- *Sharp Park Road.* Sharp Park Road is designated by the San Mateo County General Plan as a County Scenic Road. West of San Bruno, Sharp Park Road features striking views of the Pacifica coastline.
- *Sneath Lane.* Sneath Lane, west of El Camino Real, is designated by the City of San Bruno as a scenic corridor. West of I-280, Sneath Lane features partial views of San Francisco Bay, while east of I-280, it features views of Sweeney Ridge. Tall, shady trees line the roadway, and most development is set back from the street and accessed from side roads.

Gateways

Gateways are those points that identify entrances into city limits or district boundaries. Gateways inform visitors and residents that they have entered a special place. As such, they generally feature coordinated landscape design, signage, and street furniture. The following roadways and highways serve as gateways to the City of San Bruno:

- Skyline Boulevard, at the northern and southern city limits.
- Sharp Park Road, at the western city limit.
- Interstate 280, at the northern and southern city limits.
- El Camino Real, at the northern and southern city limits.
- San Mateo Avenue, at the northern city limit.
- Interstate 380, at the eastern city limit.
- San Bruno Avenue, at the eastern and western city limits.

Goods Movement

Movement of goods within the City of San Bruno is conducted primarily on the city's highways and arterials. Major arterials such as El Camino Real, San Bruno Avenue and Sneath Lane accommodate the city's truck traffic as deliveries are made.

4-3 PUBLIC TRANSIT

The Peninsula Corridor Joint Powers Board (Caltrain) and the San Mateo County Transit District (SamTrans) currently provide transit service in San Bruno. As of June 2003, the Bay Area Rapid Transit District (BART) provides service to San Bruno as well. Figure 4-3 illustrates transit facilities within the city.

Caltrain

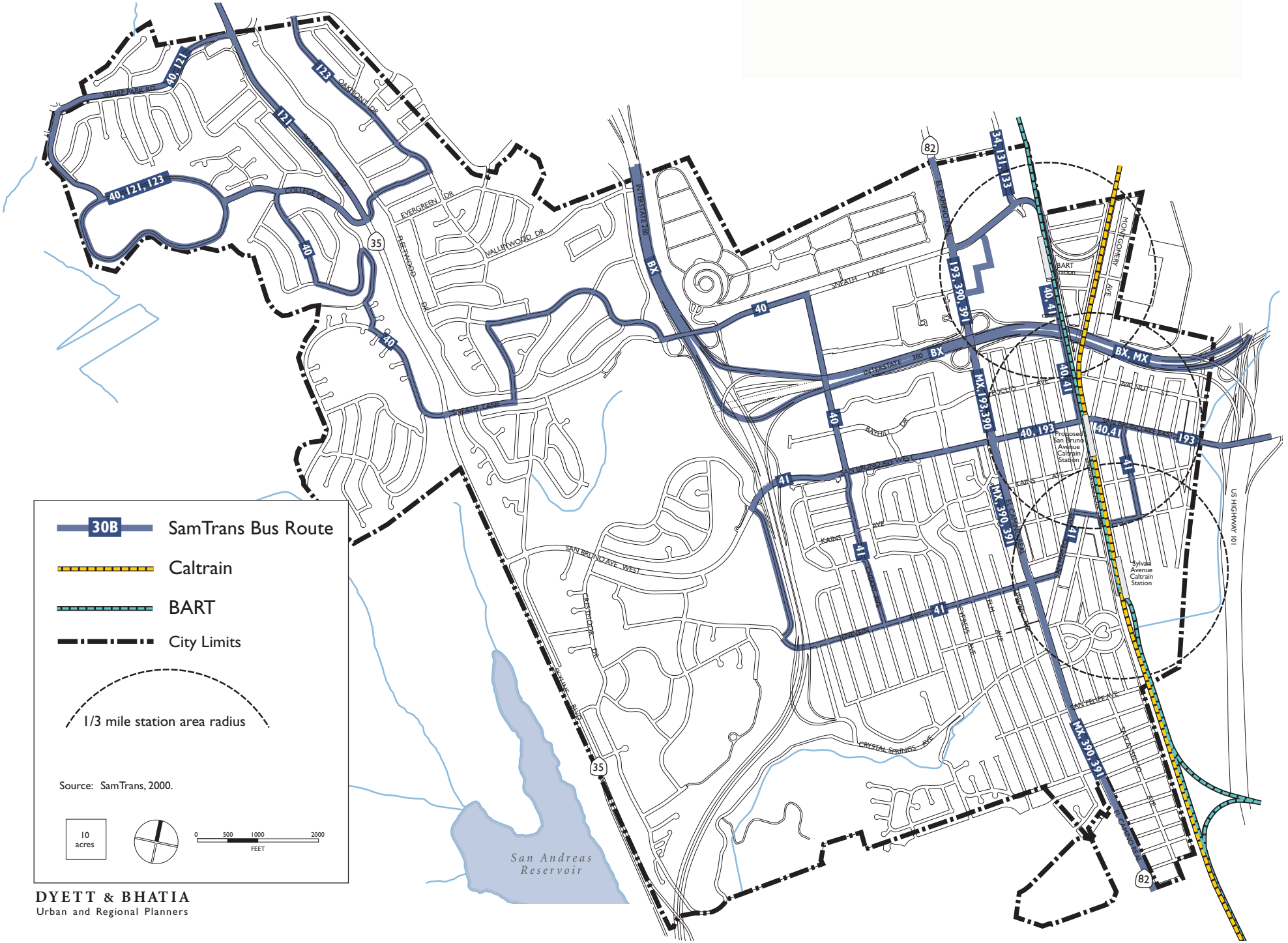
Caltrain is a commuter rail service operating on the San Francisco Peninsula between the cities of San Francisco and Gilroy. The alignment consists of approximately 77 miles of track and serves 33 stations. The current location of the San Bruno Caltrain station is between 1st Avenue and Huntington Avenue at Sylvan Avenue. A new Caltrain station at the intersection of Huntington Avenue, San Mateo Avenue, and San Bruno Avenue, along with a Grade Separation Project to elevate the tracks above the street. This planned station would serve as a northern anchor to the Downtown, and provide convenient access to retail, offices, mixed-use, and housing within the station area. Preliminary design and engineering work for the station have been completed, but as of 2008, funding for the project has not yet been fully secured. Daily ridership averaged 28,400 passengers in 2005, with approximately 488 passengers accessing Caltrain each day via the San Bruno station.

