B. TRANSPORTATION AND CIRCULATION

1. Introduction

The following discussion of transportation is based upon a traffic analysis prepared for the project by Hexagon Transportation Consultants, Inc. A copy of the traffic impact analysis (TIA) is provided in Appendix B of Volume 2 of this EIR. The purpose of the TIA was to identify the potential traffic impacts of the proposed *Strategy 2000*, according to the standards and methodologies of the City of Jose and the Santa Clara Valley Transportation Authority (VTA). The VTA administers the County Congestion Management Program (CMP). The VTA administers the County Congestion Management Program (CMP). The TIA analysis is based on the following development scenario: 11.2 msf of office space; 8,500 residential units; 1.4 msf retail; and 3,600 hotel rooms

The levels of office, retail, and hotel development are greater than proposed by *Strategy 2000*, and the TIA represents a worst-case analysis. *Strategy 2000* calls for development of between 8,000 to 10,000 new units in the Greater Downtown. An updated TIA would be required to consider the potential traffic impacts of more than 8,500 units, taking into account the trips associated with the higher levels of office, retail, and hotel development analyzed in the TIA, to confirm the EIR's conclusions regarding traffic impacts and mitigation remain valid for implementation of *Strategy 2000* as a whole.

a. Scope of Study. This analysis consists of an evaluation of the general development plans for the Greater Downtown area identified by the proposed *Strategy 2000*. The Greater Downtown area boundary extends beyond the traditional Downtown core to include areas around Diridon Station to the west, areas to the north to approximately Taylor Street, areas to the east up to San Jose State University (SJSU) and 7th Street, and areas to the south to approximately I-280 (see Figure V.B-1). The level of development envisioned within the boundary as identified in *Strategy 2000* is what is considered the "project" for this analysis.

This analysis will serve as a base by which to evaluate future individual site-specific development plans. The recommended area-wide transportation improvements can be used as a guide in determining necessary improvements to serve individual developments. Subsequent environmental analysis of transportation related concerns will be needed only when individual development plans are not consistent with those identified in the *Strategy 2000*.

The traffic analysis is based on peak-hour levels of service for signalized intersections and freeway segments. Traffic conditions were evaluated for the following scenarios:

Scenario 1: *Year 2000 Existing Conditions.* Existing traffic volumes were obtained from traffic counts generally conducted in the year 2000. Year 2000 counts were used to maintain consistency with the model that uses the year 2000 as its base year. Year 2000 also reflects contemporary peak traffic volumes for the Downtown area, as traffic volumes since the year 2000 have declined slightly with the region's economic downturn.

Scenario 2: *Project Conditions.* Traffic projections for project conditions were developed with the use of a traffic model. Forecasts include traffic associated with the identified future development within the Greater Downtown boundary as well as future development in Santa Clara County as a whole.

b. Methodology. This section presents the methods used to determine the traffic conditions for each scenario described above. It includes descriptions of the data requirements, the analysis methodologies, and the applicable level of service standards.

(1) The Traffic Model. The City of San Jose's traffic forecasting model was developed to help the City project AM and PM peak hour traffic impacts attributable to proposed changes to the City's General Plan. The model is implemented using the TRANPLAN transportation planning software system. The model includes the four elements traditionally associated with models of this kind. These elements include: (1) Trip Generation; (2) Trip Distribution; (3) Mode Choice; and (4) Traffic Assignment. Appendix B of Volume 2 of this EIR provides a more detailed description of the traffic modeling exercise.

(2) Signalized Intersection Analysis. The City of San Jose level of service methodology is based on the *Highway Capacity Manual* (HCM) method for signalized intersections. Signalized intersection operations are evaluated using the 1985 HCM Operations Method and TRAFFIX software. The method evaluates intersection LOS on the basis of average delay time for all vehicles at the intersection. Since TRAFFIX is also the CMP-designated intersection level of service software, the City of San Jose methodology employs the CMP default values for the analysis parameters. The City of San Jose level of service standard for signalized intersections not located in the Downtown Core is LOS D or better. Intersections located within the Downtown Core are exempt from having to meet the City's level of service policy. As such, levels of service for the Downtown Core intersections are reported for informational purposes only. The only difference between the San Jose and CMP analyses is that project impacts are determined on the basis of different level of service standards – the CMP level of service standard for signalized intersections is LOS E or better. The correlation between average delay and level of service is shown in Table V.B-1.

Table V.B-1: Intersection Level of Service Definitions Based on Delay

Level of Service	Description	Average Stopped Delay Per Vehicle (in seconds)
A	Operations with very low delay occurring with favorable progression and/or short cycle lengths.	Less than 5.0
B	Operations with low delay occurring with good progression and/or short cycle lengths.	5.1 to 15.0
C	Operations with average delays resulting from fair progression and/or longer cycle lengths. Individual cycle failures begin to appear.	15.1 to 25.0
D	Operations with longer delays due to a combination of unfavorable progression, long cycle lengths, or high V/C ratios. Many vehicles stop and individual cycle failures are noticeable.	25.1 to 40.0
E	Operations with high delay values indicating poor progression, long cycle lengths, and high V/C ratios. Individual cycle failures are frequent occurrences. This is considered to be the limit of acceptable delay.	40.1 to 60.0
F	Operation with delays unacceptable to most drivers occurring due to oversaturation, poor progression, or very long cycle lengths.	Greater than 60.0

Source: Transportation Research Board, Highway Capacity Manual, Special Report 209 (Washington, D.C., 1985), pp. 9-4, 9-5.

Figure V.B-1: Study Area and Intersections

11x17

back of Figure V.B-1

Traffic conditions at the selected study intersections were analyzed for the weekday AM and PM peak hours of traffic. The AM peak hour of traffic is generally between 7:00 and 9:00 a.m., and the PM peak hour is typically between 4:00 and 6:00 p.m. It is during these periods that the most congested traffic conditions occur on an average day. All signalized intersections within Downtown San Jose were studied. Additionally, intersections that surround the Downtown area and are currently operating at LOS D or worse also were studied. It is expected that any intersections outside the Downtown area operating at LOS C or better would not be significantly affected by project traffic, since the proejct would not add a sufficient amount of traffic to cause the degradation of levels of service at any intersction by two grades. The study area and intersections are shown in Figure V.B-1 and are listed below. CMP intersections are denoted with an asterisk (*) in the list.

Downtown Core Intersections

1 4th Street And Julian Street
2 4th Street and St. James Street
3 4th Street and St. John Street
4 4th Street and Santa Clara Street
5 4th Street and San Fernando Street
6 4th Street and San Carlos Street
7 4th Street and San Salvador Street
8 4th Street and William Street
9 4th Street and Reed Street
10 3rd Street and Julian Street
11 3rd Street and St. James Street
12 3rd Street and St. John Street
13 3rd Street and Santa Clara Street
14 3rd Street and San Fernando Street
15 3rd Street and San Carlos Street
16 3rd Street and San Salvador Street
17 3rd Street and William Street
18 3rd Street and Reed Street
19 2nd Street and Julian Street
20 2nd Street and St. James Street
21 2nd Street and Santa Clara Street
22 2nd Street and San Carlos Street
23 2nd Street and San Salvador S
24 2nd Street and William Street
25 2nd Street and Reed Street
26 1st Street and Julian Street
27 1st Street and St. James Street
28 1st Street and Santa Clara Street
29 1st Street and San Carlos Street
30 1st Street and Reed Street
31 Market Street and Julian Street
32 Market Street and St. James Street
33 San Pedro Street and St. James Street
34 Market Street and Santa Clara Street
35 Market Street and San Fernando Street
36 Market Street and San Carlos Street*
37 SR 87 and Julian Street (E)*
38 Almaden Blvd. and Santa Clara Street
39 Almaden Boulevard and Park Avenue
40 Almaden Boulevard and San Carlos St*
41 Almaden Boulevard and Conven. Center
42 Almaden Boulevard and Woz Way
43 Almaden Boulevard and Reed Street
44 Almaden Boulevard and I-280 NB ramp
45 Almaden Blvd. and Santa Clara Street (W)
46 SR 87 and Santa Clara Street*
47 Woz Way and Park Avenue
48 Woz Way and San Carlos Street
49 Woz Way and Auzerais Avenue
50 SR 87 and Woz Way
51 SR 87 and Julian Street (W)*

Expanded Downtown Core Intersections

52 Coleman Avenue and Taylor Street
53 Stockton Avenue and The Alameda
54 Cahill Street and Santa Clara Street
55 Montgomery St and Santa Clara St*
56 Autumn Street and Santa Clara Street*
57 Montgomery Street and Park Avenue
58 Bird Avenue and San Carlos Street*
59 Bird Avenue and Auzerais Avenue
60 I-280 and Bird Avenue (N)*
61 I-280 and Bird Avenue (S)*
62 Delmas St and San Fernando St (Fut)
63 Delmas Avenue and Park Avenue
64 Delmas Avenue and San Carlos Street
65 Delmas Avenue and Auzerais Avenue

Intersections Outside Core/Expanded Core/In Gateway Corridors

66 King Road and Mabury Road
67 King Road and McKee Road
68 King Road and Alum Rock Avenue*
69 King Road and Story Road
70 I-280 and McLaughlin Avenue*
71 McLaughlin Avenue and Story Road
72 Nineteenth Street and Julian Street (Fut)
73 Seventeenth Street and Julian Street
74 Senter Road and Keyes Street
75 Oakland Road and Commercial Street
76 US 101 and Oakland Road (N)*
77 US 101 and Oakland Road (S)*
78 Oakland Road and Hedding Street
79 13th Street and Julian Street
80 13th Street and St. James Street
81 11th Street and Hedding Street
82 11th Street and Taylor Street
83 11th Street and Jackson Street
84 11th Street and Empire Street
85 11th Street and Julian Street
86 11th Street and St. James Street
87 11th Street and St. John Street
88 11th Street and Santa Clara Street
89 11th Street and San Fernando Street
90 11th Street and San Antonio Street
91 11th Street and San Carlos Street
92 11th Street and San Salvador
93 11th Street and William Street
94 11th Street and Reed Street
95 I-280 and 11th Street (N)*
96 I-280 and 11th Street (S)*
97 11th Street and Keyes Street
98 10th Street and Hedding Street
99 10th Street and Taylor Street
100 10th Street and Jackson Street
101 10th Street and Empire Street
102 10th Street and Julian Street
103 10th Street and St. James Street
104 10th Street and St. John Street
105 10th Street and Santa Clara Street
106 10th Street and San Fernando Street
107 10th Street and San Antonio Street
108 10th Street and San Carlos Street
109 10th Street and San Salvador Street
110 10th Street and William Street
111 10th Street and Reed Street
112 I-280 and 10th Street (N)*
113 I-280 and 10th Street (S)*
114 10th Street and Keyes Street
115 7th Street and Julian Street
116 7th Street and Margaret Way
117 7th Street and Virginia Street
118 7th Street and Keyes Street
119 5th Street and Julian Street (Fut)
120 5th Street and Reed Street
121 4th Street and Hedding Street
122 4th Street and Jackson Street
123 4th Street and Empire Street (Fut)
124 3rd Street and Jackson Street
125 3rd Street and Empire Street (Fut)
126 3rd Street and Virginia Street
127 3rd Street and Martha Street (Fut)
128 3rd Street and Keyes Street
129 I-880 and 1st Street (N)*
130 I-880 and 1st Street (S)*
131 1st Street and Hedding Street
132 1st Street and Taylor Street
133 2nd Street and Virginia Street
134 2nd Street and Keyes Street
135 1st Street and Keyes Street*
136 1st Street and 2nd Street
137 1st Street and Alma Avenue*
138 Monterey Road and Curtner Avenue*
139 San Pedro Street and Taylor Street
140 Almaden Avenue and Grant Street
141 Almaden Avenue and Virginia Street
142 Almaden Avenue and Willow Street
143 Almaden Avenue and Goodyear Street
144 Almaden Avenue and Alma Avenue
145 Vine Street and Grant Street
146 Vine Street and Virginia Street
147 Vine Street and Willow Street
148 Vine Street and Goodyear Street (Fut)
149 Vine Street and Alma Avenue
150 Coleman Avenue and Airport Boulevard
151 I-880 and Coleman Avenue (N)*
152 I-880 and Coleman Avenue (S)*
153 Coleman Avenue and Hedding Street
154 Bird Street and Willow Street
155 Bird Street and Minnesota Avenue
156 The Alameda and Hedding Street*
157 The Alameda and Naglee Avenue*
158 The Alameda and Race Street*
159 Lincoln Avenue and San Carlos Street
160 Lincoln Avenue and Willow Street
161 Lincoln Avenue and Minnesota Avenue
162 Meridian Avenue and San Carlos Street
163 Meridian Avenue and Fruitdale Avenue
164 Meridian Avenue and Willow Street

(3) Freeway Segment Analysis. Future levels of service for freeway segments were calculated based on a volume-to-capacity ratio (V/C), as shown in Table V.B-2. Freeway segments to be included in the analysis were selected based on their proximity to the Downtown area. Levels of service were identified based on the CMP monitoring report.

