

APPENDIX C

TRANSPORTATION IMPACT ANALYSIS

(Technical Appendices to this report are on file at the City of San José Department of Planning, Building and Code Enforcement, 200 East Santa Clara Street, San José CA, 3rd Floor)

Coyote Valley Specific Plan

Transportation Impact Analysis

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City of San Jose

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CVSP Draft Report (2-1-07).doc

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Executive Summary

This report presents the results of the traffic analysis conducted for the Coyote Valley Specific Plan (CVSP). The Specific Plan includes project zoning and development standards and design guidelines that implement the Specific Plan vision and land use provisions and the General Plan's goals, policies, and standards relating to Coyote Valley.

Project Description

The CVSP project area consists of approximately 7,000 acres of low intensity or undeveloped land in the southern reaches of San Jose, California. The area is generally bounded by Tulare Hill to the north, Highway 101 and the eastern foothills to the east, Morgan Hill to the south, and the Santa Teresa Hills to the west. The Coyote Valley area has been divided into three different planning areas: The North Coyote Valley Campus Industrial area, the mid-Coyote Valley Urban Reserve, and the southern Coyote Greenbelt.

In summary, the Coyote Valley Specific Plan (CVSP) will include the vision of urban development to include at least 50,000 jobs and 25,000 housing units, of which 20% would be affordable. The Coyote Valley community would be highly livable with a variety of housing types, schools, parklands, trails, bicycle paths, transit, commercial and job centers, and other community services. The southern Coyote Valley Greenbelt area is included in this planning effort in order to determine mechanisms by which its long-term preservation can be ensured.

Trip Generation

Based on the model trip generation estimates, the Coyote Valley development will generate 209,991 daily vehicle trips with 18,282 vehicle trips occurring during the AM peak hour and 21,247 vehicle trips occurring during the PM peak hour.

The proposed land uses of the Coyote Valley Specific Plan will promote a balance of housing and employment within the valley. With the balance of land uses it is expected that the interaction between uses within the valley will place less of a demand on regional transportation facilities. Based on proposed land uses within Coyote Valley, model runs indicate that about 40% of the projected trips would stay

within Coyote Valley. The internalization of trips within the valley equates to approximately 5,500 trips during the AM peak hour and 7,400 trips during the PM peak hour. The remaining 60% of the daily trips generated by the project would originate or have destinations outside of the Coyote Valley project boundaries.

Scope of Study

This analysis consists of a near-term and long-range analysis of the proposed Coyote Valley development levels and their effects on transportation facilities based on the standard City of San Jose and CMP level of service policies. The potential level of service impacts of the planned Coyote Valley development levels were evaluated in accordance with the standards and methodologies set forth by the Cities of San Jose, Morgan Hill, and Gilroy and the Santa Clara Valley Transportation Authority (VTA). The VTA administers the county Congestion Management Program (CMP).

The study included the analysis of 187 existing intersections and 60 future intersections located in the cities of San Jose, Morgan Hill, San Martin, and Gilroy. All intersections within Coyote Valley were studied. In San Jose, the study intersections include 22 intersections located within Coyote Valley, none of which are CMP intersections. Outside of Coyote Valley, 49 CMP designated intersections and 46 otherwise undesignated intersections were studied. In the City of Morgan Hill, the study intersections include 36 intersections, none of which are CMP intersections. In the City of San Martin, the study intersections include four intersections. In the City of Gilroy, the study intersections include 30 intersections, two of which are CMP intersections. Freeway facility analysis included 52 directional freeway segments.

Project Impacts

Intersection Impacts

Results of the intersection level of service analysis show that 14 of the 187 study intersections would be impacted by the project according to applicable level of service standards. The location of each of the mitigated intersections is presented below:

- 11 intersections are located in San Jose
- 1 intersection is located in Morgan Hill
- 1 intersection is located in San Martin
- 1 intersection is located in Gilroy

Proposed mitigation measures are presented in Chapter 4.

Freeway Segment Impacts

The results of the freeway segment analysis showed that 10 of the 52 mixed-flow lanes and one of the 28 HOV lanes on the directional freeway segments studied would be impacted by the project according to CMP level of service standards for freeways. Mitigation of freeway facility impacts would require widening of the freeways. The feasibility of freeway widening may be constrained by the acquisition and cost of right-of-way and substantial cost for one single development. Therefore, for this particular project, these impacts must be considered significant and unavoidable. Should it be deemed that widening of the freeway is feasible and necessary, the project along with other projects within Santa Clara County could contribute towards the funding of the widening. A fee collection program would need to be established

and specific improvements identified. The forthcoming, Valley Transportation Authority *South County Circulation Study* may identify improvements to regional facilities, including freeways, which a regional funding plan could be used to fund.

There are measures that could reduce the impacts. The measures primarily consist of transit improvements and enhancements as outlined below:

- Enhancement of CalTrain service
- Extension of LRT lines
- Enhanced Bus Service

Transit Service

The Coyote Valley development would generate about 302,780 daily new person trips, with about 4 percent (12,942 trips) being made using one or more transit modes. About 50% (6,410 trips) of the total transit trips would stay within Coyote Valley. These estimates equate to approximately 3,250 transit trips during each of the peak hours originating outside of Coyote Valley with destinations within Coyote Valley and 3,250 transit trips originating and with destinations within Coyote Valley.

Transit Service Improvements

The evaluation of project conditions on transit service showed that due to the size of the project, demand for transit service would justify the need for enhancement of existing service serving Coyote Valley, but would not create the need for new transit facilities beyond those proposed as part of the project's internal transit system. The City of San Jose has endorsed VTA's Community Design and Transportation (CDT) Program and will incorporate guidelines and recommendations of the VTA, CMP, and CDT Program when appropriate and applicable in regards to future transit facilities.

CalTrain Service. A new multi-modal transit station is being proposed as an element of the proposed CVSP project. The station will be located south of the Monterey Road and Bailey Road interchange. Once this station is open, CalTrain will be available to serve commuters to and from the project area. Currently, CalTrain service through Coyote Valley is northbound only during the AM, and southbound only during the PM commute periods. However, VTA is planning to begin operating some contraflow services, and once the contraflow service is operational, commuters from San Francisco south will be able to reach the North Coyote Station via CalTrain. A minimum of one train would be provided in each direction every hour. It is likely, that trains would run every 30-minutes during the peak commute hours. Each train would have a capacity of 750 passengers, assuming a per car capacity of 150 passengers and five car trains. With a total of eight trains, four running in each direction, the trains could serve up to 6,000 seated passengers during the peak hours. It is anticipated that the contraflow service will be operational by the time the full CVSP development is completed. It is reasonable to expect that the majority of the increased transit demand due to CVSP will be served by the CalTrain system. Between 2,000 and 3,000 additional CalTrain riders are projected to be attributable to the proposed project.

Bus Service. Local and Express bus services are projected to carry the balance of the additional peak hour person trips that are projected to be using transit services. Local and Express buses could carry an additional 500 to 600 bus riders that would be attributable to the proposed project. The frequency of bus service and expansion of express bus service during peak commute periods would need to be increased to serve the increase in demand.

Pedestrian and Bicycle Facilities

With the large amount of planned development, increases in pedestrians and bicyclists along with the vehicular traffic can be expected within Coyote Valley. Existing pedestrian facilities will be improved and future development designed to better serve pedestrians. As development progresses within Coyote Valley, the following pedestrian and bicycle facility enhancements will occur:

- Sidewalks and bicycle facilities will be constructed along the minor streets of the new roadway system that will serve pedestrians and bicyclists more efficiently than the major arterials that serve large volumes of vehicular traffic. Bicycle facilities will be provided on all major streets where feasible.
- Enhance the existing bicycle facilities between San Jose and Morgan Hill. The enhancements will provide for continuous bicycle connections from southern San Jose through, Coyote Valley and into Morgan Hill. The VTA's *Santa Clara Countywide Bicycle Plan* identifies improvements to the Coyote Creek Trail between Hellyer Avenue and Anderson Lake and bicycle facility improvements along McKean Road from Harry Road to Bailey Avenue.

The City of San Jose has endorsed VTA's Community Design and Transportation (CDT) Program and will incorporate guidelines and recommendations of the *Santa Clara Countywide Bicycle Plan* and CDT Program when appropriate and applicable in regards to future pedestrian and bicycle facilities.

General Plan Amendment Analysis

An analysis of long-term traffic impacts on the countywide transportation system associated with the land use changes due to the proposed development levels for Coyote Valley as well as all other pending General Plan Amendments (GPA) in the City of San Jose was also completed. Future traffic volumes used in the General Plan analysis are consistent with ABAG projections and the VTA 2030 model. The analysis indicates that the proposed development levels for Coyote Valley would result in a significant increase in jobs and households in Coyote Valley. The traffic associated with the growth would result in increases in peak direction volumes across the identified screenlines for the Special Subareas, Vehicle Miles Traveled, Vehicle Hours Traveled, and the number of links operating at LOS E/F. As part of the traffic analysis for the project, mitigation for each of the identified impacts was identified to meet the City's level of service policy. The proposed mitigation measures would serve to reduce impacts and be in conformance with General Plan policies. It is expected that the proposed general plan amendment will make a fair-share contribution towards the cost of construction of the improvements.

Year 2030 Long-Term Analysis

Long-term traffic analysis of the proposed development levels for Coyote Valley as well as land use growth and transportation improvements within South County and Monterey Bay indicate that the proposed development levels will have adverse impacts on the major regional transportation facilities serving Coyote Valley. Traffic associated with the Coyote Valley development levels as well as other future growth will cause regional transportation facilities already projected to operate at unacceptable levels to worsen. The project shall contribute its fair-share towards funding of regional transportation improvements. Potential roadway facility improvements will be identified in the forthcoming VTA *South County Circulation Study*. The Year 2030 analysis is included in Appendix G of this report.

1. Introduction

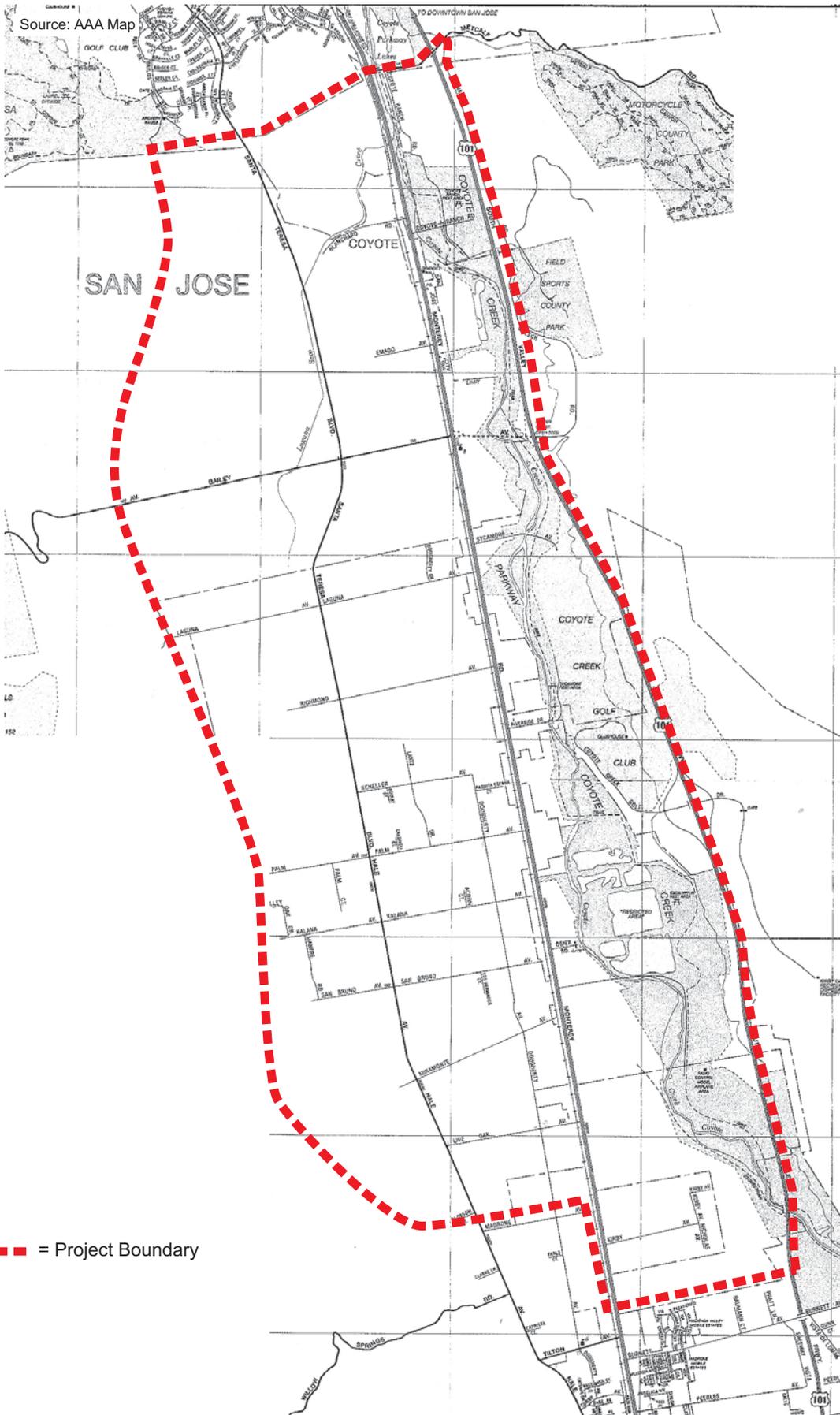
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Project Description

The CVSP project area consists of approximately 7,000 acres of low intensity or undeveloped land in the southern reaches of San Jose, California. The area is generally bounded by Tulare Hill to the north, Highway 101 and the eastern foothills to the east, Morgan Hill to the south, and the Santa Teresa Hills to the west. The Coyote Valley area has been divided into three different planning areas: The North Coyote Valley Campus Industrial area, the mid-Coyote Valley Urban Reserve, and the southern Coyote Greenbelt (see Figure 1).

In summary, the Coyote Valley Specific Plan (CVSP) will include the vision of urban development to include at least 50,000 jobs and 25,000 housing units, of which 20% would be affordable. The Coyote Valley community would be highly livable with a variety of housing types, schools, parklands, trails, bicycle paths, transit, commercial and job centers, and other community services. The southern Coyote Valley Greenbelt area is included in this planning effort in order to determine mechanisms by which its long-term preservation can be ensured.

This analysis consists of a near-term and long-range analysis of the proposed Coyote valley development levels and their effects on transportation facilities based on the standard City of San Jose and CMP level of service policies.



--- = Project Boundary

Figure 1

COYOTE VALLEY PROJECT AREA

CVSP

Scope of Study

This study was conducted for the purpose of identifying potential traffic impacts related to the proposed development levels on the immediate and surrounding transportation system of the Coyote Valley area. Due to the scale of the project, facilities outside of the City of San Jose will be affected by the project. Thus, the impacts of the project were evaluated following the standards and methodologies set forth by the Cities of San Jose, Morgan Hill, San Martin, and Gilroy, and the Santa Clara Valley Transportation Authority (VTA). The VTA administers the county Congestion Management Program (CMP). The traffic analysis is based on peak-hour levels of service for signalized and unsignalized intersections and freeway segments. Traffic conditions were evaluated for the following scenarios:

- Scenario 1:** *Existing Conditions.* Existing conditions were represented by existing peak-hour traffic volumes on the existing roadway network. Traffic volumes collected in approximately 2004-2005 were used in this analysis.
- Scenario 2:** *Year 2005 with CVRP Background Conditions.* Year 2005 with CVRP background conditions were represented by background traffic volumes with the approved Coyote Valley Research Park (CVRP) on the near-term roadway network. The CVRP project located in North Coyote Valley was approved in April 2002. Background traffic volumes were estimated by adding to existing peak-hour volumes the projected volumes from approved but not yet completed developments within each jurisdiction with CVRP.
- Scenario 3:** *Year 2005 with CVSP Project Conditions.* Project conditions were represented by background traffic volumes, with the proposed CVSP project, on the near-term roadway network. Background traffic volumes with the project (hereafter called *project traffic volumes*) were estimated by adding to the Year 2005 with CVRP background traffic volumes (with the CVRP project trips removed) the additional traffic generated by the project. Project conditions were evaluated relative to Year 2005 with CVRP background conditions in order to determine potential project impacts.
- Scenario 4:** *Year 2005 with Partial CVSP Project Conditions.* Partial CVSP Project conditions were represented by background traffic volumes, with only a portion of the proposed CVSP development levels, on the near-term roadway network. Year 2005 with CVRP background traffic volumes with the partial CVSP project were estimated by adding to the Year 2005 with CVRP background traffic volumes (with the CVRP project trips removed) the additional traffic generated by the Partial CVSP project. Partial CVSP project conditions were evaluated relative to Year 2005 with CVRP background conditions in order to determine potential project impacts.

An analysis of long-term traffic impacts on the countywide transportation system associated with the land use changes due to the proposed development levels for Coyote Valley as well as all other pending General Plan Amendments (GPA) in the City of San Jose was also completed. Future traffic volumes used in the General Plan analysis are consistent with ABAG projections and the VTA 2030 model. The General Plan methodology is presented in Chapters 6 and 7 of this report.

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.

Data Requirements

The data required for the analysis were obtained from each of the applicable cities and the 2005 CMP Annual Monitoring Report. The following data were collected from these sources:

- existing traffic volumes
- lane configurations
- signal timing and phasing (for signalized intersections only)
- average speed (for freeway segments only)

VTA 2030 Travel Demand Forecasting Model

The VTA 2030 Model was developed as an extension of the Metropolitan Transportation Commission's Regional Model (MTC Model). The VTA 2030 Model relies extensively upon MTC Model structure, coding conventions and calculation procedures. This was done to ensure consistency between the two modeling systems. The VTA 2030 Model expands on the MTC Model structure in order to provide significantly more detail and forecast precision within and surrounding Santa Clara County.

The VTA 2030 Model also uses demographic projections that are consistent with those prepared by the Association of Bay Area Governments (ABAG). The Santa Clara County 2030 demographic projections include:

- A population of 2,285,058 persons,
- 769,687 Households, and
- 1,483,121 Employees.

The VTA 2030 Model uses 2,654 traffic zones to represent 13 counties. These include all nine Bay Area Counties plus Santa Cruz, Monterey, San Benito, and San Joaquin Counties. Santa Clara County has been subdivided into 1,490 traffic zones in order to provide the best possible representation of travel demand for transportation planning purposes. Network features are coded "as they are or will be" based on the best available GIS mapping information. An extensive coordination effort was undertaken to insure consistency of analysis for the forthcoming VTA *South County Circulation Study* and this analysis for the Coyote Valley Specific Plan. Land use and network coding along with analysis procedures to be used were coordinated by VTA.

The model represents all motorized modes of travel used within the Bay Area, including nearly 100 individual transit operators. The model also provide estimates of the change in non-motorized travel for user defined analysis scenarios. The model's projections of roadway traffic demand include several modal stratifications, including: Single occupant autos, 2-person carpools, 3+ person carpools and trucks. Roadway traffic forecasts are available for AM and PM peak one and three-hour periods.

Project Traffic Model Forecasts

It was agreed upon to use intersection turn-movements forecasted by the traffic model to account for traffic associated with the CVSP project. The model was adjusted to include the future planned roadway network within Coyote Valley that is included as part of the project. Great care was taken with the coding of traffic zones within Coyote Valley so as to accurately reflect trip making characteristics not only from

points outside of Coyote Valley, but also within the valley. The coding resulted in approximately 75 traffic zones to reflect the planned land uses of the Coyote Valley Specific Plan. The turn movements for the CVSP project were then added to near-term background traffic volumes.

Intersection Analysis

Study Intersections

The study included the analysis of 187 existing intersections located in the cities of San Jose, Morgan Hill, San Martin, and Gilroy. 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 AM, and the PM peak hour is typically between 4:00 and 6:00 PM. It is during these periods that the most congested traffic conditions occur on an average work day.

Intersections that are currently operating at LOS D or worse conditions and to which the project would likely add a significant amount of traffic, 10 trips or more per lane as specified by City of San Jose and CMP criteria, were studied. Project traffic will dissipate and disperse significantly once outside of Coyote Valley. Therefore, intersections operating at LOS C or better outside of the Coyote Valley area were not studied because the amount of traffic added to these intersections would not be significant enough to cause the intersections to degrade two letter grades to unacceptable levels. Additional intersections in Morgan Hill, Gilroy and the County were studied at the request of each respective jurisdiction.

In San Jose, the study intersections include 22 intersections located within Coyote Valley (13 of which are unsignalized), none of which are CMP intersections. Outside of Coyote Valley, 49 CMP designated intersections and 46 (9 of which are unsignalized) otherwise undesignated intersections were studied. In the City of Morgan Hill, the study intersections include 36 intersections (10 of which are unsignalized), none of which are CMP intersections. In the City of San Martin, the study intersections include four intersections (three of which are unsignalized). In the City of Gilroy, the study intersections include 30 intersections (8 of which are unsignalized), 2 which are CMP intersections. The study intersections are listed below and shown graphically in Figures 2 through 6.

Coyote Valley Signalized Intersections

- 1 Monterey Road and Metcalf Road
- 2 Monterey Road and Blanchard Road
- 3 Monterey Road and Bailey Avenue (N)
- 4 Monterey Road and Bailey Avenue
- 5 Monterey Road and Palm Avenue
- 6 Monterey Road and Live Oak Avenue
- 7 US 101 and Bailey Avenue (E)
- 8 US 101 and Bailey Avenue (W)
- 9 Santa Teresa Boulevard and Bailey Avenue

Coyote Valley Unsignalized Intersections

- 10 Santa Teresa Boulevard and Laguna Avenue
- 11 Santa Teresa Boulevard and Richmond Avenue
- 12 Santa Teresa Boulevard and Palm Avenue
- 13 Santa Teresa Boulevard and Kalana Avenue
- 14 Santa Teresa Boulevard and San Bruno Avenue

- 15 Santa Teresa Boulevard and Miramonte Avenue
- 16 Santa Teresa Boulevard and Live Oak Avenue
- 17 Dougherty Avenue and Live Oak Avenue
- 18 Dougherty Avenue and Palm Avenue
- 19 IBM Entrance and Bailey Avenue (E)
- 20 IBM Entrance and Bailey Avenue (W)
- 21 US 101 and Coyote Creek Golf Drive (E)
- 22 US 101 and Coyote Creek Golf Drive (W)

City of San Jose Signalized Intersections

- 23 King Road and Tully Road*
- 24 McLaughlin Avenue and Tully Road*
- 25 Monterey Road and Old Tully Road*
- 26 Senter Road and Tully Road*
- 27 Capitol Expressway and Tully Road*
- 28 Capitol Expressway and Quimby Road*
- 29 Capitol Expressway and Aborn Road*
- 30 Silver Creek Road and Capitol Expressway*
- 31 McLaughlin Avenue and Capitol Expressway*
- 32 Senter Road and Capitol Expressway*
- 33 Snell Avenue and Capitol Expressway*
- 34 Narvaez Avenue and Capitol Expressway*
- 35 SR 87 and Capitol Expressway*
- 36 Pearl Avenue and Capitol Expressway*
- 37 US 101 and Yerba Buena Road (E)*
- 38 US 101 and Yerba Buena Road (W)*
- 39 US 101 and Blossom Hill Road (E)*
- 40 US 101 and Blossom Hill Road (W)*
- 41 Monterey Road and Curtner Avenue*
- 42 Monterey Road and Capitol Expressway (N)*
- 43 Monterey Road and Capitol Expressway (S)*
- 44 Monterey Road and Senter Road*
- 45 Monterey Road and Skyway Drive*
- 46 Monterey Road and Branham Lane*
- 47 Monterey Road and Edenvue Drive
- 48 Monterey Road and Chynoweth Drive
- 49 Monterey Road and Blossom Hill Road (N)*
- 50 Monterey Road and Blossom Hill Road (S)*
- 51 Monterey Road and Monterey Plaza
- 52 Monterey Road and Ford Road
- 53 Monterey Road and Flintwell Way
- 54 Monterey Road and Bernal Road (E)*
- 55 Monterey Road and Bernal Road (N)*
- 56 Monterey Road and Bernal Road (S)*
- 57 Monterey Road and Monterey Circle
- 58 Monterey Road and Menard Drive
- 59 Santa Teresa Boulevard and Blossom Hill Road
- 60 Santa Teresa Boulevard and Coleman Road
- 61 Allen Avenue and Santa Teresa Boulevard

- 62 Cahalan Avenue and Santa Teresa Boulevard
- 63 Chesbro Avenue and Santa Teresa Boulevard
- 64 Blossom Avenue and Santa Teresa Boulevard
- 65 Snell Avenue and Santa Teresa Boulevard*
- 66 Dunn Avenue and Santa Teresa Boulevard
- 67 Lean Avenue and Santa Teresa Boulevard
- 68 Cottle Road and Santa Teresa Boulevard*
- 69 Camino Verde and Santa Teresa Boulevard
- 70 Encinal Drive and Santa Teresa Boulevard
- 71 Miyuki and Santa Teresa Boulevard
- 72 Santa Teresa Boulevard and San Ignacio Avenue
- 73 Santa Teresa Boulevard and Great Oaks Boulevard
- 74 Santa Teresa Boulevard and Martinvale Lane
- 75 Santa Teresa Boulevard and Bernal Road*
- 76 Santa Teresa Boulevard and Chantilly Lane
- 77 Santa Teresa Boulevard and Avenida Espana
- 78 Almaden Expressway and Almaden Road*
- 79 Almaden Expressway and Via Valiente
- 80 Almaden Expressway and Trinidad Drive
- 81 Almaden Expressway and Camden Avenue*
- 82 Almaden Expressway and Redmond Avenue
- 83 Almaden Expressway and McAbee Road
- 84 Almaden Expressway and Coleman Road*
- 85 Almaden Expressway and Via Monte
- 86 Almaden Expressway and Blossom Hill Road*
- 87 Almaden Expressway and Almaden Plaza Way*
- 88 Almaden Expressway and SR 85*
- 89 Almaden Expressway and Branham Lane*
- 90 Almaden Expressway and Koch Lane*
- 91 Basking Ridge and Silicon Valley Boulevard
- 92 US 101 and Bernal Road (E)
- 93 US 101 and Bernal Road (W)*
- 94 SR 85 and Bernal Road*
- 95 San Ignacio Avenue and Bernal Road
- 96 Via Del Oro and Bernal Road
- 97 Realm Avenue and Bernal Road
- 98 Hellyer Avenue and Silver Creek Valley Road
- 99 Fontanoso Way and Silver Creek Valley Road
- 100 Piercy Road and Silver Creek Valley Road
- 101 Almaden Expressway and Harry Road
- 102 Snell Avenue and Blossom Hill Road*
- 103 SR 85 and Santa Teresa Boulevard (N)*
- 104 SR 85 and Santa Teresa Boulevard (S)*
- 105 SR 85 and Blossom Hill Road (E)*
- 106 SR 85 and Blossom Hill Road (W)*
- 107 SR 85 and Cottle Road (N)*
- 108 SR 85 and Cottle Road (S)*

City of San Jose Unsignalized Intersections

- 109 Eden Park Place and Silicon Valley Boulevard
- 110 Rue Ferrari and Silicon Valley Boulevard
- 111 McKean Road and Harry Road
- 112 Santa Teresa Boulevard and Cheltenham Way
- 113 Santa Teresa Boulevard and Bayliss Drive
- 114 McKean Road and Bailey Avenue
- 115 Santa Teresa Boulevard and Madrone Avenue
- 116 Hale Avenue and Tilton Avenue
- 117 Dougherty Avenue and Tilton Avenue

City of Morgan Hill Signalized Intersections

- 118 Monterey Road and Tilton Avenue
- 119 Monterey Road and Burnett Avenue
- 120 Monterey Road and Peebles Avenue
- 121 Monterey Road and Madrone Parkway
- 122 Monterey Road and Cochrane Road
- 123 Monterey Road and Old Monterey Road
- 124 Monterey Road and Wright Avenue
- 125 Monterey Road and Main Avenue
- 126 Monterey Road and Dunne Avenue
- 127 Monterey Road and Tennant Avenue
- 128 Monterey Road and Vineyard Boulevard
- 129 Monterey Road and Watsonville Road
- 130 Cochrane Circle and Cochrane Road
- 131 Butterfield Boulevard and Cochrane Road
- 132 Sutter Boulevard and Cochrane Road
- 133 Madrone Parkway and Cochrane Road
- 134 US 101 and Cochrane Road (E)
- 135 US 101 and Cochrane Road (W)
- 136 Hale Avenue and Llagas Road
- 137 Butterfield Boulevard and Main Avenue
- 138 Butterfield Boulevard and Dunne Avenue
- 139 Condit Road and Dunne Avenue
- 140 US 101 and Dunne Avenue (E)
- 141 US 101 and Dunne Avenue (W)
- 142 US 101 and Tennant Avenue (E)
- 143 US 101 and Tennant Avenue (W)

City of Morgan Hill Unsignalized Intersections

- 144 Hale Avenue and Wright Avenue
- 145 Hale Avenue and Main Avenue
- 146 Peak Avenue and Main Avenue
- 147 Peak Avenue and Dunne Avenue
- 148 Dewitt Avenue and Dunne Avenue
- 149 Dewitt Avenue and Edmunson Avenue
- 150 Sunnyside Avenue and Edmunson Avenue

- 151 Santa Teresa Boulevard and Watsonville Road
- 152 Murphy Avenue and Dunne Avenue
- 153 Condit Avenue and Tennant Avenue

City of San Martin Signalized Intersections

- 154 Monterey Road and San Martin Avenue

City of San Martin Unsignalized Intersections

- 155 US 101 and San Martin Avenue (E)
- 156 US 101 and San Martin Avenue (W)
- 157 Coolidge Avenue and San Martin Avenue

City of Gilroy Signalized Intersections

- 158 Santa Teresa Boulevard and Sunrise Drive
- 159 Santa Teresa Boulevard and Longmeadow Drive
- 160 Santa Teresa Boulevard and Mantelli Drive
- 161 Santa Teresa Boulevard and Welburn Avenue
- 162 Santa Teresa Boulevard and First Street/Hwy. 152
- 163 Santa Teresa Boulevard and Third Street
- 164 Santa Teresa Boulevard and Club Drive
- 165 Santa Teresa Boulevard and Ballybunion Drive
- 166 Santa Teresa Boulevard and Thomas Road
- 167 Monterey Road and Masten Avenue
- 168 Monterey Road and Leavesley Road
- 169 Monterey Road and First Street/Hwy. 152
- 170 Monterey Road and Tenth Street
- 171 Church Street and First Street/Hwy. 152
- 172 Wren Avenue and First Street/Hwy. 152
- 173 Camino Arroyo and Pacheco Pass Road/Hwy. 152
- 174 US 101 and Tenth Street (E)
- 175 US 101 and Tenth Street (W)
- 176 Chestnut Street and Tenth Street
- 177 Church Street and Tenth Street
- 178 US 101 and Leavesley Road (E)*
- 179 US 101 and Leavesley Road (W)*

City of Gilroy Unsignalized Intersections

- 180 US 101 and Masten Avenue (E)
- 181 US 101 and Masten Avenue (W)
- 182 Santa Teresa Boulevard and Fitzgerald Avenue
- 183 Santa Teresa Boulevard and Day Road (N)
- 184 Santa Teresa Boulevard and Day Road (S)
- 185 Santa Teresa Boulevard and Miller Avenue
- 186 Monterey Road and Day Road
- 187 Uvas Park Drive and Miller Avenue

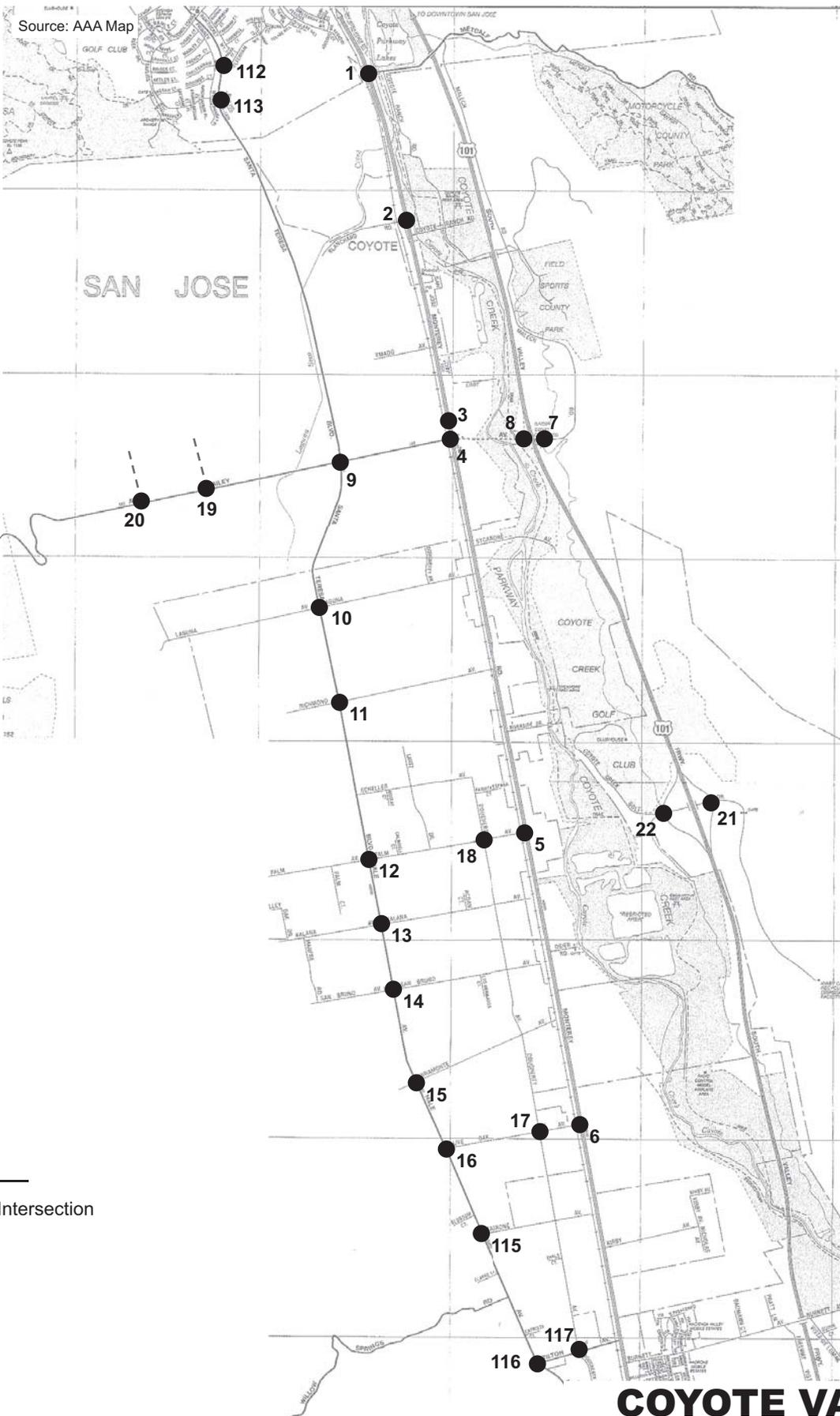


Figure 2

COYOTE VALLEY STUDY INTERSECTIONS

CVSP

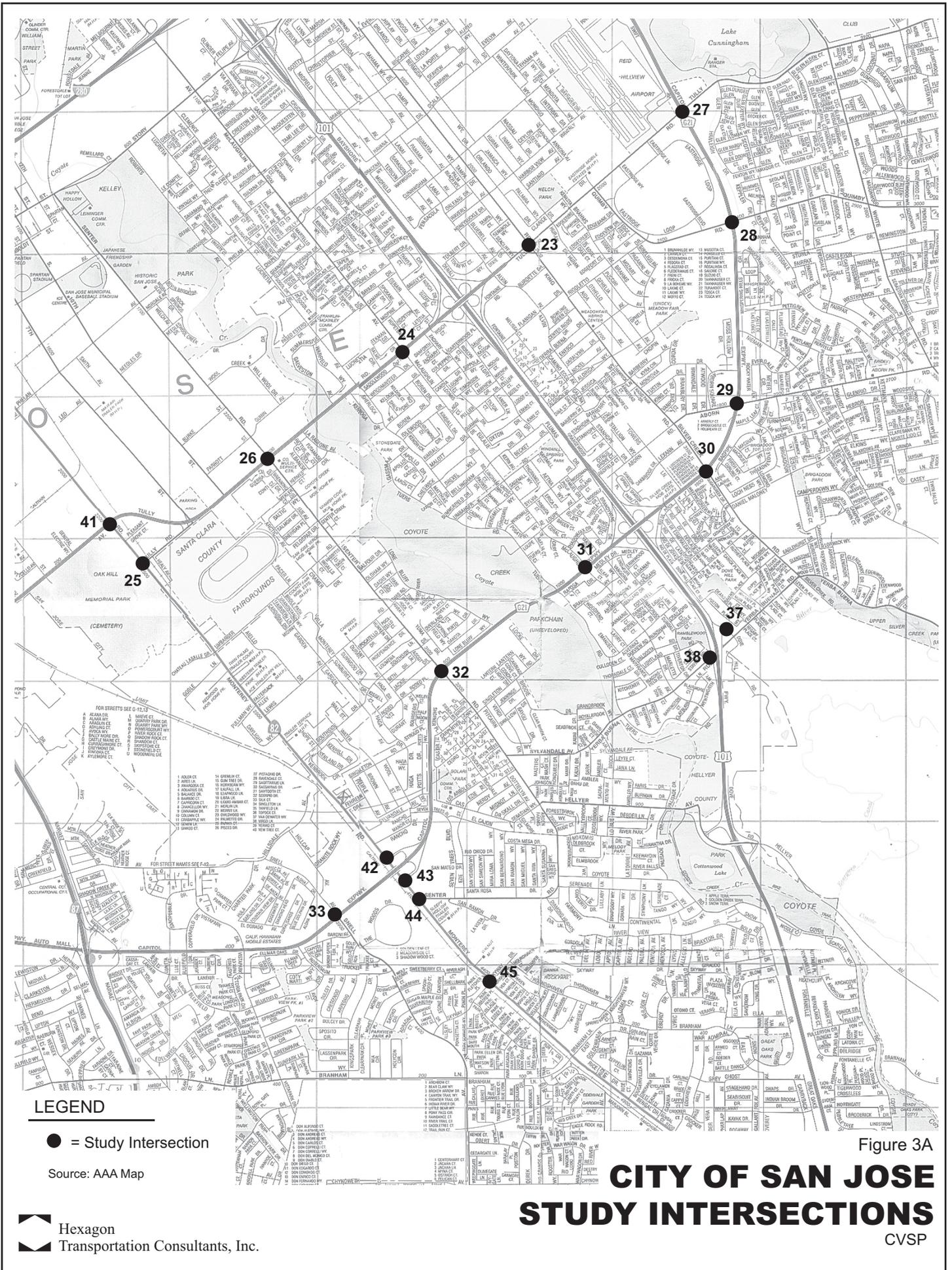
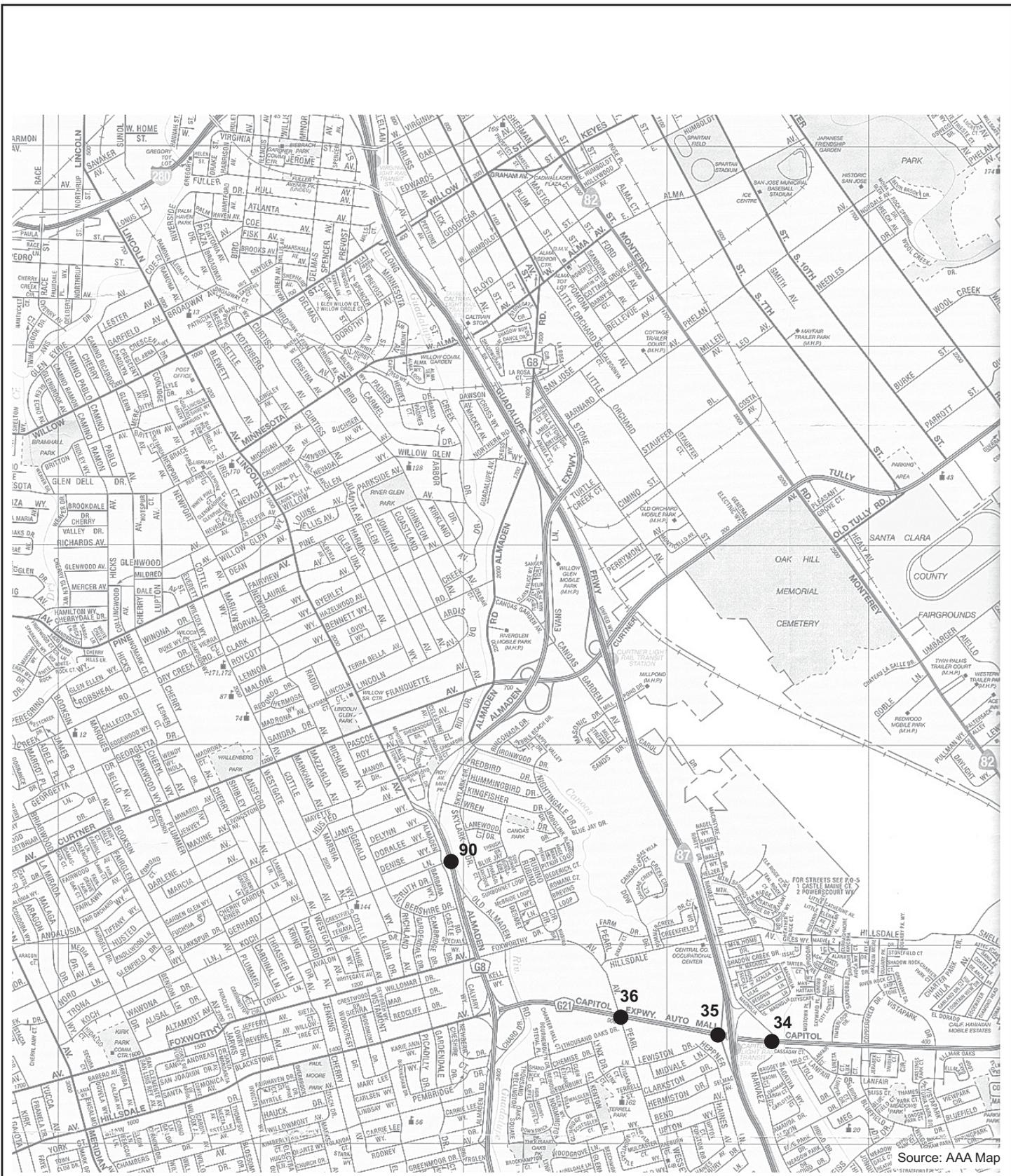


Figure 3A

CITY OF SAN JOSE

STUDY INTERSECTIONS

CVSP



Source: AAA Map

LEGEND

● = Study Intersection

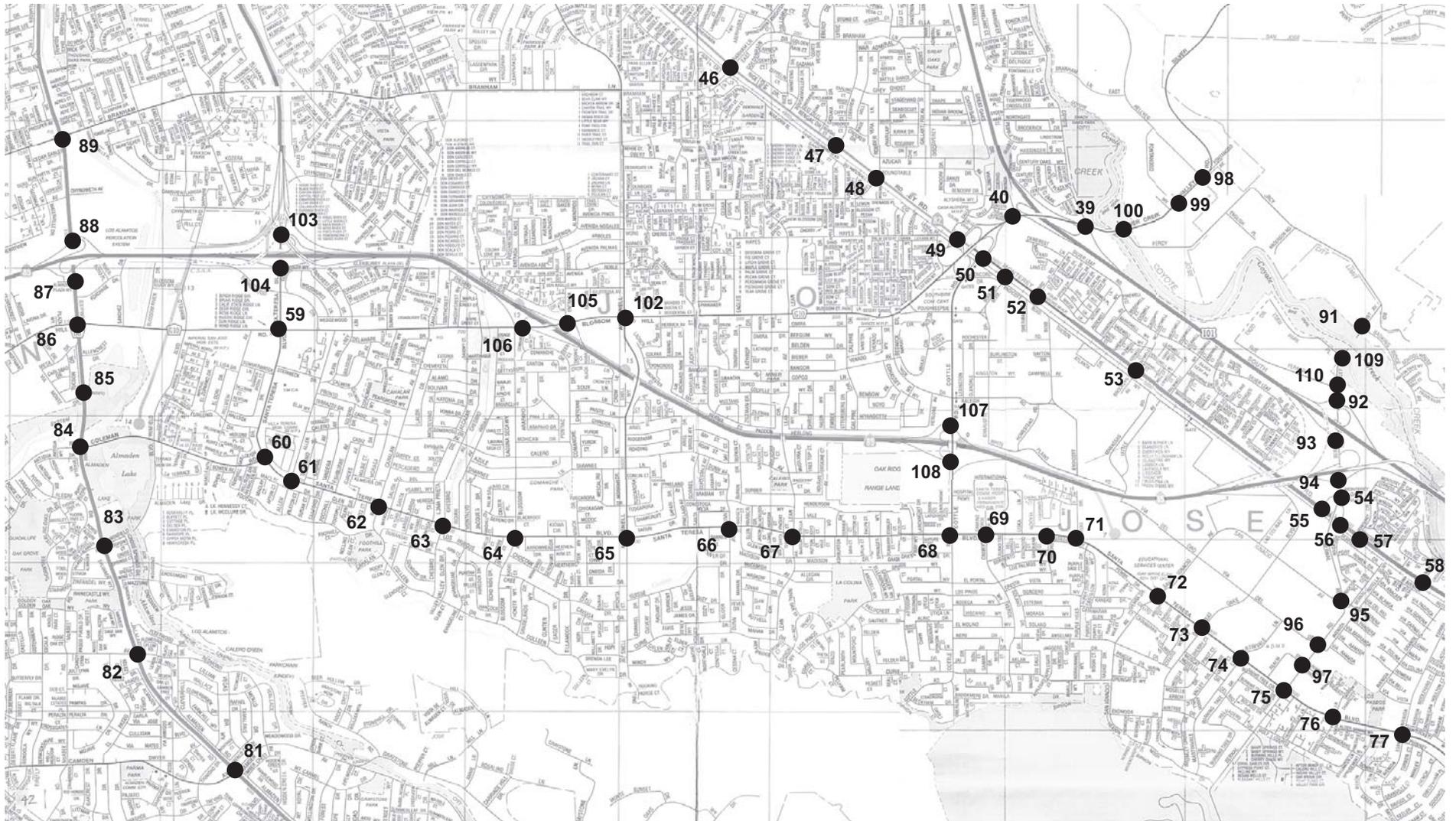
Hexagon

Transportation Consultants, Inc.