Although these trains do not stop in San Bruno, a Baby Bullet (Caltrain) commuter service from San Jose to San Francisco began operating in June 2004. Feasibility of California High Speed Rail, providing train service from San Diego to the Bay Area using existing railways, is currently being evaluated; if this were to be implemented, it would pass through San Bruno as well.

The city's major transit nodes, providing access from San Bruno throughout the Bay Area, include the Sylvan Avenue Caltrain Station (top) and the San Bruno BART Station (bottom).

FIGURE 4-3

Existing Transit Network and Facilities



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SamTrans

The SamTrans fixed-route bus system consists of 64 routes, traveling more than 28,000 miles and carrying more than 59,000 passengers on an average weekday systemwide (1999 to 2000). The total number of passengers includes more than 15,000 youth riders and 34,000 full-fare adults. Senior and disabled patrons complete ridership totals with more than 10,000 daily riders. As can be seen in Figure 4-3, 11 different fixed routes provide service to and from San Bruno. SamTrans also operates paratransit bus routes throughout San Mateo County.

BART

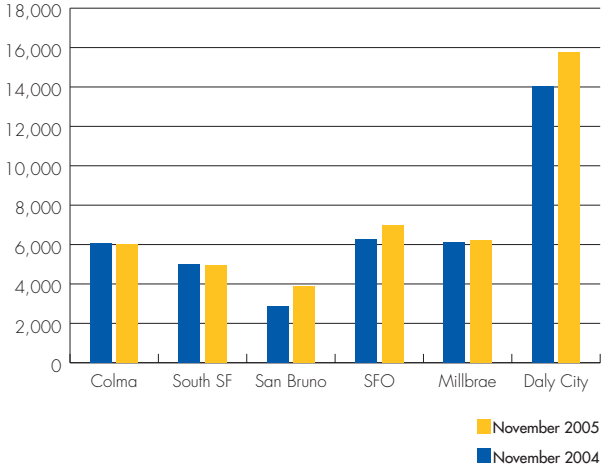
The Bay Area Rapid Transit District (BART) is a 95-mile, automated rapid transit system serving over three million people in the three BART counties of Alameda, Contra Costa, and San Francisco, as well as northern San Mateo County. Forty-three BART stations are located along five lines of double track system wide. Trains traveling up to 80 miles per hour connect San Francisco to Millbrae and East Bay communities—north to Richmond, east to Pittsburg/Bay Point, west to Dublin/Pleasanton, and south to Fremont. BART's weekday ridership was approximately 320,000 as of October 2005.

BART recently completed construction of four new stations and 8.7 miles of new track along the San Francisco Peninsula that extend south from the Colma Station. The new stations, operational as of June 2003, are located in South San Francisco, San Bruno, SFO, and Millbrae. The San Bruno BART station is located on Huntington Avenue, along the eastern side of The Shops at Tanforan. Ridership projections were estimated at 70,000 passengers by 2010, with a projected 9,800 passengers accessing the system from the San Bruno BART station. However, actual ridership has been less strong, with average weekday ridership at 2,850 in November 2004 for the extension (four stations), an increase of 4.6 percent from the previous year. Average ridership at San Bruno in November 2005 was 3,903, a strong 15.6 percent increase in a year; however the San Bruno station has by far the lowest ridership of the Peninsula stations.[2]

Shuttle Services

A free shuttle, funded by the GAP, Inc., runs between the Bayhill Office Park and the San Bruno BART Station during weekday mornings and early evenings. In December 2001, average daily ridership was approximately 180 passengers. Each bus can carry between 33 and 37 passengers per run.

CHART 4-1: Peninsula BART Ridership



[2] *SamTrans, "Multimodal Ridership Report—November 2005," Staff Report to Community Relations Committee, January 2006.*

General Plan policies promote the construction of safe bicycle and pedestrian routes, particularly to important destinations such as City Park (bicycle and pedestrian path, top) and Downtown (El Camino Real crosswalk, bottom).

4-4 BICYCLES AND PEDESTRIAN PATHS

Responsibility for planning and maintaining bicycle facilities rests with San Mateo County, various cities, CalTrans, and BART (new bikeway along the BART alignment). San Bruno's existing bicycle facilities consist of designated routes that share roadways with motorized vehicles. Class III bicycle facilities are signed as bicycle routes, but do not have bicycle lane markings on the pavement. Class II bicycle facilities, or bike lanes, are portions of the roadway that are marked with a line for use by bicyclists. Sharp Park Road and Sneath Lane are San Bruno's only Class II bike lanes. Class I bicycle facilities are completely separated from motor vehicle traffic, such as an off-street pathway. San Bruno has no Class I bike routes. Additional bicycle trails are located within the Golden Gate National Recreation Area to the west of the city and are used primarily for recreation.

Proposed bicycle routes, as designated by the City's Bicycle and Pedestrian Committee, are illustrated in Figure 4-4. The Committee selected a number of additional roadways to complement San Bruno's existing bicycle routes:

- College Drive,
- Fleetwood Drive,
- Crestmoor Drive,
- Crystal Springs Road,
- Jenevein Avenue,
- Sneath Lane extended to Huntington Avenue,
- Huntington Avenue,
- Cherry Avenue, and
- Bayhill Drive.

Both the San Bruno BART station and Sylvan Avenue Caltrain station have bicycle racks and lockers available for bicycle parking. Additionally, bicycles are allowed on board BART (except during rush hour), Caltrain, and SamTrans buses (attached to front). Figure 4-5 shows San Bruno in the context of the larger regional bikeway system.

Currently, the only exclusive pedestrian facilities, such as pedestrian trails or bridge crossings, within San Bruno are located in City Park and Junipero Serra County Park. Sidewalks are typically provided along major arterials and residential roadways, and pedestrian crosswalks and signals are provided at most major intersections within the city. Pedestrian emphasis areas are depicted in Figure 4-6.