I-280, I-880 to Meridian Avenue
I-280, Meridian Avenue to Bird Avenue
I-280, Bird Avenue to SR 87
I-280, SR 87 to 10th Street
I-280, 10th Street to McLaughlin Avenue
I-280, McLaughlin Avenue to US 101
I-680, US 101 to King Road
I-880, The Alameda to Coleman Avenue
I-880, Coleman Avenue to SR 87
I-880, SR 87 to 1st Street
I-880, 1st Street to US 101
I-880, US 101 to Brokaw Road
SR 87, Coleman Avenue to Julian Street
SR 87, Julian Street to I-280
SR 87, I-280 to Alma Avenue
SR 87, Alma Avenue to Almaden Boulevard
SR 87, Almaden Boulevard to Curtner
US 101, Santa Clara Street to I-280
US 101, Old Bayshore to I-880
US 101, I-280 to Story Road
US 101, I-880 to Oakland Road
US 101, Story Road to Tully Road
US 101, Oakland Road to McKee Road

(4) Parking, Transit, Bicycle and Pedestrian Analysis. The effects of the proposed development levels on parking facilities in the Downtown area were evaluated qualitatively. Based on existing and planned parking facilities, the projected supply vs. demand with the proposed future development was evaluated. With such extensive development for the Downtown area, it can be expected that transit services will be significantly effected. The effects on transit service were evaluated to determine necessary improvements to the existing transit system. Bicycle and pedestrian facilities were evaluated to determine the effects of the proposed development levels.

2. Setting

This section describes existing conditions for all of the major transportation facilities in the Greater Downtown area, including the roadway network, parking, transit service, and bicycle and pedestrian facilities.

a. Existing Roadway Network. Regional access to the Downtown area is provided via I-680, I-280, US 101, I-880, and SR 87. These facilities are described below:

- *Interstate-680* is an eight-lane freeway providing regional access to San Jose. It extends in a north-south direction from its junction with I-280 and US 101 near Downtown San Jose through the East Bay to its junction with I-80 in Fairfield. Both directions of I-680 serve as peak commute travel corridors during both the AM and PM peak hours.
- *Interstate-280* connects from US 101 in San Jose to I-80 in San Francisco. It is generally an eight-lane freeway in the vicinity of Downtown San Jose. It also has auxiliary lanes between some interchanges. The section of I-280 just north of the Bascom Avenue overcrossing has six mixed-flow lanes and two high-occupancy-vehicle (HOV) lanes. Connections from I-280 to Downtown San Jose are provided via a full interchange at Bird Avenue, and partial interchanges at 7th Street (no north on-ramp), at Almaden/Vine (ramps to/from north), Market Street (ramp to south), and 4th Street (ramp to north). Connections are also available indirectly via an interchange with SR 87.

Table V.B-2: Freeway Segment Levels of Service Definitions Based on Volume-to-Capacity

Level of Service	Description	V/C Ratio
A	Primarily free-flow operations. Vehicles are almost completely unimpeded in their ability to maneuver within the traffic stream.	Less than 0.36
B	Reasonably free-flow conditions. The ability to maneuver within the traffic stream is only slightly restricted.	0.36 – 0.54
C	Provides for stable operation, however, flows approach the range in which small increases will cause a substantial deterioration in service. Freedom to maneuver within the traffic is noticeably restricted.	0.55 – 0.77
D	Borders on unstable flow. Small increases in flow cause substantial deterioration in service. Freedom to maneuver within the traffic stream is severely limited. Minor incidents can be expected to create substantial queuing, as the traffic stream has little space to absorb disruptions.	0.78 – 0.93
E	Operations are extremely unstable. Any incident can be expected to produce a serious breakdown with extensive queuing. Maneuverability within the traffic stream is extremely limited.	0.94 – 1.00
F	Forced or breakdown conditions. Such conditions generally exist within queues forming behind breakdown points.	Greater than 1.00

Source: 1985 Highway Capacity Manual for freeway sections with a 70 mph design speed.

- *US 101* is a north-south freeway that extends northward though San Francisco and southward through Gilroy. Within the study area, US 101 is an eight-lane facility that includes two high-occupancy vehicle (HOV) lanes. During the peak commute hours, the mixed-flow lanes operate under stop-and-go conditions in the peak direction of travel – northbound in the AM and south-bound in the PM. Within the HOV lane, traffic flows well, although volumes are approaching capacity during the peak periods. US 101 lies to the east of Downtown, but access to the Downtown area is provided via interchanges with Santa Clara Street and Julian Street and its connection with I-280.
- *I-880* connects from I-280 in San Jose, where it is a continuation of SR 17, to I-80 in Oakland. It provides six travel lanes through San Jose. I-880 lies somewhat north of Downtown San Jose, but has connections via interchanges at Coleman Avenue and 1st Street.
- *State Route 87* connects from SR 85 in south San Jose to US 101 near the San Jose Airport. It is generally a four-lane freeway from SR 85 to Coleman, with auxiliary lanes near the I-280 inter-change. North of Coleman, SR 87 becomes an at-grade arterial street with signalized intersec-tions. The arterial section is currently being upgraded to a freeway, with a projected completion date of later this year. Connections from SR 87 to Downtown San Jose are provided via a full interchange at Julian Street and partial interchanges at Park Avenue (ramps to/from north only), at Auzerais Avenue (ramps to/from south only), and at Santa Clara Street (northbound off-ramp only).

Local access to the Downtown area is provided by numerous major arterials and minor streets. Described below are the major arterials that feed the Downtown area:

- *Market Street* is a north-south four-lane roadway that runs from Julian Street to Reed Street. North of Julian Street, Market Street becomes Coleman Avenue. South of Reed Street, Market Street becomes South 1st Street.

- *Coleman Avenue* is a four-lane arterial that provides access to I-880 and the Airport from the Downtown area. It runs in a north-south direction from Julian Street at the northern boundary of Downtown San Jose to De La Cruz Boulevard in Santa Clara. Between I-880 and De La Cruz Boulevard, Coleman Avenue provides three lanes in each direction.
- *North 1st Street* is a one-lane and one-way northbound street between San Carlos Street and Julian Street. From San Carlos to Julian Street, the Guadalupe Light Rail Transit (LRT) line runs along the right side of 1st Street. North of Julian Street, 1st Street transitions to a two-way roadway that is divided by the Guadalupe LRT line. South of San Carlos Street, 1st Street transitions to a two-way roadway and becomes Monterey Road.
- *Almaden Boulevard* is a six-lane north-south roadway that runs from Julian Street to I-280. South of I-280, Almaden Boulevard provides access to and from the south via its connections to Vine Street and Almaden Avenue. Access to SR 87 is provided via its intersection with Notre Dame Street and Santa Clara Street.
- *Bird Avenue* is a four-lane north-south arterial that provides access to I-280 and the Downtown area. Bird Avenue runs from the Willow Glen Area to Park Avenue.
- *Julian Street* is primarily a one-way westbound two-lane roadway within the Downtown core. West and east of the Downtown core at SR 87 and 17th Street, respectively, Julian Street is generally a two-way two-lane facility. Julian Street provides regional access to the Downtown area through its full interchange with SR 87.
- *The Alameda (State Route 82)* is generally a four-lane north-south arterial that runs from Santa Clara University to the Downtown area (Diridon Train Station) where it becomes Santa Clara Street.
- *Santa Clara Street* is a four-lane east-west roadway that provides access from the east and west of the Downtown area. East of US 101, Santa Clara Street becomes Alum Rock Avenue and west of the Caltrain bridge it becomes The Alameda.
- *San Fernando Street* is a four-lane east-west arterial that runs from 17th Street to Montgomery Street. Outside of the Downtown area, specifically west of Almaden Boulevard and east of 10th Street, San Fernando Street is a two-lane roadway.
- *San Carlos Street* is a four-lane east-west arterial that runs from 4th Street to I-880 at which point it becomes Stevens Creek Boulevard.
- *Park Avenue* is an east-west roadway that extends from Market Street to Meridian Avenue. West of Meridian Avenue, Park Avenue proceeds in a northwest direction into Santa Clara. Park Avenue transitions from two to four lanes at various points.
- *Fourth Street* is a north-south arterial that runs from I-280 to US 101. Limited freeway access is provided via a northbound ramp to I-280 and southbound ramp to US 101. Between Taylor Street and I-280, 4th Street is a three-lane one-way southbound roadway. Two lanes in each direction are provided north of Taylor Street.
- *Seventh Street* is a two-lane north-south roadway providing access from northbound and south-bound I-280. 7th Street runs from Hedding Street to SJSU, at which point it ends. It continues on the south side of SJSU to I-280.

- *Tenth Street* is a one-way three-lane southbound arterial that runs from I-880 to Tully Road.
- *Eleventh Street* is a one-way three-lane northbound arterial that runs from Keyes Street to Hedding Street.

b. Existing Traffic Volumes. Existing peak-hour traffic volumes were obtained from the City of San Jose. For the purpose of this study, traffic counts from the year 2000 were generally used, so as to maintain consistency with the model that uses the year 2000 as its base year. The existing peak-hour intersection volumes at each study intersection are included in Appendix B.

c. Existing Intersection Lane Configurations. The existing lane configurations at the study intersections were provided by City staff and confirmed by observations in the field. Lane configurations for each of the study intersections can be found within the level of service calculation sheets in Appendix B.

d. Existing Intersection Levels of Service. The results show that the following six signalized study intersections currently operate at an unacceptable level of service, LOS E or worse (see Table V.B-3 and Figure V.B-2).

52 Coleman Avenue and Taylor Street
82 11th Street and Taylor Street
132 1st Street and Taylor Street
152 I-880 and Coleman Avenue (S)*
153 Coleman Avenue and Hedding Street

* Denotes CMP Intersection.

The two CMP designated intersections are operating at an unacceptable LOS F based on CMP level of service standards. A table summarizing the intersection level of service results for all intersections and calculation sheets are included in Appendix B.

e. Year 2000 Freeway Segment Levels of Service. Traffic volumes and levels of service for the subject freeway segments were taken from the 2000 CMP Annual Monitoring Report. Based on the monitoring report, 40 of the 48 freeway segments analyzed currently operate at an unacceptable LOS F during at least one of the peak hours. Those segments operating at LOS F conditions are identified in Figure V.B-3. Summary tables of the freeway segment analysis are presented in Appendix B.

Nearly all peak direction freeway segments in the Downtown area are currently operating under poor traffic conditions. The peak directions of travel are northbound during the AM peak hour and southbound during the PM peak hour. Congested conditions are apparent on I-880, US 101, and SR 87. Congestion occurs on SR 87 between Curtner Avenue and Coleman Avenue during the AM peak hour and Julian Street to Curtner Avenue during the PM peak hour. During the PM peak hour the congested conditions are due to the I-280 to SB SR 87 ramps. The large volume of traffic merging onto SB SR 87 south of I-280 exceeds the capacity of the freeway. Poor conditions on US 101 and I-880 in both peak directions of travel are due to the inadequate capacity of the freeways. Congestion along I-280/I-680 occurs in both directions during both peak hours due to operational problems such as merge areas and interchanges.

Figure V.B-2: Existing Intersection Level of Service Conditions

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Figure V.B-3: Existing Freeway Segment Level of Service Conditions

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Table V.B-3: Existing Unacceptable Intersection Levels of Service

	Intersection	Peak Hour	Count Date	Average Delay (in seconds)	LOS
Expanded Downtown Core Intersections					
52	Coleman Avenue and Taylor Street	AM	1/29/97	47	E
		PM	1/29/97	34	D
Intersections Outside Core/Expanded Core					
82	11th Street and Taylor Street	AM	3/21/01	44	E
		PM	3/21/01	7	B
132	1st Street and Taylor Street	AM	5/20/97	34	D
		PM	2/13/97	49	E
152	I-880 and Coleman Avenue (S)*	AM	3/21/00	136	F
		PM	3/21/00	10	B
153	Coleman Avenue and Hedding Street	AM	3/19/97	44	E
		PM	10/29/96	36	D

* Denotes CMP intersection.

Source: Hexagon Transportation Consultants, 2004.

Poor levels of service on the Downtown freeway segments are primarily attributable to traffic moving through the Downtown area bound for destinations to the north or south. This traffic pattern is evident from intersection level of service calculations. Though the freeway segments are operating poorly, intersections operate, for the most part, at acceptable levels. Freeway ramp analysis also indicates that all freeway ramps serving the Downtown area are currently operating at acceptable levels. Any vehicle queues at the ramps are due to ramp metering which is intended to facilitate freeway mainline operations.

f. Existing Transit Service. Downtown San Jose is a hub for nearly all major transit services serving the City. Connections between bus lines, light rail, and Caltrain are provided within the Downtown area. The many choices and extensive transit system within Downtown make transit an attractive alternative to both employees and residents. Existing transit service within the greater Downtown area is provided by the VTA, ACE, Amtrak, and Caltrain. The transit services are described below and shown on Figure V.B-4.

(1) VTA Bus Service. The Downtown area is served by several local buses. Table V.B-4 shows bus lines, service terminus points, primary service roadways, and headway times during commute hours for the Downtown Area.

VTA also provides a shuttle service in the Downtown area, Downtown Area Shuttle (DASH). DASH provides shuttle service from the Diridon Caltrain station to the Paseo De San Antonio and Convention Center LRT stations via San Fernando Street and West San Carlos Street.

An express service, Highway 17 Express Bus, is provided by the VTA and Santa Cruz Metro. The bus line provides service from Santa Cruz/Scott's Valley to Downtown San Jose (Diridon Station) on 15- to 60-minute headways.