Figure 3B

**CITY OF SAN JOSE
STUDY INTERSECTIONS**

CVSP



Source: AAA Map

LEGEND

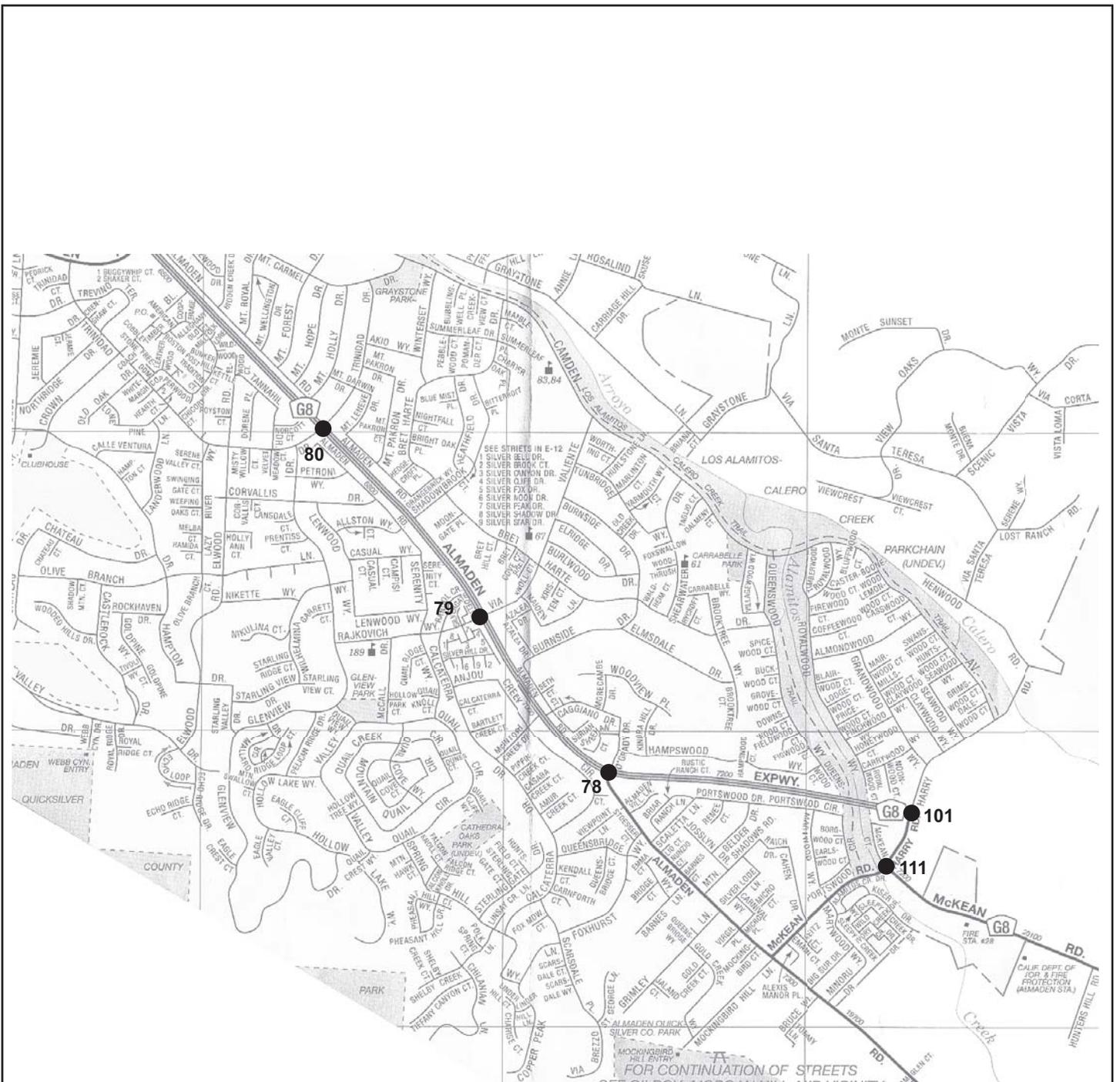
● = Study Intersection

Hexagon
 Transportation Consultants, Inc.

Figure 3C

**CITY OF SAN JOSE
 STUDY INTERSECTIONS**

CVSP



LEGEND

● = Study Intersection

Source: AAA Map

 Hexagon
 Transportation Consultants, Inc.

Figure 3D

**CITY OF SAN JOSE
STUDY INTERSECTIONS**

CVSP

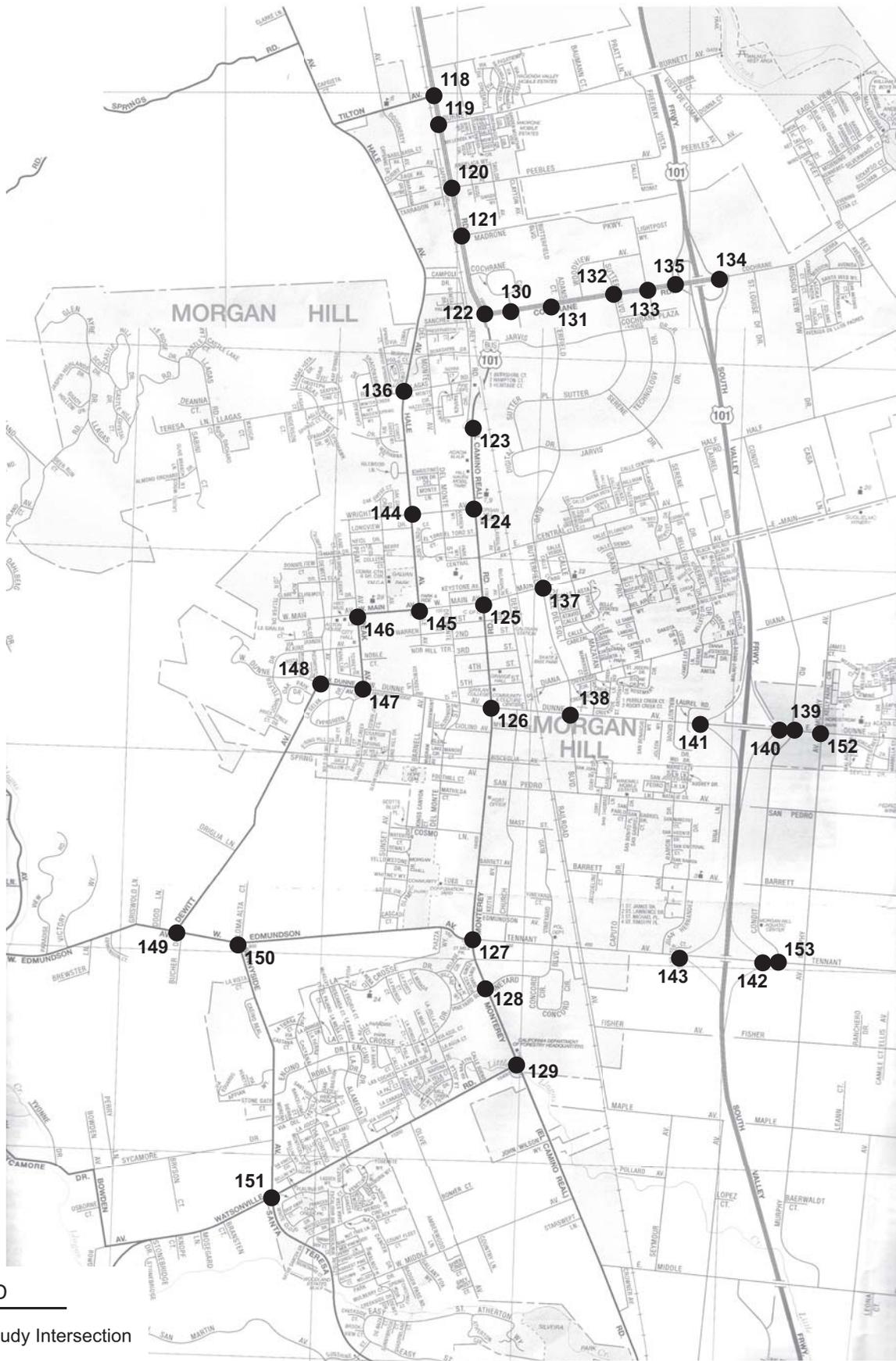


Figure 4

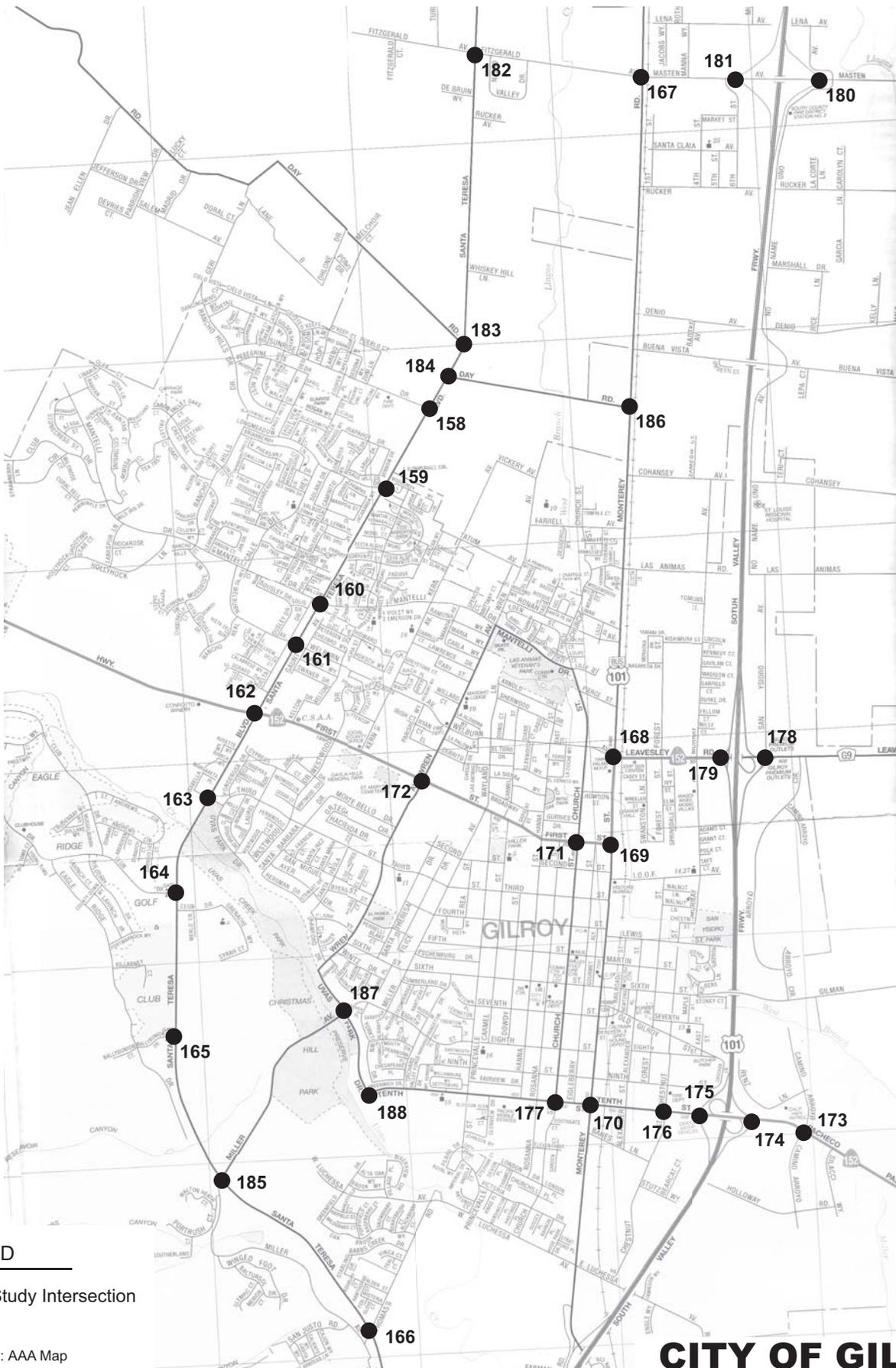
LEGEND

● = Study Intersection

Source: AAA Map

 Hexagon
 Transportation Consultants, Inc.

CITY OF MORGAN HILL
STUDY INTERSECTIONS
 CVSP



LEGEND

● = Study Intersection

Source: AAA Map

Hexagon
 Transportation Consultants, Inc.

Figure 6

CITY OF GILROY
STUDY INTERSECTIONS
 CVSP

Signalized Intersections Analysis Methodologies and Level of Service Standards

Traffic conditions at the study intersections were evaluated using level of service (LOS). *Level of Service* is a qualitative description of operating conditions ranging from LOS A, or free-flow conditions with little or no delay, to LOS F, or jammed conditions with excessive delays. The various analysis methods are described below.

Each of the cities' level of service methodology for signalized intersections is the 2000 *Highway Capacity Manual* (HCM) method, which is applied using the TRAFFIX software. The 2000 HCM operations method, via TRAFFIX, evaluates signalized intersection operations on the basis of average control delay time for all vehicles at the intersection. Since TRAFFIX is also the CMP-designated intersection level of service methodology, each of the cities' methodology employs the CMP default values for the analysis parameters. The local city level of service standards for signalized intersections is as follows:

City of San Jose Intersection LOS Standard and Impact Criteria

All intersections within the City of San Jose, including CMP designated intersections, are required to meet the City's LOS standard of LOS D.

The project is said to create a significant adverse impact on traffic conditions at signalized intersections if for either peak hour:

1. The level of service at the intersection degrades from an acceptable LOS D or better under background conditions to an unacceptable LOS E or F under project conditions, or
2. The level of service at the intersection is an unacceptable LOS E or F under background 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 .01 or more.

An exception to this rule applies when the addition of project traffic reduces the amount of average control delay for critical movements (i.e. the change in average control delay for critical movements is negative). In this case, the threshold of significance is an increase in the critical V/C value by .01 or more.

City of Morgan Hill Intersection LOS Standard and Impact Criteria

All intersections within the City of Morgan Hill are required to meet the City's LOS standard of LOS D+, with the exception of the following:

- For the intersections of Madrone Parkway and Monterey Road, Watsonville Road and Monterey, Butterfield Boulevard and Tennant Avenue, the LOS standard of D must be met;
- All freeway ramp intersections are required to meet an LOS standard of E.

The project is said to create a significant adverse impact on traffic conditions at non-CMP signalized intersections if for either peak hour:

1. The level of service at the intersection degrades from an acceptable LOS (D+, D, or E as described above) or better under background conditions to an unacceptable LOS E or F under

project conditions, or

2. The level of service at the intersection is an unacceptable LOS D or worse under background 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 .01 or more.

An exception to this rule applies when the addition of project traffic reduces the amount of average control delay for critical movements (i.e. the change in average control delay for critical movements is negative). In this case, the threshold of significance is an increase in the critical V/C value by .01 or more.

San Martin Intersection LOS Standard and Impact Criteria

There are no adopted LOS standard and impact criteria for intersections located within San Martin. Therefore, a LOS standard of LOS D and the same impact criteria as used within the City of San Jose was assumed.

City of Gilroy Intersection LOS Standard and Impact Criteria

The City of Gilroy uses two sets of impact criteria, one for intersections located west of US 101 and another set for intersections located in the LOS D commercial area designated in the City of Gilroy General Plan, primarily east of US 101.

LOS C Area

For intersections located west of US 101 (LOS C areas), the project is said to create a significant adverse impact on traffic conditions at a signalized intersection if for any peak hour:

1. The level of service at the intersection degrades from an acceptable LOS C or better under background conditions to an unacceptable LOS D or worse under project conditions, or
2. If the intersection is already operating at an unacceptable LOS D and the addition of project traffic causes the average delay to increase by two (2) second or more, or
3. If the intersection is already operating at an unacceptable LOS E or F and the addition of project traffic causes the average delay to increase by one (1) second or more.

LOS D Area

For intersections located in the LOS D area, primarily east of US 101 and in the Tenth Street corridor, the project is said to create a significant adverse impact on traffic conditions at a signalized intersection if for any peak hour:

1. The level of service at the intersection degrades from an acceptable LOS D or better under background conditions to an unacceptable LOS E or F under project conditions, or
2. If the intersection is already operating at an unacceptable LOS E or F and the addition of project traffic causes the average delay to increase by one (1) second or more.

A significant impact by local municipal standards is said to be satisfactorily mitigated when measures are implemented that would restore intersection level of service to background conditions or better.

CMP Intersection LOS Standard and Impact Criteria

The only difference between the local city's and CMP level of service analyses is that the 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. 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.

The correlation between average control delay and level of service is shown in Table 1.

**Table 1
Intersection Level of Service Definitions Based on 2000 HCM**

Level of Service	Description	Average Control Delay Per Vehicle (Sec.)
A	Operations with very low delay occurring with favorable progression and/or short cycle lengths.	Less than 10.0
B	Operations with low delay occurring with good progression and/or short cycle lengths.	10.1 to 20.0
C	Operations with average delays resulting from fair progression and/or longer cycle lengths. Individual cycle failures begin to appear.	20.1 to 35.0
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.	35.1 to 55.0
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.	55.1 to 80.0
F	Operation with delays unacceptable to most drivers occurring due to oversaturation, poor progression, or very long cycle lengths.	Greater than 80.0

Source: Transportation Research Board, Highway Capacity Manual (Washington, D.C., 2000), p. 16-2

Unsignalized Intersections

For unsignalized intersections an assessment is made of the need for signalization of the intersection. This assessment is made on the basis of the Peak-Hour Volume Signal Warrant, Warrant # 11 described in the

Caltrans *Traffic Manual*. This method makes no evaluation of intersection level of service, but simply provides an indication whether peak-hour traffic volumes are, or would be, sufficient to justify installation of a traffic signal.

Freeway Segment Analysis

Freeway segments that serve the Coyote Valley area were also analyzed as part of the study. Similar to the selected study intersections, freeway segments were analyzed for the weekday AM and PM peak hours of traffic. The following 26 freeway segments were studied:

- US 101, SR 156 to SR 129
- US 101, SR 129 to Betabel
- US 101, Betabel to Bloomfield Avenue/Highway 25
- US 101, Bloomfield Avenue/Highway 25 to Monterey Road
- US 101, Monterey Road to Pacheco Pass Highway
- US 101, Pacheco Pass Highway to Leavesly Road
- US 101, Leavesly Road to Masten Avenue
- US 101, Masten Avenue to San Martin Avenue
- US 101, San Martin Avenue to Tennant Avenue
- US 101, Tennant Avenue to East Dunne Avenue
- US 101, East Dunne Avenue to Cochrane Road
- US 101, Cochrane Road to Coyote Creek Golf Drive
- US 101, Coyote Creek Golf Drive to Bailey Avenue
- US 101, Bailey Avenue to Coyote Valley Parkway
- US 101, Coyote Valley Parkway to SR 85
- US 101, SR 85 to Bernal Road
- US 101, Bernal Road to Silver Creek Road
- US 101, Silver Creek Road to Hellyer Avenue
- US 101, Hellyer Avenue to Yerba Buena Avenue
- US 101, Yerba Buena Avenue to Capitol Expressway
- US 101, Capitol Expressway to Tully Road
- US 101, Tully Road to Story Road
- US 101, Story Road to I-280
- SR 85, Bernal Road to Cottle Road
- SR 85, Cottle Road to Blossom Hill Road
- SR 85, Blossom Hill Road to SR 87

Freeway Segment Level of Service Methodology

Year 2005 Density Method

As prescribed in the CMP technical guidelines, the level of service for freeway segments is estimated based on vehicle density. Density is calculated by the following formula:

$$D = V / (N * S)$$

where:

D= density, in vehicles per mile per lane (vpml)

V= peak hour volume, in vehicles per hour (vph)

N= number of travel lanes

S= average travel speed, in miles per hour (mph)

The vehicle density on a segment is correlated to level of service as shown in Table 2. The CMP requires that mixed-flow lanes and auxiliary lanes be analyzed separately from HOV (carpool) lanes. The CMP specifies that a capacity of 2,300 vehicles per hour per lane (vphpl) be used for segments six lanes or wider in both directions and a capacity of 2,200 vphpl be used for segments four lanes wide in both directions. The CMP defines an acceptable level of service for freeway segments as LOS E or better.

**Table 2
Freeway Level of Service Based on Density**

Level of Service	Density (vehicles/mile/lane)
A	< 11.0
B	11.0 - 18.0
C	18.0 - 26.0
D	26.0 - 46.0
E	46.0 - 58.0
F	> 58.0

CMP Definition of Significant Freeway Segment Impacts

A project is said to create a significant adverse impact on traffic conditions on a CMP freeway segment if for either peak hour:

1. The level of service on the freeway segment is an unacceptable LOS F under project conditions, and
2. The number of project trips on that segment constitutes at least one percent of capacity on that segment.
3. 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.

Roadway Segment Analysis

Roadway segments in the surrounding area of Coyote Valley were also analyzed as part of the study. Similar to the selected study intersections, roadway segments were analyzed for the weekday AM and PM peak hours of traffic. Twenty-four hour roadway segment tube counts were conducted on all major roadways serving the selected study intersections. The collected counts provide peak hour as well as daily volumes along some of the major roadways within the study areas. The collected segment volumes were used to evaluate roadway segment operations. Since there is no evaluation criteria for roadway segments, the roadway segment analysis is presented for informative purposes only. Future levels of service for roadway segments were calculated based on a volume-to-capacity ratio (V/C). The V/C method is simple and does not use travel speed as a variable in its calculation. Roadway segment level of service based on V/C is shown in Table 3.

**Table 3
Roadway 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 0.600
B	Reasonably free-flow conditions. The ability to maneuver within the traffic stream is only slightly restricted.	0.600-0.699
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.	0.700-0.799
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.	0.800-0.899
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.	0.900-0.999
F	Forced or breakdown conditions. Such conditions generally exist within queues forming behind breakdown points.	1.00 and Greater

Report Organization

The remainder of this report is divided into eight chapters. Chapter 2 describes existing conditions in terms of the existing roadway network, transit service, and existing bicycle and pedestrian facilities. Chapter 3 presents the intersection operations under Year 2005 with CVRP background conditions. Chapter 4 describes the method used to estimate project traffic, its impact on the transportation system, and the identified mitigation measures. Analysis results for the Partial CVSP development scenario is discussed in Chapter 5. A General Plan Amendment analysis for the proposed project and a Cumulative General Plan Amendment analysis are presented in Chapters 6 and 7, respectively. Chapter 8 presents the conclusions of the traffic impact analysis.

2. Existing Conditions

This chapter describes the existing conditions for all of the major transportation facilities serving the Coyote Valley area, including the roadway network, transit service, and bicycle and pedestrian facilities. It includes an evaluation of existing traffic conditions at signalized intersections, major arterials, and freeways within and surrounding the Coyote Valley area.

Existing Roadway Network

Regional access to Coyote Valley is provided via US 101 and SR 85. These facilities are described below.

US 101 is an eight-lane freeway (three mixed-flow lanes and one high-occupancy vehicle (HOV) lane in each direction) north of Cochrane Road. Existing access to and from the project area is provided via interchanges at Bailey Avenue, Bernal Road/Silicon Valley Boulevard, and Cochrane Road. There is an interchange at Coyote Creek Golf Course Drive that only serves the Kirby Canyon Landfill to the east and the Coyote Creek Golf Course to the west of Highway 101.

SR 85 is a north-south freeway that extends from Mountain View south to San Jose, terminating at US 101. SR 85 is six lanes wide operating with four mixed-flow lanes and two HOV lanes. Access to SR 85 from the project area is provided via US 101 and an interchange at Bernal Road/Silicon Valley Boulevard.

Local access to the project area is provided by Monterey Road, Santa Teresa Boulevard, Bernal Road, and Bailey Avenue. These roadways are described below.

Monterey Road is a six-lane major arterial north of Blossom Hill Road and a four-lane major arterial south of Blossom Hill Road. Monterey Road extends from Market Street in downtown San Jose, to US 101 south of the City of Gilroy. The arterial runs directly through Coyote Valley providing direct access with its intersection with Bailey Avenue. Other streets that intersect with Monterey Road include Blanchard Road, Emado Avenue, Malech Lane, Palm Avenue, Live Oak Avenue, Madrone Parkway, and Kirby Avenue. Cochrane Road in Morgan Hill provides access from Monterey Road to US 101.

Santa Teresa Boulevard is a six lane north-south arterial from Blossom Hill Road to Bernal Road. Between Bernal Road and Bailey Avenue in the Coyote Valley region of San Jose the arterial transitions down to four lanes. South of Bailey Avenue, Santa Teresa narrows to one lane in each direction and becomes Hale Avenue in Morgan Hill. Santa Teresa Boulevard runs directly through the center of Coyote Valley and the Specific Plan area and provides access to all major roadways.

Bernal Road is a divided six lane east-west arterial that extends from its ramps at US 101 west to Santa Teresa Boulevard.

Bailey Avenue is a two lane east-west roadway between Monterey Road and Santa Teresa Boulevard. West of Santa Teresa the roadway widens to four lanes to the west entrance of the existing IBM site at which point it transitions back down to one lane in each direction. Between the IBM site and McKean Road, Bailey Avenue is often referred to as "Bailey over the Hill" since it winds through the hills surrounding the Calero Reservoir area.

Existing Bicycle and Pedestrian Facilities

The Coyote Valley area is relatively secluded from any existing bicycle facilities. Bike lanes are provided along Santa Teresa Boulevard between Cottle Road and Bayliss Drive north of Coyote Valley. There is also a Santa Clara County pedestrian/bike trail that runs along Coyote Creek from the Edenvale Area to the south through Coyote Valley, ending near Anderson Reservoir in Morgan Hill. Bike lockers and bike racks are provided at the Santa Teresa LRT station. The existing bicycle facilities within the study area are shown on Figure 7.

The only pedestrian facility within the Coyote Valley is the previously described pedestrian/bike trail along Coyote Creek.

Existing Transit Service

Existing transit service to the study area is provided by the VTA. The existing transit service are described below and shown on Figure 8.

VTA Transit Service

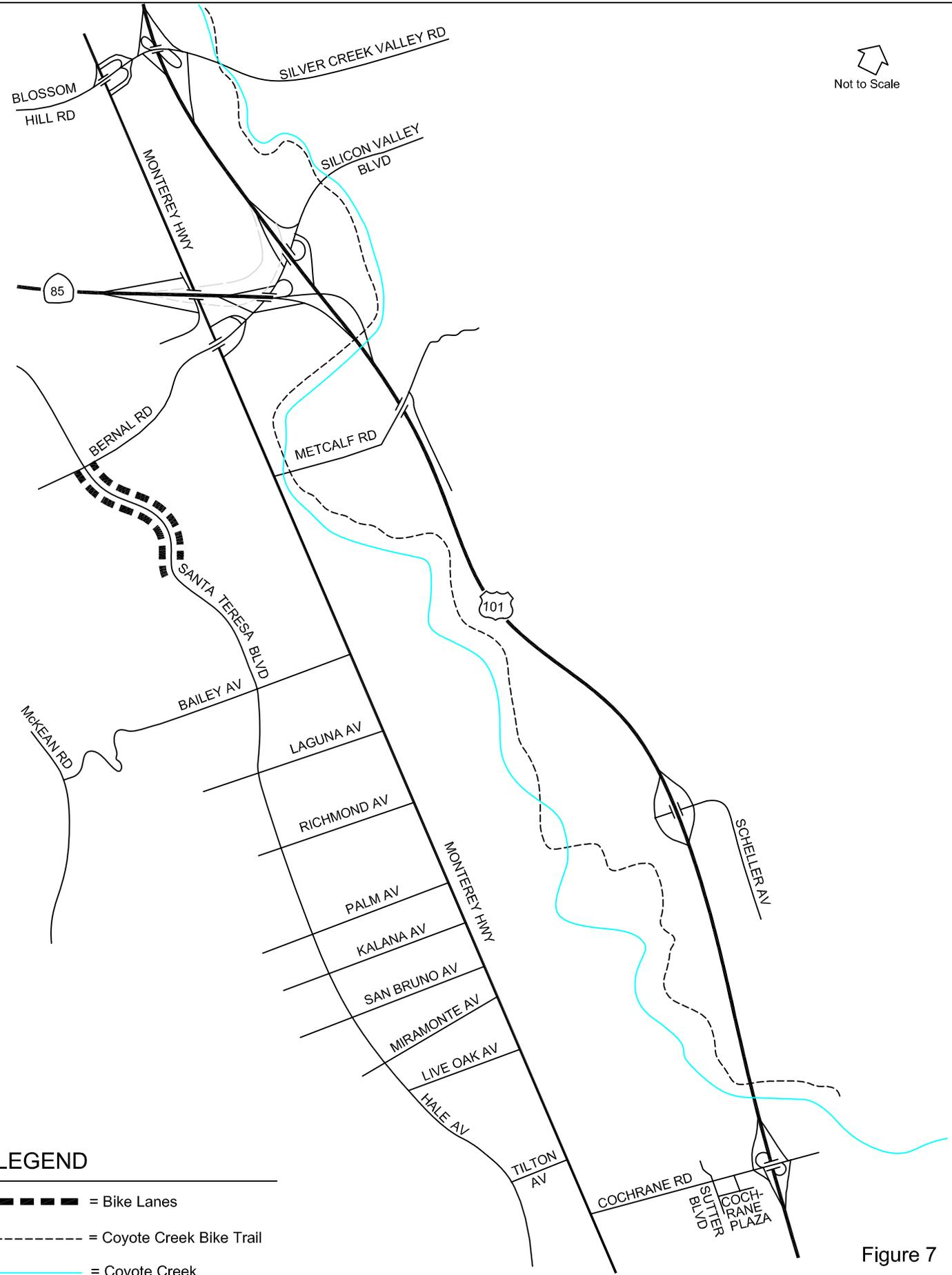
Bus Service

The study area is only served directly by one local bus. The 68 line provides service between Gavilan College in Gilroy and the Diridon CalTrain Station in San Jose via Monterey Road and Santa Teresa Boulevard, with 15-minute headways during commute hours. The study area is also served by one express bus. Express bus 501 operates on 35-40 minute headways during commute hours between Palo Alto and IBM/Bailey Avenue.

Light Rail Transit (LRT) Service

There is no LRT service within the Coyote Valley area. The nearest LRT station is the Santa Teresa LRT station situated on the Guadalupe Corridor LRT line, located near Santa Teresa Boulevard and San

Not to Scale



LEGEND

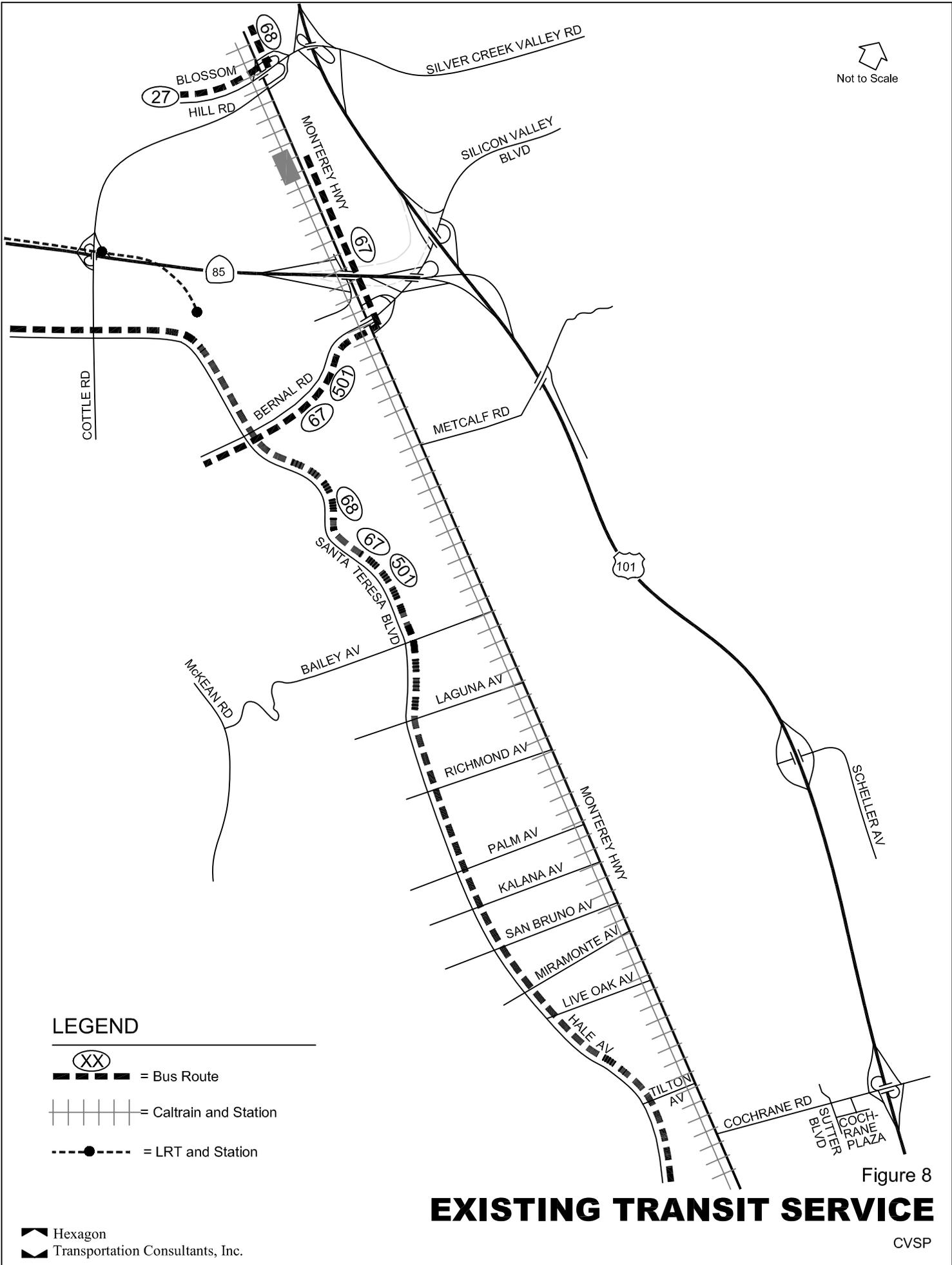
- — — — — = Bike Lanes
- - - - - = Coyote Creek Bike Trail
- = Coyote Creek

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EXISTING BICYCLE FACILITIES

Figure 7

CVSP



Not to Scale

LEGEND

-  = Bus Route
-  = Caltrain and Station
-  = LRT and Station

EXISTING TRANSIT SERVICE

Figure 8

Ignacio Avenue, approximately four miles north of Coyote Valley. A connection from the LRT station to the project area is provided by VTA's Route 68 bus line.

CalTrain

Commuter rail service between San Francisco and Gilroy is provided by CalTrain. The nearest CalTrain stations are located a few miles from the project area—the Blossom Hill station—located near Monterey Road and Blossom Hill Road, and the Morgan Hill Station located within downtown Morgan Hill. CalTrain provides four northbound trains during the morning commute period and four southbound trains during the evening commute period.

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 calculations in Appendix C.

Existing Traffic Volumes

Existing peak-hour intersection traffic volumes were obtained from databases and recent traffic studies recommended by each of the respective cities and supplemented with new traffic counts at intersections where counts were outdated. Twenty-four hour roadway segment tube counts were also conducted on all major roadways serving the selected study intersections. Figure 9 presents roadway segment peak-hour volumes based on the 24-hour tube counts. The existing peak-hour intersection volumes at each study intersection and roadway segment volumes are included in Appendix A.

Existing Intersection Levels of Service

Intersection levels of service are evaluated against the applicable municipal and CMP standards per the governing policies described previously. Results indicate that all study intersections in Coyote Valley and San Martin are currently operating at acceptable levels. The level of service results for those study intersections located in San Jose, Morgan Hill, and Gilroy operating at unacceptable levels under existing conditions are summarized in Table 4 and shown graphically in Figures 10-14. Tables summarizing the results for all intersections, as well as, levels of service calculation sheets are included in Appendix C.

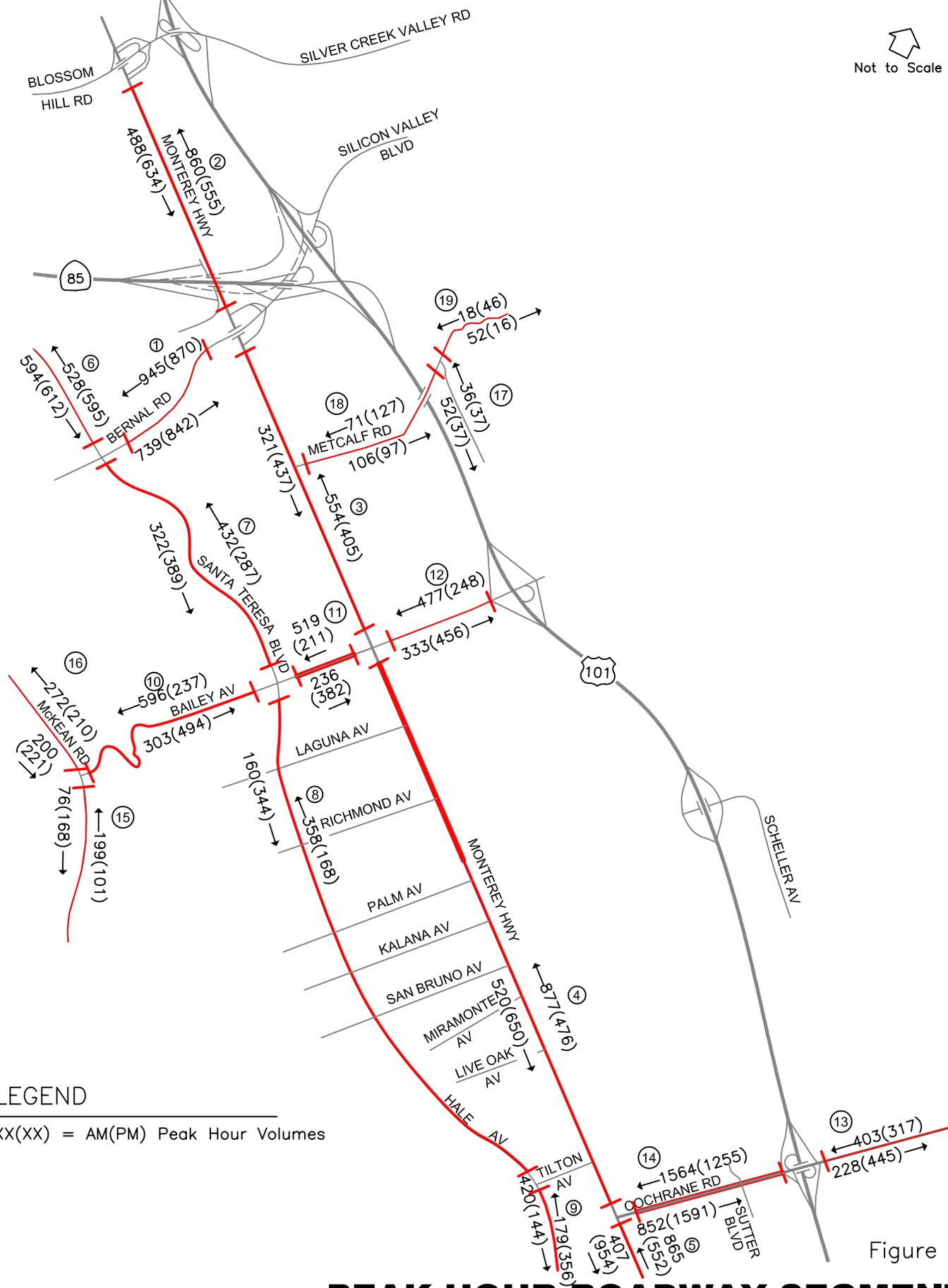
City of San Jose Intersection Analysis

San Jose Intersections

The results of the level of service analysis show that seven, all of which are CMP designated intersections, of the City of San Jose study intersections located outside of Coyote Valley currently operate at an unacceptable LOS E or worse.