TABLE 4-7: Bikeway Classifications

Classification	Function	Access Control	Right-of-Way
Class I - Bike Paths	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, along arterials and median parkways where street traffic generally exceeds 40 mph, a minimum of 11 feet for a two-way facility should be provided.
Class II - Bike Lanes	Provides preferential use of the paved area of roadway for bicyclists by establishing specific lines of demarcation between areas reserved for bicycles and motorists.	Access should be controlled to minimize intersection and driveway crossings. 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.	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.
Class III - Bike Routes	Provides a right of way designated by signs or permanent markings and shared with motorists.	Access should be controlled to minimize driveway crossings.	The width of a Class III bike route varies. It is desirable to have a minimum bicycle travel way, however, due to various constraints/conditions; a minimum width has not been established.

Source: Fehr & Peers, 2003.

FIGURE 4-4

Proposed Bikeways

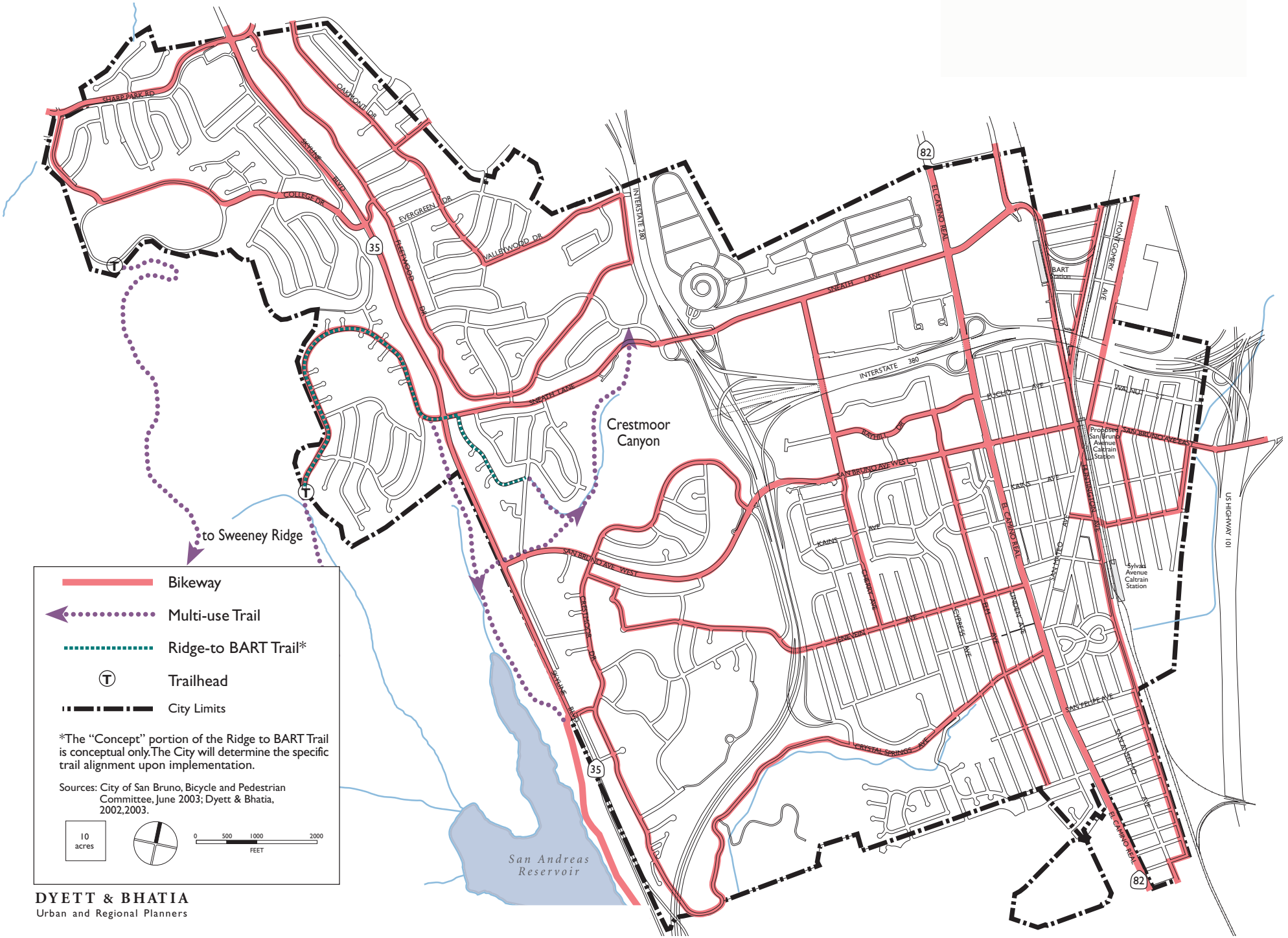


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FIGURE 4-5

Proposed Regional Bikeway System

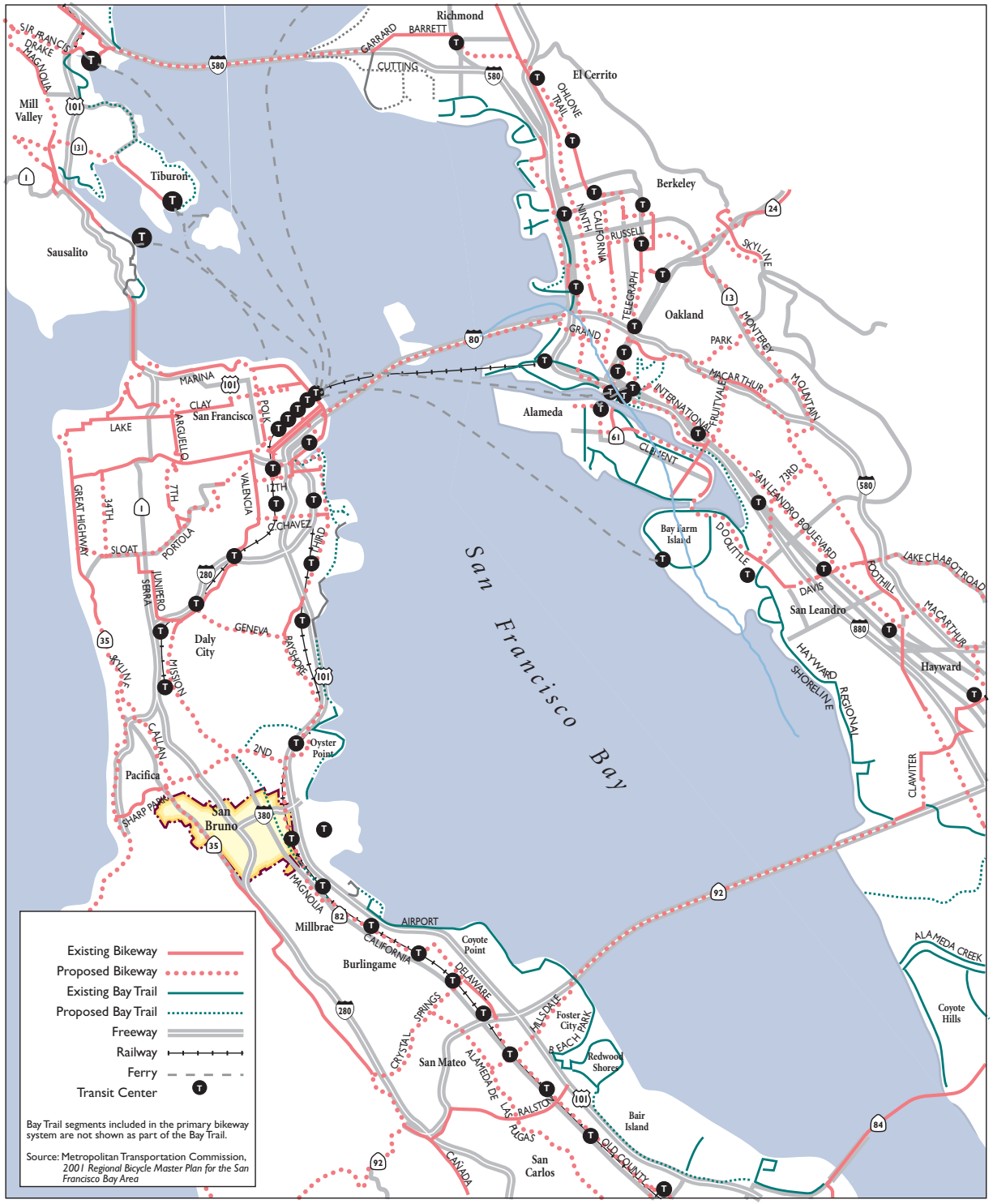
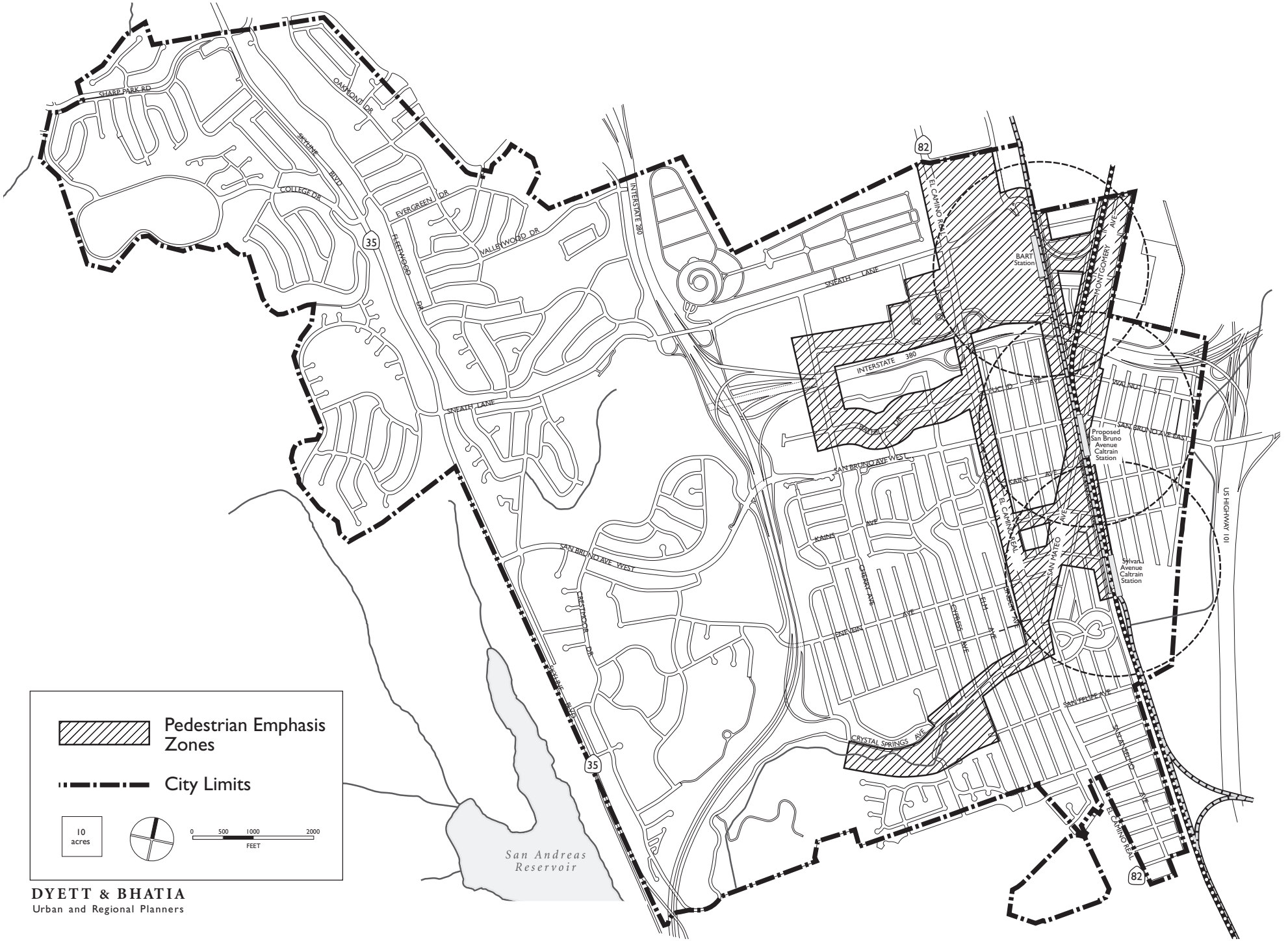


FIGURE 4-6

Pedestrian Emphasis Zones



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4-5 TRANSPORTATION POLICIES

Guiding Policies

T-A Provide for efficient, safe, and pleasant movement for all transportation modes—vehicles, bicycles, transit, and pedestrians.