Table V.B-4: Station Bus Lines

Bus Lines	Route Description	Primary Downtown Roadways	Commute Hour Headways (in minutes)
22	Eastridge to Palo Alto/Menlo Park Caltrain Station	Santa Clara St.	10
23	Downtown San Jose to San Antonio Shopping Center	San Carlos St./1st St./2nd St.	15-30
62	Los Gatos to Piedmont Hills	Taylor Street	15-30
63	San Jose State University to Almaden Valley	San Fernando St.	30
64	Almaden LRT Station to Alum Rock & Miguelito	Santa Clara St.	15
65	Almaden LRT Station to San Jose State University	San Fernando St.	30
66	Santa Teresa Hospital to Milpitas	1st St./2nd St.	15
68	San Jose Diridon Station to Gilroy/Gavilan College	1st St./2nd St.	15
72	Downtown San Jose to Santa Teresa LRT Station	San Fernando St./1st St./2nd St.	15-30
73	Downtown San Jose to Snell & Capitol Expwy.	San Fernando St./1st St./2nd St.	20
81	Vallco Fashion Park to East San Jose	Santa Clara St./Park Av.	15-30
82	Westgate to Hedding & 17th	St.James/Julian St.	30
85	Lawrence Expwy. & Moorpark to 10th & Hedding	St.James/Julian St.	30
180	San Jose Diridon Station to Fremont BART Station	San Fernando St.	15-20
300	East San Jose to Stanford University	Santa Clara St.	20-30
304	South San Jose to Mountain View Caltrain Station	Coleman Av./1st St./2nd St.	15-30
305	South San Jose to Mountain View Caltrain Station	The Alameda./1st St./2nd St.	60
HWY17	Downtown San Jose to Scott's Valley	Santa Clara St./San Fernando St.	15-60

Source: VTA Santa Clara County Bus and Rail Map, July 2002.

(2) Light Rail Transit (LRT) Service. Light Rail Transit service is provided in the Downtown area by VTA. The Guadalupe Corridor LRT runs directly through Downtown alongside 1st and 2nd Streets; it provides service between South San Jose and North San Jose on 5- to 10-minute headways during commute hours. There are six LRT stations within the Downtown area that provide connections to virtually every bus line described above.

(3) Caltrain. Caltrain operates a commuter rail service seven days a week between San Jose and San Francisco. During weekday commuting hours, Caltrain also serves the south county including Gilroy, San Martin and Morgan Hill. Caltrain provides shuttle service to businesses in the Silicon Valley and on the Peninsula.

There is an existing Caltrain station located at Diridon Station. The Diridon Station located near the Montgomery Street and Santa Clara Street intersection provides service to the Downtown area via connections with bus lines 63, 64, 65, 68, and DASH described above. Caltrain provides service with 15- to 30-minute headways during commute hours.

(4) ACE Train. The Altamont Commuter Express (ACE) provides commuter rail service between the Central Valley and Silicon Valley. Three trains are in operation during weekday commuting hours. ACE also provides an ACE/Amtrak bus 3910 for late commuters. Shuttle services from the stations to employment centers are provided by various public transit agencies.

Figure V.B-4: Downtown Area Existing Transit Services

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(5) Amtrak Capitol Corridor Inner-City Rail. Amtrak provides commuter rail service between Sacramento and San Jose. Four daily round trips are provided. The train shares the Caltrain Diridon Station.

(6) Greyhound Bus Lines. Greyhound provides intercity bus service connecting San Jose to other major cities in California. There is a Greyhound bus station located along Almaden Avenue just north of San Fernando Street. Service to and from San Francisco is provided nearly every hour throughout the day.

g. Existing Bicycle and Pedestrian Facilities. There are several bicycle facilities in the Downtown area. Bicycle facilities include striped bike lanes on roadways, bike paths, which are separated from vehicle traffic and shared with pedestrians, and bicycle corridors which are identified corridors between jurisdictions where it is desirable to implement bicycle facilities. Bicycle facilities in the Downtown area are presented in Figure V.B-5.

Within the Downtown area, a bike lane is provided on Park Avenue, between Naglee Avenue and Meridian Avenue. A bike path is located along the Guadalupe River between I-880 and Coleman Avenue and Santa Clara Street to Woz Way.

There are also two designated cross-county bicycle corridors in the Downtown Area: (1) *SR 87/ Guadalupe LRT* cross-county bicycle corridor runs along the extent of SR 87; and (2) *I-880/I-680/ SR 17/Vasona Rail/Los Gatos Creek* cross-county bicycle corridor runs along San Carlos Street and Santa Clara Street.

Pedestrian facilities in the study areas consist primarily of sidewalks, pedestrian push buttons and signal heads at intersections. With a few exceptions, sidewalks are found along virtually all previously described local roadways in the study area and along the local residential streets and collectors surrounding the Downtown area. Most of Downtown has wider than normal sidewalks to accommodate pedestrians. There are also a few paseos, pedestrian thoroughfares absent of vehicles, that provide for walking, gathering and shopping, located within the Downtown area. A significant deficiency in the existing pedestrian system is found at the bridge on San Carlos Street over Los Gatos Creek. This bridge is very steep and has narrow sidewalks and stairs; it is not ADA compliant.

h. Existing Parking Facilities. Based on surveys conducted for the *Strategy 2000 Parking Management Plan* in the year 2000 and updated in 2004, there are approximately 38,275 parking spaces within various parking facilities throughout the Downtown Core, Frame and Arena/Diridon areas. Facilities include both surface lots and parking structures; their locations are shown in Figure V.B-6. A detailed look at these facilities by type is provided in Table V.B-5.

Table V.B-5: Facilities By Type

Parking Spaces	Arena/ Diridon	Downtown Core	Downtown Frame (Excludes Core)	Total
Public	2,431	5,527	1,109	9,066
Privately Owned with Public Access	1,378	11,868	0	13,246
Private	0	4,252	1,957	6,209
San Jose State University	0	0	5,043	5,043
Future Public	0	3,211	1,500	4,711
Grand Totals	**3,809**	**24,857**	**9,609**	**38,275**

Source: San Jose Redevelopment Agency, 2004.

The cost of parking in the Downtown area ranges based on the location of the parking facility. The daily cost of most parking within the Downtown core averages about $9 to $12, while facilities located outside of the Downtown Core cost about $5 to $10 daily. Evening rates are approximately $3 to $4 with free parking after 6:00 p.m. and on weekends provided at several facilities. Shuttle service also is provided from the Downtown core area (and many of the parking facilities as shown in Figure V.B-4) to Diridon Station and the Arena.

Based on the surveys conducted, the peak parking demand for the Downtown area occurs during the weekday midday and weekend evenings. The surveys showed many lots located within the historic office building area experience 90 percent weekday occupancy; 90 percent occupancy is experienced at facilities near the Arena on weekends. The surveys also showed a demand of 2.8 to 3.0 spaces per 1,000 square feet of office space. This is double the parking code rate of 1.5 spaces per 1,000 square feet. With projected new development and removal of some surface lots, it is expected that approximately 5,000 additional spaces will be needed in the Downtown area by the year 2010.

3. Project Conditions

This section describes traffic conditions under project conditions with the development level identified in *Strategy 2000*. Included are descriptions of land uses that include the Greater Downtown area development, along with roadway network and transit service improvements.

a. Land Use and Traffic Projections Under Project Conditions.

(1) Downtown Land Use Estimates. The RDA staff provided a detailed description of projected office, retail, housing, and hotel development for each block within the designated Downtown "core" area, as defined in Chapter III, Project Description of this EIR. These projections were then aggregated to traffic zones and converted to employment estimates using the City's standard General Plan employment conversion methodology.

Table V.B-6 provides a comparison between the aggregate totals for each land use type for the year 2000, the currently adopted 2020 General Plan, and development projections for the *Strategy 2000 Plan*. The most important comparison is the increment of growth between the year 2000 and *Strategy 2000 Plan*. Because this difference provides the basis for the traffic modeling that was used to develop the intersection growth factors used to assess the projected traffic impacts attributable to the *Strategy 2000 Plan*.

(2) Household and Employment Growth. The City of San Jose's future projections of households and employment were updated based on the *Strategy 2000* project description. Table V.B-7 provides a summary of the estimated number of households and employees that were within the area traditionally modeled by the City in the year 2000 and that are projected for project conditions.[1] Table V.B-7 shows about a 17 percent growth in households and approximately a 7 percent growth in employment between 2000 and project buildout for the entire modeled area. The projected growth equates to almost 5,000 new residential units per year, and more than 3,700 new employees per year.

[1] The modeled study area is roughly equivalent to the entirety of Santa Clara County, but does not include future development plans for the Evergreen, Coyote Valley, and North San Jose areas in the City of San Jose. The combined effects of *Strategy 2000* and these future development plans are addressed in Chapter VI, Cumulative Impacts.

Figure V.B-5: Downtown Area Existing Bicycle Facilities

8x11 color

Figure 5 and 6 can be printed back-to-back as they are both color and placed in sequence…. alert graphics

Figure V.B-6: Downtown Area Existing Parking Facilities

8x11 color

Table V.B-6: Downtown San Jose Land Use Comparisons

	2000	General Plan 2020	Strategy 2000 Plan	Growth		Difference
				2000 to GP 2020	2000 to Strategy 2000	GP vs. Strategy 2000
Households	6,180	15,277	14,712	9,097	8,532	-565
Employment	39,995	69,783	84,536	29,788	44,541	14,753
Hotel Rooms	1,572	3,607	5,179	2,035	3,607	1,572
Office Space	7,038,087	17,400,000	18,245,913	10,361,913	11,207,826	845,913
Retail Space	1,000,000	2,051,500	2,361,863	1,051,500	1,361,863	310,363

Source: Hexagon Transportation Consultants, 2004.

Table V.B-7: San Jose Area Land Use Projections (2000 to 2020)

	Year 2000		Year 2020		2000 to 2020 Increases			
	Total	Downtown	Total	Downtown	Total	Percent	Downtown	Percent
Households	566,431	6,180	662,695	14,712	96,264	17%	8,532	9%
Employment	1,077,520	39,995	1,152,486	84,536	74,966	7%	44,541	59%

Source: Hexagon Transportation Consultants, 2004.

Projections also show that according to *Strategy 2000,* Downtown San Jose will account for almost 9 percent of the new residential units and nearly 60 percent of the employment growth. It is significant to note that employment growth within the Downtown will amount to nearly 45,000 new employees over the 20 year period.

b. Roadway Network Under Project Conditions. Several transportation improvements in and surrounding the Downtown area are planned and are assumed to be operational by the time the project is built-out. The improvements consist of street and freeway widenings, interchange improvements, and street conversions. Each of the planned roadway improvements are described below and presented in Table V.B-8. Though there are other improvements outside of the Downtown area represented in the model, they are not described in detail within this report. There are many planned changes to the roadway network, but only those changes for which funding is available or expected were assumed in the analysis.

(1) Couplet Conversions. The most significant roadway changes within the Downtown area consist of the conversion of major Downtown one-way couplet streets to two-way streets. The couplet conversion study was approved by the City Council in 2002. The ultimate goal of the conversions is to enhance the livability of neighborhoods served by those streets. The converted two-way streets are designed to stabilize traffic volumes at current levels or less and decrease traffic speeds. Each of the couplet conversions are described below:

- *3rd and 4th Streets* – Convert each street to provide one-lane in each direction north of Julian Street.
- *Julian and St. James Streets* – Convert each street to provide one-lane in each direction east of 4th Street.

Table V.B-8: Greater Downtown Area Transportation Improvements Under Project Conditions

Improvement	Description
Six One-Way Street Conversions	
3rd and 4th Streets	Convert to two-way operations north of Julian Street
Julian and St. James Streets	Convert to two-way operations east of 4th Street
10th and 11th Streets	Convert to two-way operations north of Santa Clara Street
2nd Street	Convert to two-way operations south of San Salvador Street
3rd Street	Convert to two-way operations in the vicinity of I-280
Almaden and Vine Streets	Convert to two-way operations between I-280 and Alma Street
10th and 11th Streets	Eliminate one lane and add bicycle lane
SR 87/Guadalupe Parkway Upgrade	Upgrade of arterial section to a freeway
I-880 Widening	Widening of I-880 from four to six lanes between US 101 to Montague Expressway
I-280 to SR 87 Auxiliary Lane	Extension of the auxiliary lane on southbound SR 87 from I-280 to Almaden Expressway
SR 87 HOV Lanes	Addition of HOV lane in each direction of SR 87
I-880 and Coleman Avenue	Full reconstruction of the interchange

Source: Hexagon Transportation Consultants, 2004.

- *10th and 11th Streets* – Convert each street to provide one-lane in each direction north of Santa Clara Street.
- *2nd Street* – Convert street to provide one-lane in each direction south of San Salvador Street.
- *3rd Street* – Convert street to provide one-lane in each direction in the vicinity of I-280.
- *Almaden and Vine Streets* – Convert each street to provide one-lane in each direction between I-280 and Alma Street.
- *10th and 11th Streets* – Change consists of retaining the one-way operations of the streets, but eliminating one travel lane on each and adding bicycle lanes.

(2) Freeway and Ramp Improvements. Listed below are several freeway and ramp improvements that are under construction or at least funded.

- *SR 87 HOV Lanes* – HOV lanes in each direction will be added to SR 87 between Julian Street and SR 85.
- *I-280 to SR 87 Auxiliary Lane* – The improvement consists of the extension of the auxiliary lane on southbound SR 87 from I-280 to Almaden Expressway.
- *SR 87 and Julian Street Interchange* – Improvements include the addition of a second lane on the westbound Julian Street to southbound SR 87 ramp.
- *I-880 and Coleman Avenue* – Improvement consists of full reconstruction of the interchange to provide new braided ramps and a widened overpass.

(3) Planned But Unfunded Roadway Improvements. Listed below are a few planned but unfunded improvements for the Downtown area. These improvements were not assumed to be in place for the purposes of this analysis.

- *Autumn Street Extension* – As identified in the City's General Plan, Autumn Street will be extended to Coleman Avenue. The extension will alleviate congestion on the parallel Market Street arterial.