24	McLaughlin Avenue and Tully Road *
30	Capitol Expressway and Silver Creek Road*

Not to Scale



LEGEND

XX(XX) = AM(PM) Peak Hour Volumes

PEAK HOUR ROADWAY SEGMENT TRAFFIC VOLUMES

Figure 9

**Table 4
Existing Unacceptable Intersection Levels of Service**

Study Number		Peak Hour	Count Date	Year 2005 Existing	
				Ave. Delay/a/	LOS
City of San Jose Signalized Intersections					
24	McLaughlin Avenue and Tully Road*	AM	11/09/04	45.3	D
		PM	09/09/04	61.3	E
30	Capitol Expressway and Silver Creek Road*	AM	01/01/04	121.6	F
		PM	09/15/04	82.1	F
32	Senter Road and Captiol Expressway*	AM	01/01/04	55.2	E+
		PM	10/05/04	45.7	D
81	Almaden Expressway and Camden Avenue*	AM	00/00/04	57.0	E+
		PM	10/12/04	50.2	D
86	Almaden Expressway and Blossom Hill Road*	AM	00/00/04	49.4	D
		PM	10/06/04	70.4	E
87	Almaden Expressway and Almaden Plaza Way*	AM	00/00/04	21.9	C+
		PM	10/14/04	64.7	E
88	Almaden Expressway and SR 85*	AM	00/00/04	20.7	C+
		PM	10/14/04	93.9	F
City of Morgan Hill Signalized Intersections					
138	Butterfield Boulevard and Dunne Avenue	AM	10/05/04	38.1	D+
		PM	10/05/04	39.0	D
City of Gilroy Signalized Intersections					
167	Monterey Road and Masten Avenue	AM	05/11/05	27.4	C
		PM	05/11/05	36.4	D+

* Denotes CMP Designated Intersection

/a/ Reported delay based on average control delay as calculated by TRAFFIX using HCM 2000 methodology

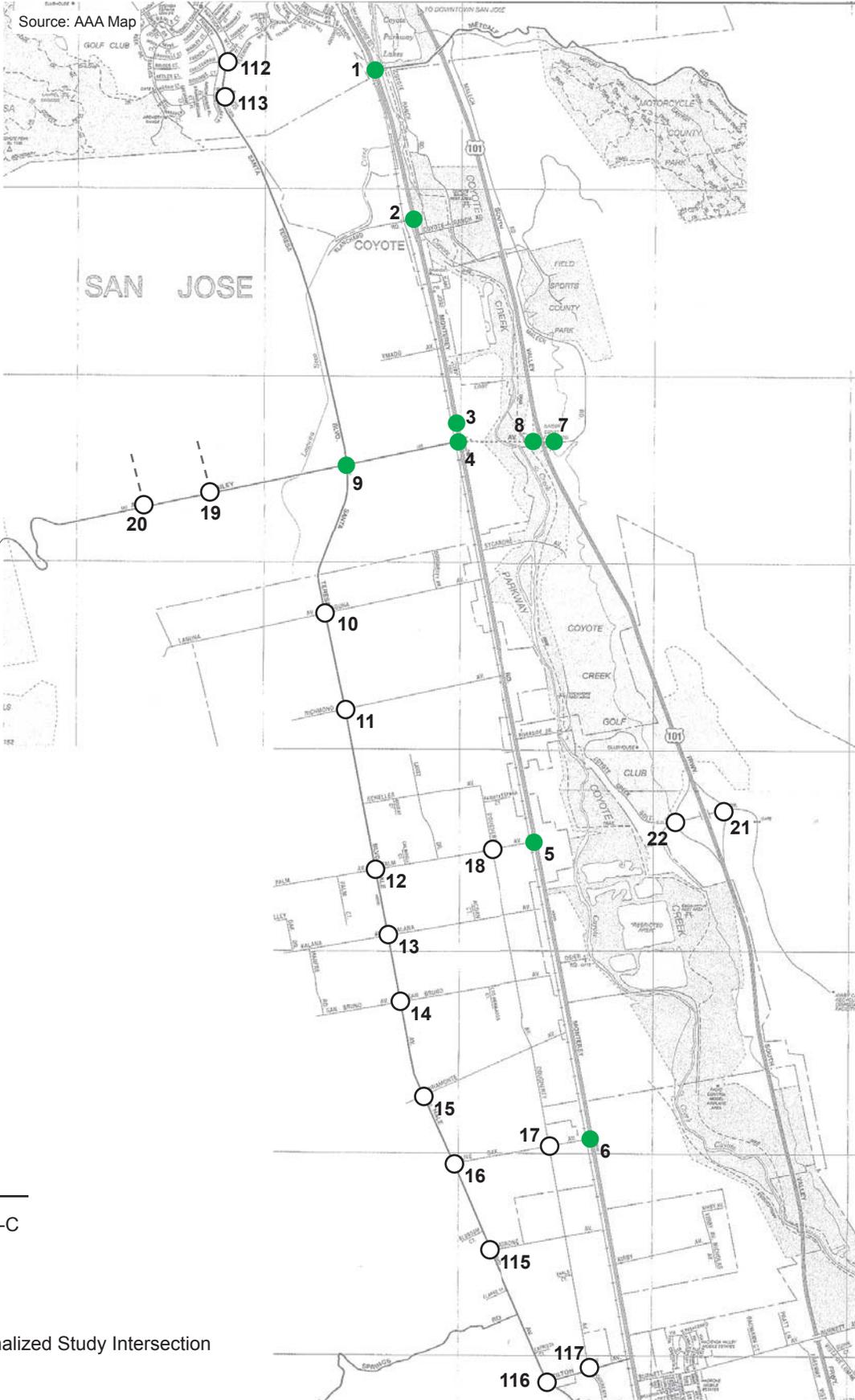


Figure 10

COYOTE VALLEY YEAR 2005 EXISTING

CVSP

- LEGEND**
- = LOS A-C
 - = LOS D
 - = LOS E
 - = LOS F
 - = Unsignalized Study Intersection

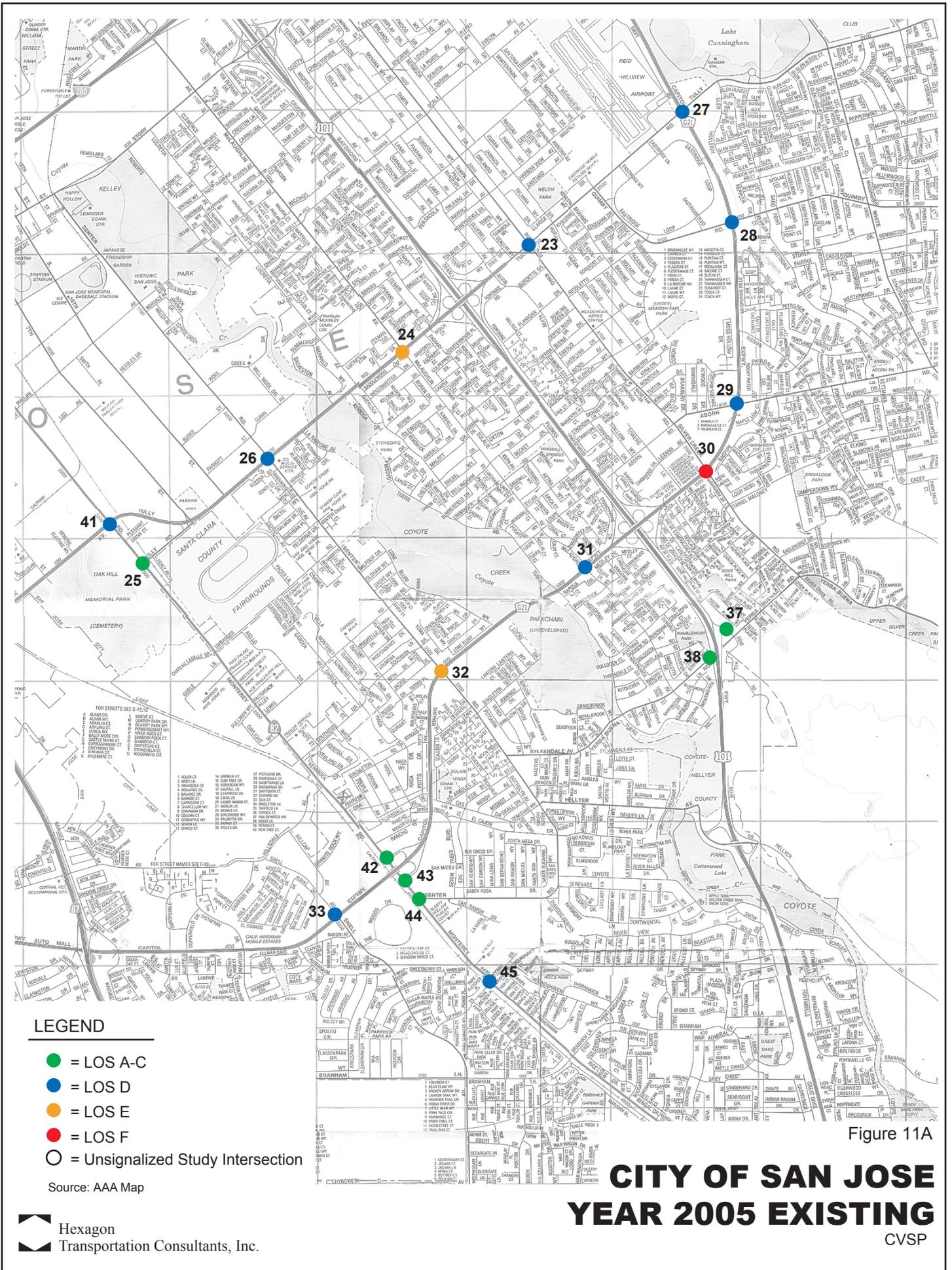


Figure 11A

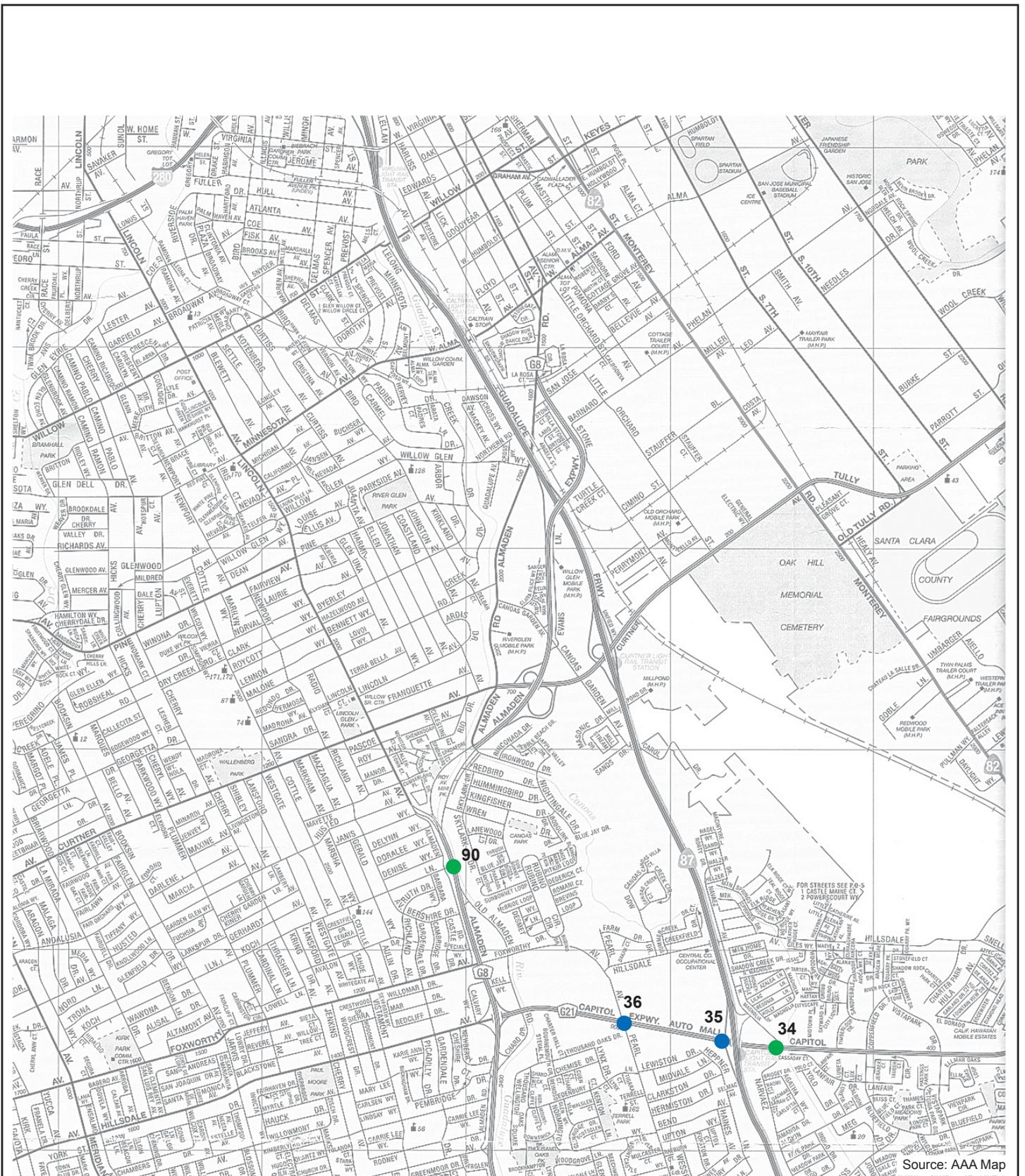
CITY OF SAN JOSE
YEAR 2005 EXISTING
 CVSP

LEGEND

- = LOS A-C
- = LOS D
- = LOS E
- = LOS F
- = Unsignalized Study Intersection

Source: AAA Map

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Source: AAA Map

- LEGEND**
- = LOS A-C
 - = LOS F
 - = LOS D
 - = Unsignalized Study Intersection
 - = LOS E

Hexagon
 Transportation Consultants, Inc.

Figure 11B

CITY OF SAN JOSE
YEAR 2005 EXISTING
 CVSP



Source: AAA Map

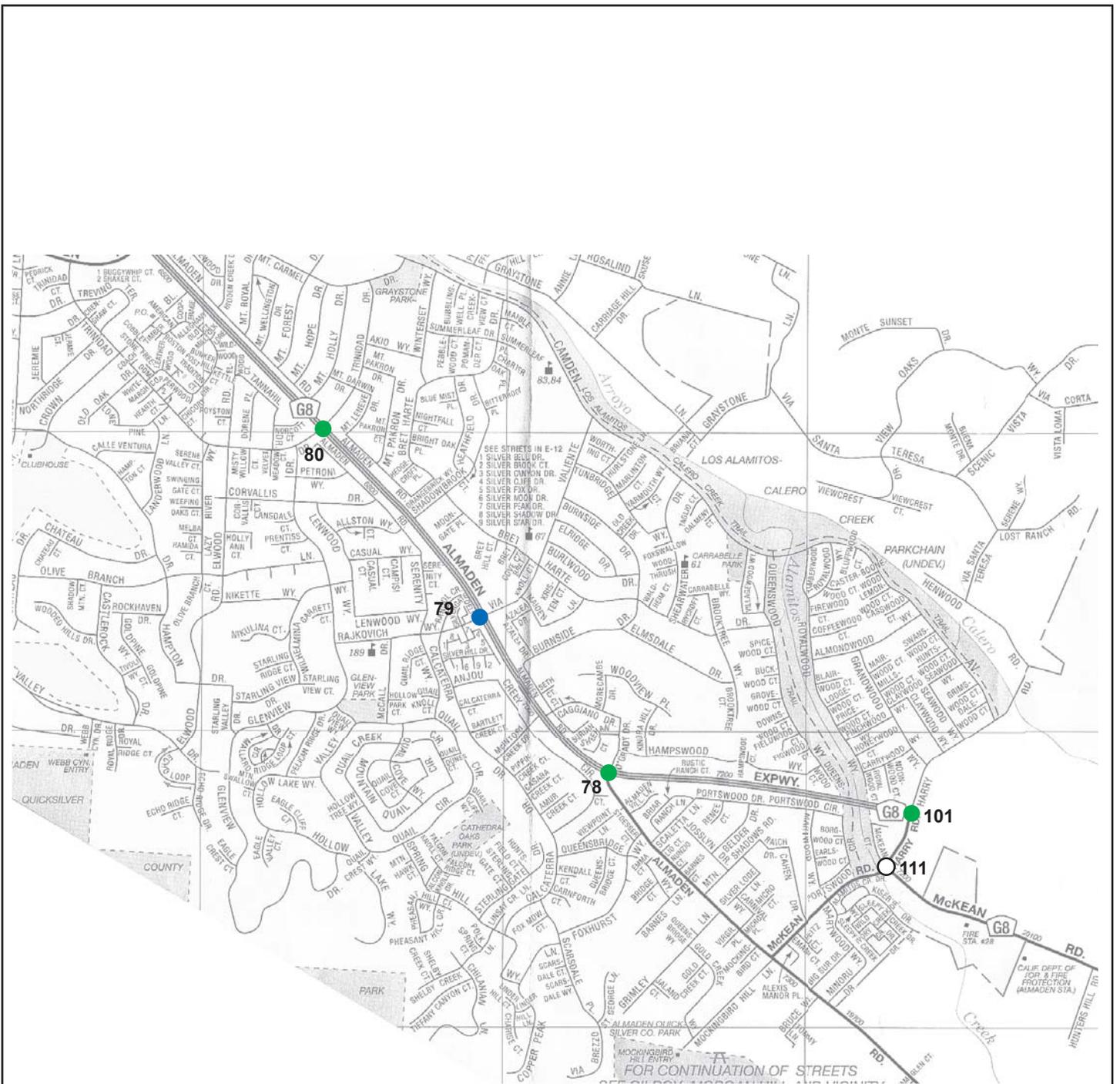
LEGEND

- = LOS A-C
- = LOS F
- = LOS D
- = Unsignalized Study Intersection
- = LOS E

Figure 11C

**CITY OF SAN JOSE
YEAR 2005 EXISTING**

CVSP



LEGEND

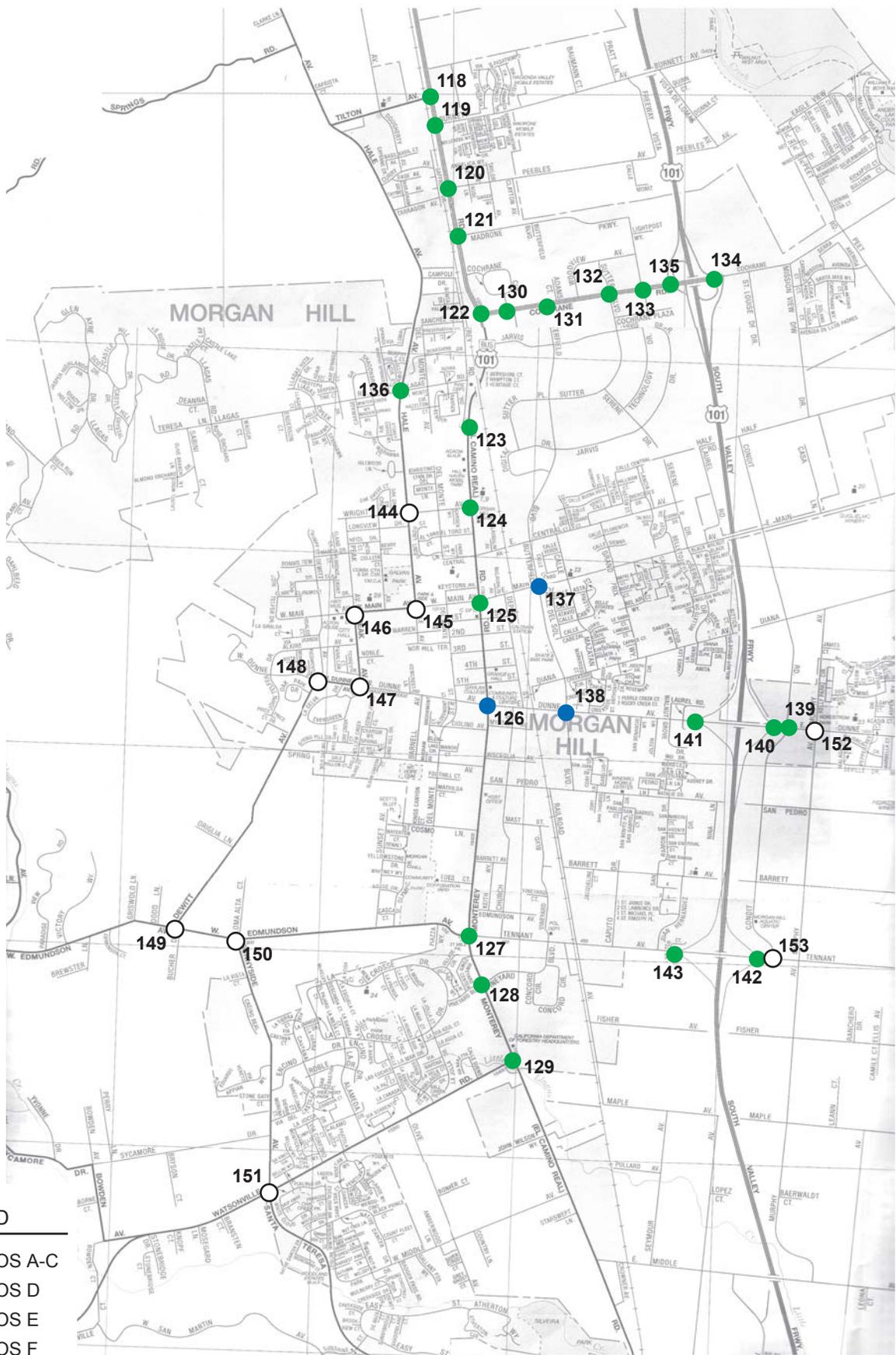
- = LOS A-C
- = LOS D
- = LOS E
- = LOS F
- = Unsignalized Study Intersection

Source: AAA Map

Figure 11D

**CITY OF SAN JOSE
YEAR 2005 EXISTING**

CVSP



LEGEND

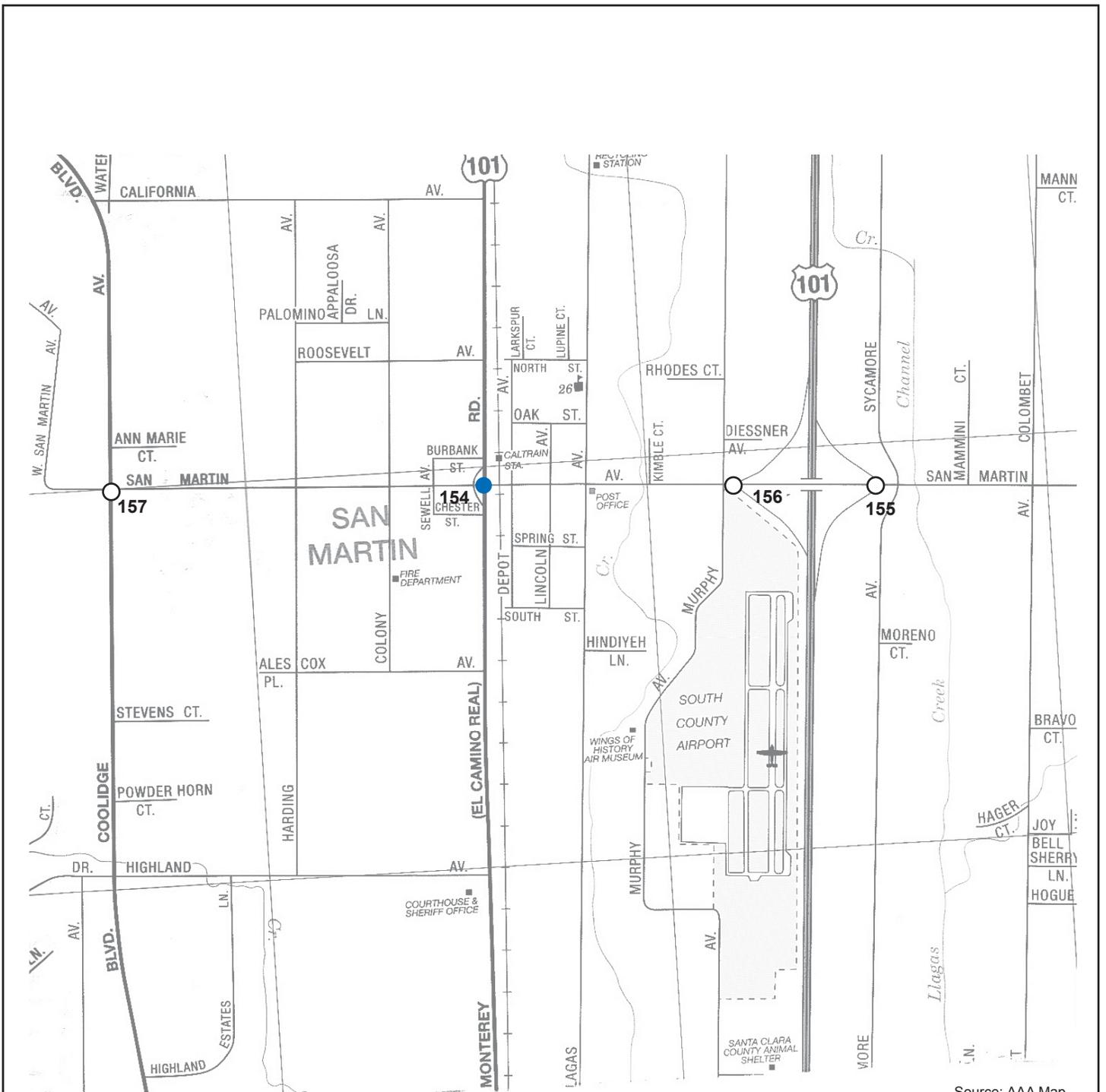
- = LOS A-C
- = LOS D
- = LOS E
- = LOS F
- = Unsignalized Study Intersection

Source: AAA Map

Hexagon
 Transportation Consultants, Inc.

Figure 12

CITY OF MORGAN HILL
YEAR 2005 EXISTING
 CVSP



Source: AAA Map

LEGEND

- = LOS A-C
- = LOS D
- = LOS E
- = LOS F
- = Unsignalized Study Intersection

Figure 13

**CITY OF SAN MARTIN
YEAR 2005 EXISTING**

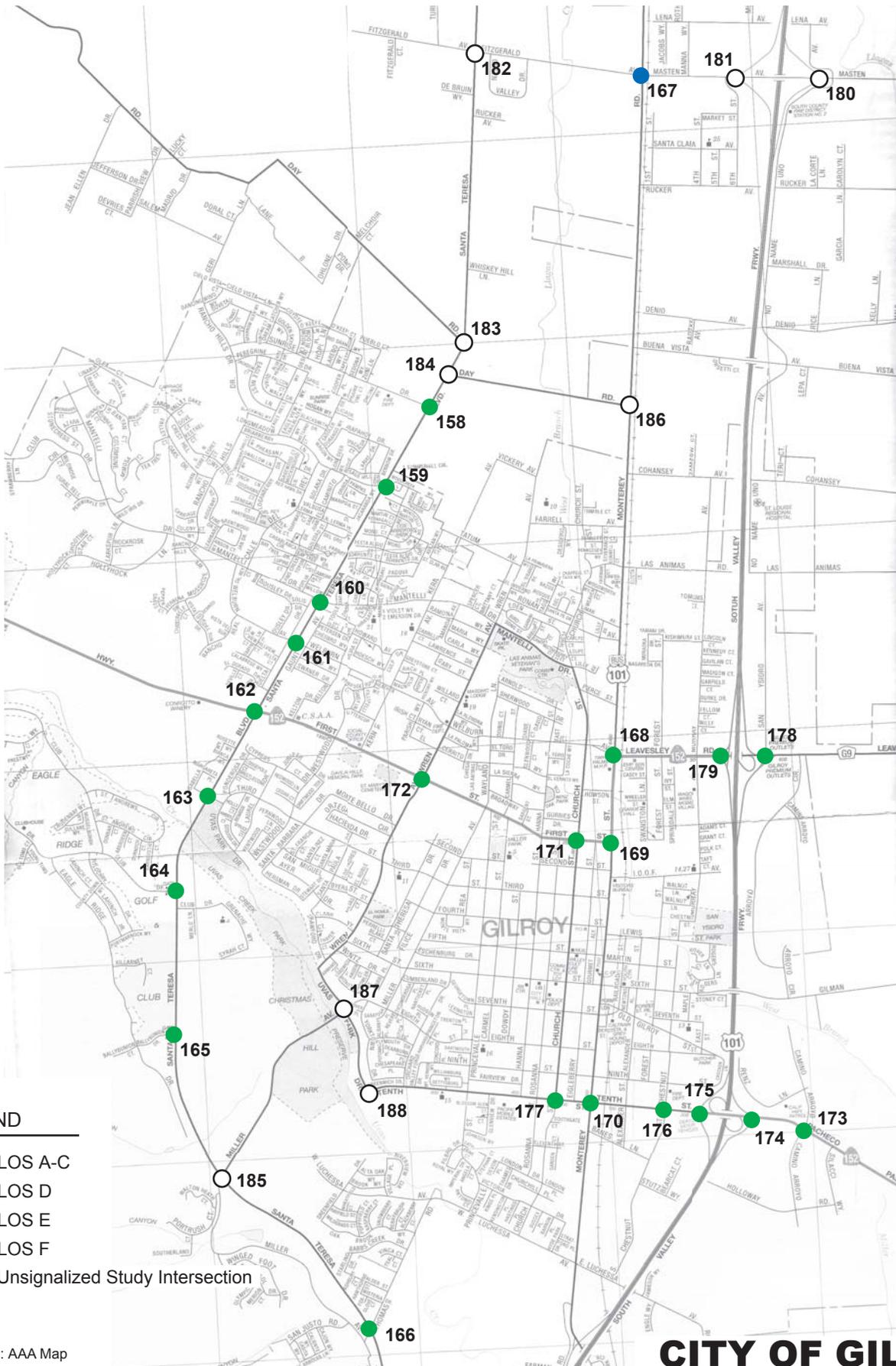


Figure 14

CITY OF GILROY YEAR 2005 EXISTING

CVSP

LEGEND

- = LOS A-C
- = LOS D
- = LOS E
- = LOS F
- = Unsignalized Study Intersection

Source: AAA Map

- 32 Senter Road and Capitol Expressway*
- 81 Almaden Expressway and Camden Avenue*
- 86 Almaden Expressway and Blossom Hill Road*
- 87 Almaden Expressway and Almaden Plaza Way*
- 88 Almaden Expressway and SR 85*

* Indicates CMP Intersection

CMP Intersections

The level of service results for the other CMP intersections show that measured against the CMP level of service standards, two intersections currently operate at an unacceptable LOS F.

- 30 Capitol Expressway and Silver Creek Road
- 88 Almaden Expressway and SR 85

City of Morgan Hill Intersection Analysis

The results of the level of service analysis show that one intersection in the City of Morgan Hill currently operates at an unacceptable LOS D during the PM peak hour when measured against the City of Morgan Hill level of service standards.

- 138 Butterfield Boulevard and Dunne Avenue

City of Gilroy Intersection Analysis

The results of the level of service analysis show that one intersection in the City of Gilroy currently operates at an unacceptable LOS D when measured against the City of Gilroy level of service standards.

- 167 Monterey Road and Masten Avenue

Existing Freeway Levels of Service

Traffic volumes for the subject freeway segments were obtained from the 2005 CMP Annual Monitoring Report. Based on the monitoring report, 8 of the 52 directional freeway segments analyzed currently operate at an unacceptable LOS F during at least one of the peak hours. One of the 28 HOV lanes on directional freeway segments (with HOV lanes) analyzed currently operates at an unacceptable LOS F during at least one peak hour. Freeway segment analysis is presented in Table 5. The following freeway segments are currently operating at LOS F conditions:

- US 101, Tennant to East Dunne (Northbound AM Peak hour)
- US 101, Silver Creek to Hellyer (Northbound AM Peak hour)
- US 101, Yerba Buena to Capitol (Northbound AM Peak hour)
- US 101, Capitol to Tully (Northbound AM/Southbound PM/NB HOV AM)
- SR 85, Blossom Hill to SR 87 (Northbound AM Peak hour)
- US 101, Story to Tully (Southbound PM Peak hour)
- US 101, I-280 to Story (Southbound PM Peak hour)

**Table 5
Year 2005 Freeway Segment Levels of Service Summary**

Freeway	Segment	Direction	Peak Hour	Mixed-Flow Lanes					HOV Lane Traffic Volume					
				Ave. Speed/a/	# of Lanes	Volume/a/	Density	LOS	Ave. Speed/a/	# of Lanes	Volume/a/	Density	LOS	
US 101	SR 156 and SR 129	NB	AM	67	2	2,010	15.0	B	N/A	N/A	N/A			
			PM	67	2	1,340	10.0	A	N/A	N/A	N/A			
US 101	SR 129 and Betabel Rd	NB	AM	66	2	2,640	20.0	C	N/A	N/A	N/A			
			PM	67	2	1,210	9.0	A	N/A	N/A	N/A			
US 101	Betabel Rd and Bloomfield Ave/Hwy 25	NB	AM	66	2	2,510	19.0	C	N/A	N/A	N/A			
			PM	67	2	1,880	14.0	B	N/A	N/A	N/A			
US 101	Bloomfield Ave/ Hwy 25 and Monterey Rd	NB	AM	66	2	2,900	22.0	C	N/A	N/A	N/A			
			PM	66	2	2,900	22.0	C	N/A	N/A	N/A			
US 101	Monterey Rd and Pacheco Pass Hwy	NB	AM	67	3	2,610	13.0	B	N/A	N/A	N/A			
			PM	67	3	2,410	12.0	B	N/A	N/A	N/A			
US 101	Pacheco Pass Hwy and Leavesley Rd	NB	AM	66	3	3,760	19.0	C	N/A	N/A	N/A			
			PM	67	3	3,420	17.0	C	N/A	N/A	N/A			
US 101	Leavesley Rd and Masten Ave	NB	AM	66	3	3,760	19.0	C	N/A	N/A	N/A			
			PM	66	3	3,760	19.0	C	N/A	N/A	N/A			
US 101	Masten Ave and San Martin Ave	NB	AM	66	3	5,350	27.0	D	N/A	N/A	N/A			
			PM	66	3	3,960	20.0	C	N/A	N/A	N/A			
US 101	San Martin Ave and Tennant Ave	NB	AM	66	3	4,360	22.0	C	N/A	N/A	N/A			
			PM	67	3	2,810	14.0	B	N/A	N/A	N/A			
US 101	Tennant Ave and East Dunne Ave	NB	AM	32	3	5,950	62.0	F	N/A	N/A	N/A			
			PM	66	3	5,540	28.0	D	N/A	N/A	N/A			
US 101	East Dunne Ave and Cochrane Rd	NB	AM	46	3	6,490	47.0	E	N/A	N/A	N/A			
			PM	66	3	4,550	23.0	C	N/A	N/A	N/A			
US 101	Cochrane Rd and Coyote Creek Golf Dr	NB	AM	66	3	5,540	28.0	D	N/A	N/A	N/A			
			PM	66	3	4,160	21.0	C	N/A	N/A	N/A			
US 101	Coyote Creek Golf Dr and Bailey Ave	NB	AM	66	3	5,350	27.0	D	66	1	1,520	23.0	C	
			PM	66	3	4,360	22.0	C	67	1	740	11.0	B	
US 101	Bailey Ave and Coyote Valley Parkway	NB	AM	66	3	5,150	26.0	D	66	1	1,520	23.0	C	
			PM	66	3	3,760	19.0	C	67	1	600	9.0	A	
US 101	Coyote Valley Parkway and SR 85	NB	AM	64	3	6,140	32.0	D	67	1	800	11.9	B	
			PM	66	3	3,760	19.0	C	67	1	600	9.0	A	
US 101	SR 85 and Bernal Rd	NB	AM	67	3	3,620	18.0	C	67	1	1,010	15.1	B	
			PM	66	3	4,550	23.0	C	67	1	1,010	15.1	B	
US 101	Bernal Rd and Silver Creek Rd	NB	AM	66	3	4,950	25.0	D	67	1	1,140	17.0	C	
			PM	66	3	3,960	20.0	C	67	1	340	5.1	A	
US 101	Silver Creek Rd and Hellyer Ave	NB	AM	27	3	5,510	68.0	F	64	1	2,050	32.0	D	
			PM	65	3	5,660	29.0	D	67	1	540	8.1	A	
US 101	Hellyer Ave and Yerba Buena Rd	NB	AM	39	3	6,200	53.0	E	65	1	2,020	31.1	D	
			PM	65	3	5,660	29.0	D	67	1	940	14.0	B	
US 101	Yerba Buena Rd and Capitol Expwy	NB	AM	24	3	5,400	75.0	F	64	1	2,050	32.0	D	
			PM	67	3	3,420	17.0	C	67	1	470	7.0	A	
US 101	Capitol Expwy and Tully Rd	NB	AM	25	3	5,400	72.0	F	36	1	2,050	56.9	F	
			PM	52	3	6,550	42.0	D	67	1	1,140	17.0	C	
US 101	Tully Rd and Story Rd	NB	AM	59	3	6,550	37.0	D	59	1	2,180	36.9	D	
			PM	63	3	6,430	34.0	D	67	1	870	13.0	B	
US 101	Story Rd and I-280	NB	AM	50	3	6,600	44.0	D	65	1	2,020	31.1	D	
			PM	67	3	2,810	14.0	B	67	1	870	13.0	B	
SR 85	Bernal Rd and Cottle Rd	NB	AM	67	2	2,010	15.0	B	67	1	540	8.1	A	
			PM	66	2	2,510	19.0	C	67	1	270	4.0	A	
SR 85	Cottle Rd and Blossom Hill Rd	NB	AM	66	2	3,300	25.0	D	66	1	1,320	20.0	C	
			PM	65	2	3,900	30.0	D	67	1	400	6.0	A	
SR 85	Blossom Hill Rd and SR 87	NB	AM	13	2	2,680	103.1	F	48	1	2,160	45.0	D	
			PM	58	2	4,410	38.0	D	67	1	600	9.0	A	

**Table 5
Year 2005 Freeway Segment Levels of Service Summary**

Freeway	Segment	Direction	Peak Hour	Mixed-Flow Lanes					HOV Lane Traffic Volume					
				Ave. Speed/a/	# of Lanes	Volume/a/	Density	LOS	Ave. Speed/a/	# of Lanes	Volume/a/	Density	LOS	
US 101	SR 156 and SR 129	SB	AM	67	2	940	7.0	A	N/A	N/A	N/A			
			PM	67	2	940	7.0	A	N/A	N/A	N/A			
US 101	SR 129 and Betabel Rd	SB	AM	67	2	1,740	13.0	B	N/A	N/A	N/A			
			PM	67	2	1,340	10.0	A	N/A	N/A	N/A			
US 101	Betabel Rd and Bloomfield Ave/Hwy 25	SB	AM	67	2	1,740	13.0	B	N/A	N/A	N/A			
			PM	66	2	3,040	23.0	C	N/A	N/A	N/A			
US 101	Bloomfield Ave/ Hwy 25 and Monterey Rd	SB	AM	67	2	2,410	18.0	C	N/A	N/A	N/A			
			PM	65	2	3,900	30.0	D	N/A	N/A	N/A			
US 101	Monterey Rd and Pacheco Pass Hwy	SB	AM	67	3	2,010	10.0	A	N/A	N/A	N/A			
			PM	67	3	3,620	18.0	C	N/A	N/A	N/A			
US 101	Pacheco Pass Hwy and Leavesley Rd	SB	AM	67	3	3,420	17.0	C	N/A	N/A	N/A			
			PM	66	3	4,160	21.0	C	N/A	N/A	N/A			
US 101	Leavesley Rd and Masten Ave	SB	AM	67	3	3,220	16.0	C	N/A	N/A	N/A			
			PM	66	3	5,150	26.0	D	N/A	N/A	N/A			
US 101	Masten Ave and San Martin Ave	SB	AM	67	3	3,420	17.0	C	N/A	N/A	N/A			
			PM	65	3	5,850	30.0	D	N/A	N/A	N/A			
US 101	San Martin Ave and Tennant Ave	SB	AM	67	3	3,020	15.0	B	N/A	N/A	N/A			
			PM	66	3	4,160	21.0	C	N/A	N/A	N/A			
US 101	Tennant Ave and East Dunne Ave	SB	AM	67	3	3,220	16.0	C	N/A	N/A	N/A			
			PM	66	3	5,540	28.0	D	N/A	N/A	N/A			
US 101	East Dunne Ave and Cochrane Rd	SB	AM	66	3	4,160	21.0	C	N/A	N/A	N/A			
			PM	65	3	5,660	29.0	D	N/A	N/A	N/A			
US 101	Cochrane Rd and Coyote Creek Golf Dr	SB	AM	66	3	4,550	23.0	C	N/A	N/A	N/A			
			PM	65	3	6,050	31.0	D	N/A	N/A	N/A			
US 101	Coyote Creek Golf Dr and Bailey Ave	SB	AM	67	3	3,420	17.0	C	67	1	670	10.0	A	
			PM	66	3	4,950	25.0	D	66	1	1,520	23.0	C	
US 101	Bailey Ave and Coyote Valley Parkway	SB	AM	66	3	4,160	21.0	C	67	1	740	11.0	B	
			PM	66	3	4,550	23.0	C	66	1	1,250	18.9	C	
US 101	Coyote Valley Parkway and SR 85	SB	AM	67	4	4,560	17.0	C	67	1	540	8.1	A	
			PM	66	4	5,540	21.0	C	67	1	940	14.0	B	
US 101	SR 85 and Bernal Rd	SB	AM	67	3	2,610	13.0	B	67	1	670	10.0	A	
			PM	66	3	4,950	25.0	D	65	1	1,950	30.0	D	
US 101	Bernal Rd and Silver Creek Rd	SB	AM	67	3	3,020	15.0	B	67	1	1,070	16.0	B	
			PM	67	3	3,420	17.0	C	66	1	1,520	23.0	C	
US 101	Silver Creek Rd and Hellyer Ave	SB	AM	66	3	4,550	23.0	C	67	1	940	14.0	B	
			PM	66	3	4,750	24.0	C	67	1	940	14.0	B	
US 101	Hellyer Ave and Yerba Buena Rd	SB	AM	64	3	6,340	33.0	D	67	1	670	10.0	A	
			PM	65	3	5,660	29.0	D	66	1	1,320	20.0	C	
US 101	Yerba Buena Rd and Capitol Expwy	SB	AM	66	3	3,760	19.0	C	67	1	670	10.0	A	
			PM	66	3	3,960	20.0	C	67	1	1,070	16.0	B	
US 101	Capitol Expwy and Tully Rd	SB	AM	62	3	6,510	35.0	D	67	1	1,010	15.1	B	
			PM	37	3	6,110	55.0	F	66	1	1,850	28.0	D	
US 101	Tully Rd and Story Rd	SB	AM	63	3	6,430	34.0	D	67	1	540	8.1	A	
			PM	14	3	4,200	100.0	F	52	1	2,180	41.9	D	
US 101	Story Rd and I-280	SB	AM	67	3	2,610	13.0	B	67	1	470	7.0	A	
			PM	24	3	5,330	74.0	F	66	1	1,850	28.0	D	
SR 85	Bernal Rd and Cottle Rd	SB	AM	67	2	2,140	16.0	B	67	1	200	3.0	A	
			PM	66	2	3,170	24.0	D	67	1	540	8.1	A	
SR 85	Cottle Rd and Blossom Hill Rd	SB	AM	64	2	4,100	32.0	D	67	1	740	11.0	B	
			PM	65	2	3,770	29.0	D	67	1	800	11.9	B	
SR 85	Blossom Hill Rd and SR 87	SB	AM	66	2	3,560	27.0	D	67	1	400	6.0	A	
			PM	42	2	4,200	50.0	E	66	1	1,250	18.9	C	

- Bold indicated LOS F operations

/a/ Source: Santa Clara Valley Transportation Authority Congestion Management Program Monitoring Study, 2005.

Existing Roadway Segment Analysis

Twenty-four hour roadway segment tube counts were conducted on all major roadways serving the selected study intersections. The collected counts provide peak hour as well as daily volumes along some of the major roadways within the study areas. The collected segment volumes were used to evaluate roadway segment operations. Since there is no evaluation criteria for roadway segments, the roadway segment analysis is presented for informative purposes only. The roadway segment analysis indicates that all studied roadway segments currently operate at LOS A during both peak hours. Table 6 presents the roadway segment analysis.

Table 6
Existing Roadway Segment Analysis

Segment	Direction	# Of Lanes	Capacity (vph)	24-Hr Tot. Volume	AM Peak-Hour			PM Peak-Hour		
					Volume	V/C	LOS	Volume	V/C	LOS
Bernal Rd										
Monterey Rd and San Ignacio Ave	EB	3	3,600	17,484	1,141	0.317	A	1,445	0.401	A
	WB	3	3,600	17,260	1,725	0.479	A	1,159	0.322	A
San Ignacio Ave and Via Del Oro	EB	3	3,600	11,202	736	0.204	A	842	0.234	A
	WB	3	3,600	11,496	945	0.263	A	870	0.242	A
Via Del Oro and Santa Teresa Blvd	EB	3	3,600	9,661	731	0.203	A	669	0.186	A
	WB	3	3,600	9,128	648	0.180	A	772	0.214	A
Monterey Rd										
Blossom Hill Rd and Bernal Rd	NB	2	2,400	7,892	860	0.358	A	555	0.231	A
	SB	2	2,400	6,566	488	0.203	A	634	0.264	A
Bernal Rd and Bailey Ave	NB	2	2,400	4,853	554	0.231	A	405	0.169	A
	SB	2	2,400	4,341	321	0.134	A	437	0.182	A
Bailey Ave and Cochrane Rd	NB	2	2,400	6,935	877	0.365	A	476	0.198	A
	SB	2	2,400	6,356	520	0.217	A	650	0.271	A
Cochrane Rd and Old Monterey Rd	NB	2	2,400	7,503	865	0.360	A	439	0.183	A
	SB	2	2,400	7,283	398	0.166	A	951	0.396	A
Santa Teresa Blvd										
Cottle Rd and Bernal Rd	NB	3	3,600	7,443	528	0.147	A	595	0.165	A
	SB	3	3,600	7,625	594	0.165	A	612	0.170	A
Bernal Rd and Bailey Ave	NB	2	2,400	3,694	432	0.180	A	287	0.120	A
	SB	2	2,400	3,617	322	0.134	A	389	0.162	A
Bailey Ave and Tilton Ave	NB	1	1,200	2,497	358	0.298	A	168	0.140	A
	SB	1	1,200	2,709	137	0.114	A	344	0.287	A
Tilton Ave and Llagas Rd	NB	2	2,400	2,528	179	0.075	A	356	0.148	A
	SB	2	2,400	2,451	420	0.175	A	144	0.060	A
Watsonville Rd and San Martin Ave	NB	1	1,200	2,522	264	0.220	A	227	0.189	A
	SB	1	1,200	2,180	149	0.124	A	259	0.216	A
San Martin Ave and Fitzgerald Rd	NB	1	1,200	2,779	313	0.261	A	197	0.164	A
	SB	1	1,200	2,566	131	0.109	A	363	0.303	A
Bailey Ave										
US 101 and Monterey Rd	EB	3	3,600	4,143	318	0.088	A	456	0.127	A
	WB	3	3,600	4,036	477	0.133	A	248	0.069	A
Monterey Rd and Santa Teresa Blvd	EB	3	3,600	2,963	172	0.048	A	382	0.106	A
	WB	3	3,600	3,269	519	0.144	A	211	0.059	A
Santa Teresa Blvd and McKean Rd	EB	1	1,200	3,556	141	0.118	A	494	0.412	A
	WB	1	1,200	3,596	596	0.497	A	211	0.176	A
Cochrane Rd										
Mission View Dr and US 101	EB	3	3,600	3,597	228	0.063	A	445	0.124	A
	WB	3	3,600	3,581	403	0.112	A	253	0.070	A
US 101 and Monterey Rd	EB	3	3,600	14,722	852	0.237	A	1,591	0.442	A
	WB	3	3,600	13,988	1,564	0.434	A	1,255	0.349	A
Watsonville Rd										
Santa Teresa Blvd and Uvas Rd	NB	1	1,200	2,659	265	0.221	A	184	0.153	A
	SB	1	1,200	2,609	150	0.125	A	325	0.271	A
Uvas Rd and Day Rd	NB	1	1,200	2,028	234	0.195	A	147	0.123	A
	SB	1	1,200	2,057	114	0.095	A	258	0.215	A
Day Rd and Hwy 152	NB	1	1,200	1,694	201	0.168	A	111	0.093	A
	SB	1	1,200	1,701	101	0.084	A	215	0.179	A
Uvas Rd										
Bailey Ave and Oak Glen Rd	NB	1	1,200	1,424	199	0.166	A	101	0.084	A
	SB	1	1,200	1,479	64	0.053	A	168	0.140	A
Oak Glen Rd and Watsonville Rd	NB	1	1,200	678	120	0.100	A	41	0.034	A
	SB	1	1,200	703	33	0.028	A	92	0.077	A
Edmunson Ave										
Oak Glen Rd and Sunnyside Ave	EB	2	2,400	2,871	223	0.093	A	283	0.118	A
	WB	2	2,400	3,137	337	0.140	A	244	0.102	A
Sunnyside Ave and Monterey Rd	EB	2	2,400	3,311	334	0.139	A	239	0.100	A
	WB	2	2,400	3,242	172	0.072	A	356	0.148	A
Oak Glen Ave										
Uvas Rd and Willow Springs Rd	NB	1	1,200	482	69	0.058	A	42	0.035	A
	SB	1	1,200	504	35	0.029	A	63	0.053	A
Willow Springs Rd and Edmunson Rd	NB	1	1,200	1,134	93	0.078	A	105	0.088	A
	SB	1	1,200	935	99	0.083	A	77	0.064	A
Edmunson Rd and Watsonville Rd	NB	1	1,200	303	34	0.028	A	28	0.023	A
	SB	1	1,200	370	16	0.013	A	47	0.039	A
Willow Springs Rd										
Oak Glen Ave and Santa Teresa Blvd	NB	1	1,200	167	20	0.017	A	17	0.014	A
	SB	1	1,200	179	10	0.008	A	30	0.025	A
McKean Rd										
Harry Rd and Bailey Ave	NB	1	1,200	2,066	272	0.227	A	210	0.175	A
	SB	1	1,200	2,051	200	0.167	A	221	0.184	A
Malech Rd										
Metcalfe Rd and Bailey Ave	NB	1	1,200	336	25	0.021	A	37	0.031	A
	SB	1	1,200	334	52	0.043	A	33	0.028	A
Metcalfe Rd										
San Felipe Rd and Malech Rd	EB	1	1,200	222	52	0.043	A	11	0.009	A
	WB	1	1,200	238	12	0.010	A	46	0.038	A
Malech Rd and Monterey Rd	EB	1	1,200	903	106	0.088	A	55	0.046	A
	WB	1	1,200	902	50	0.042	A	127	0.106	A
San Felipe Rd										
Silver Creek Valley Rd and Metcalfe Rd	NB	1	1,200	257	24	0.020	A	33	0.028	A
	SB	1	1,200	266	10	0.008	A	34	0.028	A

Notes:

1. Capacity of roadways based on assumed capacity of 1,200 vphpl and existing lanes on roadway.
2. Volumes based on 24-hour tube counts collected in June 2005.