T-B Maintain acceptable levels of service for vehicular movement along the city's street network. Acceptable level of service could vary based on characteristics of the area under consideration.

T-C Preserve and enhance the unique natural features that constitute San Bruno's scenic roadways, as well as the visual quality of major gateways into the city.

T-D Provide adequate parking facilities for commercial, industrial, and transit station areas.

T-E Focus San Bruno's efforts on improvements to the non-motorized transportation system (i.e., bicycles, pedestrians, strollers, etc) adjacent to transit corridors and stations, and their connections to those systems.

T-F Provide efficient local transit—such as a shuttle system—to the BART and Caltrain stations to avoid dependence on individual motor vehicles.

T-G Protect residential areas from congestion and associated noise resulting from BART and Caltrain spillover traffic.

T-H Expand the existing bus network to provide convenient and efficient public transit to employment centers, shopping areas, parks, and other key destinations.

T-I Develop and maintain a comprehensive bicycle network within San Bruno, providing connections to BART and Caltrain, surrounding cities, employment and shopping areas, and natural areas.

T-J Develop a safe, convenient, and continuous network of sidewalks and pedestrian paths within the city.

T-K Coordinate the City's transportation network and improvements with surrounding cities, agencies, and San Mateo County.

Implementing Policies

Please note that policies within Chapter 2: Land Use and Urban Design address the appearance and improvement of gateways (along major roadways).

Alternative Modes

T-1 Develop incentives for San Bruno government and private employers to institute staggered working hours, compressed work week, home-based telecommuting, car pooling, use of transit, alternative fuel vehicles, and bicycling to employment centers to reduce vehicle miles traveled and the associated traffic congestion and air pollution.

T-2 Ensure that all transportation improvements—roadway, transit, bicycle, and pedestrian—are

General Plan policies identify needed improvements to the existing street network for safety, aesthetics, and improved traffic flows. Recent examples include a new median along Huntington Avenue (top) and streetscaping and bulb-outs along San Mateo Avenue (bottom).

designed and constructed according to Americans with Disabilities Act standards. Improve existing facilities so they are compliant with American Disability Act standards.

T-3 Encourage provision of bicycle facilities such as weather protected bicycle parking, direct and safe access for pedestrians and bicyclists to adjacent bicycle routes and transit stations, showers and lockers for employees at the worksite, secure short-term parking for bicycles, etc.

T-4 Encourage major employers of the city to provide shuttle service for employees from worksite to food service establishments, commercial areas, and transit stations, to reduce the number of automobile trips.

T-5 Provide assistance to regional and local ride-sharing organizations; advocate legislation to maintain and expand incentives (e.g., tax deductions/credits).

Street Network

T-6 Maintain LOS standards for intersections for AM and PM peak periods as shown in Figure 4-2.

T-7 Undertake improvements to intersections shown in Table 4-8 and in Figure 4-7 to ensure their operation at the LOS shown in Figure 4-2. Determine costs for these improvements and establish an impact fee program to assess improvement costs to new development, proportionate to the impacts created by such development.

T-8 Support widening of Skyline Boulevard between Sneath Lane and I-280 to alleviate traffic congestion problems, if concerns regarding sensitive natural resources can be mitigated. Preserve the mature trees in the area, if feasible.

T-9 Continue the City's program of street maintenance (i.e., resurfacing and reconstructing streets every 15 years where necessary and feasible). Seek funds to enable the City to accelerate the current schedule.

T-10 Improve signage and access at the intersection of San Mateo Avenue, Taylor Avenue, and El Camino Real.

T-11 Vacate unnecessary streets within the Montgomery Avenue area for infill development with high technology and other advanced industrial uses. Redesign street access for better circulation, safety, and parking.

T-12 Designate permitted truck routes to avoid residential areas.

T-13 Study ways to separate through-traffic from local traffic on Euclid Avenue to eliminate its use as both an alternative route to the I-380 on-ramp, and a shortcut between Huntington Avenue and El Camino Real.

T-14 Use traffic-calming measures to reduce speeding in residential areas, rather than limiting through-street connections. Traffic-calming measures may include:

- Narrowing travel lanes and allowing on-street parking;
- Using different paving materials at pedestrian crosswalks;
- Planting street trees and other vegetation;
- Building corner bulb-outs and intersection round-abouts;
- Installing stop and/or yield signage; and
- Speed limit enforcement or other mitigation measures.

HS-15 Implement traffic-calming measures along College Drive and Skyline Boulevard.

HS-16 Install safety improvements along Sneath Lane to improve visibility of signals. Such improvements may include signage and lighting.

HS-17 Synchronize traffic signals between El Camino Real, Sneath Lane, Huntington Avenue, and San Bruno Avenue, to improve traffic flows into and out of the San Bruno BART Station.

HS-18 Require right-of-way landscaping to be maintained at an appropriate scale, so as to not reduce visibility at intersections.

HS-19 Should CalTrans vacate El Camino Real as a State highway, reconfigure the roadway to include wide sidewalks, streetscaping, and marked bicycle lanes. Consider various alternative configurations of traffic flow.

Transportation System Management

T-20 Study the potential benefit of implementing High Occupancy Vehicle (HOV) and carpool lane along major arterials.

T-21 Consider investment in Intelligent Transportation System (ITS) to enhance efficiency of existing network, potential ITS strategies include:

- Roadway monitoring system (cameras, centralized traffic control center)
- Enhanced travel information (variable message signs at major intersections)
- Incidence Response Plan
- Adaptive Traffic Signal Timing along major arterials

T-22 Apply turning restrictions to major arterials during peak hours to improve general traffic flow.

T-23 Implement Parking Guidance System to guide motorists to parking locations in commercial areas.

T-24 Implement targeted reinforcement program to eliminate double parking in Downtown and along San Bruno Ave and El Camino Real.