- *I-280 to Third Street Ramp* – The improvement will consist of the extension of the existing 7th Street off-ramp from I-280 to 3rd Street.
- *Coleman Avenue Widening* – Widen Coleman Avenue from four to six-lanes between Hedding Street and the future Autumn Street connection to Coleman Avenue.

(4) Strategy 2000 Roadway Improvements. The *Strategy 2000* also includes many detailed and general roadway improvements/adjustments. Though the roadway improvements will serve the Downtown area, some of the proposed roadway changes of the *Strategy 2000* may have an adverse effect on traffic conditions. The *Strategy 2000* identifies possible improvements. Actual roadway improvements/changes will be identified at the time of specific development. The means of funding and implementing these improvements will also be determined with future developments. In this EIR, these improvements are all considered part of the project.

- Enlarge Plaza de Cesar Chavez by removing a lane of traffic on either side of the plaza.
- Realign Julian Street between SR 87 and North 1st Street to extend the Downtown urban grid pattern.
- Facilitate access to the Downtown by extending the I-280 ramps at 3rd and 7th streets.
- Complete construction of River Street between Santa Clara Street and St. John Street.
- Complete the Autumn Street realignment and extension between St. John Street and Coleman Avenue, including an at-grade railroad crossing.
- Complete the Coleman Road widening from Hedding Street to the future Autumn Street connection.
- Improve streets in the Downtown area to accommodate future development.
- Continue development of a transit and transportation corridor on Santa Clara Street.
- Explore the design of a median in Market Street with generous planting, street trees, and carefully considered left-turn lanes in the median.
- Explore the design of the Parque de los Pabladores continuing to the north across William Street and to the east with a narrowing of 1st Street.
- Consider certain streets to have more traffic to carry and other streets to be more pedestrian-oriented within SoFA. Designate streets for the character of their traffic and pedestrian uses.
- Make Market Street a less heavily traveled, more landscaped boulevard.
- Establish 2nd Street as two-way from San Carlos south. Design 2nd Street, a local-serving street, to have bicycle lane(s)and angled parking on the west side.
- Explore the design of San Carlos to better accommodate vehicular traffic, the light rail trains (LRT) and wider sidewalks, especially along the southern side of the street.
- Consider traffic calming measures for the streets in the adjacent neighborhoods, such as Reed Street in the Market Almaden Neighborhood to the west of SoFA.
- Realign Reed Street and redesign the intersection of Market and Reed Streets for better traffic and pedestrian movements and improved streetscape design.

- Explore the designs of the intersections of San Carlos at Market, 1st, and 2nd Streets in order to make the pedestrian crossings easier and the light rail more integrated with the streetscape.

c. Transit Service Under Project Conditions. There are several major transit improvements planned and expected to be completed under Project Conditions. Major improvements that will serve the Downtown area include the addition of two new LRT lines, as well as enhancement to regional bus and commuter train services. Major improvements are described below with a complete list of new transit services and capital projects presented in Table V.B-9.

(1) Light Rail Improvements. One major light rail project is anticipated:

- *Vasona Light Rail Extension* – The 6.8-mile Vasona Light Rail Extension will provide service between Downtown San Jose and Downtown Campbell, and add 11 new stations between Woz Way in Downtown San Jose and Los Gatos. The extension is under construction and is expected to be completed in late 2006.

(2) Caltrain Improvements. Two key Caltrain improvements are anticipated:

- *Caltrain Improvements from San Jose North* **–** The Caltrain rail service will add trains and improve facilities from San Jose to Palo Alto.
- *Caltrain Improvements between Gilroy and San Jose* **–** The Caltrain rail service will add trains and improve facilities between Gilroy and San Jose.

(3) Planned But Unfunded Transit Improvements. Several improvements to the transit system serving the Downtown area are in the planning stage, but are not yet funded. These improvements include:

- *Capitol Light Rail Extension* – LRT along the entire length of Capitol Expressway from the Alum Rock Station on the Capitol LRT Line to Eastridge Mall and continuing to the Santa Teresa to Baypointe LRT Line.
- *Downtown/East Valley Light Rail Extension* – LRT along the Santa Clara Street/Alum Rock Avenue corridor from the Diridon Station in Downtown San Jose to the Alum Rock Station on the future Capitol LRT Line.
- *BART Extension to Downtown* – BART facilities are planned to serve the Downtown area as part of a potential extension of BART to the Southbay. The BART line would run under Santa Clara Street with three stations planned within the Downtown area.
- *Bus Rapid Transit Corridors* – Several corridors throughout the City are planned. The corridors will enhance highly used bus lines by providing more efficient service.

(4) Strategy 2000 Transit Improvements. In addition to the major changes to transit service, the *Strategy 2000* outlines a transit enhancement that states: "Encourage bus ridership through the use of efficient, quiet, low-emission vehicles, improved bus shelters, and other rider amenities."

Table V.B-9: Transit Improvements Under Project Conditions

Transit Projects	Description
Vasona Light Rail Transit (LRT), Vasona Junction to Downtown San Jose	New LRT Line, 10-minute headways
Tasman East/Capitol Expressway LRT	New LRT Line, 10-minute headways
Expansion of VTA bus fleet to 650 vehicles	650-bus plan from Valley Transportation Plan 2020, does not include rail shuttles
Caltrain commuter rail	Increase service to 100 trains/day San Jose to San Francisco, add express trains (San Jose, Mountain View, Palo Alto, Hillsdale, Millbrae and San Francisco stops, 60-minute travel time, 60-minute headways all day), new Coyote Valley station, 20 trains/day serving Gilroy (six round trips in peak direction, 2 to 4 round trips in reverse peak direction
ACE commuter rail service upgrade	16 peak direction trains weekday (eight in AM, eight in PM) service, new Auto Mall Parkway station
Amtrak Capitols commuter and intercity rail	11 round trips/day, Sacramento to San Jose trains, new Coliseum and Union City intermodal stations

Source: Hexagon Transportation Consultants, 2004.

d. Bicycle and Pedestrian Enhancements. The *Strategy 2000* also calls for several enhancements within the Downtown area to bicycle and pedestrian facilities.

- Develop a new paseo through the Mitchell block development.
- Provide a new paseo – "Paseo San Pedro"– that links 1st Street, Mitchell Block, and San Pedro Square.
- Develop a new paseo through the improvement of Post Street and Lightstone Alley.
- Build a sidewalk along St. John Street, north of Market Street garage.
- Incorporate east-west paseos, passages, arcades or other pedestrian ways at or near the mid-blocks of the rather long north-south blocks, particularly between 1st and Market and 1st and 2nd Streets.
- Improve pedestrian connections from the river parkway to the traditional Downtown center.
- Make SoFA a walkable area by providing generous sidewalks, better intersections, crosswalks at all feasible intersections, and by carefully defining areas for vehicular traffic.
- Continue the development of citywide bicycle and pedestrian trail networks, along the Guadalupe River between I-280 and Coleman Avenue, and Los Gatos Creek between I-280 and Santa Clara Street.
- Implement the San Fernando Street Bike Lane plan. The plan calls for bike lanes to be provided along both sides of San Fernando Street between 11th Street and Diridon Station.
- Develop a new plaza on the surface parking lots on the west side of San Pedro Street between Santa Clara and St. John streets to provide a gathering place and forecourt to new housing and retail development. Emphasize the plaza by using building setbacks, landscape elements, lighting fixtures, paving patterns, public seating and active uses around it.

e. Parking Management Plan. As part of *Strategy 2000*, a parking management plan has been prepared. The plan would control the parking supply in the Greater Downtown area by implementing programs that control the amount of parking spaces provided by new development. It is projected that approximately 2,000 new parking spaces and the replacement of 3,000 lost surface lot spaces will be needed to support future development in the Downtown area.

The Downtown transportation system and parking supply go hand in hand. With an abundant supply of on-site parking for development in the Downtown area, employees would be discouraged from using transit and carpooling thus leading to increased traffic congestion in the Downtown area. The programs of the parking plan are designed to balance the amount of parking supply and demand while encouraging the use of alternative modes of transportation. Described below are the programs by which the plan proposes to allow full development of the Greater Downtown area while not burdening the transportation system with an oversupply of parking.

(1) Parking Code Adjustment. Though it is important to avoid an oversupply of parking, it is also critical that enough parking is provided so as not to inhibit Downtown development. In the past, the parking demand in the Downtown area has far exceeded the parking supply. This was partly due to the previous Downtown parking code that did not necessarily reflect actual demand for parking by users. The code called for 1.5 spaces per 1,000 square feet of development. Surveys showed a demand of approximately 2.8-3.0 spaces/1,000 square feet. In March of 2004, an adjustment to the parking code for the Downtown area was adopted. The adjusted parking code reflects the demand by requiring 2.8 spaces/1,000 square feet. With the enhancement of the Downtown transit system, it is expected that the demand for on-site parking will be reduced. Therefore, it is also proposed that a portion of the required parking be provided off-site (0.45 spaces of the required 3.0 spaces).

(2) TDM Programs. The parking management plan also calls for the reduction of required parking for new development with the implementation of Transportation Demand Management (TDM). The developments could have their required parking reduced by as much as 15 percent with the implementation of certain TDM measures. The amount of the reduction will depend on the number of measures implemented. Outlined below are a few possible TDM measures:

- Alternative Work Schedules
- Rideshare Promotions
- Mixed-Use Development
- Land Use Densification
- Telecommuting Programs
- Education and Information on Transit Alternatives
- Parking Supply Management
- Parking Pricing
- Bicycle and Pedestrian Improvements
- Rideshare Support Facilities
- Transit Support (Eco-pass)
- Parking Fee Cash Outs
- Carpool/Vanpool
- Bicycle Support

(3) Parking Structures. As part of the plan, the potential of several sites to provide parking facilities will be investigated. The parking facilities will most likely consist of parking structures, but surface lots also may be possible. Three sites have been selected as being the most desirable locations to locate future parking facilities. The sites, shown on Figure V.B-6, include the Greyhound Bus Station block, the block North of the DeAnza Hotel, and the Parkside Hall block. The number of potential spaces at each of the sites is presented below:

Greyhound Block	1,065 spaces
North of DeAnza Hotel	965 spaces
Parkside Hall	800 spaces

In addition to the three sites identified above, several other sites as outlined below have also been identified as locations for potential parking facilities:

Site 5 – West of Almaden
Site N – South of San Carlos Street between 1st and 2nd Streets
Site C – North of the Arena
Site B – East of Autumn Street and north of Julian Street

4. Impacts and Mitigation Measures

This section discusses the project conditions analysis and impacts associated with the *Strategy 2000*'s proposed development or its policies. It begins by specifying the various criteria by which effects of the Plan's implementation would be considered to be significant impacts. Next, it summarizes the level of trip generation expected to result. Then it describes project impacts to intersections, freeway ramps, freeway segments, parking, transit, and bicycle and pedestrian transportation.

a. Criteria of Significance. The proposed project would have significant impacts relating to transportation and circulation if it would lead to any of the outcomes described below.

(1) City of San Jose Definition for Signalized Intersections. The project would create a significant adverse impact on traffic conditions at signalized intersections in the City of San Jose not located within the Downtown Core if for either peak hour:

- The level of service at the intersection degrades from an acceptable LOS D or better under existing conditions to an unacceptable LOS E or F under project conditions, or
- The level of service at the intersection is an unacceptable LOS E or F under existing conditions and the addition of project trips causes both the critical-movement delay at the intersection to increase by four or more seconds and the demand-to-capacity ratio (V/C) to increase by 0.01 or more.

An exception to this rule applies when the addition of project traffic reduces the amount of average stopped delay for critical movements (i.e., the change in average stopped delay for critical movements is negative). In such a case, the threshold of significance would be an increase in the critical V/C value by 0.01 or more.

A significant impact under these standards would be satisfactorily mitigated when measures are implemented that would restore intersection level of service to existing conditions or LOS D, whichever satisfactorily mitigated condition is closest to the project condition.

(2) Congestion Management Program (CMP) Definition for Signalized Intersections. The definition of a significant impact at a CMP intersection is the same as for the City of San Jose, except that the CMP standard for acceptable level of service at a CMP intersection is LOS E or better.

A significant impact by CMP standards is said to be satisfactorily mitigated when measures are implemented that would restore intersection conditions to LOS E or better.

(3) CMP Definition for Freeway Segment Impacts. A project would create a significant adverse impact on traffic conditions on a CMP freeway segment if, for either peak hour:

- The level of service on the freeway segment is an unacceptable LOS F under project conditions, and the number of project trips on that segment constitutes at least one percent of capacity on that segment; or
- The level of service on the freeway segment degrades from an acceptable LOS under existing conditions to an unacceptable LOS F under project conditions.

A significant impact by CMP standards is said to be satisfactorily mitigated when measures are implemented that would restore freeway conditions to LOS E or better.

(4) Parking Facilities and Operations. Impacts on parking are considered significant if the project would:

- Cause a demand for parking that would be substantially greater than the planned parking supply; or
- Cause a substantial reduction in the availability of on-street parking, either through removal of, or increased demand for, existing on-street parking.

(5) Transit Facilities and Operations. The project would create a significant impact on transit service if it would:

- Induce a substantial growth or concentration of population beyond the capacity of existing or planned public transit facilities;
- Increase demand for public transit service to such a degree that accepted service standards are not maintained;
- Reduce availability of public transit to users, or interfere with existing transit users; or
- Be located more than three-quarter mile from existing or planned public transit services, and have the potential to generate a demand for such services.