3.

Year 2005 with CVRP Background Conditions

This chapter describes background traffic conditions. Background conditions are defined as conditions with traffic associated with already approved, but not yet constructed development added to existing conditions traffic. Traffic volumes for background conditions comprise volumes from Year 2004-2005 existing traffic counts plus traffic generated by other approved developments. This chapter describes the planned roadway system and intersection improvements, the procedure used to determine background traffic volumes, and the resulting traffic conditions.

Approved Background Projects

City of San Jose staff coordinated meetings with staff of both the Cities of Morgan Hill and Gilroy in May 2006. In addition to general discussion of the proposed CVSP project, each of the cities were asked to provide a list of approved but not yet built projects within their respective jurisdictions to be included within background conditions of the analysis. Background conditions are comprised of those identified projects within each of the studied jurisdictions. Approved project trips for the Cities of Morgan Hill and Gilroy were obtained from recent traffic studies provided by each jurisdiction. There is no significant development projects approved within the jurisdiction of the County of Santa Clara.

City of San Jose

Trips for approved projects within the City of San Jose were obtained from the City's Approved Trip Inventory (ATI) database dated September 2005. The City of San Jose ATI includes the Coyote Valley Research Park (CVRP) development approved in April 2002. The North Coyote Valley Industrial Park site is included as part of the CVSP study area. The CVSP project will supercede the approved CVRP project, but under background conditions the trips associated with the approved CVRP project remain. Therefore, background conditions in this analysis is referred to as "Background Year 2005 with CVRP."

City of Morgan Hill

Approved project trips for the City of Morgan Hill were obtained from recent traffic studies (*Cochrane Road PUD*, July 2005) provided by the Morgan Hill Community Development Department. An

equivalent growth factor for future development was calculated and applied to all studied intersections within the City of Morgan Hill.

City of Gilroy

Approved project trips for the City of Gilroy were obtained from recent traffic studies (*Hecker Pass Specific Plan*) and the City's approved project database provided by the Gilroy Community Development Department.

Total approved trips at each of the study intersections are included in Appendix B.

Background Roadway Network

Improvements are planned under background conditions at many of the study intersections. The intersection improvements will be constructed as city Capitol Improvement Program (CIP) projects or as a condition of future development to be funded by the developer. The improvements are presented in Table 7.

Background Bicycle and Pedestrian Facilities

With the exception of minor enhancements to the Coyote Creek Trail, there are no planned improvements to bicycle facilities within Coyote Valley. Nor is there any planned bicycle facilities planned according to the City of San Jose Transportation Bicycle Network.

Background Transit Service

Transit service under background conditions was assumed to remain unchanged from existing conditions.

Background Intersection Levels of Service

Intersection levels of service are evaluated against the applicable municipal and CMP standards. Results indicate that all study intersections in San Martin are projected to operate at acceptable levels. The level of service results for those study intersections projected to operate at unacceptable levels under background conditions are summarized in Table 8 and shown graphically in Figures 15-19. Tables summarizing the results for all intersections, as well as, levels of service calculation sheets are included in Appendix C.

Coyote Valley Intersection Analysis

The results of the level of service analysis for study intersections located within Coyote Valley indicate that one intersection is projected to operate at LOS F during both peak hours under background conditions.

Table 7
Background Intersection Improvements

Study Number		Background Conditions Improvements
City of San Jose Intersections		
27	Capitol Expressway and Quimby Road	Remove exclusive NB and SB right-turn lanes
28	Capitol Expressway and Tully Road	Remove exclusive NB and SB right-turn lanes
39	US 101 and Blossom Hill Road (East)	Addition of second NB right-turn lane Addition of third EB and WB through lanes
40	US 101 and Blossom Hill Road (West)	Addition of third SB right-turn lane
50	Monterey Road and Blossom Hill Road (South)	Addition of third NB through lane Addition of second WB right-turn lane
75	Santa Teresa Boulevard and Bernal Road	Addition of second WB left-turn lane
91	Basking Ridge and Silicon Valley Boulevard	Addition of second NB left-turn lane
99	Fontonoso Way and Silver Creek Valley Road	Addition of second EB left-turn lane Addition of SB right-turn lane
City of Morgan Hill		
121	Monterey Road and Madrone Parkway	Addition of NB left-turn lane
City of Gilroy		
159	Santa Teresa Boulevard and Longmeadow Drive	Widen Santa Teresa to four lanes Add 2nd NB left-turn lane and exclusive NB right-turn lane Add exclusive EB and WB left-turn lanes
160	Santa Teresa Boulevard and Mantelli Drive	Widen Santa Teresa to four lanes Add 2nd NB and SB left-turn lanes Add exclusive NB and SB right-turn lanes Add exclusive WB right-turn lane
161	Santa Teresa Boulevard and Weburn Avenue	Widen Santa Teresa to four lanes Add 2nd SB left-turn lane Add exclusive NB and SB right-turn lanes Add exclusive EB and WB left-turn lanes
162	Santa Teresa Boulevard and First Street/Hwy. 152	Add 2nd NB and SB left-turn lanes
165	Santa Teresa Boulevard and Ballybunion Drive	Add SB left-turn lane
185	Santa Teresa Boulevard and Miller Avenue	Add second SB left-turn lane
187	Uvas Park Drive and Miller Avenue	Add WB right-turn lane
Notes:		
1. Improvements based on City of San Jose Traffic database and approved project information for projects within the Cities of Morgan Hill and Gilroy.		

**Table 8
Year 2005 Plus CVRP Background Unacceptable Intersection Levels of Service**

Study Number		Peak Hour	Count Date	Year 2005 Existing		Background 2005 with CVRP	
				Ave. Delay/a/	LOS	Ave. Delay/a/	LOS
Coyote Valley Signalized Intersections							
9	Santa Teresa Boulevard and Bailey Avenue	AM	06/07/05	27.5	C	85.1	F
		PM	06/07/05	30.8	C	103.8	F
City of San Jose Signalized Intersections							
24	McLaughlin Avenue and Tully Road*	AM	11/09/04	45.3	D	49.4	D
		PM	09/09/04	61.3	E	74.7	E
26	Senter Road and Tully Road*	AM	09/08/04	39.1	D	42.4	D
		PM	09/08/04	49.6	D	56	E+
28	Capitol Expressway and Quimby Road*	AM	03/05/03	42.9	D	59	E+
		PM	10/17/04	54.3	D-	66.3	E
29	Capitol Expressway and Aborn Road*	AM	01/01/04	52.6	D-	88.2	F
		PM	09/29/04	48	D	55.2	E+
30	Capitol Expressway and Silver Creek Road*	AM	01/01/04	121.6	F	158.7	F
		PM	09/15/04	82.1	F	98.4	F
32	Senter Road and Captiol Expressway*	AM	01/01/04	55.2	E+	59.2	E+
		PM	10/05/04	45.7	D	48	D
39	US 101 and Blossom Hill Road (E)*	AM	09/29/04	27.8	C	46.1	D
		PM	09/29/04	32.1	C-	94.4	F
40	US 101 and Blossom Hill Road (W)*	AM	09/30/04	17.7	B	125.7	F
		PM	09/30/04	21.9	C+	153.3	F
81	Almaden Expressway and Camden Avenue*	AM	00/00/04	57	E+	58.1	E+
		PM	10/12/04	50.2	D	58	E+
86	Almaden Expressway and Blossom Hill Road*	AM	00/00/04	49.4	D	51.8	D-
		PM	10/06/04	70.4	E	72.2	E
87	Almaden Expressway and Almaden Plaza Way*	AM	00/00/04	21.9	C+	22.6	C+
		PM	10/14/04	64.7	E	79.2	E-
88	Almaden Expressway and SR 85*	AM	00/00/04	20.7	C+	21.2	C+
		PM	10/14/04	93.9	F	97.4	F
92	US 101 and Bernal Road (E)	AM	05/19/05	21.2	C+	161.2	F
		PM	05/19/05	17.9	B	72.9	E
94	SR 85 and Bernal Road*	AM	09/21/04	20.1	C+	93.3	F
		PM	09/21/04	30.5	C	91	F
City of Morgan Hill Signalized Intersections							
138	Butterfield Boulevard and Dunne Avenue	AM	10/05/04	38.1	D+	38.3	D+
		PM	10/05/04	39	D	41.9	D
City of Gilroy Signalized Intersections							
167	Monterey Road and Masten Avenue	AM	05/11/05	27.4	C	33.6	C-
		PM	05/11/05	36.4	D+	41.3	D
172	Wren Avenue and First Street/Hwy. 152	AM	06/08/05	27	C	27.1	C
		PM	06/08/05	32.6	C-	35	D+
177	Church Street and Tenth Street	AM	10/25/05	17.2	B	17	B
		PM	10/25/05	16.2	B	48.8	D

* Denotes CMP Designated Intersection

/a/ Reported delay based on average control delay as calculated by TRAFFIX using HCM 2000 methodology

Other City of San Jose Intersection Analysis

The results of the level of service analysis show that 14, all of which are CMP designated intersections, of the other City of San Jose study intersections located outside of Coyote Valley are projected to operate at an unacceptable LOS E or worse under background conditions.

- 24 McLaughlin Avenue and Tully Road*
- 26 Senter Road and Tully Road*
- 28 Capitol Expressway and Quimby Road*
- 29 Capitol Expressway and Aborn Road*
- 30 Capitol Expressway and Silver Creek Road*
- 32 Senter Road and Capitol Expressway*
- 39 US 101 and Blossom Hill Road (East)*
- 40 US 101 and Blossom Hill Road (West)*
- 81 Almaden Expressway and Camden Avenue*
- 86 Almaden Expressway and Blossom Hill Road*
- 87 Almaden Expressway and Almaden Plaza Way*
- 88 Almaden Expressway and SR 85*
- 92 US 101 and Bernal Road (East)*
- 94 SR 85 and Bernal Road*

*Indicates CMP Intersection

CMP Intersections

The level of service results for the other CMP intersections show that measured against the CMP level of service standards, seven intersections are projected to operate at an unacceptable LOS F under background conditions.

- 29 Capitol Expressway and Aborn Road
- 30 Capitol Expressway and Silver Creek Road
- 39 US 101 and Blossom Hill Road (East)
- 40 US 101 and Blossom Hill Road (West)
- 88 Almaden Expressway and SR 85
- 92 US 101 and Bernal Road (East)
- 94 SR 85 and Bernal Road

City of Morgan Hill Intersection Analysis

The results of the level of service analysis show that one intersection in the City of Morgan Hill is projected to operate at an unacceptable LOS D during the PM peak hour when measured against the City of Morgan Hill level of service standards.

- 138 Butterfield Boulevard and Dunne Avenue

City of Gilroy Intersection Analysis

The results of the level of service analysis show that three intersections in the City of Gilroy are projected to operate at unacceptable LOS levels when measured against the City of Gilroy level of service

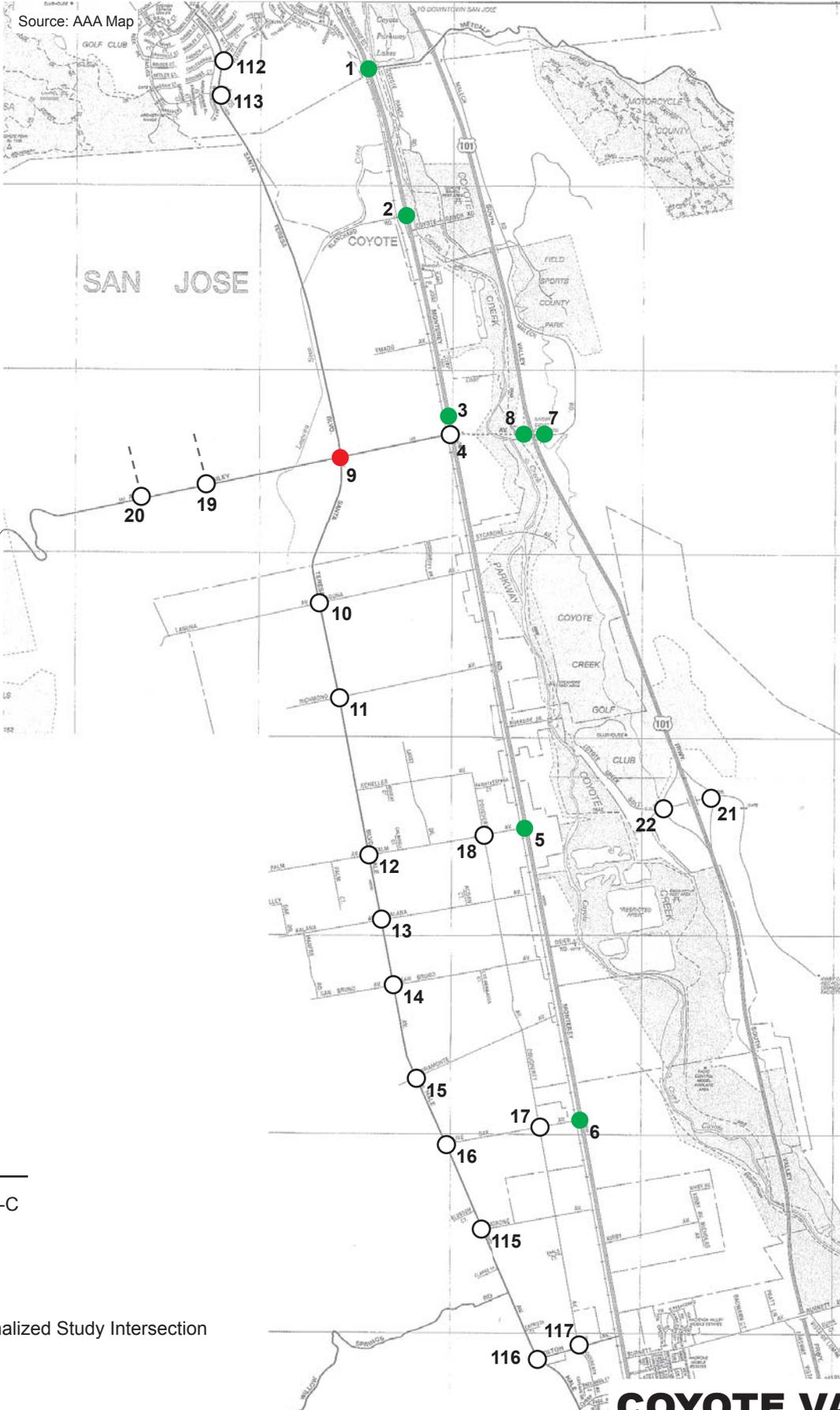


Figure 15

COYOTE VALLEY BACKGROUND 2005 WITH CVRP

CVSP

LEGEND

- = LOS A-C
- = LOS D
- = LOS E
- = LOS F
- = Unsignalized Study Intersection

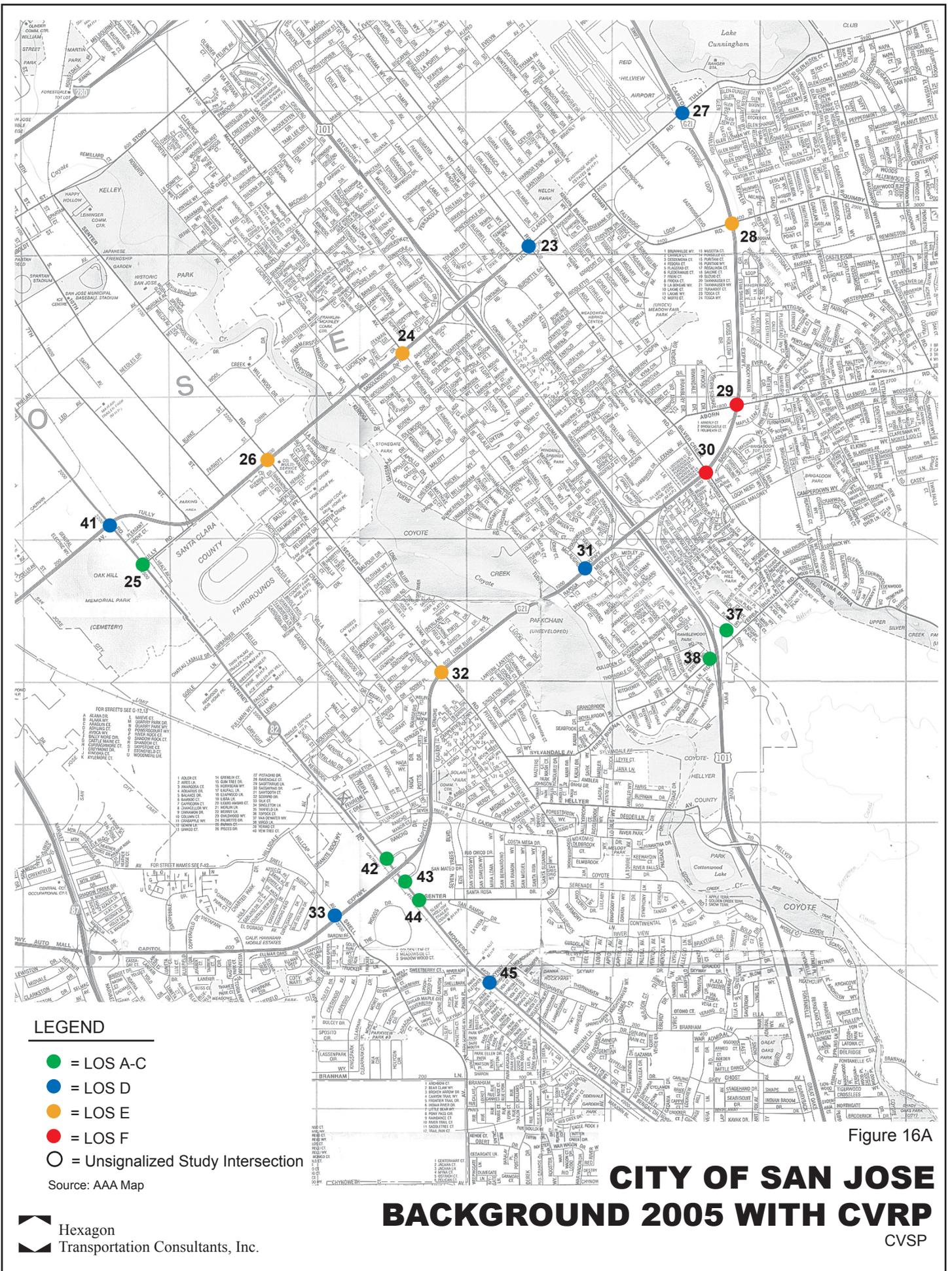


Figure 16A

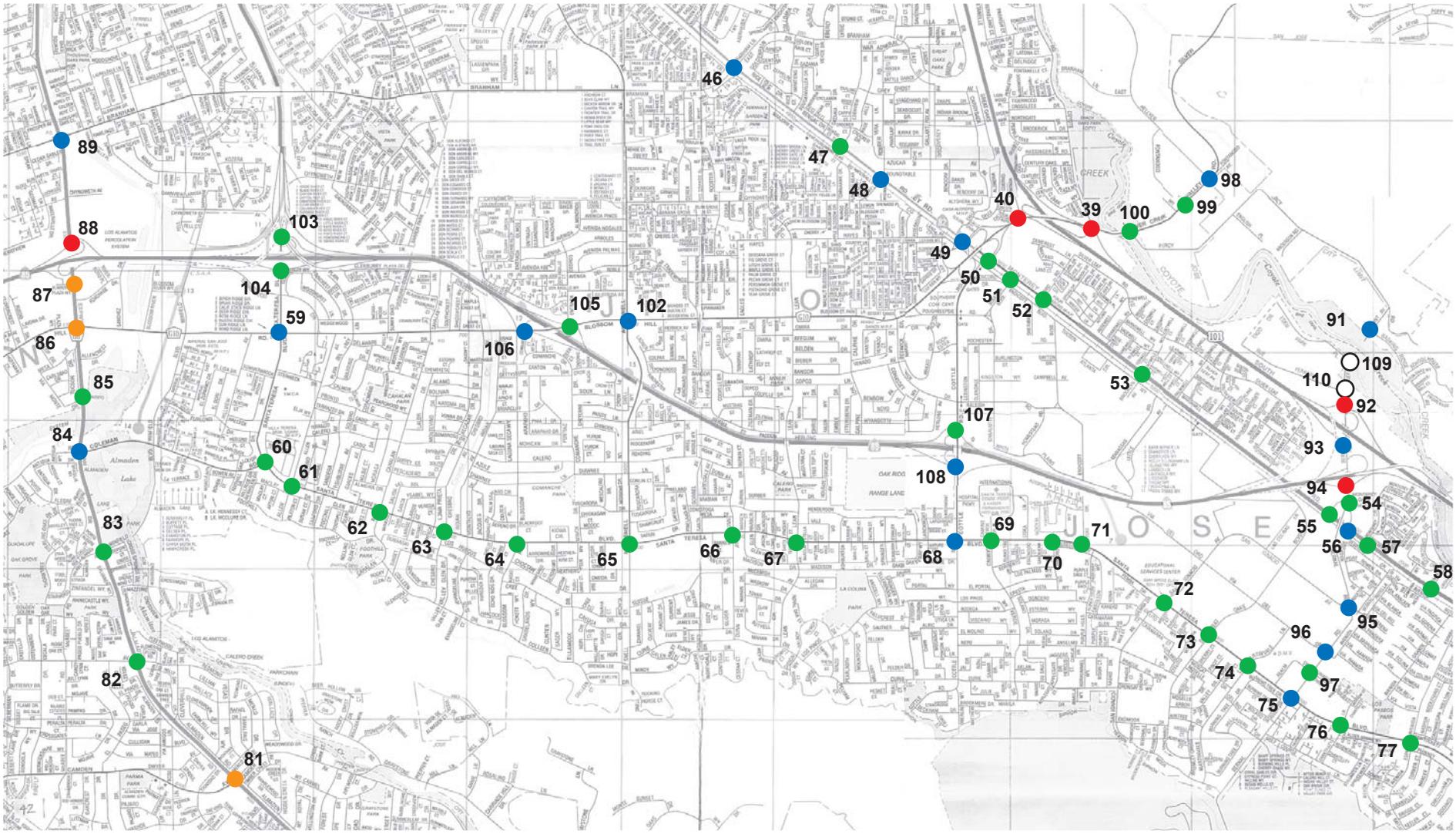
CITY OF SAN JOSE
BACKGROUND 2005 WITH CVRP
 CVSP

LEGEND

- = LOS A-C
- = LOS D
- = LOS E
- = LOS F
- = Unsignaled Study Intersection

Source: AAA Map

Hexagon
 Transportation Consultants, Inc.



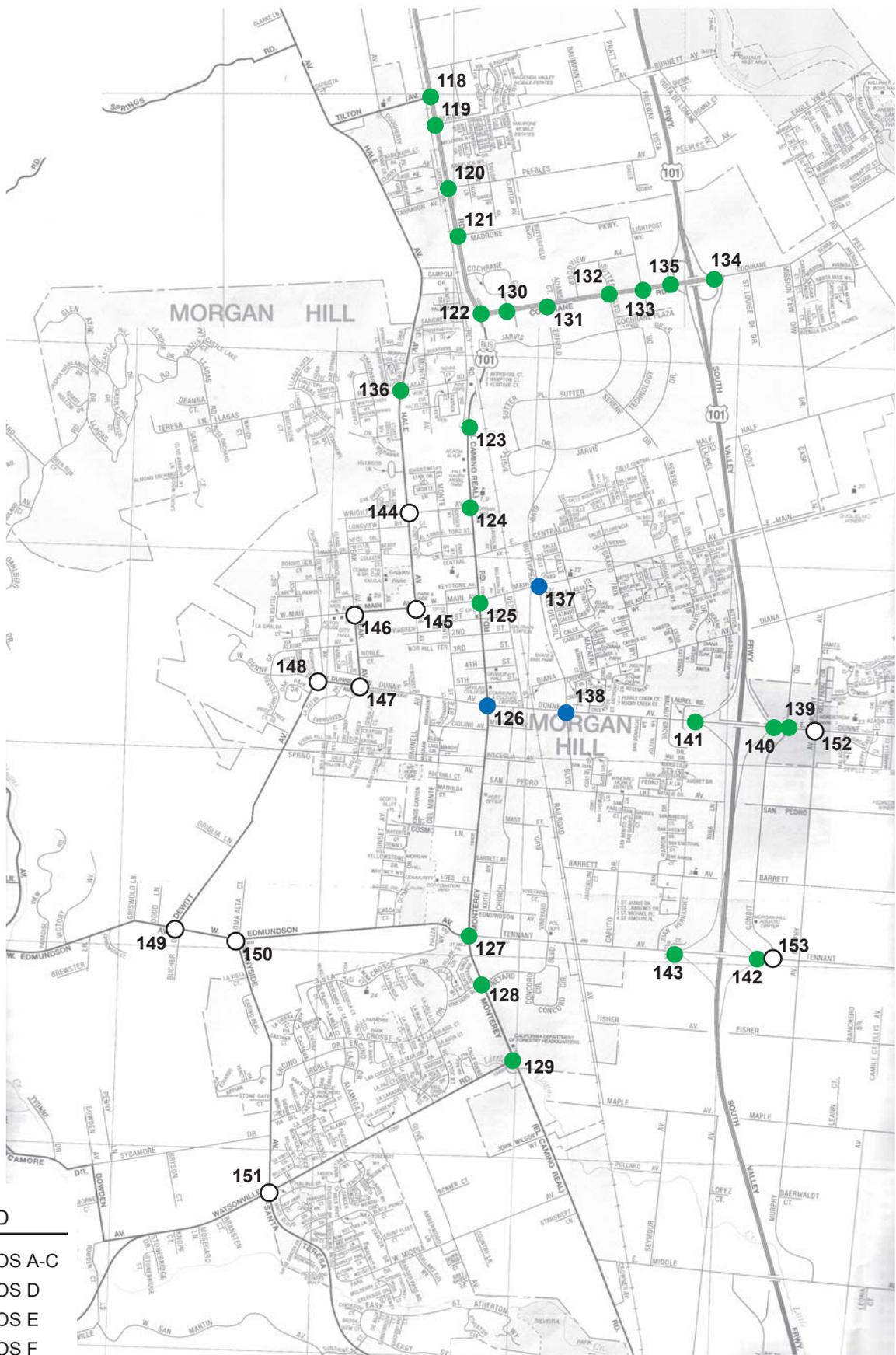
Source: AAA Map

LEGEND

- = LOS A-C
- = LOS D
- = LOS E
- = LOS F
- = Unsignalized Study Intersection

Figure 16C

CITY OF SAN JOSE
BACKGROUND 2005 WITH CVRP
 CVSP



LEGEND

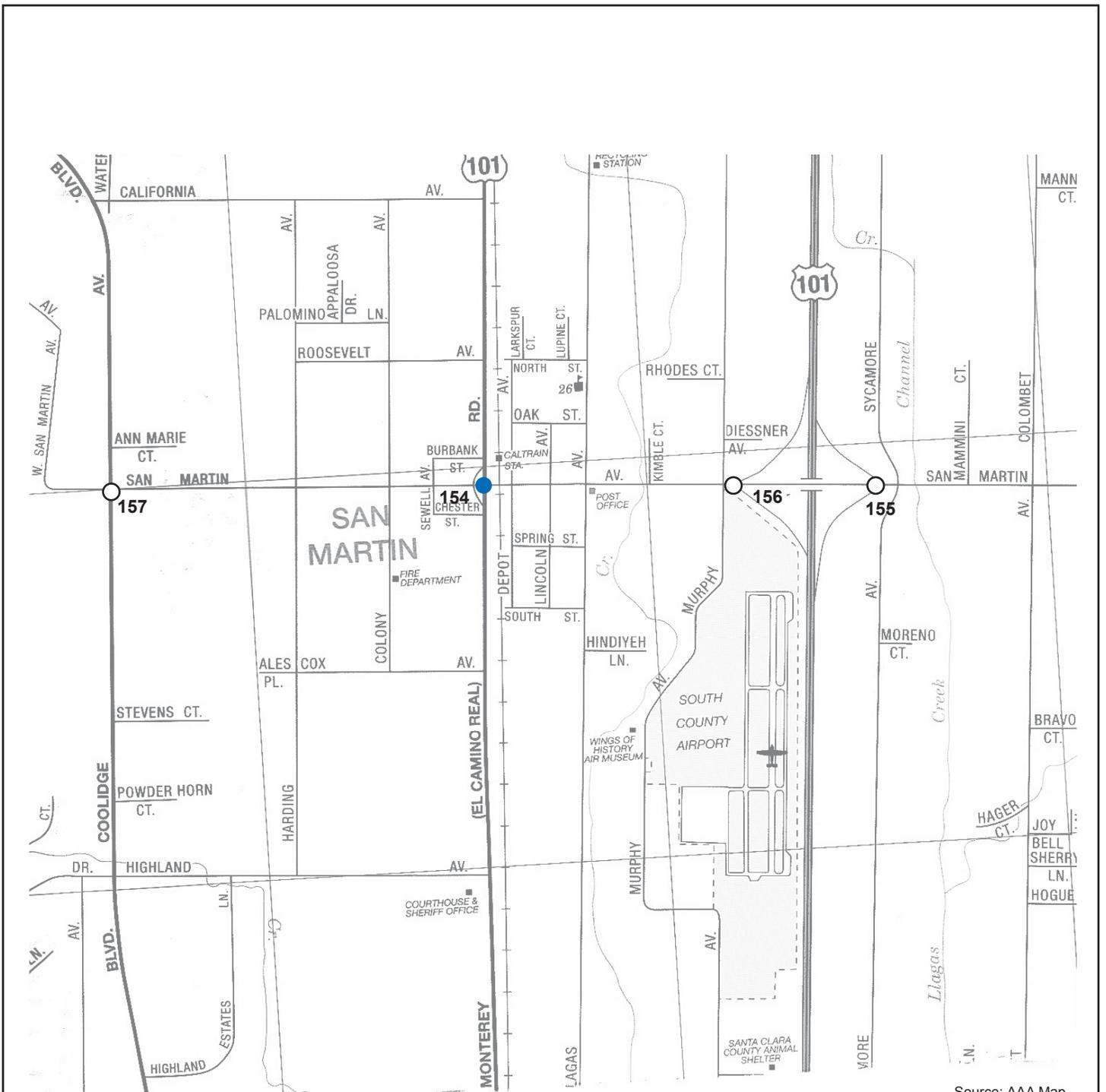
- = LOS A-C
- = LOS D
- = LOS E
- = LOS F
- = Unsignalized Study Intersection

Source: AAA Map

 Hexagon
 Transportation Consultants, Inc.

Figure 17

CITY OF MORGAN HILL
BACKGROUND 2005 WITH CVRP
 CVSP



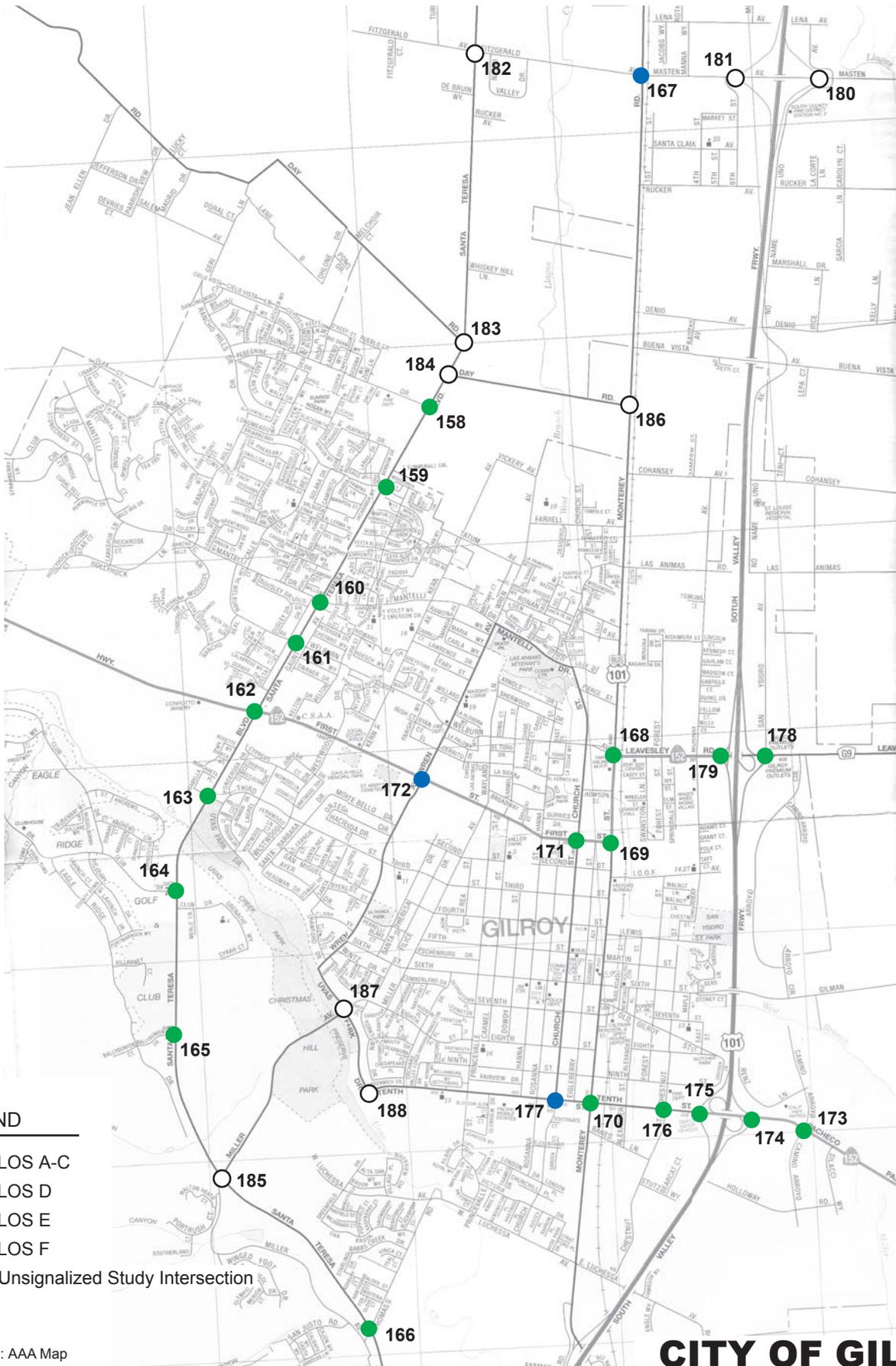
Source: AAA Map

LEGEND

- = LOS A-C
- = LOS D
- = LOS E
- = LOS F
- = Unsignalized Study Intersection

Figure 18

**CITY OF SAN MARTIN
BACKGROUND 2005 WITH CVRP**



LEGEND

- = LOS A-C
- = LOS D
- = LOS E
- = LOS F
- = Unsignalized Study Intersection

Source: AAA Map

Figure 19

**CITY OF GILROY
BACKGROUND 2005 WITH CVRP**

standards.

167	Monterey Road and Masten Avenue
172	Wren Avenue and First Street/Hwy. 152
177	Church Street and Tenth Street

Background Freeway Segment Levels of Service

The analysis of freeway segment level of service is not required for background conditions, per CMP requirements.

Background Roadway Segment Analysis

Traffic volumes for background plus CVRP conditions on each of the studied roadway segments were developed by adding to existing volumes the trips associated with the approved CVRP development. The CVRP project trips were assigned to the roadway system in the same manner as with intersections. The roadway segment analysis indicates that all studied roadway segments are projected to operate at LOS D or better during both peak hours under background conditions. Table 9 presents the roadway segment analysis.

**Table 9
Year 2005 Plus CVRP Roadway Analysis**

Segment	Direction	# Of Lanes	Capacity (vph)	Existing Conditions						CVRP Trips				Existing + CVRP					
				AM Peak-Hour			PM Peak-Hour			AM Peak-Hour		PM Peak-Hour		AM Peak-Hour			PM Peak-Hour		
				Volume	V/C	LOS	Volume	V/C	LOS	Volume	Increase	Volume	Increase	Volume	V/C	LOS	Volume	V/C	LOS
Bernal Rd																			
Monterey Rd and San Ignacio Ave	EB	3	3,600	1,141	0.317	A	1,445	0.401	A	154	13.5%	861	59.6%	1,295	0.360	A	2,306	0.641	B
	WB	3	3,600	1,725	0.479	A	1,159	0.322	A	990	57.4%	238	20.5%	2,715	0.754	C	1,397	0.388	A
San Ignacio Ave and Via Del Oro	EB	3	3,600	736	0.204	A	842	0.234	A	154	20.9%	861	102.3%	890	0.247	A	1,703	0.473	A
	WB	3	3,600	945	0.263	A	870	0.242	A	990	104.8%	238	27.4%	1,935	0.538	A	1,108	0.308	A
Via Del Oro and Santa Teresa Blvc	EB	3	3,600	731	0.203	A	669	0.186	A	976	133.5%	104	15.5%	1,707	0.474	A	773	0.215	A
	WB	3	3,600	648	0.180	A	772	0.214	A	119	18.4%	878	113.7%	767	0.213	A	1,650	0.458	A
Monterey Rd																			
Blossom Hill Rd and Bernal Rd	NB	2	2,400	860	0.358	A	555	0.231	A	158	18.4%	550	99.1%	1,018	0.424	A	1,105	0.460	A
	SB	2	2,400	488	0.203	A	634	0.264	A	473	96.9%	16	2.5%	961	0.400	A	650	0.271	A
Bernal Rd and Bailey Ave	NB	2	2,400	554	0.231	A	405	0.169	A	409	73.8%	1,369	338.0%	963	0.401	A	1,774	0.739	C
	SB	2	2,400	321	0.134	A	437	0.182	A	1,296	403.7%	28	6.4%	1,617	0.674	B	465	0.194	A
Bailey Ave and Cochrane Rd	NB	2	2,400	877	0.365	A	476	0.198	A	371	42.3%	22	4.6%	1,248	0.520	A	498	0.208	A
	SB	2	2,400	520	0.217	A	650	0.271	A	67	12.9%	655	100.8%	587	0.245	A	1,305	0.544	A
Cochrane Rd and Old Monterey Rc	NB	2	2,400	865	0.360	A	439	0.183	A	233	26.9%	9	2.1%	1,098	0.458	A	448	0.187	A
	SB	2	2,400	398	0.166	A	951	0.396	A	20	5.0%	224	23.6%	418	0.174	A	1,175	0.490	A
Santa Teresa Blvd																			
Cottle Rd and Bernal Rd	NB	3	3,600	528	0.147	A	595	0.165	A	151	28.6%	606	101.8%	679	0.189	A	1,201	0.334	A
	SB	3	3,600	594	0.165	A	612	0.170	A	452	76.1%	23	3.8%	1,046	0.291	A	635	0.176	A
Bernal Rd and Bailey Ave	NB	2	2,400	432	0.180	A	287	0.120	A	409	94.7%	1,757	612.2%	841	0.350	A	2,044	0.852	D
	SB	2	2,400	322	0.134	A	389	0.162	A	1,605	498.4%	101	26.0%	1,927	0.803	D	490	0.204	A
Bailey Ave and Tilton Ave	NB	1	1,200	358	0.298	A	168	0.140	A	386	107.8%	1	0.6%	744	0.620	B	169	0.141	A
	SB	1	1,200	137	0.114	A	344	0.287	A	6	4.4%	102	29.7%	143	0.119	A	446	0.372	A
Tilton Ave and Llagas Rd	NB	2	2,400	179	0.075	A	356	0.148	A	404	225.7%	1	0.3%	583	0.243	A	357	0.149	A
	SB	2	2,400	420	0.175	A	144	0.060	A	3	0.7%	272	188.9%	423	0.176	A	416	0.173	A
Watsonville Rd and San Martin Ave	NB	1	1,200	264	0.220	A	227	0.189	A	60	22.7%	0	0.0%	324	0.270	A	227	0.189	A
	SB	1	1,200	149	0.124	A	259	0.216	A	0	0.0%	71	27.4%	149	0.124	A	330	0.275	A
San Martin Ave and Fitzgerald Ave	NB	1	1,200	313	0.261	A	197	0.164	A	58	18.5%	0	0.0%	371	0.309	A	197	0.164	A
	SB	1	1,200	131	0.109	A	363	0.303	A	0	0.0%	44	12.1%	131	0.109	A	407	0.339	A
Bailey Ave																			
US 101 and Monterey Rd	EB	3	3,600	318	0.088	A	456	0.127	A	333	104.7%	1,731	379.6%	651	0.181	A	2,187	0.608	B
	WB	3	3,600	477	0.133	A	248	0.069	A	2,292	480.5%	98	39.5%	2,769	0.769	C	346	0.096	A
Monterey Rd and Santa Tera Blvc	EB	3	3,600	172	0.048	A	382	0.106	A	717	416.9%	1,619	423.8%	889	0.247	A	2,001	0.556	A
	WB	3	3,600	519	0.144	A	211	0.059	A	1,737	334.7%	218	103.3%	2,256	0.627	B	429	0.119	A
Santa Teresa Blvd and McKean Rc	EB	1	1,200	141	0.118	A	494	0.412	A	372	263.8%	11	2.2%	513	0.428	A	505	0.421	A
	WB	1	1,200	596	0.497	A	211	0.176	A	55	9.2%	471	223.2%	651	0.543	A	682	0.568	A
Cochrane Rd																			
Mission View Dr and US 101	EB	3	3,600	228	0.063	A	445	0.124	A	3	1.3%	22	4.9%	231	0.064	A	467	0.130	A
	WB	3	3,600	403	0.112	A	253	0.070	A	33	8.2%	1	0.4%	436	0.121	A	254	0.071	A
US 101 and Monterey Rd	EB	3	3,600	852	0.237	A	1,591	0.442	A	65	7.6%	67	4.2%	917	0.255	A	1,658	0.461	A
	WB	3	3,600	1,564	0.434	A	1,255	0.349	A	46	2.9%	62	4.9%	1,610	0.447	A	1,317	0.366	A
Watsonville Rd																			
Santa Teresa Blvd and Uvas Rd	NB	1	1,200	265	0.221	A	184	0.153	A	27	10.2%	0	0.0%	292	0.243	A	184	0.153	A
	SB	1	1,200	150	0.125	A	325	0.271	A	3	2.0%	19	5.8%	153	0.128	A	344	0.287	A
Uvas Rd and Day Rd	NB	1	1,200	234	0.195	A	147	0.123	A	162	69.2%	0	0.0%	396	0.330	A	147	0.123	A
	SB	1	1,200	114	0.095	A	258	0.215	A	3	2.6%	130	50.4%	117	0.098	A	388	0.323	A
Day Rd and Hwy 152	NB	1	1,200	201	0.168	A	111	0.093	A	160	79.6%	0	0.0%	361	0.301	A	111	0.093	A
	SB	1	1,200	101	0.084	A	215	0.179	A	3	3.0%	124	57.7%	104	0.087	A	339	0.283	A
Uvas Rd																			
Bailey Ave and Oak Glen Rd	NB	1	1,200	199	0.166	A	101	0.084	A	159	79.9%	0	0.0%	358	0.298	A	101	0.084	A
	SB	1	1,200	64	0.053	A	168	0.140	A	6	9.4%	131	78.0%	70	0.058	A	299	0.249	A
Oak Glen Rd and Watsonville Rd	NB	1	1,200	120	0.100	A	41	0.034	A	141	117.5%	0	0.0%	261	0.218	A	41	0.034	A
	SB	1	1,200	33	0.028	A	92	0.077	A	0	0.0%	115	125.0%	33	0.028	A	207	0.173	A
Edmunson Ave																			
Oak Glen Rd and Sunnyside Ave	EB	2	2,400	223	0.093	A	283	0.118	A	3	1.3%	2	0.7%	226	0.094	A	285	0.119	A
	WB	2	2,400	337	0.140	A	244	0.102	A	2	0.6%	8	3.3%	339	0.141	A	252	0.105	A
Sunnyside Ave and Monterey Rc	EB	2	2,400	334	0.139	A	239	0.100	A	8	2.4%	0	0.0%	342	0.143	A	239	0.100	A
	WB	2	2,400	172	0.072	A	356	0.148	A	2	1.2%	18	5.1%	174	0.073	A	374	0.156	A

**Table 9
Year 2005 Plus CVRP Roadway Analysis**

Segment	Direction	# Of Lanes	Capacity (vph)	Existing Conditions						CVRP Trips				Existing + CVRP					
				AM Peak-Hour			PM Peak-Hour			AM Peak-Hour		PM Peak-Hour		AM Peak-Hour			PM Peak-Hour		
				Volume	V/C	LOS	Volume	V/C	LOS	Volume	Increase	Volume	Increase	Volume	V/C	LOS	Volume	V/C	LOS
Oak Glen Ave																			
Uvas Rd and Willow Springs Rd	NB	1	1,200	69	0.058	A	42	0.035	A	8	11.6%	0	0.0%	77	0.064	A	42	0.035	A
	SB	1	1,200	35	0.029	A	63	0.053	A	6	17.1%	5	7.9%	41	0.034	A	68	0.057	A
Willow Springs Rd and Edmunson Rd																			
	NB	1	1,200	93	0.078	A	105	0.088	A	12	12.9%	0	0.0%	105	0.088	A	105	0.088	A
	SB	1	1,200	99	0.083	A	77	0.064	A	0	0.0%	8	10.4%	99	0.083	A	85	0.071	A
Edmunson Rd and Watsonville Rd																			
	NB	1	1,200	34	0.028	A	28	0.023	A	10	29.4%	0	0.0%	44	0.037	A	28	0.023	A
	SB	1	1,200	16	0.013	A	47	0.039	A	0	0.0%	11	23.4%	16	0.013	A	58	0.048	A
Willow Springs Rd																			
Oak Glen Ave and Santa Tera Blvd																			
	NB	1	1,200	20	0.017	A	17	0.014	A	15	75.0%	0	0.0%	35	0.029	A	17	0.014	A
	SB	1	1,200	10	0.008	A	30	0.025	A	1	10.0%	6	20.0%	11	0.009	A	36	0.030	A
McKean Rd																			
Harry Rd and Bailey Ave																			
	NB	1	1,200	272	0.227	A	210	0.175	A	39	14.3%	296	141.0%	311	0.259	A	506	0.422	A
	SB	1	1,200	200	0.167	A	221	0.184	A	183	91.5%	8	3.6%	383	0.319	A	229	0.191	A
Malech Rd																			
Metcalfe Rd and Bailey Ave																			
	NB	1	1,200	25	0.021	A	37	0.031	A	6	24.0%	24	64.9%	31	0.026	A	61	0.051	A
	SB	1	1,200	52	0.043	A	33	0.028	A	15	28.8%	0	0.0%	67	0.056	A	33	0.028	A
Metcalfe Rd																			
San Felipe Rd and Malech Rd																			
	EB	1	1,200	52	0.043	A	11	0.009	A	6	11.5%	55	500.0%	58	0.048	A	66	0.055	A
	WB	1	1,200	12	0.010	A	46	0.038	A	58	483.3%	1	2.2%	70	0.058	A	47	0.039	A
Malech Rd and Monterey Rd																			
	EB	1	1,200	106	0.088	A	55	0.046	A	14	13.2%	53	96.4%	120	0.100	A	108	0.090	A
	WB	1	1,200	50	0.042	A	127	0.106	A	58	116.0%	24	18.9%	108	0.090	A	151	0.126	A
San Felipe Rd																			
Silver Creek Valley Rd and Metcalfe Rd																			
	NB	1	1,200	24	0.020	A	33	0.028	A	6	25.0%	55	166.7%	30	0.025	A	88	0.073	A
	SB	1	1,200	10	0.008	A	34	0.028	A	58	580.0%	1	2.9%	68	0.057	A	35	0.029	A

Notes:
1. Capacity of roadways based on assumed capacity of 1,200 vphpl and existing lanes on roadway
2. Volumes based on 24-hour tube counts collected in June 2005

4.