Scenic Corridors

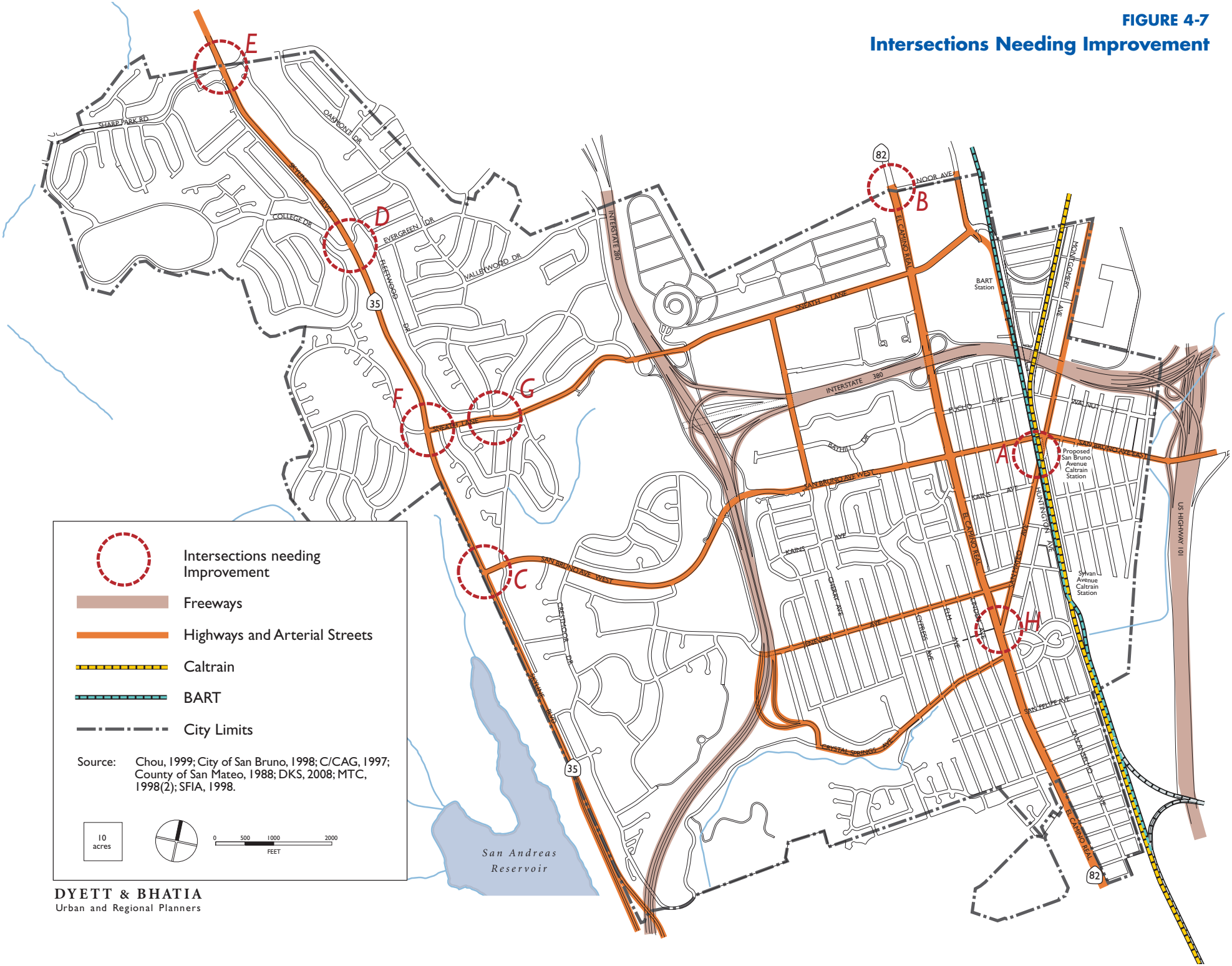
T-25 Coordinate with Caltrans, San Mateo County, and adjacent cities in order to maintain a consistent approach in applying scenic conservation standards in roadway design, improvements, and maintenance.

TABLE 4-8: Intersection Improvements

	Intersection	Condition - Peak Hour	Intersection Improvement
A	San Mateo Ave/ Huntington Ave	GP Buildout - PM	Within the existing right-of-way, restripe the southbound Huntington Avenue approach from one left/through/right lane to one left turn lane and one through/right lane. This recommended intersection improvement would result in a delay of 9.3 seconds and a LOS D for the General Plan Buildout Condition PM peak hour. No right-of-way acquisition or utility relocation would be anticipated.
B	El Camino Real/Noor Ave	No Project - PM GP Buildout - PM	The southbound El Camino Real left turn onto Noor Avenue is the critical movement at this intersection. Converting the intersection from a one-way stop controlled to a signalized intersection would result in a V/C ratio of 0.56 and a LOS A for both the No Project and General Plan Buildout Condition PM peak hour. The peak hour signal warrant is satisfied under both Conditions. No right-of-way acquisition would be anticipated. A new signal may require movement of utilities and street furniture, and would require restriping the intersection.
C	Skyline Blvd and San Bruno Ave	No Project - AM/PM GP Buildout - AM	With restriping and minor right-of-way additions, the northbound Skyline Boulevard approach could be converted from one through lane and one right turn lane to one through lane and one through/right lane. The southbound Skyline Boulevard approach could be converted from one through lane and one left turn lane to two through lanes and one left turn lane. This intersection improvement would result in a maximum V/C ratio of 0.79 and a LOS C. The northbound reconfiguration would require additional right-of-way to accommodate two receiving lanes, which could taper to one lane downstream of the intersection. The southbound reconfiguration would require additional right of way to accommodate the additional through lane and for two receiving lanes downstream. The two southbound receiving lanes could taper to one lane downstream.
D	Skyline Blvd and College Drive/Berkshire Dr	GP Buildout - AM	With additional right-of-way and restriping, add one left turn lane to the northbound Skyline Boulevard approach for a total of two, and add one through lane to the southbound Skyline Boulevard approach, for a total of three. This intersection improvement would result in a V/C ratio of 0.76 and a LOS C. Additional right-of-way, utility relocation, and movement of traffic signals and other street furniture would be required to implement this intersection improvements.
E	Skyline Blvd and Westborough Blvd/Sharp Park Rd	No Project - AM GP Buildout - AM	With additional right-of-way and restriping, add one through lane to the southbound Skyline Boulevard approach for a total of three. This intersection improvement would result in a maximum V/C ratio of 0.86 and a LOS D. Additional right-of-way and traffic signal relocation would be required to accommodate the extra through lane and extra receiving lane downstream.
F	Skyline Blvd and Sneath Lane	No Project - AM/PM GP Buildout - AM/PM	Convert the eastbound and westbound approaches from split phasing to permitted control. This intersection improvement would result in a maximum V/C ratio of 0.84 and a LOS D. No additional right-of-way or utility relocation would be required.
G	Sneath and Sequoia Ave	GP Buildout - AM/PM	Convert the intersection from a three-way stop control to a permitted or protected signalized control. This intersection improvement would result in a maximum V/C ratio of 0.76 and a LOS C. Restriping and installation of traffic signal hardware would be required to implement this intersection improvement. No additional right-of-way would be required.
H	El Camino Real/ San Mateo Ave.		Permit southbound San Mateo Avenue traffic to turn south on El Camino Real and add pedestrian crossing at north leg of El Camino Real to create a pedestrian connection to Memory Lane.