(6) Bicycle and Pedestrian Facilities and Operations. The project would create a significant impact on bicycle and pedestrian facilities if it would:

- Cause substantial inconvenience, interfere, or delay to users of existing bicycle or pedestrian travel ways;
- Substantially reduce bicycle or pedestrian access to an activity center; or
- Substantially reduce safety for bicyclists or pedestrians.

b. Trip Generation Estimates. The City of San Jose's TRANPLAN-based traffic forecasting procedures and the *Strategy 2000* development scenario produce projections of AM and PM peak hour traffic flows on area roadways. Table V.B-10 provides a summary of the year 2000 and year 2020 trip estimates from the City model. The estimates are stratified to show the proportion of trips

associated with the Greater Downtown area. The table shows that, based on the amount of projected growth in household and employment, trips within the modeled study area (i.e., an area roughly equivalent to the entire Santa Clara County) will increase by about 9 percent and 11 percent during the AM and PM peak hours respectively.

Table V.B-10: Trip Generation Summaries

	Peak Hour	
	AM	**PM**
Year 2000		
Total Trips	504,556	587,831
Downtown Related Trips	33,403	32,383
Downtown Proportion of Trips	6.60%	5.50%
Year 2020		
Total Trips	547,473	654,465
Downtown Related Trips	52,320	57,975
Downtown Proportion of Trips	9.60%	8.90%
Year 2000 to 2020 Increases		
Total Trips (Percent Growth)	42,917 (9%)	66,634 (11%)
Downtown Related Trips (Percent Growth)	18,917 (57%)	25,592 (79%)
Downtown Proportion of Trip Growth	44.10%	38.40%

Source: Hexagon Transportation Consultants, 2004.

Table V.B-10 also shows that trips associated with the Downtown area will increase by 57 percent during the AM peak hour and 79 percent during the PM peak hour. These substantial increases are primarily attributable to the very large increase in projected Downtown employment. Overall, Downtown San Jose is expected to account for about 44 percent of the total increase in AM peak hour trips and about 38 percent of the increase in PM peak hour trips.

The City of San Jose's TRANPLAN-based traffic modeling procedures do account for transit usage before vehicle trips are assigned to the area roadways. To develop the information presented in Table V.B-11, the *Strategy 2000* development scenario was used in conjunction with VTA's SVRT travel demand model, and the City of San Jose TRANPLAN Model.

Table V.B-11: Downtown Transit Mode Share Summary

	Peak Hour	
	AM	**PM**
Year 2000		
Downtown Related Trips	33,403	32,383
Downtown Related Transit Trips	6,617	6,770
Downtown Transit Mode Share Percentage	19.80%	20.90%
Year 2020		
Downtown Related Trips	52,320	57,975
Downtown Related Transit Trips	10,021	9,871
Downtown Transit Mode Share Percentage	19.20%	17.00%
Year 2000 to 2020 Increases		
Downtown Related Trips	3,404	3,101
Percent Increase in Downtown Related Transit Trips	51.60%	45.20%

Source: Hexagon Transportation Consultants, 2004.

Table V.B-11 shows that Downtown-related transit trips are projected to increase by over 50 percent during the AM peak hour and by more than 45 percent during the PM peak hour. Under project conditions, approximately 10,000 Downtown-related transit trips will be made during each of the AM and PM peak hours. This compares to about 6,600 to 6,700 in the year 2000. Table V.B-11 also shows a very small decline in the Downtown-related mode share under project conditions. This projected decline is attributable to increases in Downtown-related trips from areas that are not as well served by transit.

c. Intersection Impacts and Mitigation Measures. Intersection level of service analysis was used to evaluate traffic operations at the study intersections under project conditions. The results show that 40 of the study intersections are projected to operate at LOS E or F under project conditions during at least one peak hour (see Figure V.B-7). The project would impact 31 of the 40 intersections

during at least one peak hour as shown in Table V.B-12. A table summarizing the intersection level of service results for all study intersections and calculation sheets are included in Appendix B.

Mitigation measures were investigated for all intersection impacts. Some locations were found to have no feasible improvements. The following is a presentation of all adverse intersection impacts and a description of feasible mitigation measures where they are available. Intersections that would remain deficient due to the absence of feasible mitigation are also described (see Table V.B-13 and Figure V.B-8). The mitigation measures are presented and described below. The development of funding mechanisms, whether collected from specific developments or a traffic impact fee program, for the improvements will need to be developed as future development proceeds and creates the need for the mitigation described below. See subsection on Improvement Phasing, which concludes this transportation and circulation analysis, for details.

(1) Downtown Core Intersections. The following Downtown Core intersections are projected to operate at LOS E or F under project conditions. While they will experience increased congestion as a result of the project, intersections located in the Downtown Core are exempt from the City's level of service policy and the identified improvements are not required. Nonetheless, potential improvements at each of the intersections were investigated to determine whether such improvements were feasible. The improvements are provided as recommendations for consideration. Note that a parenthetical reference number follows each named intersection to allow easier use of the table. Use of an asterisk (*) indicates that the location is a CMP intersection.

Impact TRAF-1: The level of service at the intersection of Market Street and Julian Street (31) would be LOS C during both the AM and PM peak hours under existing conditions and the intersection would degrade to LOS E and F during the AM and PM peak hours, respectively, under 2020 project conditions. This Downtown Core intersection is exempt from the City's level of service standards and this impact is therefore less than significant. (LTS)

This intersection could be improved by providing the Autumn Street connection to Coleman Avenue as identified in the City's General Plan. The extension of Autumn Street would provide an alternative north/south route in the Downtown area and alleviate congestion along Market Street. The implementation of these improvements would improve intersection level of service to LOS C during the AM peak hour and improve the intersection's average delay during the PM peak hour. However, the intersection would continue to operate at LOS F during the PM peak hour.

Impact TRAF-2: The level of service at the intersection of Market Street and San Carlos Street (36)* would be LOS D during the PM peak hour under existing conditions and the intersection would degrade to LOS E under project conditions. This Downtown Core intersection is exempt from the City's level of service standards and this impact is therefore less than significant. (LTS)

This intersection could be improved by restricting left-turns on Market Street. The left-turn restrictions would allow for additional green time for other critical movements at the intersection, thus improving operating levels. The implementation of the left-turn restrictions would improve intersection level of service to LOS D.

Figure V.B-7: Project Intersection Level of Service Conditions

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Figure V.B-8: Project Impacts and Improvements

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Table V.B-12: Intersections Levels of Service Under Project Conditions

				Existing			2020 Projected Conditions			
	Intersection	Peak Hour	Count Date	Avg. Delay	LOS	Growth Factor	Avg. Delay	LOS	Increase in Criteria Delay	Increase in Criteria V/C
Downtown Core Intersections										
10	3rd Street and Julian Street	AM	2/20/01	10	B	1.249	110	F	123	0.64
		PM	2/20/01	9	B	1.814	78	F	83	0.88
23	2nd Street and San Salvador St	AM	2/21/02	8	B	0.616	8	B	-2	-0.03
		PM	2/21/02	9	B	1.691	48	E	51	0.76
25	2nd Street and Reed Street	AM	11/27/01	8	B	1.072	20	C	15	0.64
		PM	11/27/01	9	B	1.227	47	E	54	0.61
31	Market Street and Julian Street	AM	11/5/02	15	C	2.039	50	E	53	0.64
		PM	10/31/02	17	C	1.687	103	F	118	0.54
36	Market Street and San Carlos Street*	AM	5/2/00	29	D	1.264	28	D	-2	0.09
		PM	5/2/00	33	D	1.180	42	E	20	0.40
37	SR 87 and Julian Street (E)*	AM	3/22/00	35	D	1.285	82	F	53	0.38
		PM	3/22/00	29	D	1.831	83	F	61	0.49
38	Almaden Blvd. and Santa Clara Street (E)	AM	11/16/00	19	C	1.304	25	C	8	0.22
		PM	11/16/00	17	C	1.580	40	E	35	0.45
40	Almaden Boulevard and San Carlos Street*	AM	2/16/00	25	D	1.235	25	C	-1	0.04
		PM	2/15/00	29	D	1.494	42	E	25	0.35
42	Almaden Boulevard and Woz Way	AM	11/16/00	8	B	1.601	11	B	3	0.27
		PM	11/16/00	11	B	2.193	51	E	56	0.69
Expanded Downtown Core Intersections										
52	Coleman Avenue and Taylor Street	AM	1/29/97	47	E	1.106	121	F	147	0.32
		PM	1/29/97	34	D	1.369	59	E	43	0.38
53	Stockton Avenue and The Alameda	AM	11/1/00	17	C	1.298	137	F	144	0.54
		PM	11/1/00	18	C	1.500	134	F	159	0.65
55	Montgomery Street and Santa Clara Street*	AM	5/2/00	14	B	1.214	14	B	-1	-0.11
		PM	5/2/00	16	C	1.268	120	F	216	0.70
56	Autumn Street and Santa Clara Street*	AM	2/16/00	31	D	1.203	51	E	33	0.23
		PM	2/22/00	14	B	1.369	51	E	56	0.76
58	Bird Avenue and San Carlos Street*	AM	10/31/01	24	C	1.143	27	D	-5	0.10
		PM	11/8/01	34	D	1.230	64	F	49	0.23
59	Bird Avenue and Auzerais Avenue	AM	9/5/00	19	C	1.233	15	C	1	0.10
		PM	7/16/98	23	C	1.360	53	E	4	0.20
60	I-280 and Bird Avenue (N)*	AM	3/14/00	21	C	1.153	23	C	0	0.06
		PM	3/14/00	19	C	1.280	50	E	34	0.33
63	Delmas Avenue and Park Avenue	AM	3/10/99	18	C	1.620	20	C	4	0.25
		PM	3/10/99	20	C	1.567	199	F	255	0.75
Intersections Outside Core/Expanded Core										
74	Senter Road and Keyes Street	AM	4/4/01	19	C	1.048	20	C	1	0.04
		PM	4/4/01	27	D	1.221	48	E	37	0.21
75	Oakland Road and Commercial Street	AM	11/27/01	31	D	1.667	252	F	396	0.58
		PM	11/27/01	36	D	1.285	93	F	94	0.27
76	US 101 and Oakland Road (N)*	AM	3/23/00	37	D	1.667	255	F	435	0.53
		PM	3/23/00	17	C	1.285	21	C	5	0.09
77	US 101 and Oakland Road (S)*	AM	3/23/00	19	C	1.136	16	C	-4	0.11
		PM	3/23/00	26	D	1.448	157	F	270	0.43
78	Oakland Road and Hedding Street	AM	2/8/00	39	D	1.054	43	E	5	0.05
		PM	2/8/00	30	D	1.162	33	D	3	0.11
82	11th Street and Taylor Street	AM	3/21/01	44	E	1.026	55	E	44	-0.02
		PM	3/21/01	7	B	1.318	121	F	172	0.80

Table V.B-12 *continued*

	Intersection	Peak Hour	Count Date	Existing		Growth Factor	2020 Projected Conditions			
				Avg. Delay	LOS		Avg. Delay	LOS	Increase in Criteria Delay	Increase in Criteria V/C
85	11th Street and Julian Street	AM	3/21/01	12	B	1.326	88	F	106	0.47
		PM	3/21/01	8	B	2.132	202	F	301	1.15
86	11th Street and St. James Street	AM	3/21/01	5	A	1.233	54	E	65	0.67
		PM	3/21/01	9	B	2.433	>500	F	>500	1.35
87	11th Street and St. John Street	AM	3/4/99	4	A	1.167	16	C	15	0.37
		PM	3/4/99	7	B	1.830	56	E	73	0.89
88	11th Street and Santa Clara Street	AM	2/22/01	16	C	1.101	57	E	62	0.34
		PM	2/22/01	12	B	1.227	28	D	17	0.42
90	11th Street and San Antonio Street	AM	1/24/01	5	A	1.093	148	F	145	0.41
		PM	1/24/01	4	A	1.029	5	A	1	0.18
98	10th Street and Hedding Street	AM	4/5/01	10	B	1.109	68	F	69	0.42
		PM	5/9/01	22	C	1.251	47	E	48	0.22
99	10th Street and Taylor Street	AM	3/20/01	6	B	1.098	31	D	24	0.36
		PM	3/20/01	11	B	1.223	45	E	48	0.32
102	10th Street and Julian Street	AM	3/22/01	8	B	1.544	181	F	238	0.94
		PM	3/22/01	8	B	1.397	20	C	18	0.53
103	10th Street and St. James Street	AM	3/20/01	8	B	1.421	108	F	141	1.03
		PM	3/20/01	9	B	1.638	71	F	96	0.67
111	10th Street and Reed Street	AM	2/21/02	5	B	1.045	5	B	0	0.12
		PM	2/21/02	5	A	1.213	70	F	71	0.50
117	7th Street and Virginia Street	AM	10/17/00	13	B	1.538	17	C	5	0.28
		PM	10/17/00	16	C	1.818	72	F	80	0.53
122	4th Street and Jackson Street	AM	7/10/00	21	C	1.146	52	E	44	0.37
		PM	7/10/00	13	B	1.377	48	E	48	0.45
132	1st Street and Taylor Street	AM	5/20/97	34	D	1.154	36	D	3	0.10
		PM	2/13/97	49	E	1.249	107	F	72	0.24
141	Almaden Avenue and Virginia Street	AM	9/12/00	5	B	0.965	6	B	1	0.05
		PM	9/12/00	11	B	1.401	81	F	88	0.89
145	Vine Street and Grant Street	AM	10/12/00	6	B	1.246	48	E	44	0.48
		PM	10/12/00	16	C	1.145	19	C	8	0.07
153	Coleman Avenue and Hedding Street	AM	3/19/97	44	E	1.017	46	E	3	0.02
		PM	10/29/96	36	D	1.192	67	F	53	0.18
162	Meridian Avenue and San Carlos Street	AM	2/27/01	28	D	1.182	31	D	5	0.13
		PM	2/27/01	31	D	1.322	48	E	24	0.25

Note: Grey shading indicates significant impact.
* Denotes CMP intersection.