Project Impacts and Mitigation Measures

This chapter describes project traffic conditions, significant project impacts, and measures that are identified to mitigate project impacts. Included are estimates of project-generated traffic, identification of the impacts, and descriptions of the mitigation measures. Project conditions are represented by Year 2005 with CVRP background traffic conditions with the addition of traffic generated by the project.

Project Description

The Coyote Valley area consists of approximately 7,000 acres of low intensity or undeveloped land in the southern reaches of San Jose, California. The area is generally bounded by Tulare Hill to the north, Highway 101 and the eastern foothills to the east, Morgan Hill to the south, and the Santa Teresa Hills to the west. The Coyote Valley area has been divided into three different planning areas: The North Coyote Valley Campus Industrial area, the Mid-Coyote Valley Urban Reserve, and the southern Coyote Greenbelt. The project area is shown on Figure 1.

The proposed development would occur on only 3,400 acres located within the North Coyote Valley Campus Industrial area and the Mid-Coyote Valley Urban Reserve.

Proposed Development Levels

The Coyote Valley Specific Plan (CVSP) will include the vision of urban development to include at least 50,000 jobs and 25,000 housing units, of which 20% would be affordable. The Coyote Valley community would be highly livable with a variety of housing types, schools, parklands, trails, bicycle paths, transit, commercial and job centers, and other community services. The previously approved North Coyote Valley Industrial Park development would be included in and superseded by the specific plan effort. The southern Coyote Valley Greenbelt area also is included in this planning effort in order to determine mechanisms by which its long-term preservation can be ensured.

With housing located in close proximity to employment, it is expected that less of a demand will be placed on regional transportation facilities.

Project Land Use and Traffic Projections

Project's Land Use Estimates

City staff provided a detailed description of projected employment and housing development. These projections were converted to employment estimates using the City's standard General Plan employment conversion methodology. The project's housing and employment numbers were then aggregated to traffic zones and put into the model to project the future traffic volumes. The project would add 57,060 jobs and 25,550 residential units to the CVSP area.

Traffic Projections

The VTA 2030 County Wide travel demand model was used to estimate the trip making characteristics of the project. There are four major steps in the travel demand forecasting process. First, the trip generation model is applied to calculate the number of (daily) trips produced by the population in the modeled area. Next, the distribution model estimates where the trips are coming from and going to. The mode choice model then estimates which mode of transportation will be chosen for each trip (walk, bike, transit, automobile). And at last, the trip assignment step determines the amount of traffic that will be allocated to each road or transit route.

Trip Generation

Based on the model trip generation estimates, the CVSP development will generate 302,780 daily new person trips. Of all CVSP project trips, 88% would be made by automobile, 4% percent would be on transit and 8% percent would be walk or bike trips. The approximately 266,100 vehicle person trips projected by the model equate to 209,991 daily vehicle trips. The project will generate 18,282 vehicle trips during the AM peak hour and 21,247 vehicle trips during the PM peak hour.

The proposed land uses of the Coyote Valley Specific Plan will promote a balance of housing and employment within the valley. With the balance of land uses it is expected that the interaction between land uses within the valley will place less of a demand on regional transportation facilities. Based on proposed land uses within Coyote Valley, model runs indicate that about 128,200 (or 40%) of the projected person trips would stay within Coyote Valley. The remaining 60% of the daily person trips generated by the project would originate or have destinations outside of the CVSP project boundaries. The internalization of trips within the valley equates to approximately 5,500 trips during the AM peak hour and 7,400 trips during the PM peak hour. Trip estimates for the project are presented in Table 10.

Trip Distribution

The distribution of trips external to Coyote Valley is shown graphically in Figure 20. Of those trips external to Coyote Valley, approximately 70% would originate or be bound for destinations north of and 30% south of Coyote Valley. The majority, approximately 95%, of external Coyote Valley trips to the north would originate or be bound for destinations within Santa Clara County. Approximately 70% of trips to south of Coyote Valley would be originating or bound for destinations within Gilroy or Morgan

Table 10
Trip Generation Estimates for Coyote Valley Specific Plan

Daily Trips	AM Peak Hour							PM Peak Hour						
	Splits			Trips				Splits			Trips			
	In	Out	Internal.	In	Out	Internal	Total	In	Out	Internal.	In	Out	Internal	Total
209,991	33%	37%	30%	6,050	6,727	5,505	18,282	33%	32%	35%	6,957	6,890	7,400	21,247

Notes:

1. Trips based on VTA 2030 County Wide Travel demand model run for CVSP, 2006.
2. Internal trips would stay within the Coyote Valley Specific Plan project boundary.

Hill. The remaining 30% of trips to the south would be originating or bound for destinations in either Santa Cruz, Monterey, or San Benito Counties.

Project Traffic Volumes

Peak-hour traffic volumes for project conditions were produced with the traffic model using the method described earlier in this report. Traffic volumes for project conditions are presented in Appendix B.

Project Roadway Improvements

Several transportation improvements within Coyote Valley are planned as part of the project and are assumed to be operational prior to or at the time of project completion. The improvements consist of the construction of an entirely new street network with the creation of several new intersections within Coyote Valley. Several improvements to the major roadway facilities serving the valley are also planned including two new interchanges with US 101 and several arterial interchanges with Monterey Road. Each of the planned improvements is described below and presented in Figure 21.

Roadway Improvements

The following are major roadway improvements that will be necessary to provide access to Coyote Valley from regional transportation facilities and provide for efficient circulation within Coyote Valley.

- **Coyote Valley Parkway Interchange with US 101** – A new interchange north of the existing Bailey Avenue interchange with US 101 will be constructed and will provide full access to and from US 101. The interchange will serve as the northerly most access point to US 101.
- **Improved US 101 Interchanges** – The existing interchanges at Bailey Avenue and Coyote Creek Golf Course Drive will be improved to serve six-lane arterials to Coyote Valley.
- **Arterials To and From US 101** – Coyote Valley will be served by three six-lane arterials (Coyote Valley Parkway, Bailey Avenue, and Coyote Creek Drive) to and from US 101. Each of the arterials will be six-lanes from US 101 to the new north/south arterial within Coyote Valley. The arterials will then narrow to two or four lanes within the valley.



Figure 20

EXTERNAL COYOTE VALLEY PROJECT TRIP DISTRIBUTION

CVSP

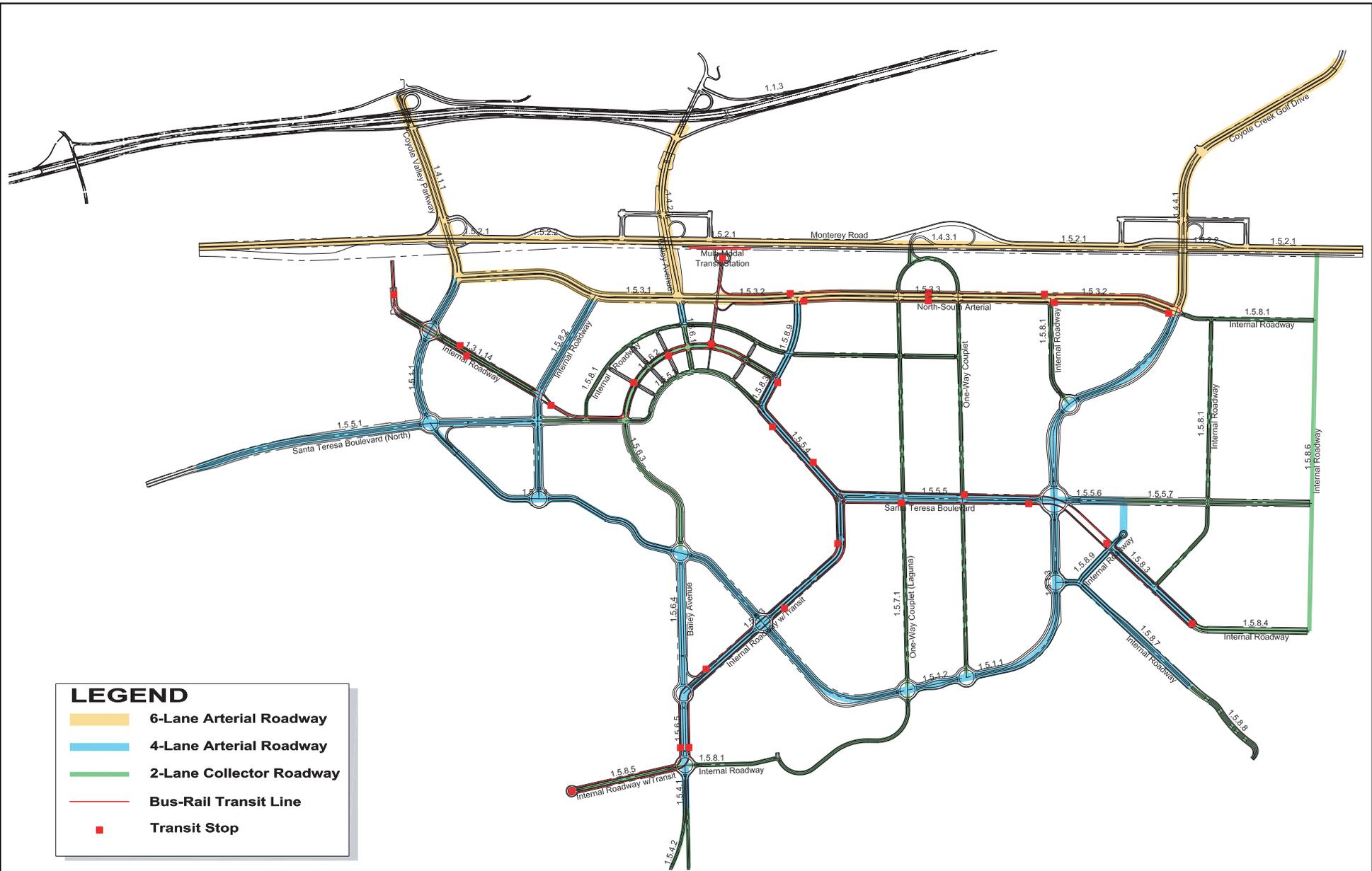


Figure 21

COYOTE VALLEY ROADWAY IMPROVEMENTS

CVSP

- ***Coyote Valley Parkway*** – A new six to four lane arterial will run from the planned Coyote Valley Parkway interchange at US 101 to the reconfigured Coyote Creek Drive interchange at US 101. East of the new north-south arterial, Coyote Valley Parkway will be six-lanes wide. West of the north/south arterial the parkway will narrow to four-lanes. The parkway will wind around the western edge of the valley providing access to all major arterials and several collector roads. Nine intersections with major roadways along Coyote Valley Parkway may be roundabouts as opposed to conventional signalized intersections so as to improve capacity and efficiency of the parkway
- ***North/South Arterial*** – A new four-lane arterial will run parallel to and along the westside of Monterey Road. The roadway will extend between Coyote Valley Parkway north and south.
- ***Internal Coyote Valley Roadway System*** – To facilitate the efficient circulation of traffic within and through Coyote Valley, several new local streets and major arterials will be constructed. The streets, as shown in Figure 21, would serve future development and provide connections to areas both north and south of Coyote Valley. The new streets would include a four-lane parkway along the western edge of Coyote Valley that will provide connections to US 101, Monterey Road, and Santa Teresa Boulevard. A four-lane north/south arterial running parallel and along the westside of Monterey Road also will be provided. Several two-lane collectors will provide access from the major arterials to areas throughout the valley.
- ***Monterey Road*** – Monterey Road runs from South First Street near downtown San Jose south through Gilroy. It is currently two lanes in each direction though Coyote Valley, between Bernal Road and Cochrane Road. Monterey Road will remain two lanes in each direction through Coyote Valley with four grade-separated interchanges fed by major arterials leading to Coyote Valley.
- ***Santa Teresa Boulevard*** – The alignment of Santa Teresa Boulevard through Coyote Valley will be adjusted. The roadway would enter the valley from the north as a four-lane arterial, but narrow to a two lane collector through the core of Coyote Valley, then widening back to four lanes, and narrow back to two lanes south of Coyote Valley Parkway.
- ***Bailey Avenue*** – Bailey Avenue will be reconfigured to provide direct access to the core of Coyote Valley. The roadway will vary from two to six lanes and will not be continuous.

Intersection Improvements and Adjustments

In addition to the major roadway improvements described above, several smaller intersection improvements and/or adjustments also will be constructed as part of the project. The intersection improvements described below are associated with existing intersections within Coyote Valley that will either be reconfigured or eliminated as part of the new roadway system.

(3) Monterey Road and Bailey Avenue – The recently constructed intersection located on the north side of the Bailey Avenue overpass of Monterey Road will be reconfigured to accommodate the new square loop interchange that will be constructed as part of the new Bailey Avenue/Monterey Road grade-separated interchange. A second intersection south of the Bailey over-crossing will also be constructed.

(9) Santa Teresa Boulevard and Bailey Avenue – The existing intersection of Bailey Avenue with Santa Teresa Boulevard will be eliminated as part of the new roadway system within Coyote Valley.

Future Coyote Valley Intersections

As part of the new roadway system within Coyote Valley, nearly 80 new intersections will be created. Several of the new intersections will be signalized, while others are stop controlled, or roundabouts. Presented in Table 11 and Figure 22 is projected intersection levels of service for the potential major future intersections within Coyote Valley. The remaining future intersections are projected to serve only a minor amount of traffic and would not require signalization.

The intersection level of service results indicate that for those intersections requiring signalization, all but three intersections would operate at LOS D conditions or better with full buildout of the CVSP plan. The following three intersections are projected to operate at LOS E or worse conditions during at least one peak hour under project conditions:

- (F-16) Coyote Creek Road and Bailey Avenue
- (F-38) Lakeside Drive and Tenth Street
- (F-52) Central Lop Road and Tenth Street

The City has recently amended their LOS Policy to create the concept of Protected Intersections that operate in major transit corridors and other special planning areas. The intersections identified to operate at unacceptable levels will serve as gateways to the CVSP area and be near major transit.

The LOS policy specifies that additional capacity not be added to the intersections and they be allowed to operate at capacity (thus, not being required to meet the LOS D standard) with the expectation that alternative routes or modes will be used by drivers when delays become unacceptable. Physical improvements to alleviate the congestion at the identified intersections would include widening of roadways that would not be consistent with the vision of the Coyote Valley plan. The identified intersections should be added to the List of Protected Intersections.

Project Impacts and Mitigation Measures

This section discusses the project conditions analysis and any impacts associated with the proposed development levels for the Coyote Valley Specific Plan. Included are descriptions of project impacts to intersections and freeway segments.

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 23 of the 187 study intersections are projected to operate at unacceptable levels under project conditions during at least one peak hour based on applicable level of service standards (see Figures 23 through 27). Of these 23 intersections, the project would impact 14 intersections during at least one peak hour according to the impact criteria (see Table 12). Results indicate that no existing study intersections within Coyote Valley will be impacted by the project. The following intersections will be impacted by the project:

City of San Jose Signalized Intersections

- 24 McLaughlin Avenue and Tully Road*
- 30 Capitol Expressway and Silver Creek Road*
- 31 McLaughlin Avenue and Capitol Expressway*

Table 11
Future Coyote Valley Intersection Levels of Service Summary

Study Number		Peak Hour	Signal Warrant Met?	Ave. Delay/a/	LOS
F-1	Patane Way and Coyote Valley Parkway	AM	Roundabout	4.2	A
		PM	Roundabout	22.4	C
F-2	North Santa Teresa Boulevard and Coyote Valley Parkway	AM	Roundabout	4.7	A
		PM	Roundabout	5.5	A
F-3	Coyote Valley Parkway and Industrial Parkway	AM	Roundabout		
		PM	Roundabout		
F-4	Coyote Valley Parkway and West Bailey Avenue	AM	Roundabout	3.5	A
		PM	Roundabout	8.7	A
F-5	Coyote Valley Parkway and Sobrato Road	AM	Roundabout	3.0	A
		PM	Roundabout	3.5	A
F-6	Fisher Creek Drive and West Central Boulevard	AM	Roundabout		
		PM	Roundabout		
F-7	Fisher Creek Drive and East Central Boulevard	AM	Roundabout		
		PM	Roundabout		
F-8	Fisher Creek Drive and Palm Canyon	AM	Roundabout	2.3	A
		PM	Roundabout	2.4	A
F-9	South Santa Teresa Boulevard and Scheller Avenue	AM	Roundabout	2.8	A
		PM	Roundabout	3.4	A
F-10	Silver Drive and Scheller Avenue	AM	Roundabout	8.0	A
		PM	Roundabout	7.5	A
F-11	Coyote Creek Road and Scheller Avenue	AM	Yes	29.5	C
		PM	Yes	29.2	C
F-12	Coyote Creek Road and Silver Drive	AM	Yes	16.7	B
		PM	Yes	12.9	B
F-13	Coyote Creek Road and East Central Boulevard	AM	Yes	11.5	B
		PM	Yes	15.1	B
F-14	Coyote Creek Road and West Central Boulevard	AM	Yes	12.0	B
		PM	Yes	16.1	B
F-15	Coyote Creek Road and Tenth Street	AM	Yes	7.8	A
		PM	Yes	8.6	A
F-16	Coyote Creek Road and East Bailey Avenue	AM	Yes	74.6	E
		PM	Yes	57.4	E
F-17	Coyote Creek Road and Industrial Parkway	AM	Yes	25.5	C
		PM	Yes	36.8	D
F-18	Coyote Valley Parkway and Coyote Creek Road	AM	Yes	18.1	B
		PM	Yes	29.8	C
F-19	Monterey Connector and Coyote Valley Parkway	AM	Yes	7.0	A
		PM	Yes	5.3	A
F-20	US 101 and Coyote Valley Parkway (W)	AM	Yes	5.5	A
		PM	Yes	5.1	A
F-21	US 101 and Coyote Valley Parkway (E)	AM	No		
		PM	No		
F-22	N/S Connector and E Bailey Connector (N)	AM	No	24.4	C
		PM	Yes	29.5	C
F-23	N/S Connector and E Bailey Avenue	AM	Yes	44.9	D
		PM	Yes	31.8	C
F-24	N/S Connector and E Bailey Connector (S)	AM	Yes	20.5	C
		PM	No	11.1	B
F-25	Monterey Road and E Bailey Avenue (S)	AM	Yes	5.2	A
		PM	Yes	12.8	B
F-26	Monterey Road and Scheller Avenue (N)	AM	Yes	17.1	B
		PM	Yes	16.3	B
F-27	Monterey Road and Scheller Avenue (S)	AM	Yes	29.5	C
		PM	Yes	33.4	C
F-28	N/S Connector and Scheller Connector (N)	AM	No		
		PM	No		
F-29	N/S Connector and Scheller Avenue	AM	Yes	26.3	C
		PM	Yes	27.0	C
F-30	N/S Connector and Scheller Connector (S)	AM	Yes	41.1	D
		PM	Yes	53.0	D
F-31	North Santa Teresa Boulevard and Industrial Parkway	AM	Yes	28.6	C
		PM	Yes	31.4	C

Table 11
Future Coyote Valley Intersection Levels of Service Summary

Study Number		Peak Hour	Signal Warrant Met?	Ave. Delay/a/	LOS
F-32	North Santa Teresa Boulevard and Central Loop Road	AM	No		
		PM	No		
F-33	North Santa Teresa Boulevard and Outer Lake Road	AM	No		
		PM	No		
F-34	Fifth Street and Lakeside Drive	AM	No		
		PM	No		
F-35	Lakeside Drive and Sixth Street	AM	No		
		PM	No		
F-36	Lakeside Drive and East Bailey Avenue	AM	Yes	16.6	B
		PM	Yes	15.6	B
F-37	Lakeside Drive and Ninth Street	AM	No		
		PM	No		
F-38	Lakeside Drive and Tenth Street	AM	Yes	35.1	D
		PM	Yes	69.2	E
F-39	South Santa Teresa Boulevard and Lakeside Drive	AM	Yes	24.7	C
		PM	Yes	29.3	C
F-40	South Santa Teresa Boulevard and West Central Boulevard	AM	Yes	13.0	B
		PM	Yes	13.8	B
F-41	South Santa Teresa Boulevard and East Central Boulevard	AM	Yes	14.2	B
		PM	Yes	11.2	B
F-42	South Santa Teresa Boulevard and Coyote Drive	AM	No		
		PM	No		
F-43	Coyote Creek Road and Palm Avenue	AM	No		
		PM	No		
F-44	Coyote Creek Road and Coyote Drive	AM	No		
		PM	No		
F-45	Outer Lake Road and Fifth Street	AM	No		
		PM	No		
F-46	Outer Lake Road and Sixth Street	AM	No		
		PM	No		
F-47	Outer Lake Road and East Bailey Avenue	AM	Yes	26.7	C
		PM	Yes	31.9	C
F-48	Outer Lake Road and Eighth Street	AM	No	21.2	C
		PM	Yes	19.8	B
F-49	Outer Lake Road and Tenth Street	AM	Yes	25.3	C
		PM	Yes	35.5	D
F-50	Central Loop Road and Fifth Street	AM	No		
		PM	No		
F-51	Central Loop Road and Sixth Street	AM	No		
		PM	No		
F-52	Central Loop Road and East Bailey Avenue	AM	Yes	41.4	D
		PM	Yes	67.3	E
F-53	Central Loop Road and Eighth Street	AM	Yes	42.9	D
		PM	Yes	37.3	D
F-54	Central Loop Road and Tenth Street	AM	Yes	34.1	C
		PM	Yes	30.4	C
F-55	Central Loop Road and West Central Boulevard	AM	No		
		PM	No		
F-56	Central Loop Road and East Central Boulevard	AM	No		
		PM	No		
F-57	Hillside Road and West Bailey Avenue	AM	Roundabout	6.4	A
		PM	Roundabout	7.0	A
F-58	Sobrato Road and West Bailey Avenue	AM	Roundabout	6.3	A
		PM	Roundabout	10.8	B
F-59	Patane Way and Industrial Parkway	AM	No	8.9	A
		PM	Yes	13.4	B
F-60	Coyote Creek Road and Eighth Street	AM	Yes	24.1	C
		PM	Yes	18.9	B

/a/ Reported delay based on average control delay as calculated by TRAFFIX using HCM 2000 methodology

- Indicates LOS E conditions

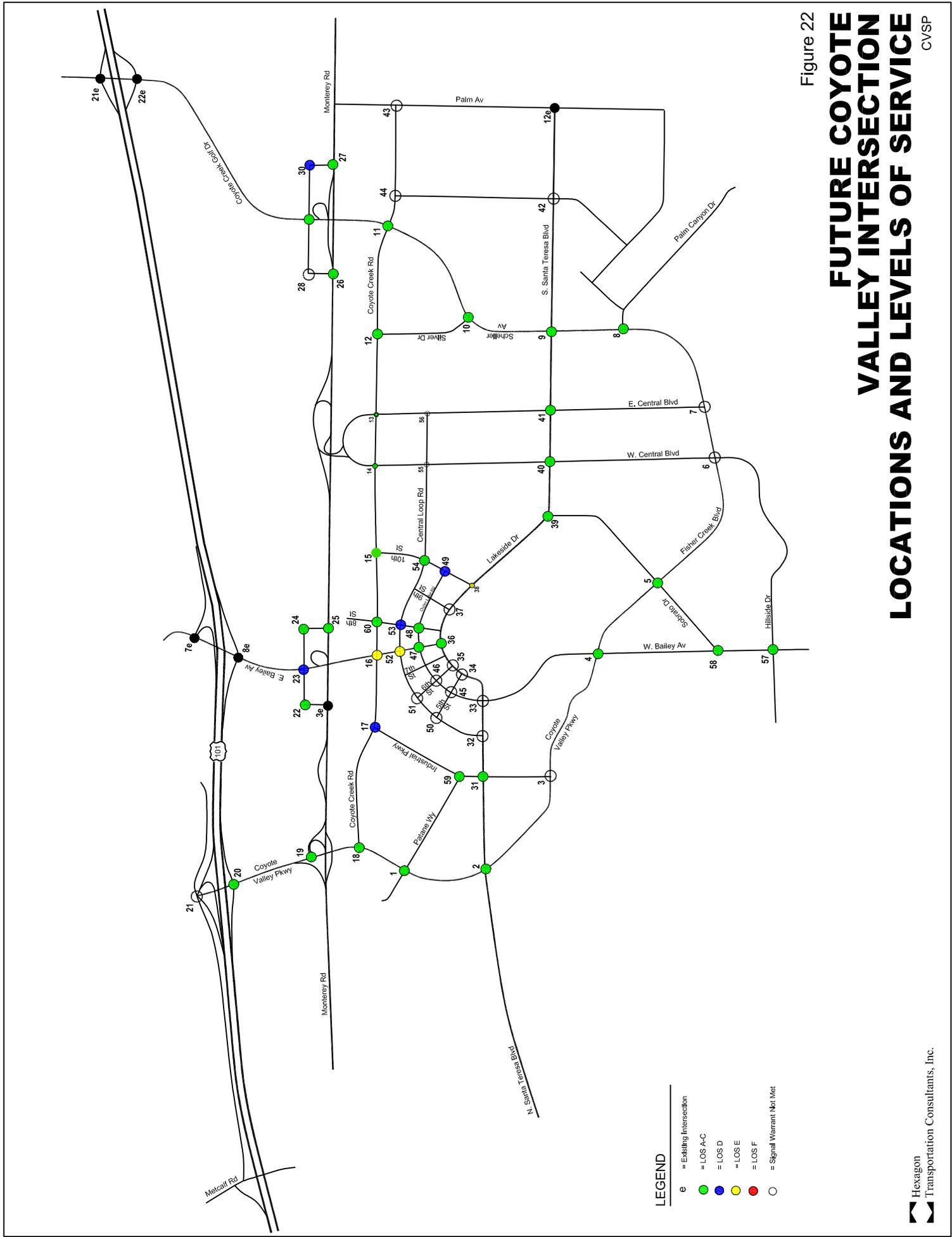


Figure 22
FUTURE COYOTE VALLEY INTERSECTION LOCATIONS AND LEVELS OF SERVICE
 CVSP

**Table 12
Year 2005 Plus CVSP Project Conditions Unacceptable Intersection Levels of
Service**

Study Number	Peak Hour	Count Date	Background 2005 with CVRP		Project Conditions 2005 with CVSP			
			Ave. Delay/a/	LOS	Ave. Delay/a/	LOS	Incr. In Crit. Delay	Incr. In Crit. V/C
City of San Jose Signalized Intersections								
24	McLaughlin Avenue and Tully Road*	AM 11/09/04	49.4	D	49.4	D	-0.1	
		PM 09/09/04	74.7	E	84.7	F	17.9	0.047
26	Senter Road and Tully Road*	AM 09/08/04	42.4	D	42.7	D	0.6	0.01
		PM 09/08/04	56	E+	56.5	E+	0.5	0.004
28	Capitol Expressway and Quimby Road*	AM 03/05/03	59	E+	60.5	E	1.7	0.009
		PM 10/17/04	66.3	E	66.8	E	1.1	0.003
29	Capitol Expressway and Aborn Road*	AM 01/01/04	88.2	F	88.9	F	1.1	0.003
		PM 09/29/04	55.2	E+	56.3	E+	2	0.023
30	Capitol Expressway and Silver Creek Road*	AM 01/01/04	158.7	F	159.9	F	1.1	0.002
		PM 09/15/04	98.4	F	104.4	F	10.8	0.037
31	McLaughlin Avenue and Capitol Expressway*	AM 01/01/04	45.6	D	46.3	D	-4.2	0.022
		PM 09/16/04	51.2	D-	55.2	E+	7.6	0.03
32	Senter Road and Captiol Expressway*	AM 01/01/04	59.2	E+	61	E	1.9	0.008
		PM 10/05/04	48	D	49.5	D	2.9	0.021
39	US 101 and Blossom Hill Road (E)*	AM 09/29/04	46.1	D	77.7	E-	38.5	0.102
		PM 09/29/04	94.4	F	110.7	F	20.7	0.05
40	US 101 and Blossom Hill Road (W)*	AM 09/30/04	125.7	F	138.8	F	22.7	0.053
		PM 09/30/04	153.3	F	162.9	F	18.5	0.042
56	Monterey Road and Bernal Road (S)*	AM 09/21/04	36.6	D+	36.6	D+	8.8	0.015
		PM 09/21/04	36.1	D+	76.7	E-	47.1	0.135
81	Almaden Expressway and Camden Avenue*	AM 00/00/04	58.1	E+	61.3	E	3	0.037
		PM 10/12/04	58	E+	59.8	E+	0.4	0.039
84	Almaden Expressway and Coleman Road*	AM 01/01/04	52.3	D-	56.2	E+	8	0.049
		PM 10/07/04	51.8	D-	53.1	D-	1.4	0.021
86	Almaden Expressway and Blossom Hill Road*	AM 00/00/04	51.8	D-	53.6	D-	2.3	0.021
		PM 10/06/04	72.2	E	74.6	E	5.1	0.014
87	Almaden Expressway and Almaden Plaza Way*	AM 00/00/04	22.6	C+	22.1	C+	-0.5	-0.004
		PM 10/14/04	79.2	E-	83.2	F	15.3	-0.041
88	Almaden Expressway and SR 85*	AM 00/00/04	21.2	C+	22.6	C+	-0.4	0.041
		PM 10/14/04	97.4	F	97.3	F	0.1	0.018
92	US 101 and Bernal Road (E)	AM 05/19/05	161.2	F	223.6	F	77.2	0.175
		PM 05/19/05	72.9	E	87.5	F	15.1	0.049
94	SR 85 and Bernal Road*	AM 09/21/04	93.3	F	53.8	D-	-60.6	-0.156
		PM 09/21/04	91	F	81.7	F	59.5	0.108
City of Morgan Hill Signalized Intersections								
123	Monterey Road and Old Monterey Road	AM 05/04/05	11	B+	11.3	B+	7.9	0.003
		PM 05/03/05	25	C	46.4	D	39.4	0.127
138	Butterfield Boulevard and Dunne Avenue	AM 10/05/04	38.3	D+	37.4	D+		0.002
		PM 10/05/04	41.9	D	42.6	D	0.9	0.013
San Martin Signalized Intersections								
154	Monterey Road and San Martin Avenue	AM 05/04/05	54.5	D-	59.4	E+	5.7	0.021
		PM 05/04/05	31.4	C	31	C	-4.8	-0.029
City of Gilroy Signalized Intersections								
167	Monterey Road and Masten Avenue	AM 05/11/05	33.6	C-	35.9	D+	3.5	0.011
		PM 05/11/05	41.3	D	42.3	D	1.4	0.019
172	Wren Avenue and First Street/Hwy. 152	AM 06/08/05	27.1	C	27	C	-0.1	-0.001
		PM 06/08/05	35	D+	35.1	D+	-0.1	0.009
177	Church Street and Tenth Street	AM 10/25/05	17	B	17.1	B	0.2	0.003
		PM 10/25/05	48.8	D	49.3	D	0.9	0.007

* Denotes CMP Designated Intersection

/a/ Reported delay based on average control delay as calculated by TRAFFIX using HCM 2000 methodology

Project Impact when compared to 2005 Plus CVRP

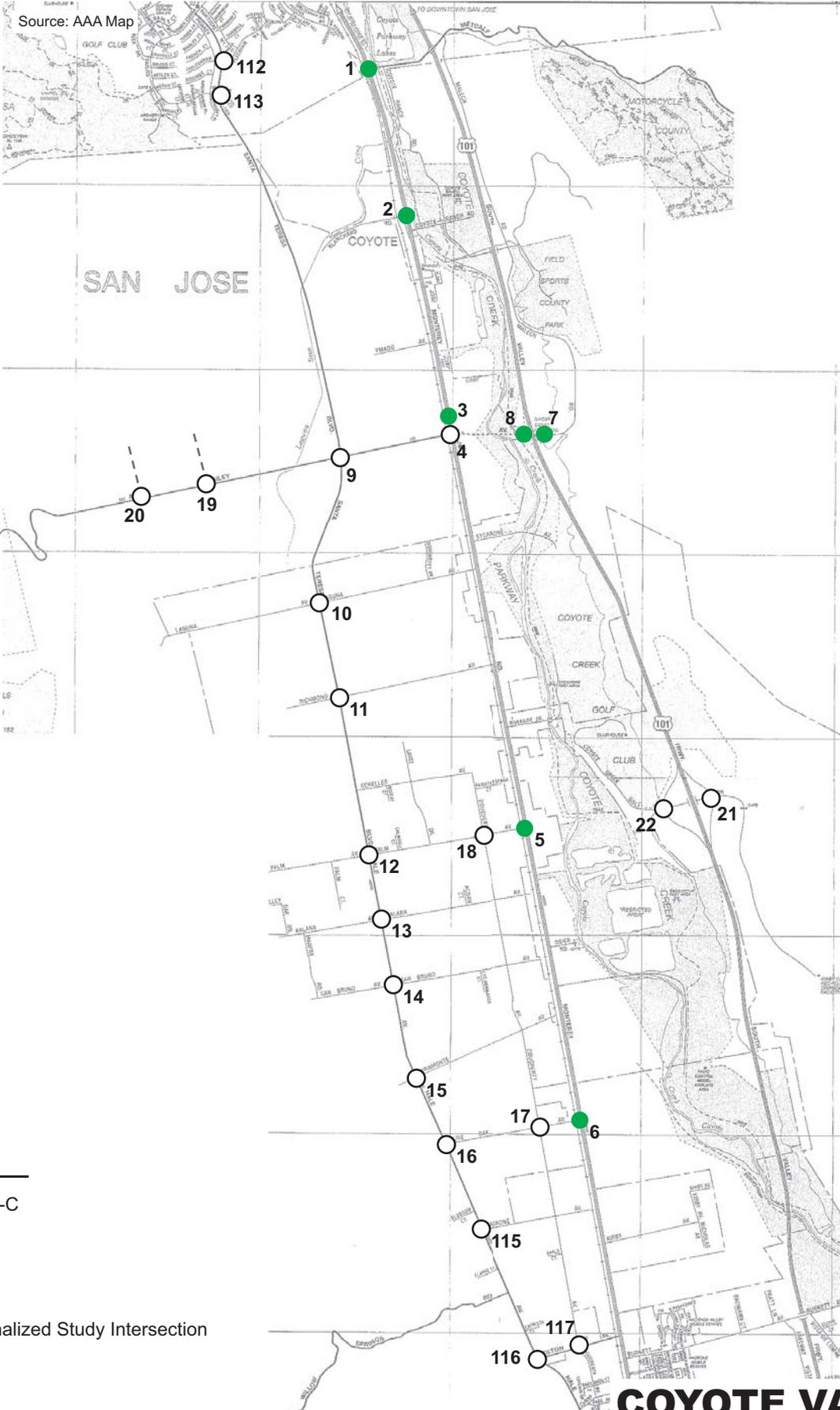


Figure 23

COYOTE VALLEY PROJECT CONDITIONS (2005 WITH CVSP)

CVSP

- LEGEND**
- = LOS A-C
 - = LOS D
 - = LOS E
 - = LOS F
 - = Unsignalized Study Intersection

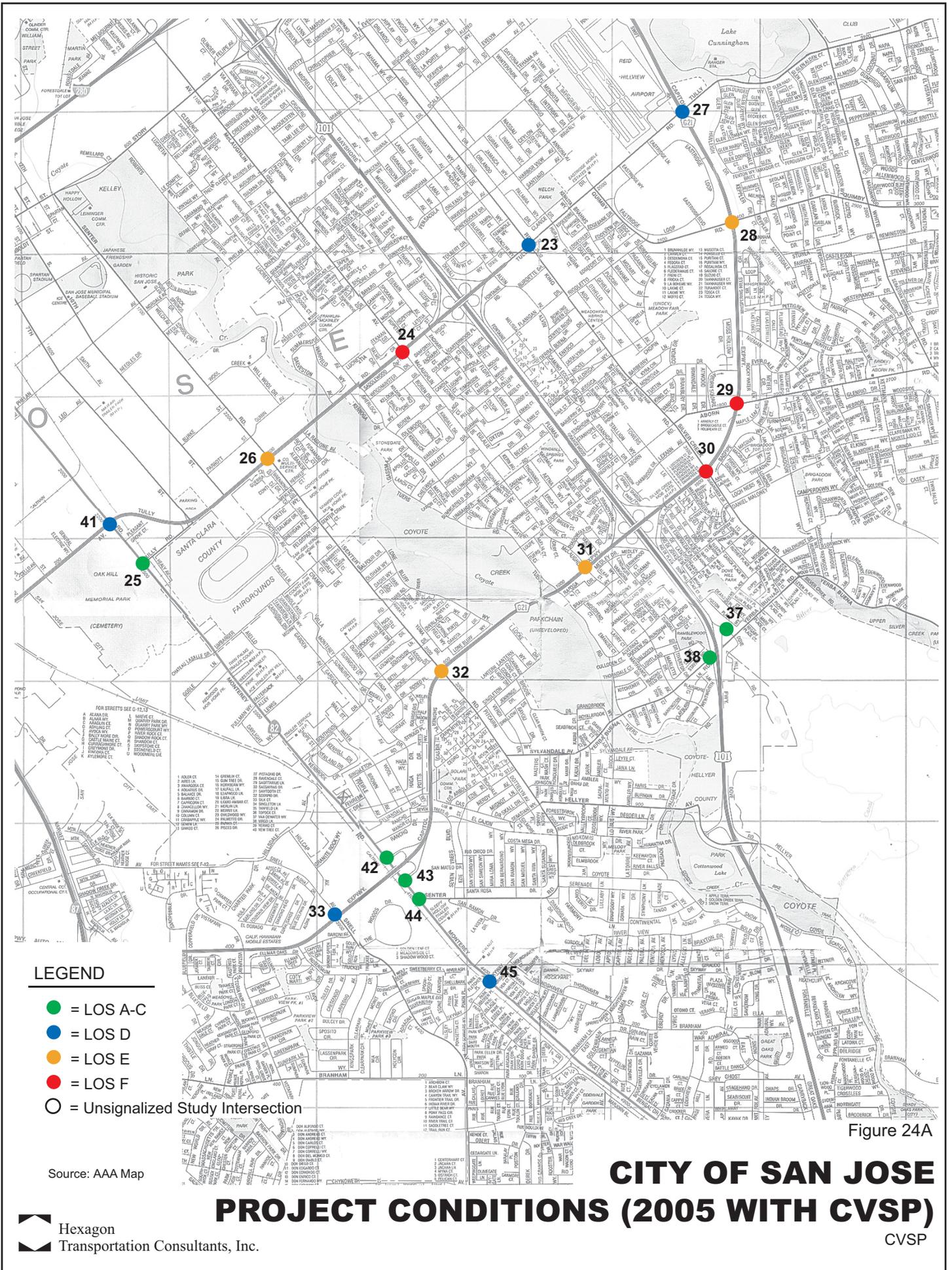


Figure 24A

CITY OF SAN JOSE

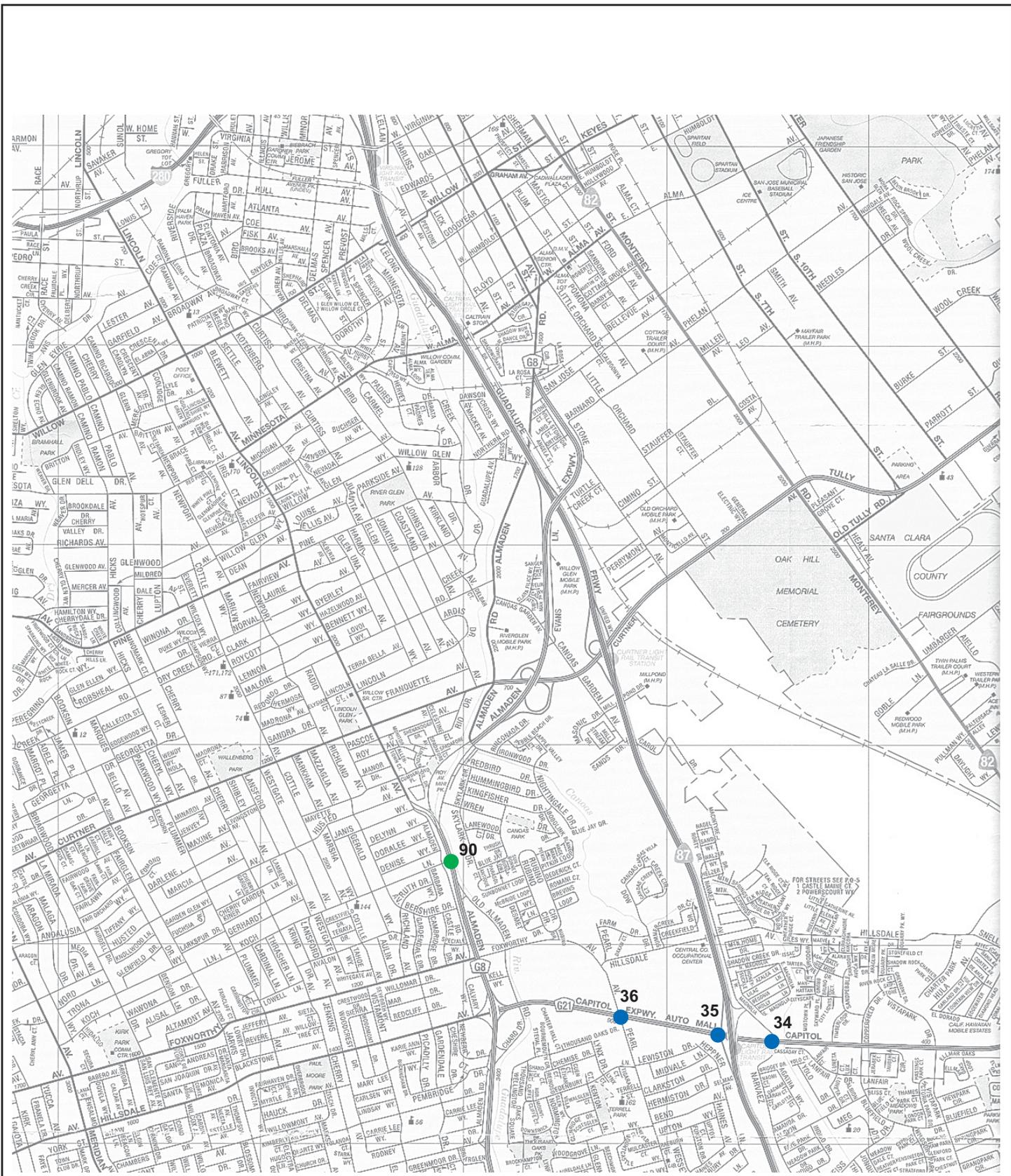
PROJECT CONDITIONS (2005 WITH CVSP)

CVSP

- LEGEND**
- = LOS A-C
 - = LOS D
 - = LOS E
 - = LOS F
 - = Unsignalized Study Intersection

Source: AAA Map

 Hexagon
 Transportation Consultants, Inc.