FIGURE 4-7

Intersections Needing Improvement



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T-26 Continue to limit widening, modification, or realignment of the city's scenic corridors, consistent with Ordinance 1284. Preserve large trees and other natural features, limit signage, maintain wide setbacks, and reduce traffic speeds along these roadways.

T-27 Continue to support beautification efforts along Interstate 280, an officially designated State Scenic Highway.

T-28 Recognize and protect the following as local scenic corridors:

- Skyline Boulevard, State Scenic Highway
- Crystal Springs Road, County Scenic Road
- Sharp Park Road, County Scenic Road
- Sneath Lane

T-29 Review and update the City's Scenic Corridor Protection Program for I-280, Skyline Boulevard, and future State-designated scenic highways.

T-30 Improve the appearance of the following streets:

- El Camino Real: Continue landscaping the median strips and review projects for good design. Coordinate landscaping design with neighboring jurisdictions.
- San Mateo Avenue: Continue implementation of the Street Beautification Plan in conjunction with merchants and property owners.
- San Bruno Avenue (west of El Camino Real): Retain trees on Bayhill property along San Bruno Avenue, consistent with the City's Tree Preservation policy.
- Huntington Avenue/railroad tracks: Continue landscaping along both sides of the railroad tracks.
- Improve the appearance of the following major gateways to the city with landscaping and improved architectural design:
  - San Bruno Avenue, western city limits;
  - El Camino Real, northern and southern city limits;
  - Skyline Boulevard, northern and southern city limits; and
  - Sharp Park Road, western city limits.

T-31 Encourage local citizens and organizations to help design and maintain street and gateway improvements.

T-32 Encourage design of public and private development to frame vistas of the Downtown, public buildings, parks, and natural features.

T-33 Promote and facilitate planting of shade trees along all streets within San Bruno, through public education, developer incentives, and general beautification funds. Tree specifics should be selected to create a unified image and an effective canopy.

Parking

T-34 Comprehensively review and revise parking standards for new office and commercial devel-

opment providing alternative transportation measures (i.e., vanpool, shuttle service, bicycle storage).

T-35 Conduct a parking study to determine potential deficiencies at parks and public facilities. Recommend parking solutions.

T-36 Enforce on-street and off-street parking restrictions, particularly of motor homes, trailers, boats, and non-operating vehicles, and in residential areas near major transit facilities.

T-37 Require provisions and marking of handicapped parking spaces in conformance with California Vehicle Code to allow enforcement by public agencies or private interests.

T-38 Study the possibility of providing public parking facilities for commercial and industrial areas. Designate general areas where parking lots are needed; purchase site(s) if possible when land uses change to avoid displacement of occupants. Consider the use of assessment districts to fund land acquisition as one option.

T-39 Encourage parking lot access from non-residential side streets in order to minimize interruption to traffic flow on primary streets (San Bruno Avenue east of El Camino Real and along El Camino Real).

T-40 Consider reduced parking standards within transit corridors and station areas in recognition of their proximity to high frequency transit service, mix of land uses, and walkable environment.

T-41 Allow joint use of parking facilities when nearby uses have staggered peak periods of demand.

T-42 Do not allow parking lots to dominate the frontage of mixed-use streets, interrupt pedestrian routes, or negatively impact surrounding neighborhoods.

BART and Caltrain Station Areas

T-43 Create a "pedestrian-friendly" environment surrounding the BART and Caltrain stations by installing additional street trees, lighting, signage, and widening sidewalks along streets adjacent to these stations.

T-44 Support the Caltrain Grade Separation Project, featuring relocation of the Caltrain station above grade at the San Mateo Avenue/San Bruno Avenue intersection. Provide main parking facilities for the Caltrain station on the former San Bruno Lumber site north of the intersection, and bicycle and pedestrian connections to surrounding areas with prominence given to access south to Downtown.

T-45 During the Caltrain Grade Separation Project, ensure that the San Bruno station serves as an important gateway and northern anchor to Downtown, which should be clearly visible from the station platform.

The General Plan seeks to create a pedestrian-friendly environment surrounding the BART and Caltrain stations. Required improvements include streetscaping and safety measures along the railroad tracks (top), as well as bicycle and pedestrian connections to the proposed San Bruno Avenue Caltrain Station (former San Bruno Lumber site, bottom).

T-46 As rail capacity increases with expanded BART and Caltrain service, install pedestrian safety measures—such as clear markings, safety gates, alternative routes, or overcrossings—at all at-grade railway crossings in the city. At grade-separated locations, provide safe pedestrian under-crossings.

T-47 Improve multi-modal access—specifically for pedestrians, cyclists, and transit passengers—to the BART and Caltrain stations through improvements along Huntington Avenue.

T-48 Incorporate a dedicated pedestrian crossing and flashing street markers at the new four-way signal installed on El Camino Real connecting The Crossing with The Shops at Tanforan and the San Bruno BART station.

T-49 Install adequate turning, driveway, and drop-off lanes at the San Bruno BART and planned San Bruno Avenue Caltrain stations to accommodate the increased levels of traffic expected.