Source: Hexagon Transportation Consultants, 2004.

Table V.B-13: Intersection Levels of Service Under Project Conditions (With Mitigation)

	Intersection	Peak Hour	2020 Project		Mitigated	
			Avg. Delay	LOS	Avg. Delay	LOS
Expanded Downtown Core Intersections						
52	Coleman Avenue and Taylor Street	AM	121	F	40	D
		PM	59	E	36	D
53	Stockton Avenue and The Alameda	AM	137	F	34	D
		PM	134	F	18	C
55	Montgomery Street and Santa Clara Street*	AM	14	B	9	B
		PM	120	F	11	B
56	Autumn Street and Santa Clara Street*	AM	51	E	34	D
		PM	51	E	41	E
58	Bird Avenue and San Carlos Street*	AM	27	D	26	D
		PM	64	F	48	E
59	Bird Avenue and Auzerais Avenue	AM	15	C	19	C
		PM	53	E	21	C
60	I-280 and Bird Avenue (N)*	AM	23	C	22	C
		PM	50	E	24	C
63	Delmas Avenue and Park Avenue	AM	20	C	18	C
		PM	199	F	32	D
Intersections Outside Core/Expanded Core						
74	Senter Road and Keyes Street	AM	20	C	19	C
		PM	48	E	24	C
75	Oakland Road and Commercial Street	AM	252	F	41	E
		PM	93	F	34	D
76	US 101 and Oakland Road (N)*	AM	255	F	21	C
		PM	21	C	13	B
77	US 101 and Oakland Road (S)*	AM	16	C	14	B
		PM	157	F	25	C
78	Oakland Road and Hedding Street	AM	43	E	40	D
		PM	33	D	36	D
Gateway Intersections						
82	11th Street and Taylor Street	AM	55	E	55	E
		PM	121	F	121	F
85	11th Street and Julian Street	AM	88	F	88	F
		PM	202	F	202	F
86	11th Street and St. James Street	AM	54	E	54	E
		PM	500	F	500	F
87	11th Street and St. John Street	AM	16	C	16	C
		PM	56	E	56	E
88	11th Street and Santa Clara Street	AM	57	E	57	E
		PM	28	D	28	D
90	11th Street and San Antonio Street	AM	148		148	F
		PM	5	B	5	B
98	10th Street and Hedding Street	AM	68	F	68	F
		PM	47	E	47	E
99	10th Street and Taylor Street	AM	31	D	31	D
		PM	45	E	45	E
102	10th Street and Julian Street	AM	181	F	181	F
		PM	20	C	20	C
103	10th Street and St. James Street	AM	108	F	108	F
		PM	71	F	71	F
111	10th Street and Reed Street	AM	5	B	5	B
		PM	70	F	70	F

Table V.B-13 *continued*

	Intersection	Peak Hour	2020 Project		Mitigated	
			Avg. Delay	LOS	Avg. Delay	LOS
117	7th Street and Virginia Street	AM	17	C	17	C
		PM	72	F	72	F
122	4th Street and Jackson Street	AM	52	E	52	E
		PM	48	E	48	E
132	1st Street and Taylor Street	AM	36	D	36	D
		PM	107	F	107	F
141	Almaden Avenue and Virginia Street	AM	6	B	6	B
		PM	81	F	81	F
145	Vine Street and Grant Street	AM	48	E	48	E
		PM	19	C	19	C
153	Coleman Avenue and Hedding Street	AM	46	E	32	D
		PM	67	F	29	D
162	Meridian Avenue and San Carlos Street	AM	31	D	31	D
		PM	48	E	48	E

Note: Grey shading indicates significant impact.
* Denotes CMP intersection.
Source: Hexagon Transportation Consultants, 2004.

Impact TRAF-3: The level of service at the intersection of SR 87 and Julian Street (E) (37)* would be LOS D during both the AM and PM peak hours under existing conditions and the intersection would degrade to LOS F during both peak hours under project conditions. This constitutes a significant impact by CMP standards. (S)

Mitigation Measure TRAF-3: At this intersection numerous improvements have been identified. These improvements include the Autumn Street extension from Julian Street to Coleman Avenue as identified in the City's General Plan, addition of second exclusive through and left-turn lanes on the SR 87 northbound off-ramp, addition of exclusive through and right-turn lanes from Notre Dame Street, addition of an exclusive westbound right-turn lane from Julian Street, and changes to the signal phasing. The implementation of these improvements would improve intersection level of service to LOS D and E under the AM and PM peak hours, respectively. In accordance to CMP standards, this is an acceptable level of service. (SU)

Impact TRAF-4: The level of service at the intersection of Almaden Boulevard and Santa Clara Street (E) (38) would be LOS C during the PM peak hour under existing conditions and the intersection would degrade to LOS E under project conditions. This Downtown Core intersection is exempt from the City's level of service standards and this impact is therefore less than significant. (LTS)

This intersection could be improved by providing the Autumn Street connection to Coleman Avenue as identified in the City's General Plan. The extension of Autumn Street would provide an alternative north/south route in the Downtown area and alleviate congestion along Almaden Boulevard. The implementation of this improvement would improve intersection level of service to LOS D.

Impact TRAF-5: The level of service at the intersection of Almaden Boulevard and San Carlos Street* (40) would be LOS D during the PM peak hour under existing conditions and the intersection would degrade to LOS E under project conditions. This Downtown Core intersection is exempt from the City's level of service standards and this impact is therefore less than significant. (LTS)

This intersection could be improved by the addition of a separate southbound right-turn lane. The implementation of this improvement would improve intersection level of service to LOS D.

(2) Expanded Core Intersections. Seven intersections in the area proposed to be added to the Downtown Core as part of the project would experience LOS impacts that could be at least partially mitigated. Part of the project analyzed in this EIR (see Chapter III, Project Description) includes an application to amend the City's General Plan to expand the Downtown Core and exempt the intersections identified in the following impacts from the City's level of service policy (Level of Service, Traffic Policy 5). The application asserts that, in conformance with General Plan policies and in recognition of the unique position of the Downtown Core Area as the transit hub of Santa Clara County, and as the center for financial, business, institutional and cultural activities, Downtown Core intersections experience higher traffic volumes and traffic impacts. The General Plan amendment requests that additional capacity not be added to the intersections and they be allowed to operate at capacity during both the morning and evening peak periods in recognition of the unique position of the Downtown Core Area and available transit services. Because the General Plan amendment requests are included in the proposed project under evaluation and have not been adopted by the City to mitigate significant unavoidable impacts, they are defined as such in the following analysis. The proposed project evaluated in this EIR also includes the proposed widening of Coleman Avenue. This project has been studied previously by the City. The study indicated that the widening is feasible, but funding is necessary. The General Plan amendment analysis has been completed by the City and is presented in Appendix B.

Upon adoption of the Downtown Core boundary expansion, decisions as to the timing of these improvements would be made.

The following impacts address each of the seven intersections.

Impact TRAF-6: The level of service at the intersection of Coleman Avenue and Taylor Street (52) would be LOS E and D during the AM and PM peak hours, respectively, under existing conditions, and the intersection would degrade to LOS F and E during the AM and PM peak hours, respectively, under project conditions. This constitutes a significant impact by City of San Jose standards. (S)

> Mitigation Measure TRAF-6: The necessary improvement to mitigate the project impact at this intersection would consist of the widening of Coleman Avenue from a four-lane roadway to a six-lane roadway (including the associated improvements of double-left-turn and separate right-turn lanes on Taylor Street), and construction of the Autumn Street connection to Coleman Avenue as identified in the City's General Plan. The implementation of these improvements would improve intersection level of service to LOS D under both the AM and PM peak hours. (LTS)

It should be noted that the approved San Jose MarketCenter (Cousins) development may be required to implement improvements to Coleman Avenue/Taylor Street.

Impact TRAF-7: The level of service at the intersection of Stockton Avenue and The Alameda (53) would be LOS C during both the AM and PM peak hours under existing conditions and the intersection would degrade to LOS F during both peak hours under project conditions. This constitutes a significant impact by City of San Jose standards. (S)

Mitigation Measure TRAF-7: The necessary improvement to mitigate the project impact at this intersection would consist of the Autumn Street connection to Coleman Avenue as identified in the City's General Plan, in addition to restriping the southbound approach to provide one left-turn, one shared left-through, and one right-turn lane. The extension of Autumn Street would provide an alternative north/south route in the area and alleviate congestion along both Stockton Avenue and The Alameda. The implementation of these improvements would improve intersection level of service to LOS D and C under the AM and PM peak hours, respectively. (LTS)

Impact TRAF-8: The level of service at the intersection of Montgomery Street and Santa Clara Street* (55) would be LOS C during the PM peak hour under existing conditions and the intersection would degrade to LOS F under project conditions. This condition constitutes a significant impact by both City of San Jose and CMP standards. (S)

Mitigation Measure TRAF-8: The necessary improvement to mitigate the project impact at this intersection would consist of the Autumn Street connection to Coleman Avenue as identified in the City's General Plan. The extension of Autumn Street would provide an alternative north/south route in the area and alleviate congestion along Montgomery Street. The implementation of this improvement would improve intersection level of service to LOS B. (LTS)

Since this is a CMP intersection, should it be determined that the recommended improvement will not be implemented by the project, an alternative would be the application of Senate Bill No. 1636, as described above.

Impact TRAF-9: The level of service at the intersection of Autumn Street and Santa Clara Street* (56) would be LOS D and B during the AM and PM peak hours, respectively, under existing conditions and the intersection would degrade to LOS E during both peak hours under project conditions. This condition constitutes a significant impact by City of San Jose standards. (S)

Mitigation Measure TRAF-9: The necessary improvement to mitigate the project impact at this intersection would consist of the Autumn Street connection to Coleman Avenue as identified in the City's General Plan, in addition to providing two westbound left-turn lanes at the intersection. The implementation of these improvements would improve intersection level of service to LOS D during the AM peak hour and improve the intersection's average delay during the PM peak hour. However, the intersection would continue to operate at LOS E during the PM peak hour. This, based on City of San Jose standards, is an unacceptable level of service.

There are no further feasible improvements that can be implemented to improve intersection level of service to acceptable levels, therefore the impact is significant and unavoidable. (SU)

Impact TRAF-10: The level of service at the intersection of Bird Avenue and San Carlos Street* (58) would be LOS D during the PM peak hour under existing conditions and the intersection would degrade to LOS F under project conditions. This condition constitutes a significant impact by both City of San Jose and CMP standards. (S)

Mitigation Measure TRAF-10: One possible improvement consists of the addition of a second northbound left-turn lane. The implementation of this improvement would improve intersection level of service to LOS E. In accordance to CMP standards, this is an acceptable level of service. However, based on City of San Jose standards this intersection would continue to operate at an unacceptable level of service during the PM peak hour. The impact at this intersection is significant and unavoidable. Operational problems such as blocked intersections and an imbalance of lane usage along Bird Avenue between San Carlos Street and I-280 are due to large volumes of traffic and the close spacing of intersections. As such, signal timing modifications along Bird Avenue between I-280 and San Carlos Street should also be implemented. (SU)

Since this is a CMP intersection, should it be determined that the recommended improvement will not be implemented by the project, an alternative would be the application of Senate Bill No. 1636, as described above.

Impact TRAF-11: The level of service at the intersection of Bird Avenue and Auzerais Avenue (59) would be LOS C during the PM peak hour under existing conditions and the intersection would degrade to LOS E under project conditions. This condition constitutes a significant impact by City of San Jose standards. (S)

Mitigation Measure TRAF-11: One possible improvement to mitigate the project impact at this intersection would consist of the addition of a second northbound left-turn lane. The implementation of this improvement would improve intersection level of service to LOS C. Operational problems such as blocked intersections and an imbalance of lane usage along Bird Avenue between San Carlos Street and I-280 are due to large volumes and the close spacing of intersctions. As such, signal timing modifications along Bird Avenue between I-280 and San Carlos Street should be implemented. (LTS)

Impact TRAF-12: The level of service at the intersection of I-280 and Bird Avenue (N)* (60) would be LOS C during the PM peak hour under existing conditions and the intersection would degrade to LOS E under project conditions. This condition constitutes a significant impact by City of San Jose standards. (S)

Mitigation Measure TRAF-12: A possible improvement to mitigate the project impact at this intersection would consist of the addition of a southbound free-right-turn lane. The addition of the right-turn lane would also require that a fourth southbound through lane be added at the upstream intersection of Bird Avenue with Auzerais Avenue. The implementation of this improvement would improve intersection level of service to LOS C. Operational problems such as blocked intersections and an imbalance of lane usage along Bird Avenue between San

Carlos Street and I-280 are due to large volumes and the close spacing of intersections. As such, signal timing modifications along Bird Avenue betweenI-280 and San Carlos Street should also be implemented. (LTS)

Impact TRAF-13: The level of service at the intersections of Delmas Avenue and Park Avenue (63) would be LOS C during the PM peak hour under existing conditions and the intersection would degrade to LOS F under project conditions. This condition constitutes a significant impact by City of San Jose standards. (S)

Mitigation Measure TRAF-13: The necessary improvement to mitigate the project impact at this intersection would consist of the striping of the north leg to provide a shared through-left turn lane and shared through-right-turn lane. The improvement would require that on-street parking in the area of the intersection be eliminated. In order to maintain the existing on-street parking along both sides of Delmas Avenue north of Park Avenue, this improvement would require widening the roadway between San Fernando Street and Park Avenue by 2 feet. Additional right of way would need to be acquired from the properties on the east side of the street in order to maintain the existing sidewalk width. There are no street trees within the public right-of-way along Delmas Avenue. The affected properties from which additional ROW would be acquired include privately owned parcels and a parcel owned by Santa Clara County. If additional right of way can not be acquired from the private property owners, up to seven on-street parking spaces may need to be eliminated in order to accomplish the recommended mitigation measure. Because the intersection would function at acceptable levels with only a single southbound lane during much of the day, the parking restriction could be implemented during the PM peak hours only. Currently, the on-street parking is allowed only by permit and is used by the residents of the adjacent single-family homes and the multi-family residential development on the northwest corner of Delmas Avenue and Park Avenue. The permit parking restriction is in effect 24 hours a day. The planned Vasona LRT Project will widen the segment of Delmas Avenue between Park Avenue and San Carlos Street. The planned width south of Park Avenue is adequate for two travel lanes with on-street parking on both sides. The implementation of these improvements would improve intersection level of service to LOS C. (LTS)

(3) Intersections Outside the Core or Expanded Core. Five intersections outside of the existing Downtown Core or proposed expanded Downtown Core, but that are within the Downtown gateway corridors, would experience level of service impacts that could be at least partially mitigated.