LEGEND

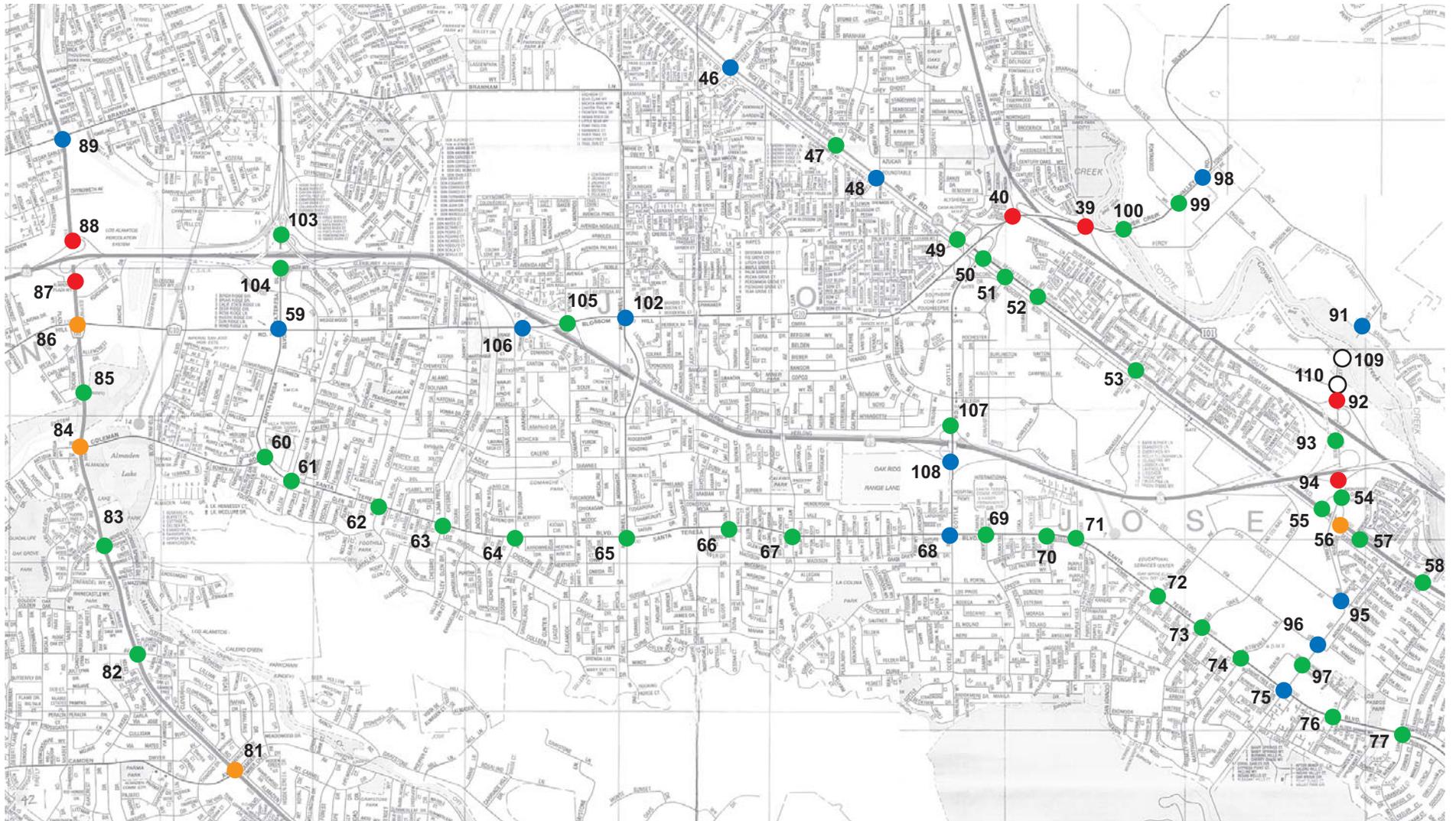
- = LOS A-C
- = LOS D
- = LOS E
- = LOS F
- = Unsignalized Study Intersection

Hexagon
 Transportation Consultants, Inc.

Source: AAA Map
Figure 24B

CITY OF SAN JOSE PROJECT CONDITIONS (2005 WITH CVSP)

CVSP



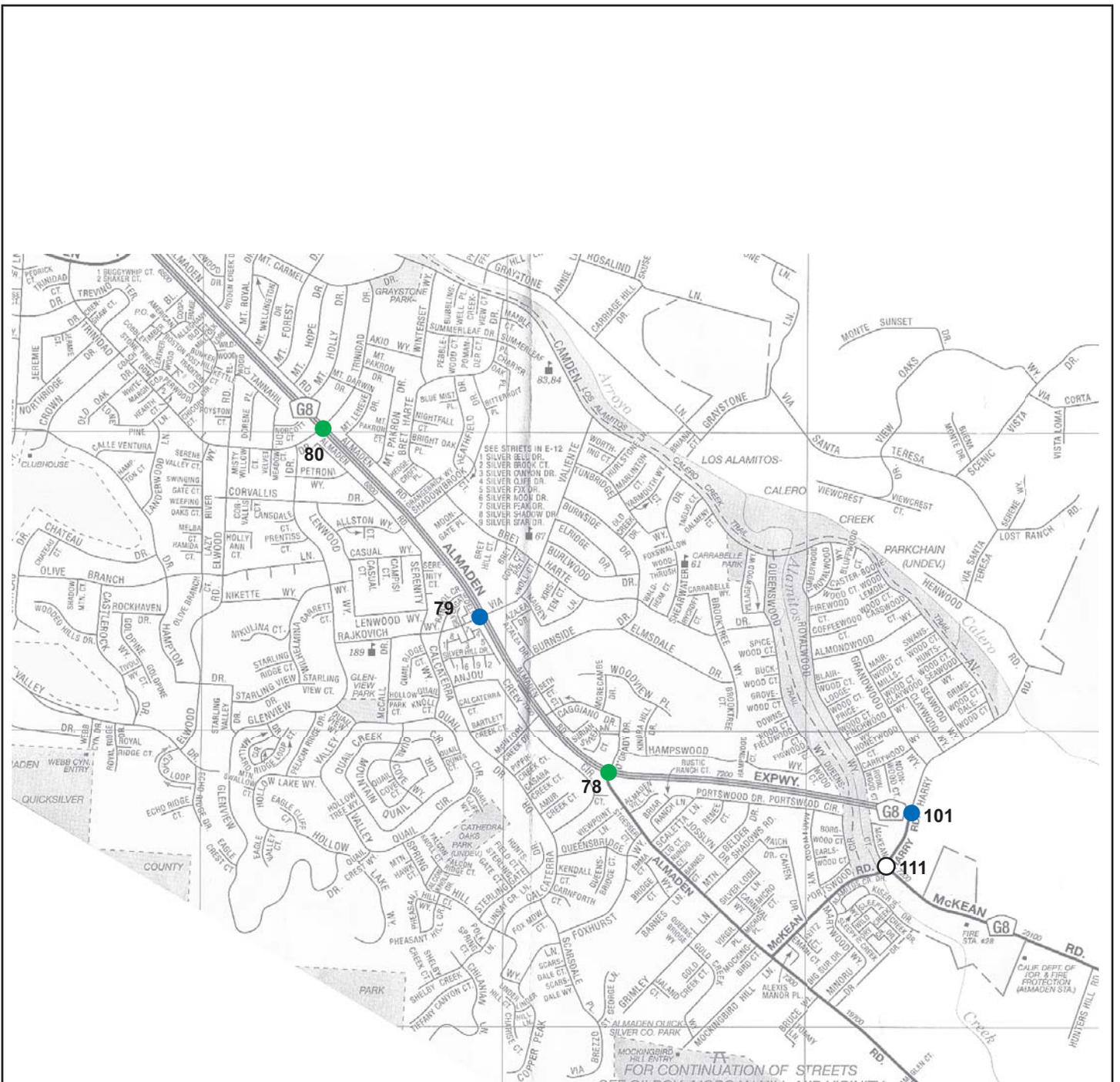
Source: AAA Map

LEGEND

- = LOS A-C
- = LOS D
- = LOS E
- = LOS F
- = Unsignalized Study Intersection

Figure 24C

**CITY OF SAN JOSE
PROJECT CONDITIONS (2005 WITH CVSP)**



LEGEND

- = LOS A-C
- = LOS D
- = LOS E
- = LOS F
- = Unsignalized Study Intersection

Source: AAA Map

 Hexagon
 Transportation Consultants, Inc.

Figure 24D

**CITY OF SAN JOSE
PROJECT CONDITIONS (2005 WITH CVSP)**

CVSP

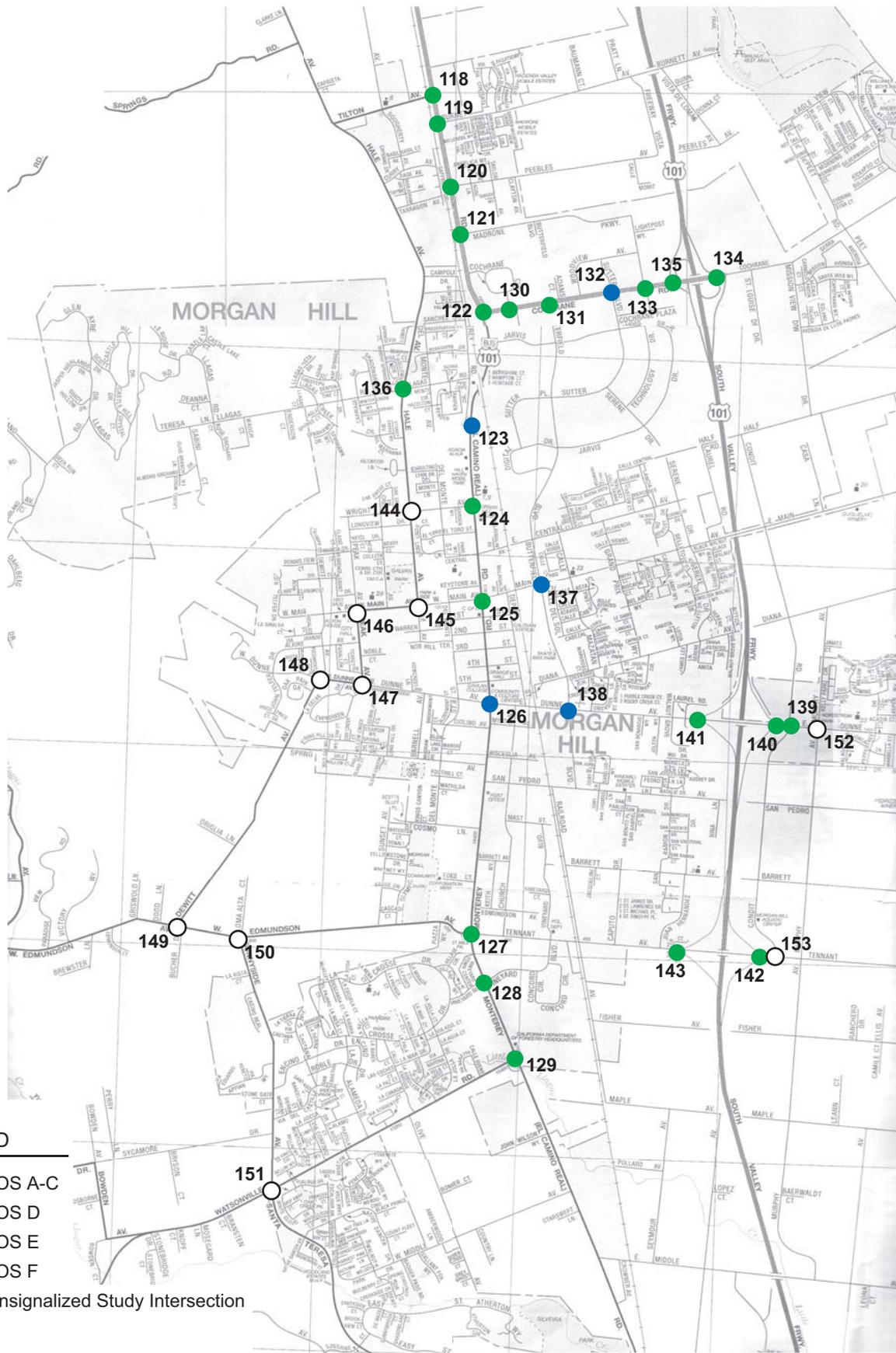


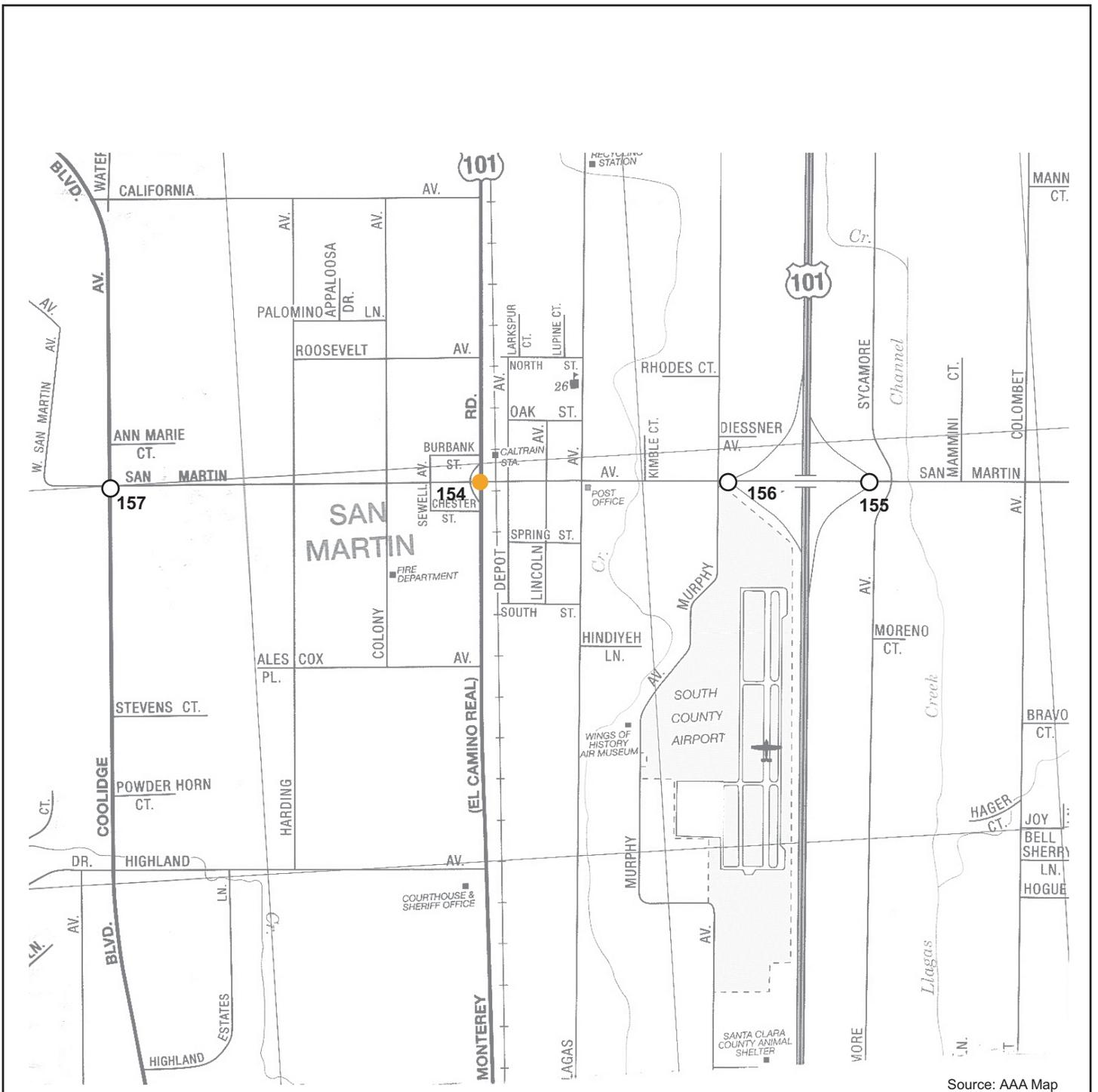
Figure 25

LEGEND

- = LOS A-C
- = LOS D
- = LOS E
- = LOS F
- = Unsignalized Study Intersection

Source: AAA Map

**CITY OF MORGAN HILL
PROJECT CONDITIONS (2005 WITH CVSP)**



Source: AAA Map

LEGEND

- = LOS A-C
- = LOS D
- = LOS E
- = LOS F
- = Unsignalized Study Intersection

Figure 26

**CITY OF SAN MARTIN
PROJECT CONDITIONS (2005 WITH CVSP)**

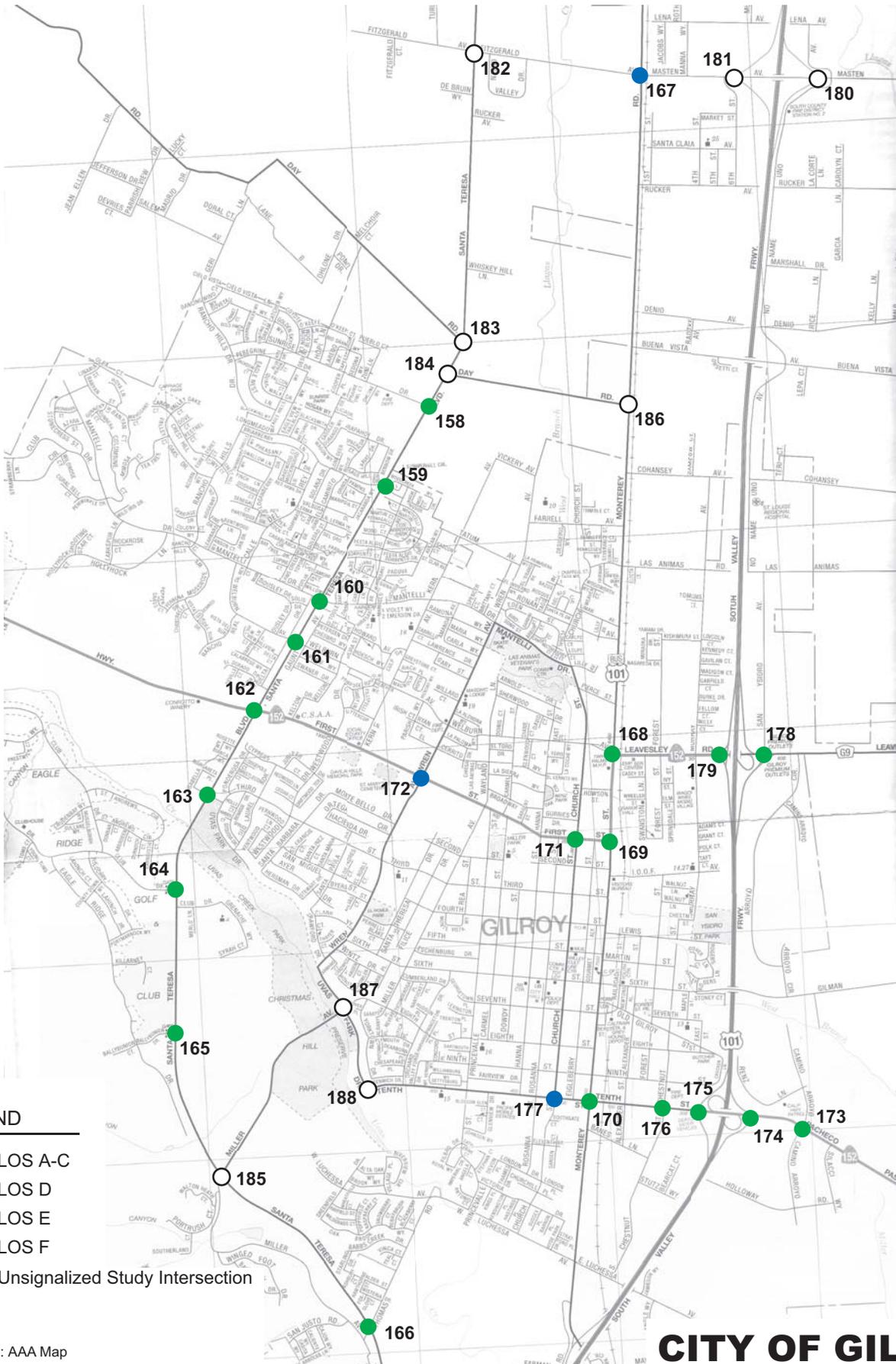


Figure 27

CITY OF GILROY PROJECT CONDITIONS (2005 WITH CVSP)

CVSP

LEGEND

- = LOS A-C
- = LOS D
- = LOS E
- = LOS F
- = Unsignalized Study Intersection

Source: AAA Map

- 39 US 101 and Blossom Hill Road (East)*
- 40 US 101 and Blossom Hill Road (West)*
- 56 Monterey Road and Bernal Road (South)*
- 84 Almaden Expressway and Coleman Road*
- 86 Almaden Expressway and Blossom Hill Road*
- 87 Almaden Expressway and Almaden Plaza Way*
- 92 US 101 and Bernal Road (East)*
- 94 SR 85 and Bernal Road*

City of Morgan Hill Signalized Intersections

- 123 Monterey Road and Old Monterey Road

San Martin Signalized Intersections

- 154 Monterey Road and San Martin Avenue

City of Gilroy Signalized Intersections

- 167 Monterey Road and Masten Avenue

A table summarizing the intersection level of service results for all study intersections and calculation sheets is included in Appendix C.

Mitigation measures were investigated for all of the identified intersection impacts. Described below are each of the necessary intersection improvements that would mitigate the identified project impacts (see Table 13 and Figures 28 through 31). The improvements identified are considered “off-site” improvements and are in addition to those roadway improvements described as part of the project in the previous section. It is expected that the project would fund or contribute a fair-share towards each of the necessary improvements.

Other City of San Jose Intersection Impacts and Mitigation Measures

The results of the level of service analysis show that 17 of the other City of San Jose study intersections located outside of Coyote Valley, all of which are CMP designated intersections, are projected to operate at an unacceptable LOS E or worse under project conditions. The project will impact 11 of the 17 intersections identified to operate at unacceptable levels. Each of the impacted intersections and recommended mitigation measures are described below.

(24) McLaughlin Avenue and Tully Road*

Impact: The level of service would be LOS E during the PM peak hour under Year 2005 with CVRP background conditions and the intersection would degrade to LOS F under project conditions. This constitutes a significant impact by both City of San Jose and CMP standards.

Mitigation Measure. The necessary improvements to mitigate the project impact at this intersection would consist of the construction of an exclusive northbound right-turn lane. The improvements would require the acquisition of right-of-way (approximately 3 feet wide and 300 feet long) along the eastside of the south approach. The intersection improvement would improve intersection operating levels to better than

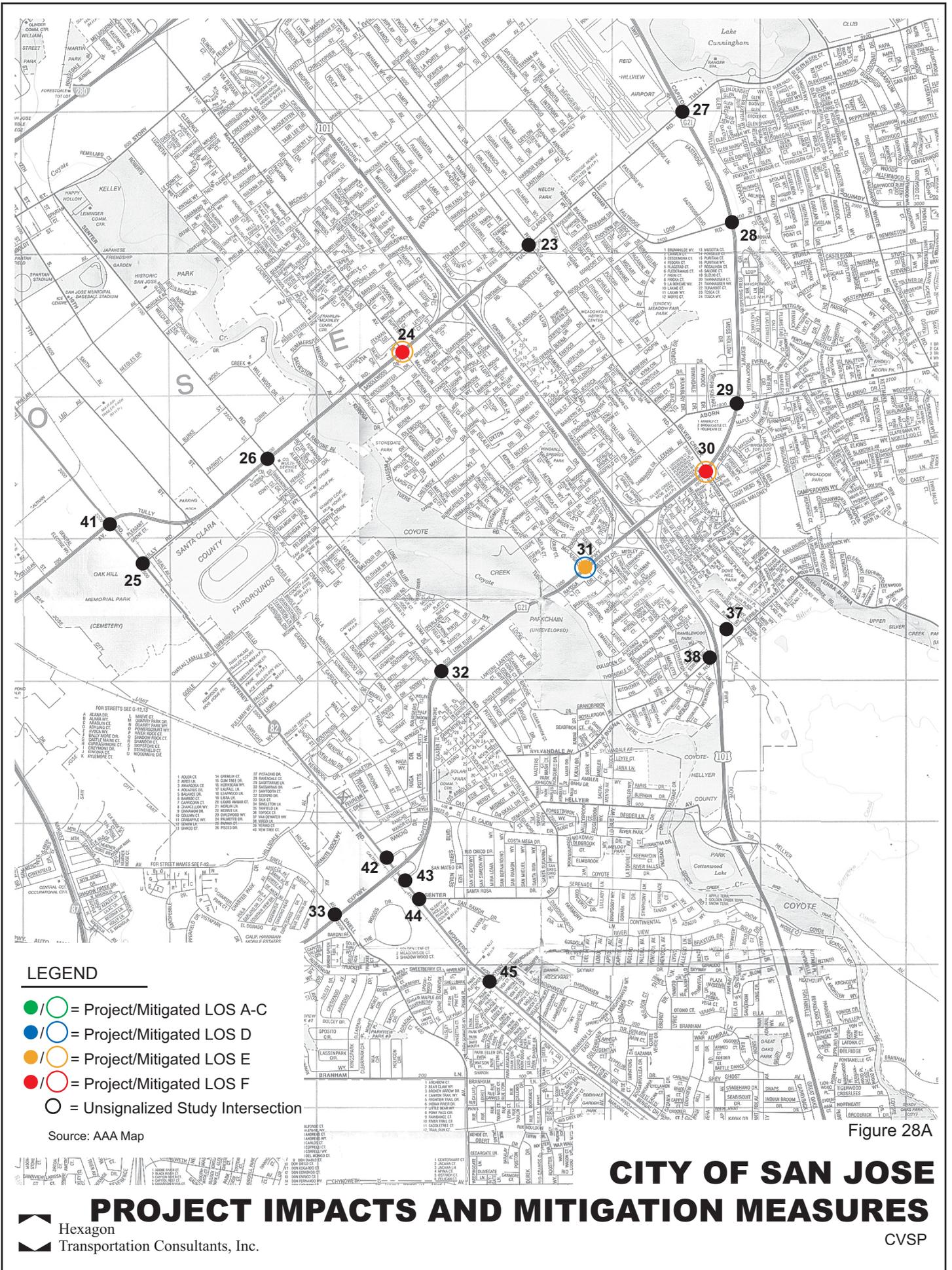
**Table 13
Year 2005 Plus CVSP Project Conditions Intersection Level of Service (Impacted Intersections with Mitigation)**

Study Number	Peak Hour	Count Date	Background 2005 with CVRP		Project Conditions 2005 with CVSP				2005w/CVSP Mitigated/b/	
			Ave. Delay/a/	LOS	Ave. Delay/a/	LOS	Incr. In Crit. Delay	Incr. In Crit. V/C	Ave. Delay/a/	LOS
City of San Jose Signalized Intersections										
24	McLaughlin Avenue and Tully Road*	AM 11/09/04	49.4	D	49.4	D	-0.1		42.4	D
		PM 09/09/04	74.7	E	84.7	F	17.9	0.047	61.8	E
26	Senter Road and Tully Road*	AM 09/08/04	42.4	D	42.7	D	0.6	0.01		
		PM 09/08/04	56	E+	56.5	E+	0.5	0.004		
28	Capitol Expressway and Quimby Road*	AM 03/05/03	59	E+	60.5	E	1.7	0.009		
		PM 10/17/04	66.3	E	66.8	E	1.1	0.003		
29	Capitol Expressway and Aborn Road*	AM 01/01/04	88.2	F	88.9	F	1.1	0.003		
		PM 09/29/04	55.2	E+	56.3	E+	2	0.023		
30	Capitol Expressway and Silver Creek Road*	AM 01/01/04	158.7	F	159.9	F	1.1	0.002	159	F
		PM 09/15/04	98.4	F	104.4	F	10.8	0.037	62.4	E
31	McLaughlin Avenue and Capitol Expressway*	AM 01/01/04	45.6	D	46.3	D	-4.2	0.022	43.5	D
		PM 09/16/04	51.2	D-	55.2	E+	7.6	0.03	52.4	D-
32	Senter Road and Captiol Expressway*	AM 01/01/04	59.2	E+	61	E	1.9	0.008		
		PM 10/05/04	48	D	49.5	D	2.9	0.021		
39	US 101 and Blossom Hill Road (E)*	AM 09/29/04	46.1	D	77.7	E-	38.5	0.102	65.4	E
		PM 09/29/04	94.4	F	110.7	F	20.7	0.05	64.6	E
40	US 101 and Blossom Hill Road (W)*	AM 09/30/04	125.7	F	138.8	F	22.7	0.053	44.8	D
		PM 09/30/04	153.3	F	162.9	F	18.5	0.042	51.2	D-
56	Monterey Road and Bernal Road (S)*	AM 09/21/04	36.6	D+	36.6	D+	8.8	0.015	19.7	B-
		PM 09/21/04	36.1	D+	76.7	E-	47.1	0.135	25.4	C
81	Almaden Expressway and Camden Avenue*	AM 00/00/04	58.1	E+	61.3	E	3	0.037		
		PM 10/12/04	58	E+	59.8	E+	0.4	0.039		
84	Almaden Expressway and Coleman Road*	AM 01/01/04	52.3	D-	56.2	E+	8	0.049	48.2	D
		PM 10/07/04	51.8	D-	53.1	D-	1.4	0.021	53	D-
86	Almaden Expressway and Blossom Hill Road*	AM 00/00/04	51.8	D-	53.6	D-	2.3	0.021	51.9	D-
		PM 10/06/04	72.2	E	74.6	E	5.1	0.014	58.6	E+
87	Almaden Expressway and Almaden Plaza Way*	AM 00/00/04	22.6	C+	22.1	C+	-0.5	-0.004	22.3	C+
		PM 10/14/04	79.2	E-	83.2	F	15.3	-0.041	50.6	D
88	Almaden Expressway and SR 85*	AM 00/00/04	21.2	C+	22.6	C+	-0.4	0.041		
		PM 10/14/04	97.4	F	97.3	F	0.1	0.018		
92	US 101 and Bernal Road (E)	AM 05/19/05	161.2	F	223.6	F	77.2	0.175	45.2	D
		PM 05/19/05	72.9	E	87.5	F	15.1	0.049	19.6	B-
94	SR 85 and Bernal Road*	AM 09/21/04	93.3	F	53.8	D-	-60.6	-0.156	27.1	C
		PM 09/21/04	91	F	81.7	F	59.5	0.108	50.4	D
City of Morgan Hill Signalized Intersections										
123	Monterey Road and Old Monterey Road	AM 05/04/05	11	B+	11.3	B+	7.9	0.003	11.1	B+
		PM 05/03/05	25	C	46.4	D	39.4	0.127	19.4	B-
138	Butterfield Boulevard and Dunne Avenue	AM 10/05/04	38.3	D+	37.4	D+		0.002		
		PM 10/05/04	41.9	D	42.6	D	0.9	0.013		
San Martin Signalized Intersections										
154	Monterey Road and San Martin Avenue	AM 05/04/05	54.5	D-	59.4	E+	5.7	0.021	37.3	D+
		PM 05/04/05	31.4	C	31	C	-4.8	-0.029	29.5	C
City of Gilroy Signalized Intersections										
167	Monterey Road and Masten Avenue	AM 05/11/05	33.6	C-	35.9	D+	3.5	0.011	32	C-
		PM 05/11/05	41.3	D	42.3	D	1.4	0.019	41.1	D
172	Wren Avenue and First Street/Hwy. 152	AM 06/08/05	27.1	C	27	C	-0.1	-0.001		
		PM 06/08/05	35	D+	35.1	D+	-0.1	0.009		
177	Church Street and Tenth Street	AM 10/25/05	17	B	17.1	B	0.2	0.003		
		PM 10/25/05	48.8	D	49.3	D	0.9	0.007		

* Denotes CMP Designated Intersection

/a/ Reported delay based on average control delay as calculated by TRAFFIX using HCM 2000 methodology

 - Project Impact when compared to 2005 Plus CVRP



LEGEND

- /○ = Project/Mitigated LOS A-C
- /○ = Project/Mitigated LOS D
- /○ = Project/Mitigated LOS E
- /○ = Project/Mitigated LOS F
- = Unsignalized Study Intersection

Source: AAA Map

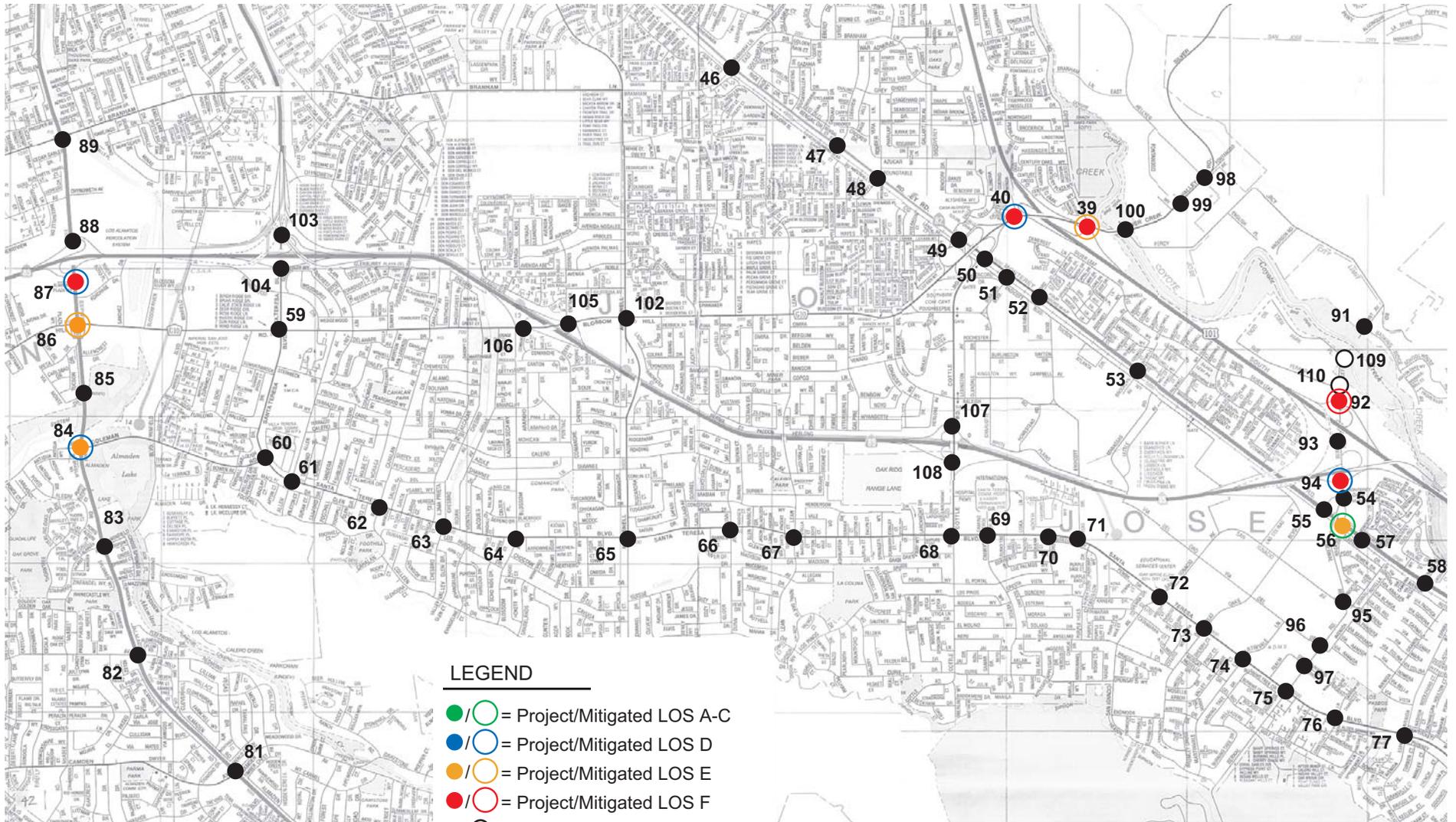
Figure 28A

CITY OF SAN JOSE

PROJECT IMPACTS AND MITIGATION MEASURES

CVSP

Hexagon
 Transportation Consultants, Inc.



LEGEND

- / ○ = Project/Mitigated LOS A-C
- / ○ = Project/Mitigated LOS D
- / ○ = Project/Mitigated LOS E
- / ○ = Project/Mitigated LOS F
- = Unsignalized Study Intersection

Source: AAA Map

Figure 28B

CITY OF SAN JOSE PROJECT IMPACTS AND MITIGATION MEASURES

background conditions, though the intersection will continue to operate at LOS E during the PM peak hour.

(30) Capitol Expressway and Silver Creek Boulevard*

Impact: The level of service would be LOS F during the PM peak hour under Year 2005 with CVRP background conditions and the addition of project traffic would cause 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 .01 or more under project conditions. This constitutes a significant impact by both City of San Jose and CMP standards.

Mitigation Measure. The necessary improvements to mitigate the project impact at this intersection would consist of the addition of a separate eastbound right-turn lane. The improvement would fit within the existing right-of-way, but would require restriping. The intersection improvement would improve intersection operating levels to better than background conditions, though the intersection will continue to operate at LOS E during the PM peak hour.

(31) McLaughlin Avenue and Capitol Expressway*

Impact: The level of service would be LOS D during the PM peak hour under Year 2005 with CVRP background conditions and the intersection would degrade to LOS E under project conditions. This constitutes a significant impact by City of San Jose standards.

Mitigation Measure. The necessary improvements to mitigate the project impact at this intersection would consist of the re-striping of the southbound leg of the intersection to provide two exclusive left-turn lanes, one through lane, and one right-turn lane. The re-stripe would also require that the signal phasing of the intersection be adjusted to provide protected phasing both northbound and southbound. The intersection improvement would improve intersection operating levels LOS D during the PM peak hour.

(39) US 101 and Blossom Hill Road (East)*

Impact: The level of service would be LOS F during the PM peak hour under Year 2005 with CVRP background conditions and the addition of project traffic would cause 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 .01 or more under project conditions. This constitutes a significant impact by both City of San Jose and CMP standards.

Mitigation Measure. The necessary improvements to mitigate the project impact at this intersection would consist of the widening of the Blossom Hill Road over-crossing of US 101. The overpass widening is planned as part of the Edenvale Assessment District, though not completely funded. This project should therefore contribute a fair-share towards the planned improvements. The intersection improvement would improve intersection operating levels to better than background conditions, though the intersection will continue to operate at LOS E during both peak hours.

(40) US 101 and Blossom Hill Road (West)*

Impact: The level of service would be LOS F during both peak hours under Year 2005 with CVRP background conditions and the addition of project traffic would cause 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 .01 or more under project conditions. This constitutes a significant impact by both City of San Jose and CMP standards.

Mitigation Measure. The necessary improvements to mitigate the project impact at this intersection would consist of the widening of the Blossom Hill Road over-crossing of US 101. The overpass widening is planned as part of the Edenvale Assessment District, though not completely funded. This project should therefore contribute a fair-share towards the planned improvements. The intersection improvement would improve intersection operating levels to LOS D during both peak hours.

(56) Monterey Road and Bernal Road (South)*

Impact: The level of service would be LOS D during the PM peak hour under Year 2005 with CVRP background conditions and the intersection would degrade to LOS E under project conditions. This constitutes a significant impact by City of San Jose standards.

Mitigation Measure. The necessary improvements to mitigate the project impact at this intersection would consist of the conversion of the northbound controlled right-turn lane to a uncontrolled right-turn lane with its own receiving lane. The improvement would fit within the existing right-of-way, but would require restriping and relocation of curbing. The intersection improvement would improve intersection operating levels to LOS C during the PM peak hour.

(84) Almaden Expressway and Coleman Road*

Impact: The level of service would be LOS D during the AM peak hour under Year 2005 with CVRP background conditions and the intersection would degrade to LOS E under project conditions. This constitutes a significant impact by City of San Jose standards.

Mitigation Measure. The necessary improvements to mitigate the project impact at this intersection would consist of the addition of a second eastbound left-turn lane. The improvement would fit within the existing right-of-way, but would require restriping. The intersection improvement would improve intersection operating levels to LOS D during the AM peak hour.

(86) Almaden Expressway and Blossom Hill Road*

Impact: The level of service would be LOS E during the PM peak hour under Year 2005 with CVRP background conditions and the addition of project traffic would cause 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 .01 or more under project conditions. This constitutes a significant impact by City of San Jose standards.

Mitigation Measure. The necessary improvements to mitigate the project impact at this intersection would consist of the addition of a separate westbound right-turn lane. Though existing striping provides a short right-turn lane, it does not operate as a right-turn because queued vehicles headed westbound along Blossom Hill Road constantly block it. The improvement would fit within the existing right-of-way, but would require restriping. The intersection improvement would improve intersection operating levels to better than background conditions, though the intersection will continue to operate at LOS E during the PM peak hour.

(88) Almaden Expressway and Almaden Plaza Way*

Impact: The level of service would be LOS E during the PM peak hour under Year 2005 with CVRP background conditions and the intersection would degrade to LOS F under project conditions. This constitutes a significant impact by both City of San Jose and CMP standards.

Mitigation Measure. The necessary improvements to mitigate the project impact at this intersection would consist of the widening of southbound Almaden Expressway to accommodate five lanes. The widening is only necessary at the intersection to improve intersection operating levels, but to maintain efficient flow along southbound Almaden Expressway the widening would need to run through Blossom Hill Road. The improvements would require the acquisition of right-of-way (up to approximately 6 feet wide and 400 feet long) along the eastside of Almaden Expressway between the Almaden Plaza Way and Blossom Hill Road. The intersection improvement would improve intersection operating levels to LOS D during the PM peak hour.

(92) US 101 and Bernal Road (East)*

Impact: The level of service would be LOS F during the AM peak hour under Year 2005 with CVRP background conditions and the addition of project traffic would cause 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 .01 or more under project conditions. This constitutes a significant impact by both City of San Jose and CMP standards.

Mitigation Measure. The necessary improvements to mitigate the project impact at this intersection would consist of the widening of Bernal Road to six-lanes. Bernal Road would need to be widened to six-lanes between the southbound US 101 off ramp and through the northbound off-ramp. The improvement will require adjustment of the US 101 over-crossing structure of Bernal Road. The intersection improvement would improve intersection operating levels to LOS D during the AM peak hour.

(94) SR 85 and Bernal Road*

Impact: The level of service would be LOS F during the PM peak hour under Year 2005 with CVRP background conditions and the addition of project traffic would cause 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 .01 or more under project conditions. This constitutes a significant impact by both City of San Jose and CMP standards.

Mitigation Measure. The necessary improvement to mitigate the project impact at this intersection would consist of the addition of a second westbound (on the SR 85 off-ramp) left-turn lane. The improvement would fit within the existing right-of-way, but would require restriping and signal modifications. The intersection improvement would improve intersection operating levels to LOS D during the PM peak hour.