T-50 Consider developing a shuttle service to provide reliable, consistent, and convenient access between the BART and Caltrain stations and other destinations within the city, including Bayhill Office Park, Skyline College, Downtown, schools and neighborhoods in the western and southern portions of the city.

T-51 Publicize all routes that provide non-auto access to the BART and Caltrain station areas, such as the GAP Inc. shuttle, bicycle routes, etc.

T-52 Work with BART and Caltrain to provide park and ride facilities with convenient, safe pedestrian access to the transit stations.

T-53 Coordinate with the Peninsula Corridor Joint Powers Board to ensure design of the planned San Bruno Avenue Caltrain Station (and Grade Separation Project) that will accommodate such regional transit improvements.

T-54 Continue landscaping along the railroad right-of-way and commuter parking areas to improve neighborhood appearance and mitigate noise.

T-55 Consider developing a parking permit system in residential areas adjacent to the new Caltrain Station to prevent overflow parking, when requested by a designated majority of residents in that area.

T-56 Work with SamTrans to provide paratransit (demand-based transit) services to residents with special needs.

Bus Transit

T-57 Work with SamTrans to schedule the routing of public transit in San Bruno so that a majority of residents are within walking distance of transit stops.

T-58 Work with SamTrans to design the local bus transit system for maximum passenger satisfaction, safety, comfort, convenience, and privacy.

T-59 Encourage SamTrans to configure bus transit service to serve connections with other transit systems (BART, Caltrain, SFO, and other bus lines).

T-60 Work with SamTrans to design the local bus transit system to serve transportation-dependent groups, including low income families that do not own an automobile, the elderly, youths, the handicapped, and others.

T-61 Work with SamTrans to route large buses on arterials, rather than on collector and local streets. Utilize smaller vehicles through residential areas.

T-62 Seek community input in establishing transit routes and schedules.

T-63 Encourage Skyline College to coordinate with SamTrans to implement a reliable, consistent and convenient bus system providing students with regular connections to the BART and Caltrain station areas, Downtown, El Camino Real, and multifamily apartments throughout the city.

T-64 Work with SamTrans to plan the local system with built-in flexibility for increases in service in accordance with increases in demand. Coordinate with local school districts on possible joint transit usage.

T-65 Work with SamTrans to locate transit stops directly adjacent to buildings with retail frontage, rather than severed by large parking lots.

T-66 Design arterial and collector streets to facilitate safe pedestrian crossings to transit stops. Provide crosswalks at all signalized arterial intersections.

T-67 Encourage installation of bus shelters, appropriate for year-round weather, to provide comfortable, safe waiting areas for SamTrans riders.

T-68 Work with SamTrans to implement Bus Signal Priority System to improve bus speed and reliability.

Bicycle Routes

T-69 Continue to work toward dedication and/or installation of bicycle lanes throughout the city in accordance with Figure 4-4, to enhance recreational opportunities and make bicycling a more viable transportation alternative. Implement bicycle route improvements including signing, striping, paving, and provision of bicycle facilities at employment sites, shopping centers, schools, and public facilities.

T-70 Identify funding for and implement as a priority bicycle/pedestrian paths along the BART and Caltrain track alignments (Huntington Avenue and Herman Avenue) within the city limits. Coordinate with the Linear Park planned in South San Francisco and Millbrae.

T-71 Provide bicycle parking facilities in Downtown, Bayhill Office Park, BART and Caltrain Stations, The Shops at Tanforan and Towne Center, parks, schools, and other key destinations. Review bicycle standards as part of the Zoning Ordinance Update.

General Plan policies identify a need for coordinated bus transit routes and facilities. Emphasis is placed on major transit corridors such as El Camino Real (top) and key destinations such as The Shops at Tanforan (bottom).

Pedestrian connections provide an important source of recreation and transportation. Local pedestrian paths include the Sweeney Ridge Trail (top) and sidewalks adjacent to City Park (bottom).

T-72 Identify and mark safe bicycle routes providing connections between the BART and Caltrain stations, and the following regional trail networks:

- Bay Area Ridge Trail,
- Sweeney Ridge Trail,
- Bay Trail,
- San Andreas Trail, and
- Sawyer Camp Trail

T-73 Coordinate with the Bicycle and Pedestrian Committee to promote safe cycling programs, sponsored rides, and other community outreach programs geared toward cyclists.

T-74 Ensure maintenance of vegetation along bicycle routes within the city. Ensure that overgrown vegetation does not push bicyclists into vehicular travel lanes and cause potential accidents.

Pedestrian Paths

T-75 Link sidewalks directly to building entrances. Avoid routes through parking lots or at the rear of residential developments.

T-76 Require construction of sidewalks at least five (5) feet wide along newly built streets within San Bruno, and four (4) feet wide on older streets to preserve street character in older neighborhoods.

T-77 Create a pedestrian-oriented setting along the Pedestrian Emphasis Zones (see Figure 4-6) through potential construction of the following public improvements:

- Brick pavers to make sidewalks look more distinct;
- Street trees to soften the environment and provide color and shade;
- Human-scale street lights for enhanced aesthetics and illumination;
- Banners and flags to make the area look more festive and cheerful; and
- Benches to give people a place to sit, rest, and watch what goes on around them.

T-78 Allow new development to contribute to the Pedestrian Emphasis Zones (Figure 4-6) through construction of off-site improvements.

T-79 Prioritize improvements to sidewalks and other walking paths adjacent to public school facilities where children and youth are likely to use them on a daily basis.

T-80 Install safety improvements for pedestrian crossings along El Camino Real. Such improvements may include bulb-outs at the corners, crossing medians, and signal synchronization.

Coordination

T-81 Provide for public safety and efficient operation in the planning, construction, and maintenance of transportation facilities.

T-82 Prohibit the encroachment of transportation facilities on irreplaceable resources, such as important open spaces, recreational areas, and historic sites.

T-83 Undertake periodic reviews of highway projects and improvements, San Francisco Airport expansion planning, and County and regional transit planning to enable the City to coordinate effectively with regional circulation systems.

T-84 The City shall work closely with the High Speed Rail Authority to ensure all impacts associated with the High Speed Rail Project are mitigated to the fullest extent possible. The City shall work to ensure that the design for the High Speed Rail project is consistent with the train station and grade separation design approved by the Citizens Advisory Committee and City Council.

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