Impact TRAF-14: The level of service at the intersection of Senter Road and Keyes Street (74) would be LOS D during the PM peak hour under existing conditions and the intersection would degrade to LOS E under project conditions. This constitutes a significant impact by City of San Jose standards. (S)

Mitigation Measure TRAF-14: The necessary improvement to mitigate the project impact at this intersection would consist of the addition of a second westbound left-turn lane. The implementation of this improvement would improve intersection level of service to LOS C. The impact and need for improvement at this intersection would occur after 96 percent of the proposed *Strategy 2000* is developed. (LTS)

Impact TRAF-15: The level of service at the intersection of Oakland Road and Commercial Street (75) would be LOS D during both peak hours under existing conditions and the intersection would degrade to LOS F during both peak hours under project conditions. This condition constitutes a significant impact by City of San Jose standards. (S)

Mitigation Measure TRAF-15: The necessary improvement to mitigate the project impact at this intersection would consist of the reconstruction of the US 101/Oakland Road interchange to include six lanes on the overpass. The Oakland Road interchange operates over capacity with many operational problems due to vehicle queues. The intersection of Commercial Street and Oakland Road serves as a primary gateway to access the interchange and does not have the capacity to meet demands. Necessary improvements at Oakland/Commercial to serve the reconstructed interchange will be determined upon design of the interchange. The reconstruction of the interchange would improve level of service to LOS D during both the AM and PM peak hours at the intersection. The impact and need for improvement at this intersection would occur after 65 percent of the proposed *Strategy 2000* is developed. (LTS)

Impact TRAF-16: The level of service at the intersection of US 101 and Oakland Road (N)* (76) would be LOS D during the AM peak hour under existing conditions and the intersection would degrade to LOS F under project conditions. This condition constitutes a significant impact by both City of San Jose and CMP standards. (S)

Mitigation Measure TRAF-16: The necessary improvement to mitigate the project impact at this intersection (and the following one, in TRAF-17) would consist of the construction of the interchange to include six lanes on the overpass. The reconstruction of the interchange would improve intersection levels of service to LOS C. The impact and need for improvement at this intersection would occur after 65 percent of the proposed *Strategy 2000* is developed. (LTS)

Impact TRAF-17: The level of service at the intersection of US 101 and Oakland Road (S)* (77) would be LOS D during the PM peak hour under existing conditions and the intersection would degrade to LOS F under project conditions. This condition constitutes a significant impact by both City of San Jose and CMP standards. (S)

Mitigation Measure TRAF-17: Implement Mitigation Measure TRAF-16, the implementation of which would improve intersection level of service to LOS C. (LTS)

Impact TRAF-18: The level of service at the intersection of Oakland Road and Hedding Street (78) would be LOS D during the AM peak hour under existing conditions and the intersection would degrade to LOS E under project conditions. This condition constitutes a significant impact by City of San Jose standards. (S)

Mitigation Measure TRAF-18: The necessary improvement to mitigate the project impact at this intersection would consist of the conversion of an eastbound through lane to a shared through-left-turn lane. The implementation of this improvement would improve intersection level of service to LOS D. The impact and need for improvement at this intersection would occur after 96 percent of the proposed *Strategy 2000* is developed. (LTS)

(4) Proposed Gateway Intersections. The project proposes to modify Council Policy 5-3, Transportation Level of Service Policy, to exempt intersections that serve as gateways to the greater Downtown area from the City's level of service policy for Downtown Development. Future development including that envisioned under *Strategy 2000,* will not be required to provide mitigation at the exempted gateway intersections. The proposal contends that the intersections serve as gateways to the greater Downtown area and experience higher traffic demands resulting in traffic impacts. The General Plan Amendment requests that additional capacity not be added to the intersections and that they be allowed to operate at capacity (i.e., be exempt from the LOS D standard) with the expectation that alternative routes or modes will be used by drivers when delays become unacceptable. A total of 19 identified gateway intersections will be impacted by the project. Of the 19 intersections only one can be improved to the point that the impact would be less than significant.

Impact TRAF-19: The level of service at the intersection of Coleman Avenue and Hedding Street (153) would be LOS D during the PM peak hour under existing conditions and the intersection would degrade to LOS F under project conditions. This condition constitutes a significant impact by City of San Jose standards. (S)

> Mitigation Measure TRAF-19: The necessary improvement to mitigate the project impact at this intersection would consist of the widening of Coleman Avenue from a four-lane roadway to a six-lane roadway (including the associated improvements of double left turn lanes and separate right-turn lanes on Hedding Street). The widening of Coleman Avenue has been studied by the City. The study indicated that the widening is feasible, but funding is necessary. The Coleman widening will require an amendment to the City's General Plan. The implementation of these improvements would improve intersection level of service to LOS D. (LTS)

It should be noted that the approved San Jose MarketCenter (Cousins) development may be required to implement improvements to Coleman Avenue/Taylor Street.

(5) Proposed Gateway Intersections Where Mitigation is Infeasible. There would be no feasible improvements at the 17 gateway intersections listed below due to right-of-way restrictions. The addition of project traffic to these intersections would result in significant unavoidable impacts. With the exemption of these intersections from the city's level of service policy, as described above, it is expected that traffic congestion will increase as the development identified in *Strategy 2000* as well as other future development progresses. Future development, including that envisioned under *Strategy 2000,* will not be required to provide mitigation at the exempted gateway intersections.

Impact TRAF-20: The addition of project traffic to the following intersections in and outside of the expanded Downtown Core would result in significant unavoidable level of service impacts.

(82) 11th Street and Taylor Street
(85) 11th Street and Julian Street
(86) 11th Street and St. James Street
(87) 11th Street and St. John Street
(88) 11th Street and Santa Clara Street
(90) 11th Street and San Antonio Street

(98) 10th Street and Hedding Street
(99) 10th Street and Taylor Street
(102) 10th Street and Julian Street
(103) 10th Street and St. James Street
(111) 10th Street and Reed Street
(117) Seventh Street and Virginia Street
(122) 4th Street and Jackson Street
(132) First Street and Taylor Street
(141) Almaden Avenue and Virginia Street
(145) Vine Street and Grant Street
(162) Meridian Avenue and San Carlos Street (S)

Mitigation Measure TRAF-20: Due to right-of-way restrictions, no feasible mitigation measures are available. This impact would remain significant and unavoidable. (SU)

d. Freeway Segment and Ramp Levels of Service. Project traffic volumes for the subject freeway segments were estimated with the use of the traffic model. Ratios of traffic model projections for the Year 2000 and project conditions were applied to the year 2000 CMP traffic volume data.

Impact TRAF-21: Thirty-three of the 48 directional freeway segments analyzed will operate at an unacceptable LOS F during at least one peak hour (see Figure V.B-9). (S)

Mitigation Measure TRAF-21: Mitigation of freeway impacts would require widening of the freeways, which is infeasible. Therefore, these impacts must be considered significant and unavoidable. However, there are measures that could reduce the impacts. The measures primarily consist of transit improvements and enhancements as outlined below:

- Extension of BART to San Jose.
- Further expansion of LRT lines.
- Enhanced bus service.
- Successful implementation of the parking plan that leads to a mode split composed of a higher percentage of transit users.

These measures would provide options to commuters to the Downtown area. An enhanced transit system, with a major improvement such as the BART extension, would reduce auto usage and thus lessons congestion on freeways. The implementation of a parking plan that controls the amount of parking provided in the Downtown area with policies and pricing, will also encourage the use of transit that would be more efficient and economical than the use of autos. The reduction in auto usage will be most noticeable on freeways since most transit trips would originate from outside the Downtown area. Because widening the freeways is infeasible, and not all these improvements are currently funded, this impact is considered significant and unavoidable. (SU)

Impact TRAF-22: The HOV lanes on 25 of the segments also are projected to operate at LOS F conditions. (S)

Mitigation Measure TRAF-22: Implementation of Mitigation Measure TRAF-21 would reduce impacts to the HOV lanes; however, this impact would still be significant and unavoidable. (SU)

Ramp Operations: Three ramps are projected to experience substantial congestion. The following ramps are projected to operate at congested levels of service (V/C worse than 0.900 or LOS E):

- **Northbound SR 87 off to Julian Street (AM Peak Hour)**
- **Southbound SR 87 on from Julian Street (PM Peak Hour)**
- **Northbound I-280 off to 7th Street (AM Peak Hour)**

Summary tables of freeway segment and ramp analysis are included in Appendix B.

Ramp Operational Improvements: The planned improvements to the southbound SR 87 on-ramp from Julian Street and the northbound I-280 off-ramp to 7th Street would reduce projected congestion.

- Southbound SR 87 on-ramp from Julian Street – The planned improvement at the ramp consists of the addition of a second lane to the ramp.
- Northbound I-280 off-ramp to 7th Street – A potential improvement at this ramp consists of its extension to 3rd Street. With the addition of a second lane on the ramp, levels of service would improve. Funding for this improvement has not been obtained.

The northbound SR 87 off-ramp to Julian Street would necessitate the widening of the off-ramp to two-lanes, but there are no plans to construct this improvement. Implementation of Mitigation Measure TRAF-21 would also reduce impacts to the freeways ramps; however, because these improvements are not funded, this impact would still be significant and unavoidable.

e. Strategy 2000 Roadway Improvements. The proposed roadway improvements or adjustments outlined by the *Strategy 2000* and described earlier in this chapter will, in some cases, improve traffic circulation throughout the Greater Downtown area. Some of the proposed changes may improve transit, pedestrian, and vehicular cohesion, but also result in adverse impacts on the roadways. Discussed below are each of the proposed roadway changes and their effects on the transportation system.

- ***I-280 3rd Street Ramp Extension*** – As the freeway ramp analysis indicates, the extension of the I-280 to 7th Street off-ramp to 3rd Street would improve projected congestion levels on the ramp. The improvements should include an additional lane on the off-ramp. The ramp extension would provide necessary capacity to serve the Downtown area and aid in alleviating congestion on other Downtown area ramps.

Figure V.B-9: Freeway Segment Level of Service Conditions

11x17

back of Figure V.B-9

- ***Autumn Street Extension*** – The extension of Autumn Street, as identified under previously described mitigation measures, is necessary to serve projected traffic volumes. The Autumn Street extension would serve as an alternative route through the Downtown area and alleviate traffic congestion along parallel routes such as Market Street and Almaden Boulevard.
- ***Coleman Avenue Widening*** – The widening of Coleman Avenue, as identified under previously identified mitigation measures, is necessary to serve projected traffic volumes.

The following proposed roadway changes could result in potentially significant impacts on the roadway system. However, meaningful analysis is not currently possible in the absence of specific plans, and CEQA does not encourage speculation on such outcomes. The effects of each change will need to be assessed at the time of specific development plans in the context of supplemental environmental review as appropriate.

- Enlarge Plaza de Cesar Chavez by removing a lane of traffic on either side of the plaza.
- Realign Julian Street between SR 87 and North 1st Street to extend the Downtown urban grid pattern.
- Explore the design of a median in Market Street with generous planting, street trees, and carefully considered left-turn lanes in the median.
- Explore the design of the Park continuing to the north across William Street and to the east with a narrowing of 1st Street.
- Consider certain streets to have more traffic to carry and other streets to be more pedestrian-oriented within SoFA. Designate streets for the character of their traffic and pedestrian uses.
- Make Market Street a less heavily traveled, more landscaped boulevard.
- Establish 2nd Street as two-way from San Carlos Street. Design 2nd Street, a local-serving street, to have bicycle lane(s)and angled parking on the west side.
- Explore the design of San Carlos Street to better accommodate vehicular traffic, the light rail trains (LRT) and wider sidewalks, especially along the southern side of the street.
- Consider traffic calming measures for the streets in the adjacent neighborhoods, such as Reed Street in the Market Almaden Neighborhood to the west of SoFA.
- Realign Reed Street and redesign the intersection of Market and Reed Streets for better traffic and pedestrian movements and improved streetscape design.
- Explore the designs of the intersections of San Carlos Street at Market, 1st, and 2nd Streets in order to make the pedestrian crossings easier and the light rail more integrated with the streetscape.

f. Transit Service Under Project Conditions. The planned growth within the Downtown area will require that the already extensive transit system within the Downtown area be enhanced. Projections indicate an increase of 50 percent in transit usage in the Downtown area; under project conditions, approximately 10,000 Downtown-related transit trips will be made during each of the AM and PM peak hours, compared to about 6,600 to 6,700 in the year 2000.