City of Morgan Hill Intersection Impacts and Mitigation Measures

The results of the level of service analysis show that two of the City of Morgan Hill study intersections are projected to operate at unacceptable levels under project conditions. The project will impact one of the two intersections projected to operate at unacceptable levels in the City of Morgan Hill as described

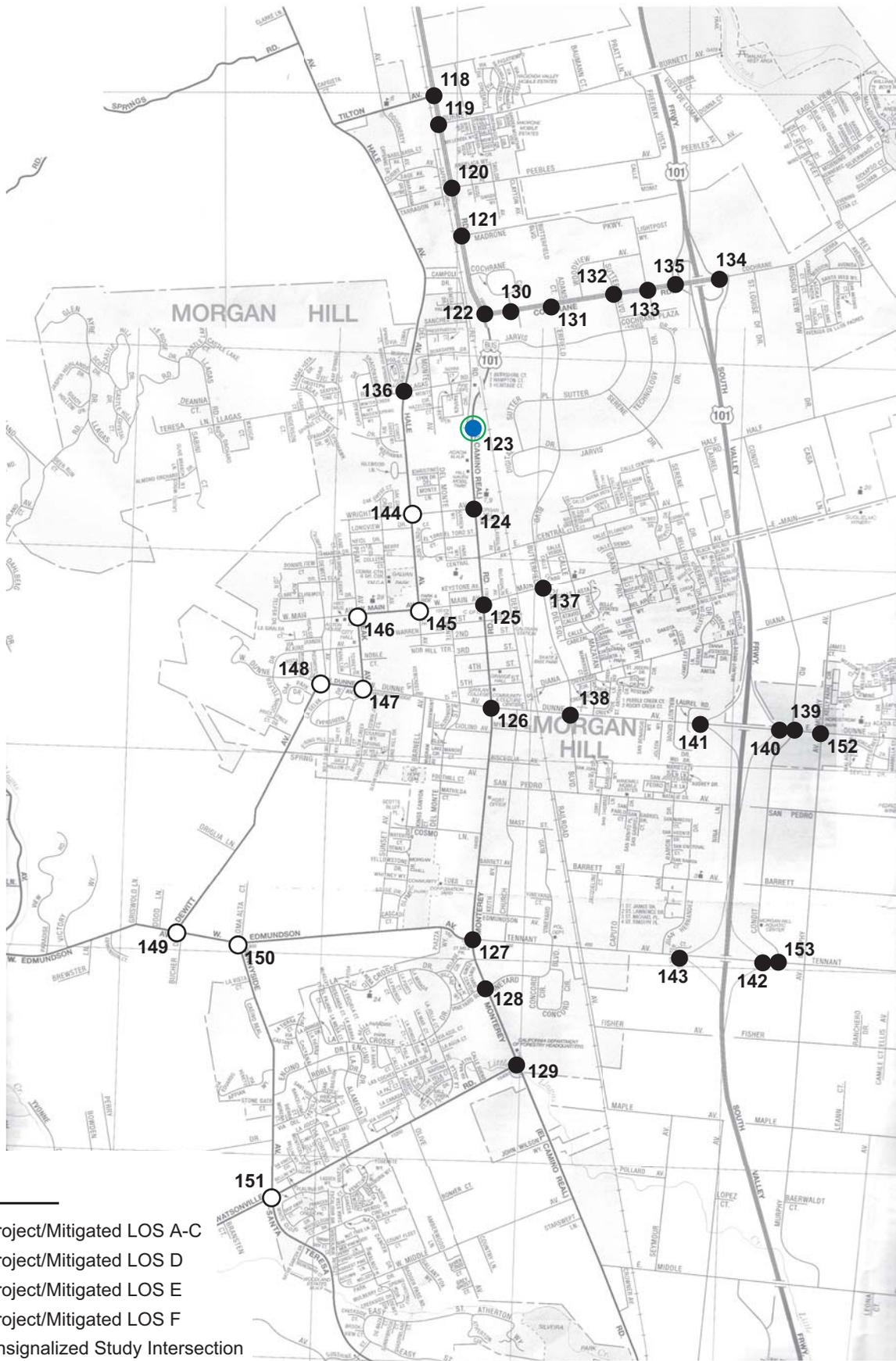


Figure 29

LEGEND

- /○ = Project/Mitigated LOS A-C
- /○ = Project/Mitigated LOS D
- /○ = Project/Mitigated LOS E
- /○ = Project/Mitigated LOS F
- = Unsignalized Study Intersection

Source: AAA Map

CITY OF MORGAN HILL

PROJECT IMPACTS AND MITIGATION MEASURES

below.

(123) Monterey Road and Old Monterey Road

Impact: The level of service would be LOS C during the PM peak hour under background conditions and the intersection would degrade to LOS D under project conditions. This constitutes a significant impact by City of Morgan Hill standards.

Mitigation Measure. The necessary improvement to mitigate the project impact at this intersection would consist of the addition of a separate southbound right-turn lane. The improvement would fit within the existing right-of-way, but would require restriping. The intersection improvement would improve intersection operating levels to LOS B during the PM peak hour.

San Martin Intersection Impacts and Mitigation Measures

The level of service results for intersections located in the San Martin show that measured against the San Martin level of service standards, one intersection is projected to operate at unacceptable levels and be impacted by the project under project conditions. The impacted intersection and recommended mitigation measure is described below.

(154) Monterey Road and San Martin Avenue

Impact: The level of service would be LOS D during the AM peak hour under background conditions and the intersection would degrade to LOS E under project conditions. This constitutes a significant impact by San Martin standards.

Mitigation Measure. The necessary improvements to mitigate the project impact at this intersection would consist of the addition of a separate westbound right-turn lane. The improvement would fit within the existing right-of-way, but would require restriping and signal modifications. The implementation of this improvement would improve intersection level of service to LOS D during the AM peak hour.

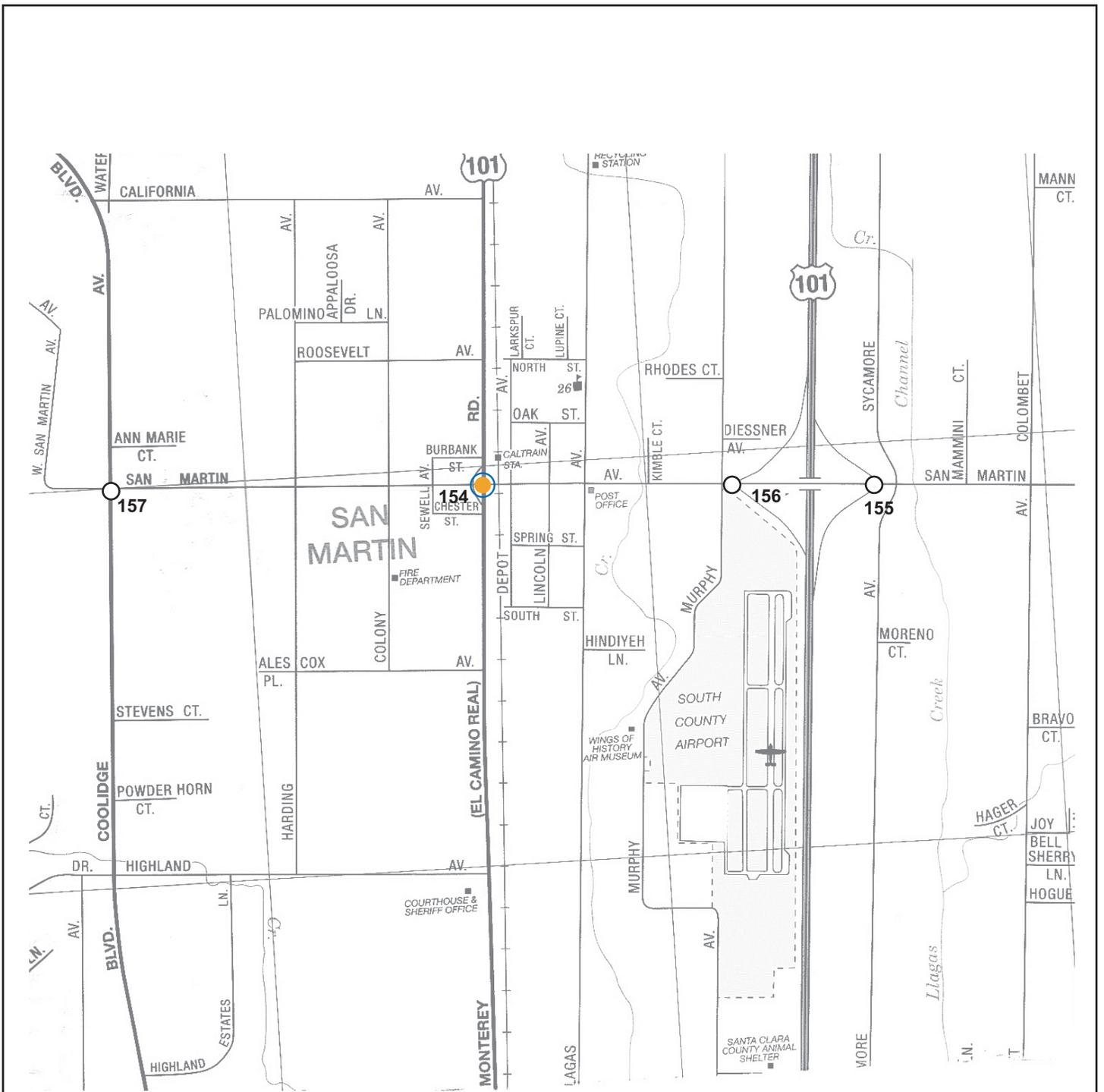
City of Gilroy Intersection Impacts and Mitigation Measures

The results of the level of service analysis show that three of the City of Gilroy study intersections are projected to operate at unacceptable levels under project conditions. The project will impact one of the three intersections projected to operate at unacceptable levels in the City of Gilroy as described below.

(167) Monterey Road and Masten Avenue

Impact: The level of service would be LOS C during the AM peak hour under background conditions and the intersection would degrade to LOS D under project conditions. This constitutes a significant impact by City of Gilroy standards.

Mitigation Measure. The necessary improvements to mitigate the project impact at this intersection would consist of the addition of a separate eastbound right-turn lane. The improvement may require the acquisition of right-of-way. The implementation of this improvement would improve intersection level of service to LOS C during the AM peak hour.



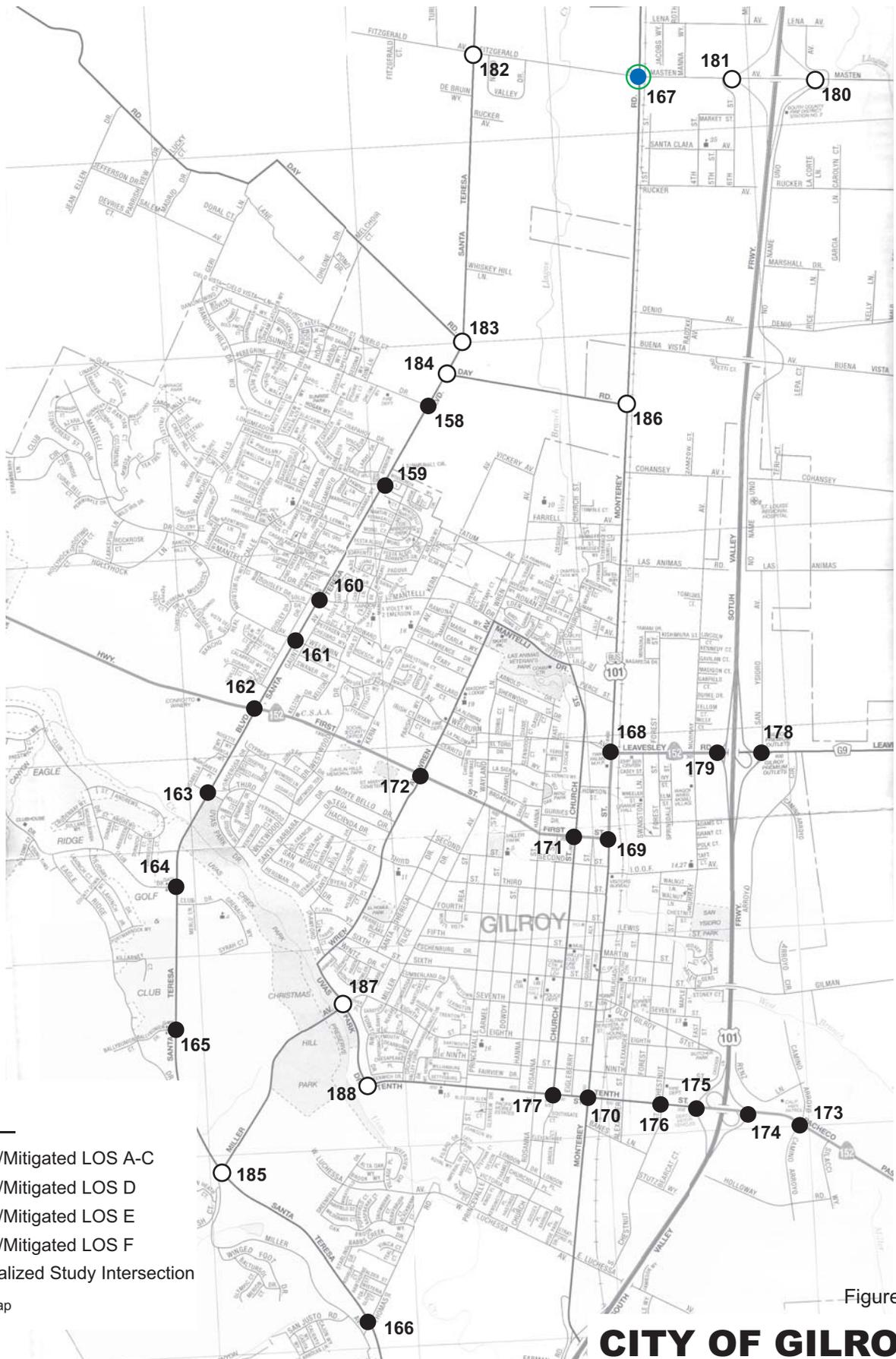
LEGEND

- /○ = Project/Mitigated LOS A-C
- /○ = Project/Mitigated LOS D
- /○ = Project/Mitigated LOS E
- /○ = Project/Mitigated LOS F
- = Unsignalized Study Intersection

Source: AAA Map

Figure 30

CITY OF SAN MARTIN PROJECT IMPACTS AND MITIGATION MEASURES



LEGEND

- /○ = Project/Mitigated LOS A-C
- /○ = Project/Mitigated LOS D
- /○ = Project/Mitigated LOS E
- /○ = Project/Mitigated LOS F
- = Unsignalized Study Intersection

Source: AAA Map

Figure 31

CITY OF GILROY
PROJECT IMPACTS AND MITIGATION MEASURES

Signal Warrant Analysis

Peak-hour signal warrant checks (*Caltrans Traffic Manual*, Chapter 9, Warrant 11) were performed at all unsignalized study intersections. Signal warrants are checked in order to identify the need for a traffic signal due to project peak-hour volumes. For those intersections that are identified as meeting signal warrants, it is expected that the project would fund or contribute a fair-share towards each of the signal installations. The signal installations may require additional intersection improvements such as curb removal/reconstruction, adjustment of lane configurations and re-stripping. Necessary improvements will be identified during the actual design of each signal.

Results of the signal warrant analysis are presented in Table 14. The signal warrant sheets are included in Appendix D.

City of San Jose Unsignalized Intersections

The signal warrant analysis showed that three of the nine unsignalized intersections analyzed within the City of San Jose would warrant a traffic signal under project conditions. The following intersections meet Caltrans' Signal Warrant under project conditions:

110	Rue Ferrari and Silicon Valley Boulevard
111	McKean Road and Harry Road
114	McKean Road and Bailey Avenue

City of Morgan Hill Unsignalized Intersections

The signal warrant analysis showed that four of the 10 unsignalized intersections analyzed within the City of Morgan Hill would warrant a traffic signal under project conditions. The following intersections meet Caltrans' Signal Warrant under project conditions:

144	Hale Avenue and Wright Avenue
145	Hale Avenue and Main Avenue
151	Santa Teresa Boulevard and Watsonville Road
152	Murphy Avenue and Dunne Avenue

San Martin Unsignalized Intersections

The signal warrant analysis showed that two of the three unsignalized intersections analyzed within San Martin would warrant a traffic signal under project conditions. The following intersections meet Caltrans' Signal Warrant under project conditions:

155	US 101 and San Martin Avenue (E)
156	US 101 and San Martin Avenue (W)

City of Gilroy Unsignalized Intersections

The signal warrant analysis showed that all of the eight unsignalized intersections analyzed within the City of Gilroy would warrant a traffic signal under project conditions. The following intersections meet Caltrans' Signal Warrant under project conditions:

180	US 101 and Masten Avenue (E)
-----	------------------------------

**Table 14
Signal Warrant Analysis Summary**

Study Number	Intersection Name	Scenario					
		Existing		2005 + CVRP		2005 + CVSP	
		AM	PM	AM	PM	AM	PM
City of San Jose Unsignalized Intersections							
109	Eden Park Place & Silicon Valley Boulevard	No	No	No	No	No	No
110	Rue Ferrari & Silicon Valley Boulevard	No	No	Yes	No	Yes	Yes
111	McKean Road & Harry Road	No	No	Yes	No	Yes	Yes
112	Santa Teresa Boulevard & Cheltenham Way	No	No	No	Yes	No	No
113	Santa Teresa Boulevard & Bayliss Drive	No	No	Yes	No	No	No
114	McKean Road & Bailey Avenue	No	No	No	No	Yes	Yes
115	Santa Teresa Boulevard & Madrone Avenue	No	No	No	No	No	No
116	Hale Avenue & Tilton Avenue	No	No	No	No	No	No
117	Dougherty Avenue & Tilton Avenue	No	No	No	No	No	No
City of Morgan Hill Unsignalized Intersections							
144	Hale Avenue & Wright Avenue	No	No	Yes	No	Yes	No
145	Hale Avenue & Main Avenue	No	No	No	Yes	No	Yes
146	Peak Avenue & Main Avenue	No	No	No	No	No	No
147	Peak Avenue & Dunne Avenue	No	No	No	No	No	No
148	Dewitt Avenue & Dunne Avenue	No	No	No	No	No	No
149	Dewitt Avenue & Edmundson Avenue	No	No	No	No	No	No
150	Sunnyside Avenue & Edmundson Avenue	No	No	No	No	No	No
151	Santa Teresa Boulevard & Watsonville Road	No	No	No	Yes	Yes	Yes
152	Murphy Avenue & Dunne Avenue	Yes	No	Yes	No	Yes	No
153	Condit Road & Tennant Avenue	No	No	No	No	No	No
San Martin Unsignalized Intersections							
155	US 101 & San Martin Avenue (E)	Yes	No	Yes	No	Yes	No
156	US 101 & San Martin Avenue (W)	Yes	Yes	Yes	Yes	Yes	Yes
157	Coolidge Avenue & San Martin Avenue	No	No	No	No	No	No
City of Gilroy Unsignalized Intersections							
180	US 101 & Masten Avenue (E)	No	No	Yes	No	Yes	No
181	US 101 & Masten Avenue (W)	Yes	Yes	Yes	Yes	Yes	Yes
182	Santa Teresa Boulevard & Fitzgerald Avenue	Yes	Yes	Yes	Yes	Yes	Yes
183	Santa Teresa Boulevard & Day Road (N)	No	No	Yes	Yes	Yes	Yes
184	Santa Teresa Boulevard & Day Road (S)	No	No	Yes	Yes	Yes	Yes
185	Santa Teresa Boulevard & Miller Avenue	Yes	No	Yes	Yes	Yes	Yes
186	Monterey Road & Day Road	Yes	No	Yes	No	Yes	Yes
187	Uvas Park Drive & Miller Avenue	No	No	No	Yes	No	Yes

Notes:

1. Warrant based on Caltrans Peak Hour Volume Warrant 11.

181	US 101 and Masten Avenue (W)
182	Santa Teresa Boulevard and Fitzgerald Avenue
183	Santa Teresa Boulevard and Day Road (N)
184	Santa Teresa Boulevard and Day Road (S)
185	Santa Teresa Boulevard and Miller Avenue
186	Monterey Road and Day Road
187	Uvas Park Drive and Miller Avenue

Freeway Segment Levels of Service

Project traffic volumes on the freeway segments were estimated by adding to existing freeway volumes the estimated project trips on freeway segments. The results of the analysis are summarized in Table 15. The results show that the mixed-flow lanes on 10 of the 52 directional freeway segments analyzed would operate at an unacceptable LOS F during at least one of the peak hours under project conditions.

The results also show that the HOV lane on one of the 28 directional freeway segments (with HOV lanes) analyzed would operate at an unacceptable LOS F during at least one of the peak hours under project conditions. All other freeway segments analyzed would operate at LOS E or better during the AM and PM peak hours.

Project traffic would constitute one percent or more of freeway segment capacity in the mixed-flow lanes on 8 of the 10 impacted directional freeway segments and one HOV lane that operate at LOS F. Project traffic would cause freeway segments operating levels to degrade from an acceptable LOE to LOS F on the two remaining impacted freeway segments:

- US 101, Tennant to East Dunne (Northbound AM Peak hour)
- US 101, Silver Creek to Hellyer (Northbound AM Peak hour)
- US 101, Hellyer to Yerba Buena (Northbound AM Peak hour)
- US 101, Yerba Buena to Capitol (Northbound AM Peak hour)
- US 101, Capitol to Tully (Northbound AM/Southbound PM/NB HOV AM)
- SR 85, Blossom Hill to SR 87 (Northbound AM Peak hour/Southbound PM Peak hour)
- US 101, Story to Tully (Southbound PM Peak hour)
- US 101, I-280 to Story (Southbound PM Peak hour)

Therefore, based on the CMP criteria for significant impacts on freeways, the project would have a significant impact on all 10 directional freeway segments and one HOV lane under project conditions.

Mitigation of freeway facility impacts would require widening of the freeways. The feasibility of freeway widening may be constrained by the acquisition and cost of right-of-way and substantial cost for one single development. Therefore, for this particular project, these impacts must be considered significant and unavoidable. Should it be deemed that widening of the freeway is feasible and necessary, the project along with other projects within Santa Clara County could contribute towards the funding of the widening. A fee collection program would need to be established and specific improvements identified. The forthcoming, Valley Transportation Authority *South County Circulation Study* may identify improvements to regional facilities, including freeways, which a regional funding plan could be used to fund.

There are measures that could reduce the impacts. The measures primarily consist of transit improvements and enhancements as outlined below:

Table 15
Year 2005 With CVSP Freeway Segment Level of Service Summary

Freeway	Segment	Direction	Peak Hour	Existing Plus Project Trips										Project Trips				
				Mixed-Flow					HOV					Total Volume	Mixed-Flow		HOV	
				Ave. Speed/a/	# of Lanes	Volume/a/	Density	LOS	Ave. Speed/a/	# of Lanes	Volume/a/	Density	LOS		Volume	% Capacity	Volume	% Capacity
US 101	SR 156 and SR 129	NB	AM	67	2	2,301	17.2	C	--	--	--	--	--	291	291	6.6%	--	--
			PM	67	2	1,406	10.5	B	--	--	--	--	--	66	66	1.5%	--	--
US 101	SR 129 and Betabel Rd	NB	AM	66	2	2,973	22.5	C	--	--	--	--	--	333	333	7.6%	--	--
			PM	67	2	1,282	9.6	A	--	--	--	--	--	72	72	1.6%	--	--
US 101	Betabel Rd and Bloomfield Ave/Hwy 25	NB	AM	66	2	2,843	21.5	C	--	--	--	--	--	333	333	7.6%	--	--
			PM	67	2	1,952	14.6	B	--	--	--	--	--	72	72	1.6%	--	--
US 101	Bloomfield Ave/ Hwy 25 and Monterey Rd	NB	AM	66	2	3,274	24.8	D	--	--	--	--	--	374	374	8.5%	--	--
			PM	66	2	3,002	22.7	C	--	--	--	--	--	102	102	2.3%	--	--
US 101	Monterey Rd and Pacheco Pass Hwy	NB	AM	67	3	3,049	15.2	B	--	--	--	--	--	439	439	6.4%	--	--
			PM	67	3	2,556	12.7	B	--	--	--	--	--	146	146	2.1%	--	--
US 101	Pacheco Pass Hwy and Leavesley Rd	NB	AM	66	3	4,321	21.8	C	--	--	--	--	--	561	561	8.1%	--	--
			PM	67	3	3,652	18.2	C	--	--	--	--	--	232	232	3.4%	--	--
US 101	Leavesley Rd and Masten Ave	NB	AM	66	3	4,424	22.3	C	--	--	--	--	--	664	664	9.6%	--	--
			PM	66	3	4,135	20.9	C	--	--	--	--	--	375	375	5.4%	--	--
US 101	Masten Ave and San Martin Ave	NB	AM	66	3	6,093	30.8	D	--	--	--	--	--	743	743	10.8%	--	--
			PM	66	3	4,383	22.1	C	--	--	--	--	--	423	423	6.1%	--	--
US 101	San Martin Ave and Tennant Ave	NB	AM	66	3	5,178	26.2	D	--	--	--	--	--	818	818	11.9%	--	--
			PM	67	3	3,279	16.3	C	--	--	--	--	--	469	469	6.8%	--	--
US 101	Tennant Ave and East Dunne Ave	NB	AM	32	3	6,804	70.9	F	--	--	--	--	--	854	854	12.4%	--	--
			PM	66	3	6,092	30.8	D	--	--	--	--	--	552	552	8.0%	--	--
US 101	East Dunne Ave and Cochrane Rd	NB	AM	46	3	7,271	52.7	E	--	--	--	--	--	781	781	11.3%	--	--
			PM	66	3	5,331	26.9	D	--	--	--	--	--	781	781	11.3%	--	--
US 101	Cochrane Rd and Coyote Creek Golf Dr	NB	AM	66	3	6,235	31.5	D	--	--	--	--	--	895	895	10.1%	--	--
			PM	66	3	4,886	24.7	D	--	--	--	--	--	842	726	10.5%	--	--
US 101	Coyote Creek Golf Dr and Bailey Ave	NB	AM	66	3	5,899	29.8	D	66	1	1,751	26.5	D	780	549	8.0%	231	12.8%
			PM	66	3	4,799	24.2	D	67	1	835	12.5	B	534	439	6.4%	95	5.3%
US 101	Bailey Ave and Coyote Valley Parkway	NB	AM	66	3	6,121	30.9	D	66	1	1,929	29.2	D	1,380	971	14.1%	409	22.7%
			PM	66	3	4,583	23.1	C	67	1	833	12.4	B	1,056	823	11.9%	233	12.9%
US 101	Coyote Valley Parkway and SR 85	NB	AM	64	3	8,062	42.0	D	67	1	1,231	18.4	C	2,353	1,922	27.9%	431	23.9%
			PM	66	3	5,615	28.4	D	67	1	905	13.5	B	2,160	1,855	26.9%	305	16.9%
US 101	SR 85 and Bernal Rd	NB	AM	67	3	5,203	25.9	D	67	1	1,254	18.7	C	1,827	1,583	22.9%	244	13.6%
			PM	66	3	6,150	31.1	D	67	1	1,188	17.7	C	1,778	1,600	23.2%	178	9.9%
US 101	Bernal Rd and Silver Creek Rd	NB	AM	66	3	6,578	33.2	D	67	1	1,397	20.9	C	1,885	1,628	23.6%	257	14.3%
			PM	66	3	5,671	28.6	D	67	1	521	7.8	A	1,892	1,711	24.8%	181	10.1%
US 101	Silver Creek Rd and Hellyer Ave	NB	AM	27	3	6,953	85.8	F	64	1	2,275	35.5	D	1,668	1,443	20.9%	225	12.5%
			PM	65	3	7,186	36.9	D	67	1	708	10.6	B	1,694	1,526	22.1%	168	9.3%
US 101	Hellyer Ave and Yerba Buena Rd	NB	AM	39	3	7,580	64.8	F	65	1	2,239	34.4	D	1,599	1,380	20.0%	219	12.2%
			PM	65	3	7,115	36.5	D	67	1	1,102	16.4	C	1,617	1,455	21.1%	162	9.0%
US 101	Yerba Buena Rd and Capitol Expwy	NB	AM	24	3	6,525	90.6	F	64	1	2,235	34.9	D	1,310	1,125	16.3%	185	10.3%
			PM	67	3	4,511	22.4	C	67	1	566	8.4	A	1,187	1,091	15.8%	96	5.3%
US 101	Capitol Expwy and Tully Rd	NB	AM	25	3	6,643	88.6	F	36	1	2,234	62.1	F	1,427	1,243	18.0%	184	10.2%
			PM	52	3	7,645	49.0	E	67	1	1,233	18.4	C	1,188	1,095	15.9%	93	5.2%
US 101	Tully Rd and Story Rd	NB	AM	59	3	7,654	43.2	D	59	1	2,344	39.7	D	1,268	1,104	16.0%	164	9.1%
			PM	63	3	7,450	39.4	D	67	1	940	14.0	B	1,090	1,020	14.8%	70	3.9%
US 101	Story Rd and I-280	NB	AM	50	3	7,217	48.1	E	65	1	2,146	33.0	D	743	617	8.9%	126	7.0%
			PM	67	3	3,274	16.3	C	67	1	903	13.5	B	497	464	6.7%	33	1.8%
SR 85	Bernal Rd and Cottle Rd	NB	AM	67	2	2,770	20.7	C	67	1	739	11.0	B	959	760	17.3%	199	11.1%
			PM	66	2	3,312	25.1	D	67	1	415	6.2	A	947	802	18.2%	145	8.1%
SR 85	Cottle Rd and Blossom Hill Rd	NB	AM	66	2	4,053	30.7	D	66	1	1,470	22.3	C	903	753	17.1%	150	8.3%
			PM	65	2	4,639	35.7	D	67	1	514	7.7	A	853	739	16.8%	114	6.3%
SR 85	Blossom Hill Rd and SR 87	NB	AM	13	2	3,497	134.5	F	48	1	2,295	47.8	E	952	817	18.6%	135	7.5%
			PM	58	2	5,155	44.4	D	67	1	687	10.3	B	832	745	16.9%	87	4.8%

**Table 15
Year 2005 With CVSP Freeway Segment Level of Service Summary**

Freeway	Segment	Direction	Peak Hour	Existing Plus Project Trips										Project Trips				
				Mixed-Flow					HOV					Total Volume	Mixed-Flow		HOV	
				Ave. Speed/a/	# of Lanes	Volume/a/	Density	LOS	Ave. Speed/a/	# of Lanes	Volume/a/	Density	LOS		Volume	% Capacity	Volume	% Capacity
US 101	SR 156 and SR 129	SB	AM	67	2	1,015	7.6	A	--	--	--	--	--	75	75	1.7%	--	--
			PM	67	2	1,232	9.2	A	--	--	--	--	--	292	292	6.6%	--	--
US 101	SR 129 and Betabel Rd	SB	AM	67	2	1,823	13.6	B	--	--	--	--	--	83	83	1.9%	--	--
			PM	67	2	1,663	12.4	B	--	--	--	--	--	323	323	7.3%	--	--
US 101	Betabel Rd and Bloomfield Ave/Hwy 25	SB	AM	67	2	1,823	13.6	B	--	--	--	--	--	83	83	1.9%	--	--
			PM	66	2	3,363	25.5	D	--	--	--	--	--	323	323	7.3%	--	--
US 101	Bloomfield Ave/ Hwy 25 and Monterey Rd	SB	AM	67	2	2,520	18.8	C	--	--	--	--	--	110	110	2.5%	--	--
			PM	65	2	4,261	32.8	D	--	--	--	--	--	361	361	8.2%	--	--
US 101	Monterey Rd and Pacheco Pass Hwy	SB	AM	67	3	2,154	10.7	B	--	--	--	--	--	144	144	2.1%	--	--
			PM	67	3	4,073	20.3	C	--	--	--	--	--	453	453	6.6%	--	--
US 101	Pacheco Pass Hwy and Leavesley Rd	SB	AM	67	3	3,654	18.2	C	--	--	--	--	--	234	234	3.4%	--	--
			PM	66	3	4,729	23.9	C	--	--	--	--	--	569	569	8.2%	--	--
US 101	Leavesley Rd and Masten Ave	SB	AM	67	3	3,593	17.9	C	--	--	--	--	--	373	373	5.4%	--	--
			PM	66	3	5,867	29.6	D	--	--	--	--	--	717	717	10.4%	--	--
US 101	Masten Ave and San Martin Ave	SB	AM	67	3	3,838	19.1	C	--	--	--	--	--	418	418	6.1%	--	--
			PM	65	3	6,580	33.7	D	--	--	--	--	--	730	730	10.6%	--	--
US 101	San Martin Ave and Tennant Ave	SB	AM	67	3	3,481	17.3	C	--	--	--	--	--	461	461	6.7%	--	--
			PM	66	3	5,009	25.3	D	--	--	--	--	--	849	849	12.3%	--	--
US 101	Tennant Ave and East Dunne Ave	SB	AM	67	3	3,791	18.9	C	--	--	--	--	--	571	571	8.3%	--	--
			PM	66	3	6,461	32.6	D	--	--	--	--	--	921	921	13.3%	--	--
US 101	East Dunne Ave and Cochrane Rd	SB	AM	66	3	4,980	25.2	D	--	--	--	--	--	820	820	11.9%	--	--
			PM	65	3	6,763	34.7	D	--	--	--	--	--	1,103	1,103	16.0%	--	--
US 101	Cochrane Rd and Coyote Creek Golf Dr	SB	AM	66	3	5,392	27.2	D	--	--	--	--	--	1,001	842	12.2%	--	--
			PM	65	3	7,168	36.8	D	--	--	--	--	--	1,372	1,118	16.2%	--	--
US 101	Coyote Creek Golf Dr and Bailey Ave	SB	AM	67	3	4,062	20.2	C	67	1	781	11.7	B	753	642	9.3%	111	6.2%
			PM	66	3	5,605	28.3	D	66	1	1,869	28.3	D	1,004	655	9.5%	349	19.4%
US 101	Bailey Ave and Coyote Valley Parkway	SB	AM	66	3	5,480	27.7	D	67	1	923	13.8	B	1,503	1,320	19.1%	183	10.2%
			PM	66	3	6,103	30.8	D	66	1	1,640	24.8	D	1,943	1,553	22.5%	390	21.7%
US 101	Coyote Valley Parkway and SR 85	SB	AM	67	4	6,746	25.2	D	67	1	855	12.8	B	2,501	2,186	23.8%	315	17.5%
			PM	66	4	7,856	29.8	D	67	1	1,384	20.7	C	2,760	2,316	25.2%	444	24.7%
US 101	SR 85 and Bernal Rd	SB	AM	67	3	4,165	20.7	C	67	1	864	12.9	B	1,749	1,555	22.5%	194	10.8%
			PM	66	3	6,483	32.7	D	65	1	2,191	33.7	D	1,774	1,533	22.2%	241	13.4%
US 101	Bernal Rd and Silver Creek Rd	SB	AM	67	3	4,579	22.8	C	67	1	1,264	18.9	C	1,753	1,559	22.6%	194	10.8%
			PM	67	3	5,215	25.9	D	66	1	1,762	26.7	D	2,037	1,795	26.0%	242	13.4%
US 101	Silver Creek Rd and Hellyer Ave	SB	AM	66	3	5,956	30.1	D	67	1	1,106	16.5	C	1,572	1,406	20.4%	166	9.2%
			PM	66	3	6,253	31.6	D	67	1	1,143	17.1	C	1,706	1,503	21.8%	203	11.3%
US 101	Hellyer Ave and Yerba Buena Rd	SB	AM	64	3	7,630	39.7	D	67	1	824	12.3	B	1,444	1,290	18.7%	154	8.6%
			PM	65	3	7,103	36.4	D	66	1	1,519	23.0	C	1,642	1,443	20.9%	199	11.1%
US 101	Yerba Buena Rd and Capitol Expwy	SB	AM	66	3	4,915	24.8	D	67	1	779	11.6	B	1,264	1,155	16.7%	109	6.1%
			PM	66	3	5,309	26.8	D	67	1	1,244	18.6	C	1,523	1,349	19.6%	174	9.7%
US 101	Capitol Expwy and Tully Rd	SB	AM	62	3	7,538	40.5	D	67	1	1,082	16.1	C	1,100	1,028	14.9%	72	4.0%
			PM	37	3	7,414	66.8	F	66	1	1,997	30.3	D	1,451	1,304	18.9%	147	8.2%
US 101	Tully Rd and Story Rd	SB	AM	63	3	7,418	39.2	D	67	1	562	8.4	A	1,010	988	14.3%	22	1.2%
			PM	14	3	5,505	131.1	F	52	1	2,335	44.9	D	1,460	1,305	18.9%	155	8.6%
US 101	Story Rd and I-280	SB	AM	67	3	3,020	15.0	B	67	1	488	7.3	A	428	410	5.9%	18	1.0%
			PM	24	3	6,071	84.3	F	66	1	1,970	29.8	D	861	741	10.7%	120	6.7%
SR 85	Bernal Rd and Cottle Rd	SB	AM	67	2	3,100	23.1	C	67	1	322	4.8	A	1,082	960	21.8%	122	6.8%
			PM	66	2	4,170	31.6	D	67	1	704	10.5	B	1,164	1,000	22.7%	164	9.1%
SR 85	Cottle Rd and Blossom Hill Rd	SB	AM	64	2	4,896	38.3	D	67	1	837	12.5	B	893	796	18.1%	97	5.4%
			PM	65	2	4,778	36.8	D	67	1	921	13.7	B	1,129	1,008	22.9%	121	6.7%
SR 85	Blossom Hill Rd and SR 87	SB	AM	66	2	4,300	32.6	D	67	1	483	7.2	A	823	740	16.8%	83	4.6%
			PM	42	2	5,193	61.8	F	66	1	1,360	20.6	C	1,103	993	22.6%	110	6.1%

Box indicates significant impact

/a/ Source: Santa Clara Valley Transportation Authority Congestion Management Program Monitoring Study, 2005.

- Enhancement of CalTrain service
- Extension of LRT lines
- Enhanced Bus Service

These measures would provide options to commuters to Coyote Valley. An enhanced transit system, with a major improvement such as an LRT line extension, would reduce auto usage. The reduction in auto usage would be most noticeable on freeways since most transit trips would originate from outside the Coyote Valley area.

Project Roadway Segment Analysis

Traffic volumes for project conditions on each of the studied roadway segments were developed by adding to existing condition volumes the CVSP project trips. The project trips were assigned to the roadway system in the same manner as with intersections. The roadway segment analysis indicates that all studied roadway segments are projected to operate at LOS D or better during both peak hours under background conditions. Table 16 presents the roadway segment analysis.

Transit Service Improvements

The evaluation of project conditions on transit service showed that due to the size of the project, demand for transit service would justify the need for enhancement of existing service serving Coyote Valley, but would not create the need for new transit facilities beyond those proposed as part of the project's internal transit system. The City of San Jose has endorsed VTA's Community Design and Transportation (CDT) Program and will incorporate guidelines and recommendations of the VTA, CMP, and CDT Program when appropriate and applicable in regards to future transit facilities.

CalTrain Service. A new multi-modal transit station is being proposed as an element of the proposed CVSP project. The station will be located south of the Monterey Road and Bailey Road interchange. Once this station is open, CalTrain will be available to serve commuters to and from the project area. Currently, CalTrain service through Coyote Valley is northbound only during the AM, and southbound only during the PM commute periods. However, VTA is planning to begin operating some contraflow services, and once the contraflow service is operational, commuters from San Francisco south will be able to reach the North Coyote Station via CalTrain. A minimum of one train would be provided in each direction every hour. It is likely, that trains would run every 30-minutes during the peak commute hours. Each train would have a capacity of 750 passengers, assuming a per car capacity of 150 passengers and five car trains. With a total of eight trains, four running in each direction, the trains could serve up to 6,000 seated passengers during the peak hours. It is anticipated that the contraflow service will be operational by the time the full CVSP development is completed. It is reasonable to expect that the majority of the increased transit demand due to CVSP will be served by the CalTrain system. Between 2,000 and 3,000 additional CalTrain riders are projected to be attributable to the proposed project.

Bus Service. Local and Express bus services are projected to carry the balance of the additional peak hour person trips that are projected to be using transit services. Local and Express buses could carry an additional 500 to 600 bus riders that would be attributable to the proposed project. The frequency of bus service and expansion of express bus service during peak commute periods would need to be increased to serve the increase in demand.