The *Strategy 2000* outlines a transit enhancement strategy that states: "Encourage bus ridership through the use of efficient, quiet, low-emission vehicles, improved bus shelters, and other rider amenities."

If successfully implemented, this strategy from *Strategy 2000* will have a beneficial impact on transit service and ridership. However, individual developments could have adverse impacts depending on the building orientation and parking entrances.

Impact TRAF-23: Implementation of *Strategy 2000* could result in individual developments that are not oriented to or encourage the use of transit services. (S)

> Mitigation Measure TRAF-23: The City shall forward plans for individual development projects to VTA staff for their review to ensure compatibility with transit services. (LTS)

g. Pedestrian and Bicycle Enhancements. It is a goal of the *Strategy 2000* to not only maintain, but also enhance the pedestrian environment within the Downtown area. With the large amount of planned development, increases in vehicular traffic are expected. It is undesirable to inhibit the flow of pedestrians and bicyclists throughout Downtown with the narrowing or elimination of sidewalks for street widening to accommodate vehicular traffic. Rather the *Strategy 2000* proposes that existing pedestrian and bicycle facilities be improved and future development designed to better serve pedestrians and bicyclists.

By implementing the measures described earlier in this chapter, the *Strategy 2000* will have a beneficial effect on pedestrian and bicycle circulation. However, there is no provision in the plan to replace the San Carlos Street Bridge over Los Gatos Creek at the UPRR tracks.

Impact TRAF-24: Implementation of *Strategy 2000* will increase pedestrian traffic on San Carlos Street and exacerbate the existing deficiencies on the bridge, a significant adverse impact. (S)

> Mitigation Measure TRAF-24: When pedestrian levels warrant, the City shall replace or renovate the San Carlos Street bridge with a design that is compliant with the Americans with Disabilities Act or will provide a separate pedestrian bridge. (LTS)

The San Fernando Street Bike Lane plan will provide for bike lanes along both sides of San Fernando Street between 11th Street and Diridon Station. Along with other pedestrian improvements, the bike lanes will provide for a pedestrian friendly connection between Diridon Station and the traditional Downtown center. Though the bike lanes will necessitate the elimination of one lane of traffic in each direction on San Fernando Street, traffic conditions will only be minimally effected and will continue to operate at acceptable levels.

h. Parking Conditions Under Project Conditions. Coordination of the proposed parking plan with the anticipated development levels will be critical in the maintenance of a functional transportation system. The parking plan will serve as a tool to control the quantity of parking spaces provided within the Downtown Core. Controlling the allotment of parking spaces on-site will serve as a tool to encourage the use of transit. As it benefits both employers and employees, it is expected that alternative means of transportation will be pursued. This shift from vehicle to

transit will provide some relief to the roadway system. *Strategy 2000*, by incorporating the Parking Management Plan will have a beneficial impact on Downtown parking conditions.

i. Development and Improvements Phasing. The timing and implementation of each of the improvements identified to mitigate project impacts in the previous chapter are described in this chapter. As development within Downtown San Jose progresses, the construction of each of the identified improvements will be necessary.

(1) Development Phasing. The funding for each of the identified improvements will be established as the development levels planned for Downtown San Jose proceed. Since the development planned for Downtown San Jose will not occur immediately, it is not necessary to construct all improvements at the initiation of development. Rather the improvements will be constructed concurrently with development as deemed necessary.

Generally, the implementation of each of the intersection improvements was determined based on level of service calculations with incremental phases of development. The planned development was divided into 25 percent increments to develop the following four phases of development:

- Phase 1: > 25 percent;
- Phase 2: > 75 percent;
- Phase 3: > 50 percent; and
- Phase 4: 100 percent.

(2) Improvement Phasing. The phasing of the improvements was determined based on judgment of necessity of the improvements and level of service calculations. The phase at which the major improvements were needed was determined based on their need to serve the Downtown San Jose area as a whole. The major improvements serve as gateways and/or major arterials to and within Downtown San Jose, and therefore are needed to serve each of the development phases. Each of the major improvements is outlined below and presented in Table V.B-14.

Major Downtown San Jose Improvements
Coleman Avenue Widening (Phase 1)
Autumn Extension (Phase 1)
Adjacent Neighborhood Traffic Calming (Phase 1)
SR 87/Julian off-ramp Improvements (Phase 2)
Bird Avenue Corridor Improvements (Phase 2)
US 101/Oakland Road Interchange Upgrade (Phase 2)
I-280/3rd & 7th Streets Extension (Phase 3)
Couplet Conversions (Phases 3 and 4)

The need for specific intersection improvements during each phase of development was determined based on level of service calculations. Each impacted intersection was evaluated to determine during which phase the addition of project traffic would cause the intersection to be impacted. A few exceptions to the level of service criteria include intersections for which the proposed improvements are minor and can be completed within the first phase of development. Each of the proposed

improvements is outlined below. Level of service results for each development phase are shown in Table V.B-14.

Phase 1
52 Coleman Avenue and Taylor Street
53 Stockton Avenue and The Alameda
55 Montgomery Street and Santa Clara Street*
56 Autumn Street and Santa Clara Street*

Phase 2
58 Bird Avenue and San Carlos Street*
59 Bird Avenue and Auzerais Avenue
60 I-280 and Bird Avenue (N)*
75 Oakland Road and Commercial Street
76 US 101 and Oakland Road (N)*
77 US 101 and Oakland Road (S)*
78 Oakland Road and Hedding Street
153 Coleman Avenue and Hedding Street

Phase 3
63 Delmas Avenue and Park Avenue

Phase 4
74 Senter Road and Keyes Street

j. Traffic Spillover Caused by Congestion. A concern that is commonly expressed by residential neighborhoods adjacent to areas of redevelopment is the likelihood that residential streets there will become "cut-throughs," shortcuts or bypasses used by non-neighborhood traffic. While some use of residential streets by such traffic occurs in most areas, substantial quantities of through traffic can result in safety impacts to pedestrians, impaired driveway access, interference with emergency vehicle access, and similar annoyances that adversely affect the residential character of a neighborhood. The most effective way to reduce the likelihood that traffic will use local residential streets in order to cut-through, is to minimize congestion on the major streets, the collectors, and arterials that are intended to carry through traffic. Since the major collectors and arterials are usually the most direct routes, traffic will use those routes as long as congestion is not excessive. *Strategy 2000* includes improvements to many roadways and intersections in an effort to maintain through traffic movement and minimize the likelihood of cut-through traffic using minor residential streets. In some cases, there is no feasible mitigation identified. In those circumstances, it is more likely that some traffic will leave the major roadways and spill over into nearby neighborhoods. This is less likely to occur where there are parallel routes on major streets to which some of the spillover traffic will resort.

Unmitigated congestion at certain intersections could reduce travel speeds to the extent that motorists might seek alternate routes. Alternate routes could involve the use of local streets not designed to carry through traffic, which could affect safety. Trying to predict driver behavior in this way would be entirely speculative, however.

Table V.B-14: Downtown San Jose Phase Intersection Levels of Service Summary

			Existing		Phase 1				Phase 2				Phase 3				2020 Project				Mitigated	
	Intersection	Peak Hour	Avg. Delay	LOS	Avg. Delay	LOS	Incr. in Crit. Delay.	Incr. in Crit. V/C	Avg. Delay	LOS	Incr. in Crit. Delay.	Incr. in Crit. V/C	Avg. Delay	LOS	Incr. in Crit. Delay.	Incr. in Crit. V/C	Avg. Delay	LOS	Incr. in Crit. Delay.	Incr. in Crit. V/C	Avg. Delay	LOS
Expanded Downtown Core Intersections																						
52	Coleman Avenue and	AM	47	E	**54**	**E**	16	0.07	70	F	47	0.15	92	F	91	0.23	121	F	147	0.32	37	D
	Taylor Street	PM	34	D	38	D	6	0.06	**41**	**E**	16	0.15	46	E	21	0.25	59	E	43	0.38	34	D
53	Stockton Avenue and	AM	17	C	16	C	-2	0.11	22	C	6	0.23	**47**	**E**	35	0.36	137	F	144	0.54	34	D
	The Alameda	PM	18	C	24	C	6	0.16	31	D	14	0.32	**57**	**E**	52	0.48	134	F	159	0.65	18	C
55	Montgomery Street and	AM	14	B	14	B	0	-0.03	14	B	-1	-0.05	14	B	-1	-0.08	14	B	-1	-0.11	9	B
	Santa Clara Street*	PM	16	C	20	C	6	0.18	28	D	23	0.35	**58**	**E**	89	0.53	120	F	216	0.70	11	B
56	Autumn Street and	AM	31	D	33	D	4	0.06	35	D	8	0.12	**40**	**E**	16	0.18	51	E	33	0.23	34	D
	Santa Clara Street*	PM	14	B	18	C	4	0.14	24	C	12	0.39	29	D	20	0.57	**51**	**E**	56	0.76	41	E
58	Bird Avenue and	AM	24	C	25	C	1	0.03	26	D	2	0.07	26	D	3	0.10	27	D	-5	0.10	26	D
	San Carlos Street*	PM	34	D	38	D	4	0.06	**44**	**E**	13	0.12	54	E	27	0.18	64	F	49	0.23	48	E
59	Bird Avenue and	AM	19	C	14	B	0	0.03	15	B	1	0.05	15	B	1	0.07	15	C	1	0.10	19	C
	Auzerais Avenue	PM	23	C	28	D	1	0.05	34	D	2	0.10	**43**	**E**	3	0.15	53	E	4	0.20	21	C
60	I-280 and	AM	21	C	22	C	0	0.02	22	C	0	0.03	22	C	0	0.04	23	C	0	0.06	22	C
	Bird Avenue (N)*	PM	19	C	21	C	2	0.08	24	C	5	0.15	29	D	11	0.23	**50**	**E**	34	0.33	24	C
63	Delmas Avenue and	AM	18	C	19	C	1	0.06	19	C	2	0.13	20	C	3	0.19	20	C	4	0.25	18	C
	Park Avenue	PM	20	C	23	C	4	0.19	33	D	18	0.38	**83**	**F**	92	0.57	199	F	255	0.75	32	D
Intersections Outside Core/Expanded Core																						
74	Senter Road and	AM	19	C	19	C	0	0.01	20	C	1	0.02	20	C	1	0.03	20	C	1	0.04	20	C
	Keyes Street	PM	27	D	27	D	0	0.06	31	D	7	0.11	38	D	19	0.16	**48**	**E**	37	0.21	48	E
75	Oakland Road and	AM	31	D	**47**	**E**	32	0.15	89	F	108	0.29	156	F	229	0.44	252	F	396	0.58	41	E
	Commercial Street	PM	36	D	**42**	**E**	10	0.07	53	E	29	0.14	70	F	58	0.21	93	F	94	0.27	34	D
76	US 101 and	AM	37	D	**42**	**E**	13	0.07	87	F	102	0.22	157	F	242	0.38	255	F	435	0.53	21	C
	Oakland Road (N)*	PM	17	C	15	B	-3	-0.07	16	C	-1	-0.02	18	C	1	0.04	21	C	5	0.09	13	B
77	US 101 and	AM	19	C	15	B	-5	0.04	15	B	-5	0.07	15	C	-4	0.09	16	C	-4	0.11	14	B
	Oakland Road (S)*	PM	26	D	**42**	**E**	32	0.11	69	F	87	0.22	107	F	166	0.33	157	F	270	0.43	25	C
78	Oakland Road and	AM	39	D	40	D	1	0.01	**40**	**E**	2	0.02	41	E	4	0.04	43	E	5	0.05	40	D
	Hedding Street	PM	30	D	31	D	1	0.03	31	D	1	0.05	32	D	7	0.07	33	D	3	0.11	36	D
Gateway Intersections																						
153	Coleman Avenue and	AM	44	E	45	E	1	0.00	45	E	2	0.01	46	E	2	0.01	46	E	3	0.02	32	D
	Hedding Street	PM	36	D	40	D	7	0.04	**46**	**E**	17	0.09	56	E	33	0.13	67	F	53	0.18	29	D

Notes: Intersections located within downtown core are exempt from the city's LOS Policy and are allowed to operate at unacceptable levels. Levels of service provided for informational purposes only.
Bold indicates trigger point of significant impact.

* Denotes CMP intersection.

Source: Hexagon Transportation Consultants, 2005.

Impact TRAF-25: Implementation of *Strategy 2000* would lead to congestion at numerous study area intersections, with the possible outcome being that drivers facing such congestion would choose shortcuts or bypasses through adjacent neighborhoods, possibly limiting access or leading to safety impacts. (LTS)

Intersection and roadway improvements are recommended as mitigation measures for many of the traffic impacts set forth in this section. However, the City Council has recognized the special nature of Downtown and has exempted the Downtown Core from the Level of Service Policy. Through this exemption, some spillover traffic could be experienced in nearby neighborhoods outside of the Downtown.

> Mitigation Measure TRAF-25: No mitigation is required for this less-than-significant impact. However, City of San Jose traffic calming measures could be invoked in the event that a policy choice were made to address any such conditions that develop. Procedures for implementing traffic calming include objective criteria for identifying problems with traffic volume or speed and include a set of measures to reduce or eliminate problems. (LTS)