Table 16
Existing Plus CVSP Roadway Segment Analysis

Segment	Direction	# Of Lanes	Capacity (vph)	Existing Conditions						CVSP Trips				Existing + CVSP					
				AM Peak-Hour			PM Peak-Hour			AM Peak-Hour		PM Peak-Hour		AM Peak-Hour			PM Peak-Hour		
				Volume	V/C	LOS	Volume	V/C	LOS	Volume	Increase	Volume	Increase	Volume	V/C	LOS	Volume	V/C	LOS
Bernal Rd																			
Monterey Rd and San Ignacio Ave	EB	3	3,600	1,141	0.317	A	1,445	0.401	A	425	37.2%	417	28.9%	1,566	0.435	A	1,862	0.517	A
	WB	3	3,600	1,725	0.479	A	1,159	0.322	A	497	28.8%	420	36.2%	2,222	0.617	B	1,579	0.439	A
San Ignacio Ave and Via Del Oro	EB	3	3,600	736	0.204	A	842	0.234	A	425	57.7%	417	49.5%	1,161	0.323	A	1,259	0.350	A
	WB	3	3,600	945	0.263	A	870	0.242	A	497	52.6%	420	48.3%	1,442	0.401	A	1,290	0.358	A
Via Del Oro and Santa Teresa Blvd	EB	3	3,600	731	0.203	A	669	0.186	A	189	25.9%	377	56.4%	920	0.256	A	1,046	0.291	A
	WB	3	3,600	648	0.180	A	772	0.214	A	428	66.0%	263	34.1%	1,076	0.299	A	1,035	0.288	A
Monterey Rd																			
Blossom Hill Rd and Bernal Rd	NB	2	2,400	860	0.358	A	555	0.231	A	606	70.5%	386	69.5%	1,466	0.611	B	941	0.392	A
	SB	2	2,400	488	0.203	A	634	0.264	A	237	48.6%	612	96.5%	725	0.302	A	1,246	0.519	A
Bernal Rd and Bailey Ave	NB	2	2,400	554	0.231	A	405	0.169	A	897	161.9%	579	143.0%	1,451	0.605	B	984	0.410	A
	SB	2	2,400	321	0.134	A	437	0.182	A	594	185.0%	395	90.4%	915	0.381	A	832	0.347	A
Bailey Ave and Cochrane Rd	NB	2	2,400	877	0.365	A	476	0.198	A	823	93.8%	796	167.2%	1,700	0.708	C	1,272	0.530	A
	SB	2	2,400	520	0.217	A	650	0.271	A	516	99.2%	762	117.2%	1,036	0.432	A	1,412	0.588	A
Cochrane Rd and Old Monterey Rd	NB	2	2,400	865	0.360	A	439	0.183	A	406	46.9%	279	63.6%	1,271	0.530	A	718	0.299	A
	SB	2	2,400	398	0.166	A	951	0.396	A	173	43.5%	426	44.8%	571	0.238	A	1,377	0.574	A
Santa Teresa Blvd																			
Cottle Rd and Bernal Rd	NB	3	3,600	528	0.147	A	595	0.165	A	780	147.7%	388	65.2%	1,308	0.363	A	983	0.273	A
	SB	3	3,600	594	0.165	A	612	0.170	A	131	22.1%	450	73.5%	725	0.201	A	1,062	0.295	A
Bernal Rd and Bailey Ave	NB	2	2,400	432	0.180	A	287	0.120	A	1,279	296.1%	929	323.7%	1,711	0.713	C	1,216	0.507	A
	SB	2	2,400	322	0.134	A	389	0.162	A	373	115.8%	885	227.5%	695	0.290	A	1,274	0.531	A
Bailey Ave and Tilton Ave	NB	1	1,200	358	0.298	A	168	0.140	A	410	114.5%	174	103.6%	768	0.640	B	342	0.285	A
	SB	1	1,200	137	0.114	A	344	0.287	A	160	116.8%	205	59.6%	297	0.248	A	549	0.458	A
Tilton Ave and Llagas Rd	NB	2	2,400	179	0.075	A	356	0.148	A	470	262.6%	81	22.8%	649	0.270	A	437	0.182	A
	SB	2	2,400	420	0.175	A	144	0.060	A	41	9.8%	269	186.8%	461	0.192	A	413	0.172	A
Watsonville Rd and San Martin Ave	NB	1	1,200	264	0.220	A	227	0.189	A	61	23.1%	0	0.0%	325	0.271	A	227	0.189	A
	SB	1	1,200	149	0.124	A	259	0.216	A	0	0.0%	47	18.1%	149	0.124	A	306	0.255	A
San Martin Ave and Fitzgerald Ave	NB	1	1,200	313	0.261	A	197	0.164	A	56	17.9%	3	1.5%	369	0.308	A	200	0.167	A
	SB	1	1,200	131	0.109	A	363	0.303	A	2	1.5%	45	12.4%	133	0.111	A	408	0.340	A
Bailey Ave																			
US 101 and Monterey Rd	EB	3	3,600	318	0.088	A	456	0.127	A	1,806	567.9%	1,381	302.9%	2,124	0.590	A	1,837	0.510	A
	WB	3	3,600	477	0.133	A	248	0.069	A	1,731	362.9%	1,831	738.3%	2,208	0.613	B	2,079	0.578	A
Monterey Rd and Santa Tera Blvd	EB	3	3,600	172	0.048	A	382	0.106	A	1,909	1109.9%	1,925	503.9%	2,081	0.578	A	2,307	0.641	B
	WB	3	3,600	519	0.144	A	211	0.059	A	1,879	362.0%	2,049	971.1%	2,398	0.666	B	2,260	0.628	B
Santa Teresa Blvd and McKean Rd	EB	1	1,200	141	0.118	A	494	0.412	A	409	290.1%	536	108.5%	550	0.458	A	1,030	0.858	D
	WB	1	1,200	596	0.497	A	211	0.176	A	443	74.3%	445	210.9%	1,039	0.866	D	656	0.547	A
Cochrane Rd																			
Mission View Dr and US 101	EB	3	3,600	228	0.063	A	445	0.124	A	25	11.0%	55	12.4%	253	0.070	A	500	0.139	A
	WB	3	3,600	403	0.112	A	253	0.070	A	32	7.9%	29	11.5%	435	0.121	A	282	0.078	A
US 101 and Monterey Rd	EB	3	3,600	852	0.237	A	1,591	0.442	A	74	8.7%	88	5.5%	926	0.257	A	1,679	0.466	A
	WB	3	3,600	1,564	0.434	A	1,255	0.349	A	132	8.4%	219	17.5%	1,696	0.471	A	1,474	0.409	A
Watsonville Rd																			
Santa Teresa Blvd and Uvas Rd	NB	1	1,200	265	0.221	A	184	0.153	A	68	25.7%	25	13.6%	333	0.278	A	209	0.174	A
	SB	1	1,200	150	0.125	A	325	0.271	A	9	6.0%	58	17.8%	159	0.133	A	383	0.319	A
Uvas Rd and Day Rd	NB	1	1,200	234	0.195	A	147	0.123	A	206	88.0%	31	21.1%	440	0.367	A	178	0.148	A
	SB	1	1,200	114	0.095	A	258	0.215	A	13	11.4%	197	76.4%	127	0.106	A	455	0.379	A
Day Rd and Hwy 152	NB	1	1,200	201	0.168	A	111	0.093	A	199	99.0%	30	27.0%	400	0.333	A	141	0.118	A
	SB	1	1,200	101	0.084	A	215	0.179	A	12	11.9%	195	90.7%	113	0.094	A	410	0.342	A
Uvas Rd																			
Bailey Ave and Oak Glen Rd	NB	1	1,200	199	0.166	A	101	0.084	A	166	83.4%	8	7.9%	365	0.304	A	109	0.091	A
	SB	1	1,200	64	0.053	A	168	0.140	A	8	12.5%	190	113.1%	72	0.060	A	358	0.298	A
Oak Glen Rd and Watsonville Rd	NB	1	1,200	120	0.100	A	41	0.034	A	145	120.8%	5	12.2%	265	0.221	A	46	0.038	A
	SB	1	1,200	33	0.028	A	92	0.077	A	3	9.1%	145	157.6%	36	0.030	A	237	0.198	A
Edmunson Ave																			
Oak Glen Rd and Sunnyside Ave	EB	2	2,400	223	0.093	A	283	0.118	A	1	0.4%	20	7.1%	224	0.093	A	303	0.126	A
	WB	2	2,400	337	0.140	A	244	0.102	A	8	2.4%	3	1.2%	345	0.144	A	247	0.103	A
Sunnyside Ave and Monterey Rd	EB	2	2,400	334	0.139	A	239	0.100	A	6	1.8%	5	2.1%	340	0.142	A	244	0.102	A
	WB	2	2,400	172	0.072	A	356	0.148	A	5	2.9%	7	2.0%	177	0.074	A	363	0.151	A

Table 16
Existing Plus CVSP Roadway Segment Analysis

Segment	Direction	# Of Lanes	Capacity (vph)	Existing Conditions						CVSP Trips				Existing + CVSP					
				AM Peak-Hour			PM Peak-Hour			AM Peak-Hour		PM Peak-Hour		AM Peak-Hour			PM Peak-Hour		
				Volume	V/C	LOS	Volume	V/C	LOS	Volume	Increase	Volume	Increase	Volume	V/C	LOS	Volume	V/C	LOS
Oak Glen Ave																			
Uvas Rd and Willow Springs Rd	NB	1	1,200	69	0.058	A	42	0.035	A	12	17.4%	2	4.8%	81	0.068	A	44	0.037	A
	SB	1	1,200	35	0.029	A	63	0.053	A	7	20.0%	31	49.2%	42	0.035	A	94	0.078	A
Willow Springs Rd and Edmunson Rd																			
	NB	1	1,200	93	0.078	A	105	0.088	A	11	11.8%	0	0.0%	104	0.087	A	105	0.088	A
	SB	1	1,200	99	0.083	A	77	0.064	A	0	0.0%	28	36.4%	99	0.083	A	105	0.088	A
Edmunson Rd and Watsonville Rd																			
	NB	1	1,200	34	0.028	A	28	0.023	A	2	5.9%	0	0.0%	36	0.030	A	28	0.023	A
	SB	1	1,200	16	0.013	A	47	0.039	A	0	0.0%	8	17.0%	16	0.013	A	55	0.046	A
Willow Springs Rd																			
Oak Glen Ave and Santa Tersa Blvd																			
	NB	1	1,200	20	0.017	A	17	0.014	A	11	55.0%	3	17.6%	31	0.026	A	20	0.017	A
	SB	1	1,200	10	0.008	A	30	0.025	A	2	20.0%	4	13.3%	12	0.010	A	34	0.028	A
McKean Rd																			
Harry Rd and Bailey Ave																			
	NB	1	1,200	272	0.227	A	210	0.175	A	292	107.4%	270	128.6%	564	0.470	A	480	0.400	A
	SB	1	1,200	200	0.167	A	221	0.184	A	137	68.5%	343	155.2%	337	0.281	A	564	0.470	A
Malech Rd																			
Metcalfe Rd and Bailey Ave																			
	NB	1	1,200	25	0.021	A	37	0.031	A	256	1024.0%	8	21.6%	281	0.234	A	45	0.038	A
	SB	1	1,200	52	0.043	A	33	0.028	A	31	59.6%	41	124.2%	83	0.069	A	74	0.062	A
Metcalf Rd																			
San Felipe Rd and Malech Rd																			
	EB	1	1,200	52	0.043	A	11	0.009	A	14	26.9%	50	454.5%	66	0.055	A	61	0.051	A
	WB	1	1,200	12	0.010	A	46	0.038	A	46	383.3%	21	45.7%	58	0.048	A	67	0.056	A
Malech Rd and Monterey Rd																			
	EB	1	1,200	106	0.088	A	55	0.046	A	13	12.3%	73	132.7%	119	0.099	A	128	0.107	A
	WB	1	1,200	50	0.042	A	127	0.106	A	269	538.0%	11	8.7%	319	0.266	A	138	0.115	A
San Felipe Rd																			
Silver Creek Valley Rd and Metcalf Rd																			
	NB	1	1,200	24	0.020	A	33	0.028	A	14	58.3%	50	151.5%	38	0.032	A	83	0.069	A
	SB	1	1,200	10	0.008	A	34	0.028	A	46	460.0%	21	61.8%	56	0.047	A	55	0.046	A

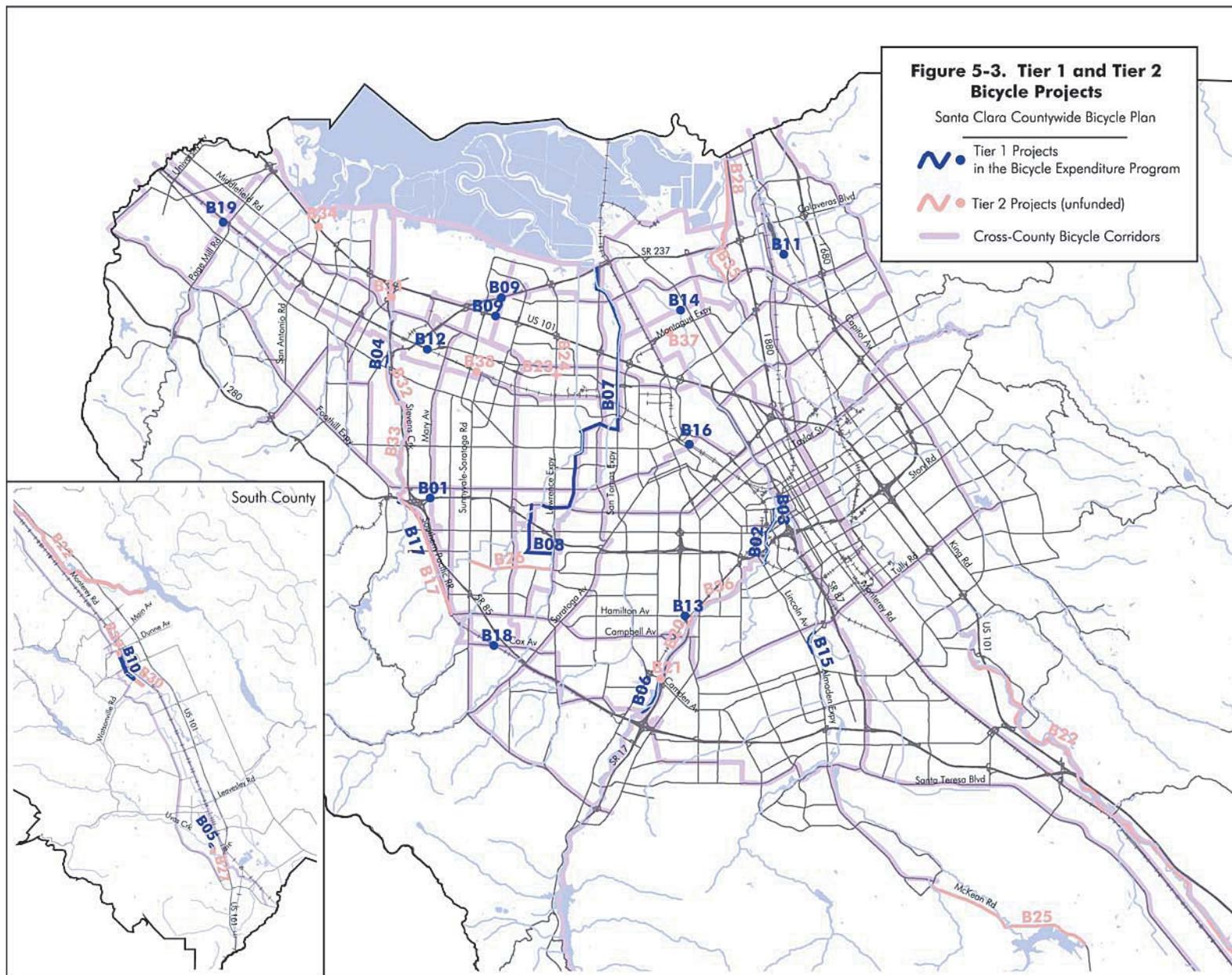
Notes:
1. Capacity of roadways based on assumed capacity of 1,200 vphpl and existing lanes on roadway
2. Volumes based on 24-hour tube counts collected in June 2005.

Pedestrian and Bicycle Facilities

With the large amount of planned development, increases in pedestrians and bicyclists along with the vehicular traffic can be expected within Coyote Valley. Existing pedestrian facilities will be improved and future development designed to better serve pedestrians. As development progresses within Coyote Valley, the following pedestrian and bicycle facility enhancements will occur:

- Sidewalks and bicycle facilities will be constructed along the minor streets of the new roadway system that will serve pedestrians and bicyclists more efficiently than the major arterials that serve large volumes of vehicular traffic. Bicycle facilities will be provided on all major streets where feasible.
- Enhance the existing bicycle facilities between San Jose and Morgan Hill. The enhancements will provide for continuous bicycle connections from southern San Jose through, Coyote Valley and into Morgan Hill. The VTA's *Santa Clara Countywide Bicycle Plan* identifies improvements to the Coyote Creek Trail between Hellyer Avenue and Anderson Lake and bicycle facility improvements along McKean Road from Harry Road to Bailey Avenue as shown in Figure 32.

The City of San Jose has endorsed VTA's Community Design and Transportation (CDT) Program and will incorporate guidelines and recommendations of the *Santa Clara Countywide Bicycle Plan* and CDT Program when appropriate and applicable in regards to future pedestrian and bicycle facilities.



Source: Santa Clara Countywide Bicycle Plan - VTP2020

Figure 32

POTENTIAL FUTURE BICYCLE FACILITIES

5. Partial CVSP Buildout Conditions

The timing and construction of the Coyote Valley Specific Plan will be driven largely by market forces with no anticipated date for complete buildout of the plan. As such, it was deemed necessary by City of San Jose staff to analyze a near-term scenario that provides an evaluation of partial plan completion. The analysis result of the partial plan completion are described in this chapter.

Partial CVSP Development Levels and Roadways

The initial CVSP construction, or Partial CVSP, will provide for up to 20,000 jobs and 10,000 residential units. The partial CVSP development levels are consistent with the amount of development already approved within North Coyote Valley with the Coyote Valley Research Park (CVRP) and other development that provide for up to 36,000 jobs. Though the approved land uses within Coyote Valley do not include residential uses, the reduction in jobs and addition of housing that is part of Partial CVSP, will balance land uses and provide for internal trip making within the valley.

There is no detailed plan for the phasing of either the entire or partial development within Coyote Valley. Therefore, the Partial CVSP development was conceived based on the existing approved CVRP project and its analysis, study of current market absorption, fiscal planning, ABAG land use projections and coordination with the South County Circulation Study. Initial development within North Coyote Valley will provide for the utilization of existing roadway infrastructure, primarily the US 101 and Bailey Avenue freeway interchange. The future roadway system described in the previous chapter would only be partially implemented with several of the major roadway facilities excluded. The major roadway facilities excluded in the Partial CVSP roadway network include the following:

- US 101/Coyote Valley Parkway Interchange
- Connection to the US 101/Coyote Creek Golf Course Drive Interchange
- Arterial interchange at Scheller Avenue and Monterey Road
- Arterial interchange along Monterey Road between Bailey Avenue and Scheller Avenue
- Full buildout of Coyote Valley Parkway (only one lane in each direction provided between the one-way couplet and Monterey Road).

- No widening of Santa Teresa south of Bailey Avenue

As development of the CVSP progresses, the construction of the remainder of the planned roadway system would proceed as needed.

Partial CVSP Traffic Projections

Based on the model trip generation estimates, the Partial Coyote Valley development will generate 134,247 daily new person trips. Of all CVSP project trips, 86% would be made by automobile, 6% percent would be on transit and 8% percent would be walk or bike trips. The approximately 115,305 vehicle person trips projected by the model equate to 85,763 daily vehicle trips. The project will generate 7,545 vehicle trips during the AM peak hour and 8,733 vehicle trips during the PM peak hour.

Though to a lesser scale than the planned full buildout of the Coyote Valley Specific Plan, the proposed land uses of the Partial Coyote Valley Specific Plan will still promote a balance of housing and employment within the valley. Based on the proposed land uses within Coyote Valley for the Partial buildout scenario, model runs indicate that about 48,150 (or 35%) of the projected person trips would stay within Coyote Valley. The remaining 65% of the daily person trips generated by the project would originate or have destinations outside of the Coyote Valley project boundaries. The internalization of trips within the valley equates to approximately 1,476 trips during the AM peak hour and 2,152 trips during the PM peak hour. Trip estimates for the project are presented in Table 17.

Table 17
Trip Generation Estimates for Partial Coyote Valley Specific Plan

Daily Trips	AM Peak Hour							PM Peak Hour						
	Splits			Trips				Splits			Trips			
	In	Out	Internal.	In	Out	Internal	Total	In	Out	Internal.	In	Out	Internal	Total
85,763	38%	43%	20%	2,858	3,211	1,476	7,545	38%	38%	25%	3,304	3,277	2,152	8,733

Notes:

1. Trips based on VTA 2030 County Wide Travel demand model run for Partial CVSP (20,000 jobs/10,000 homes), 2006.
2. Internal trips would stay within the Coyote Valley Specific Plan project boundary.

Trip Distribution

The distribution of trips external to Coyote Valley for the Partial buildout scenario would be similar to that which was described for the full buildout of the Coyote Valley Specific Plan.

Partial CVSP Project Traffic Volumes

Peak-hour traffic volumes for partial CVSP project conditions were produced with the traffic model using the method described earlier in this report. Traffic volumes for project conditions are presented in Appendix B.

Future Partial Coyote Valley Intersections

With only portions of the planned full Coyote Valley roadway network assumed for the partial CVSP project scenario, not all future intersections presented in the previous chapter would be created. Presented in Table 18 and Figure 33 is projected intersection levels of service for potential major future intersections within Coyote Valley under the Partial CVSP scenario. The intersection level of service results indicate that for those intersections requiring signalization, all future intersections within the CVSP area would operate at LOS C conditions or better with the partial CVSP plan.

Partial CVSP Project Impacts and Mitigation Measures

This section discusses the project conditions analysis and any impacts associated with the Partial CVSP development levels. Included are descriptions of project impacts to intersections and freeway segments located outside of the CVSP area.

Intersection Impacts and Mitigation Measures

Intersection level of service analysis was used to evaluate traffic operations at the study intersections under Partial CVSP project conditions. The results show that 18 of the 187 study intersections are projected to operate at unacceptable levels under Partial CVSP project conditions during at least one peak hour based on applicable level of service standards (see Figures 34 through 38). Of these 18 intersections, the project would impact three intersections during at least one peak hour according to the impact criteria (see Table 19). Results indicate that no study intersections within Coyote Valley will be impacted by the project. The following intersections will be impacted by the partial buildout of Coyote valley:

City of San Jose Signalized Intersections

- 24 McLaughlin Avenue and Tully Road*
- 40 US 101 and Blossom Hill Road (West)*
- 92 US 101 and Bernal Road (East)*

The necessary improvements to mitigate project impacts due to the partial buildout of Coyote Valley would be identical to those identified for the same three intersections under full buildout conditions. Table 20 indicates resulting levels of service at impacted intersections with implementation of the proposed improvements.

A table summarizing the intersection level of service results for all study intersections and calculation sheets are included in Appendix C.

Partial CVSP Signal Warrant Analysis

Peak-hour signal warrant checks (*Caltrans Traffic Manual*, Chapter 9, Warrant 11) were performed at all unsignalized study intersections for the Partial CVSP development levels. The signal warrant analysis showed that all but one, McKean Road and Bailey Avenue, of the unsignalized intersections identified as meeting traffic signal warrants under Full CVSP buildout project conditions will meet warrants under the Partial CVSP scenario.

For those intersections that are identified as meeting signal warrants, it is expected that the project would

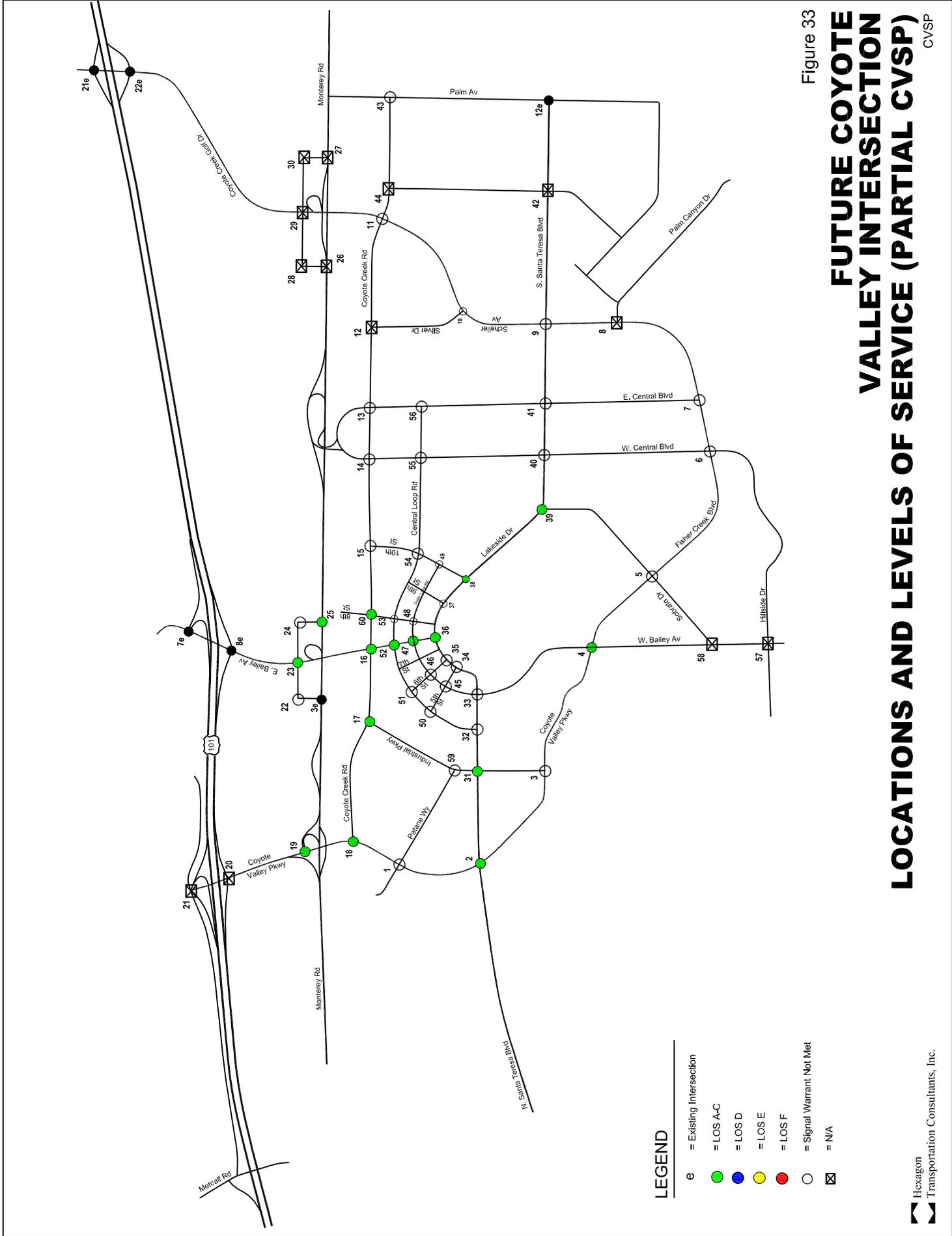
Table 18
Future Coyote Valley Intersection Levels of Service Summary (Partial CVSP)

Study Number		Peak Hour	Signal Warrant Met?	Ave. Delay/a/	LOS
F-1	Patane Way and Coyote Valley Parkway	AM	Roundabout		
		PM	Roundabout		
F-2	North Santa Teresa Boulevard and Coyote Valley Parkway	AM	Roundabout	2.6	A
		PM	Roundabout	3.5	A
F-3	Coyote Valley Parkway and Industrial Parkway	AM	Roundabout		
		PM	Roundabout		
F-4	Coyote Valley Parkway and West Bailey Avenue	AM	Roundabout	3.1	A
		PM	Roundabout	4.2	A
F-5	Coyote Valley Parkway and Sobrato Road	AM	Roundabout		
		PM	Roundabout		
F-6	Fisher Creek Drive and West Central Boulevard	AM	Roundabout		
		PM	Roundabout		
F-7	Fisher Creek Drive and East Central Boulevard	AM	Roundabout		
		PM	Roundabout		
F-8	Fisher Creek Drive and Palm Canyon	AM	Roundabout	N/A	N/A
		PM	Roundabout	N/A	N/A
F-9	South Santa Teresa Boulevard and Scheller Avenue	AM	Roundabout		
		PM	Roundabout		
F-10	Silver Drive and Scheller Avenue	AM	Roundabout		
		PM	Roundabout		
F-11	Coyote Creek Road and Scheller Avenue	AM	No		
		PM	No		
F-12	Coyote Creek Road and Silver Drive	AM	N/A	N/A	N/A
		PM	N/A	N/A	N/A
F-13	Coyote Creek Road and East Central Boulevard	AM	No		
		PM	No		
F-14	Coyote Creek Road and West Central Boulevard	AM	No		
		PM	No		
F-15	Coyote Creek Road and Tenth Street	AM	No		
		PM	No		
F-16	Coyote Creek Road and East Bailey Avenue	AM	Yes	31.7	C
		PM	Yes	32.7	C
F-17	Coyote Creek Road and Industrial Parkway	AM	Yes	23.8	C
		PM	Yes	31.0	C
F-18	Coyote Valley Parkway and Coyote Creek Road	AM	Yes	22.1	C
		PM	Yes	21.0	C
F-19	Monterey Connector and Coyote Valley Parkway	AM	Yes	6.1	A
		PM	Yes	4.4	A
F-20	US 101 and Coyote Valley Parkway (W)	AM	N/A	N/A	N/A
		PM	N/A	N/A	N/A
F-21	US 101 and Coyote Valley Parkway (E)	AM	N/A	N/A	N/A
		PM	N/A	N/A	N/A
F-22	N/S Connector and E Bailey Connector (N)	AM	No		
		PM	No		
F-23	N/S Connector and E Bailey Avenue	AM	Yes	17.3	B
		PM	Yes	15.5	B
F-24	N/S Connector and E Bailey Connector (S)	AM	No		
		PM	No		
F-25	Monterey Road and E Bailey Avenue (S)	AM	Yes	7.3	A
		PM	Yes	13.2	B
F-26	Monterey Road and Scheller Avenue (N)	AM	N/A	N/A	N/A
		PM	N/A	N/A	N/A
F-27	Monterey Road and Scheller Avenue (S)	AM	N/A	N/A	N/A
		PM	N/A	N/A	N/A
F-28	N/S Connector and Scheller Connector (N)	AM	N/A	N/A	N/A
		PM	N/A	N/A	N/A
F-29	N/S Connector and Scheller Avenue	AM	N/A	N/A	N/A
		PM	N/A	N/A	N/A
F-30	N/S Connector and Scheller Connector (S)	AM	N/A	N/A	N/A
		PM	N/A	N/A	N/A
F-31	North Santa Teresa Boulevard and Industrial Parkway	AM	No	24.0	C
		PM	Yes	28.9	C

Table 18
Future Coyote Valley Intersection Levels of Service Summary (Partial CVSP)

Study Number		Peak Hour	Signal Warrant Met?	Ave. Delay/a/	LOS
F-32	North Santa Teresa Boulevard and Central Loop Road	AM	No		
		PM	No		
F-33	North Santa Teresa Boulevard and Outer Lake Road	AM	No		
		PM	No		
F-34	Fifth Street and Lakeside Drive	AM	No		
		PM	No		
F-35	Lakeside Drive and Sixth Street	AM	No		
		PM	No		
F-36	Lakeside Drive and East Bailey Avenue	AM	Yes	13.2	B
		PM	Yes	14.6	B
F-37	Lakeside Drive and Ninth Street	AM	No		
		PM	No		
F-38	Lakeside Drive and Tenth Street	AM	Yes	14.7	B
		PM	Yes	22.7	C
F-39	South Santa Teresa Boulevard and Lakeside Drive	AM	No	23.0	C
		PM	Yes	22.1	C
F-40	South Santa Teresa Boulevard and West Central Boulevard	AM	No		
		PM	No		
F-41	South Santa Teresa Boulevard and East Central Boulevard	AM	No		
		PM	No		
F-42	South Santa Teresa Boulevard and Coyote Drive	AM	N/A	N/A	N/A
		PM	N/A	N/A	N/A
F-43	Coyote Creek Road and Palm Avenue	AM	No		
		PM	No		
F-44	Coyote Creek Road and Coyote Drive	AM	N/A	N/A	N/A
		PM	N/A	N/A	N/A
F-45	Outer Lake Road and Fifth Street	AM	No		
		PM	No		
F-46	Outer Lake Road and Sixth Street	AM	No		
		PM	No		
F-47	Outer Lake Road and East Bailey Avenue	AM	No	19.4	B
		PM	Yes	22.9	C
F-48	Outer Lake Road and Eighth Street	AM	No		
		PM	No		
F-49	Outer Lake Road and Tenth Street	AM	No		
		PM	No		
F-50	Central Loop Road and Fifth Street	AM	No		
		PM	No		
F-51	Central Loop Road and Sixth Street	AM	No		
		PM	No		
F-52	Central Loop Road and East Bailey Avenue	AM	Yes	23.8	C
		PM	Yes	32.0	C
F-53	Central Loop Road and Eighth Street	AM	No		
		PM	No		
F-54	Central Loop Road and Tenth Street	AM	No		
		PM	No		
F-55	Central Loop Road and West Central Boulevard	AM	No		
		PM	No		
F-56	Central Loop Road and East Central Boulevard	AM	No		
		PM	No		
F-57	Hillside Road and West Bailey Avenue	AM	Roundabout	N/A	N/A
		PM	Roundabout	N/A	N/A
F-58	Sobrato Road and West Bailey Avenue	AM	Roundabout	N/A	N/A
		PM	Roundabout	N/A	N/A
F-59	Patane Way and Industrial Parkway	AM	No		
		PM	No		
F-60	Coyote Creek Road and Eighth Street	AM	Yes	14.9	B
		PM	Yes	14.9	B

N/A -Indicates intersection will not be constructed as part of Partial CVSP development.



LEGEND

- e = Existing Intersection
- = LOS A-C
- = LOS D
- = LOS E
- = LOS F
- = Signal Warrant Not Met
- ⊗ = N/A

Figure 33

FUTURE COYOTE VALLEY INTERSECTION LOCATIONS AND LEVELS OF SERVICE (PARTIAL CVSP)

**Table 19
Year 2005 Plus Partial CVSP Project Conditions Unacceptable Intersection Levels
of Service**

Study Number	Peak Hour	Count Date	Background 2005 with CVRP		Project Conditions 2005 with Partial CVSP			
			Ave. Delay/a/	LOS	Ave. Delay/a/	LOS	Incr. In Crit. Delay	Incr. In Crit. V/C
City of San Jose Signalized Intersections								
24	McLaughlin Avenue and Tully Road*	AM 11/09/04	49.4	D	47.8	D	-1.8	-0.013
		PM 09/09/04	74.7	E	77.7	E-	5.3	0.014
26	Senter Road and Tully Road*	AM 09/08/04	42.4	D	42.5	D	0.2	0.004
		PM 09/08/04	56.0	E+	56.1	E+	-0.5	-0.003
28	Capitol Expressway and Quimby Road*	AM 03/05/03	59.0	E+	58.7	E+	-7.8	-0.034
		PM 10/17/04	66.3	E	65.1	E	-19.2	-0.119
29	Capitol Expressway and Aborn Road*	AM 01/01/04	88.2	F	85.4	F	-5.0	-0.012
		PM 09/29/04	55.2	E+	55.6	E+	0.7	0.010
30	Capitol Expressway and Silver Creek Road*	AM 01/01/04	158.7	F	146.9	F	-17.8	-0.041
		PM 09/15/04	98.4	F	96.9	F	0.8	0.008
32	Senter Road and Captiol Expressway*	AM 01/01/04	59.2	E+	58.7	E+	-1.3	-0.012
		PM 10/05/04	48.0	D	48.2	D	1.2	0.013
33	Snell Avenue and Capitol Expressway*	AM 01/01/04	42.4	D	42.9	D	0.8	0.010
		PM 10/06/04	37.1	D+	36.3	D+	-1.5	-0.015
39	US 101 and Blossom Hill Road (E)*	AM 09/29/04	46.1	D	48.5	D	2.9	0.009
		PM 09/29/04	94.4	F	88.9	F	-7.3	-0.015
40	US 101 and Blossom Hill Road (W)*	AM 09/30/04	125.7	F	120.3	F	-6.4	-0.014
		PM 09/30/04	153.3	F	155.2	F	4.7	0.010
81	Almaden Expressway and Camden Avenue*	AM 00/00/04	58.1	E+	58.7	E+	0.1	0.001
		PM 10/12/04	58.0	E+	52.7	D-	-13.8	-0.044
86	Almaden Expressway and Blossom Hill Road*	AM 00/00/04	51.8	D-	51.6	D-	-0.6	-0.002
		PM 10/06/04	72.2	E	73.9	E	5.1	0.000
87	Almaden Expressway and Almaden Plaza Way*	AM 00/00/04	22.6	C+	21.8	C+	-1.3	-0.025
		PM 10/14/04	79.2	E-	81.1	F	10.8	-0.050
88	Almaden Expressway and SR 85*	AM 00/00/04	21.2	C+	21.7	C+	-1.9	0.005
		PM 10/14/04	97.4	F	93.1	F	-2.6	0.008
92	US 101 and Bernal Road (E)	AM 05/19/05	161.2	F	163.6	F	3.9	0.009
		PM 05/19/05	72.9	E	79.4	E-	6.6	0.015
94	SR 85 and Bernal Road*	AM 09/21/04	93.3	F	40.0	D	-93.1	-0.247
		PM 09/21/04	91.0	F	72.4	E	10.3	-0.011
City of Morgan Hill Signalized Intersections								
138	Butterfield Boulevard and Dunne Avenue	AM 10/05/04	38.3	D+	38.2	D+	0.0	-0.002
		PM 10/05/04	41.9	D	42.3	D	0.2	0.003
City of Gilroy Signalized Intersections								
167	Monterey Road and Masten Avenue	AM 05/11/05	33.6	C-	33.0	C-	-1.4	-0.014
		PM 05/11/05	41.3	D	40.2	D	-1.1	-0.016
177	Church Street and Tenth Street	AM 10/25/05	17.0	B	16.8	B	-0.2	-0.004
		PM 10/25/05	48.8	D	48.7	D	-0.2	0.001

* Denotes CMP Designated Intersection

/a/ Reported delay based on average control delay as calculated by TRAFFIX using HCM 2000 methodology

 - Project Impact when compared to 2005 Plus CVRP

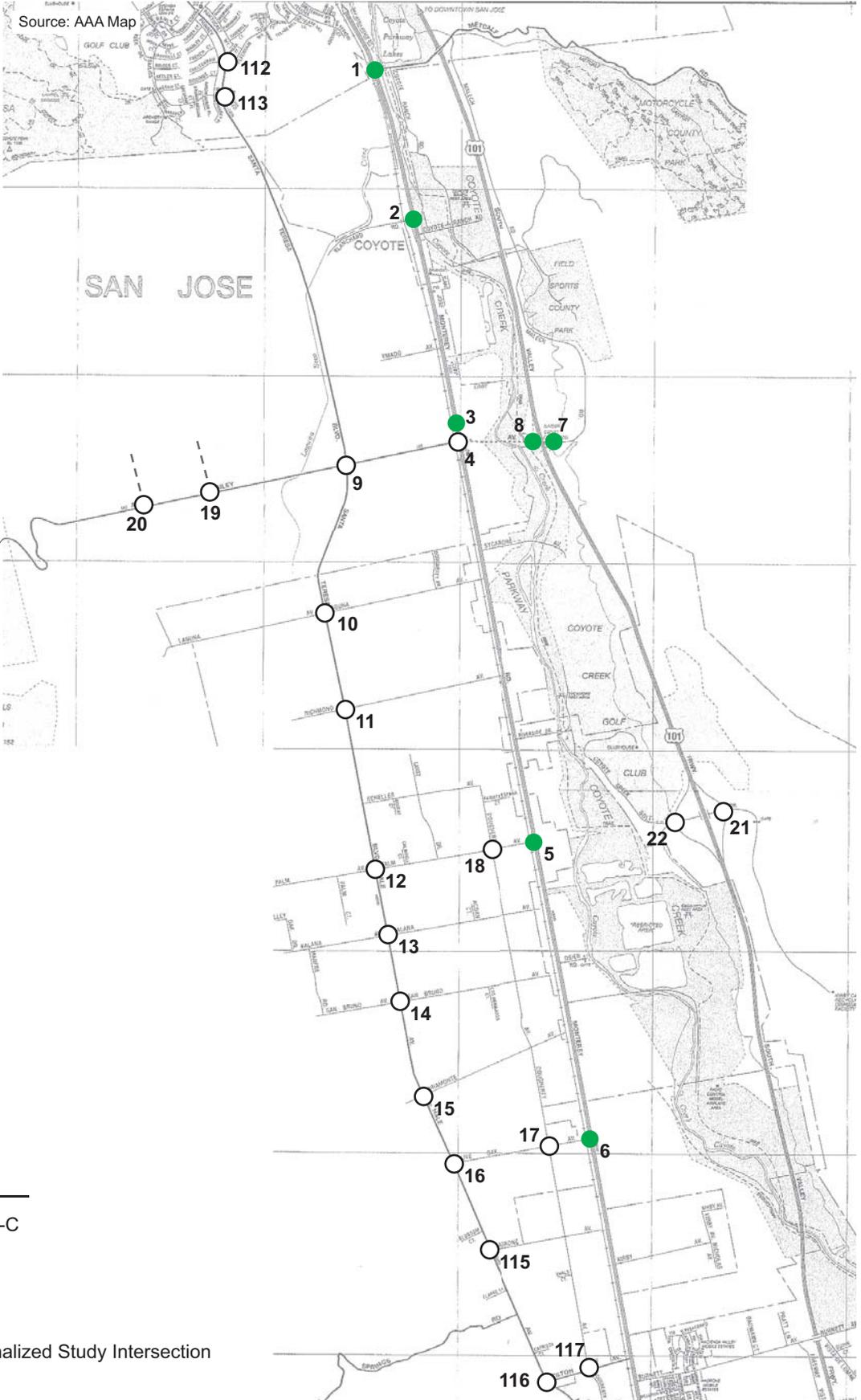


Figure 34

COYOTE VALLEY PROJECT CONDITIONS (2005 WITH PARTIAL CVSP)

CVSP

LEGEND

- = LOS A-C
- = LOS D
- = LOS E
- = LOS F
- = Unsignalized Study Intersection

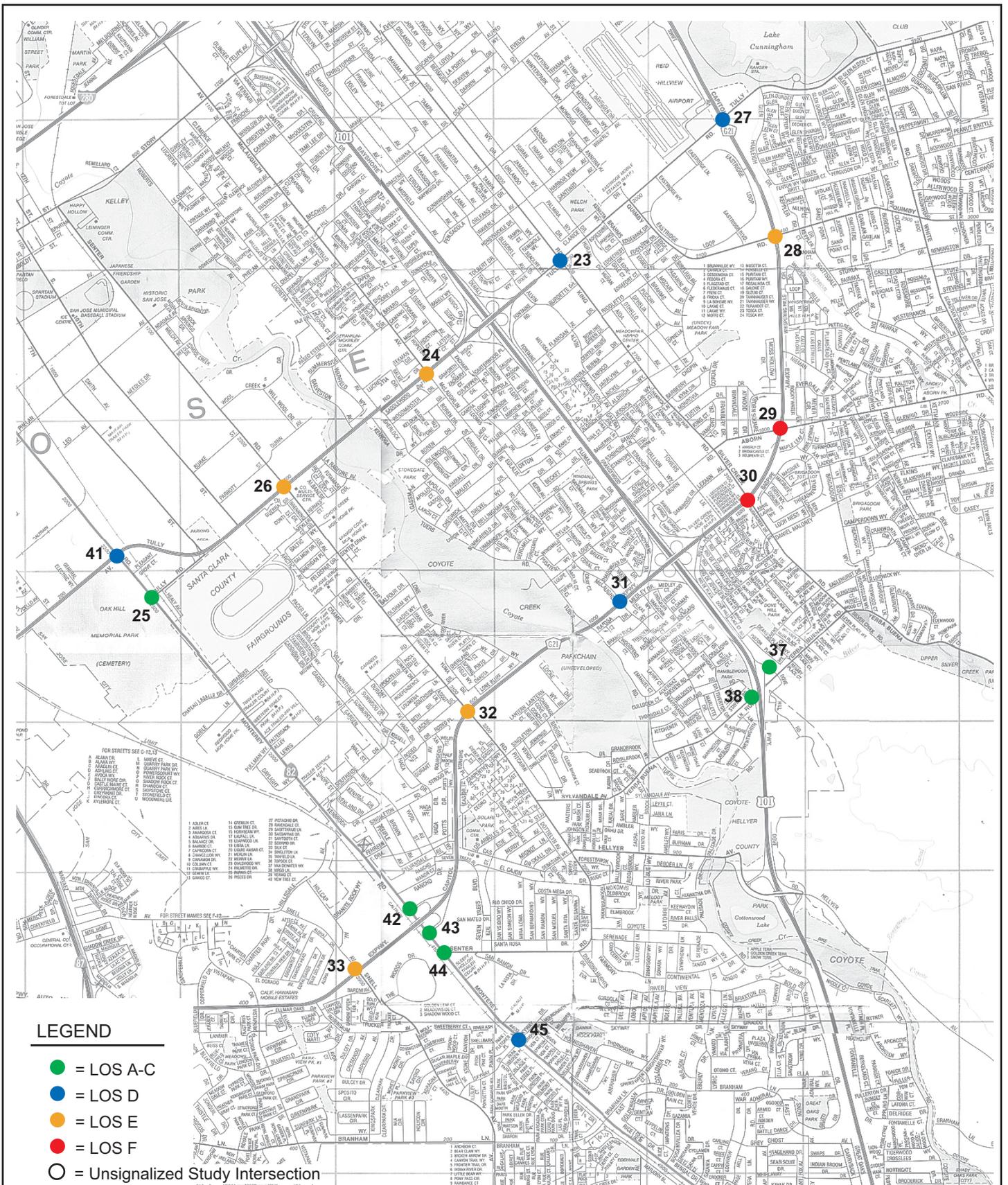
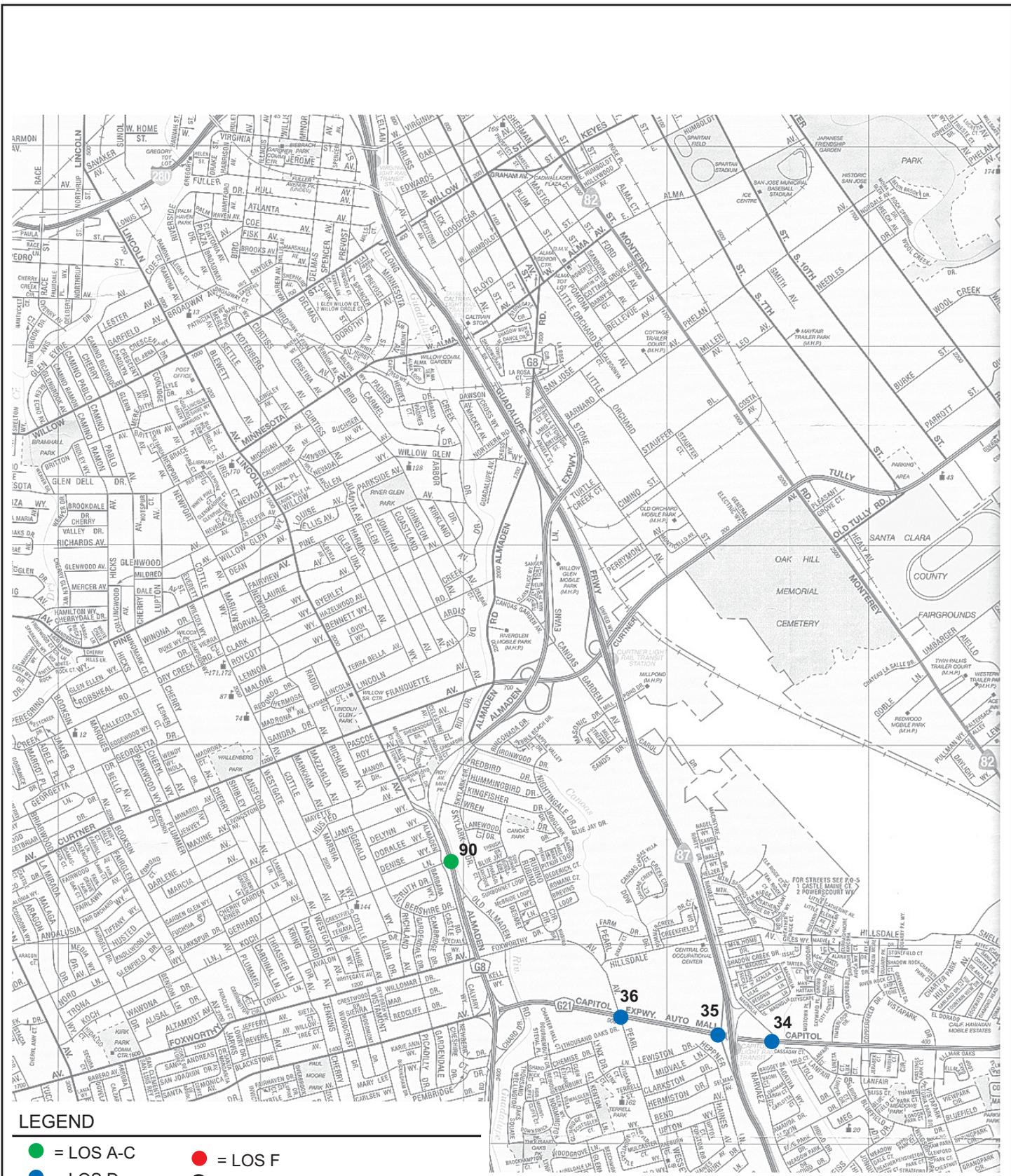


Figure 35A

Source: AAA Map

CITY OF SAN JOSE PROJECT CONDITIONS (2005 WITH PARTIAL CVSP)

CVSP



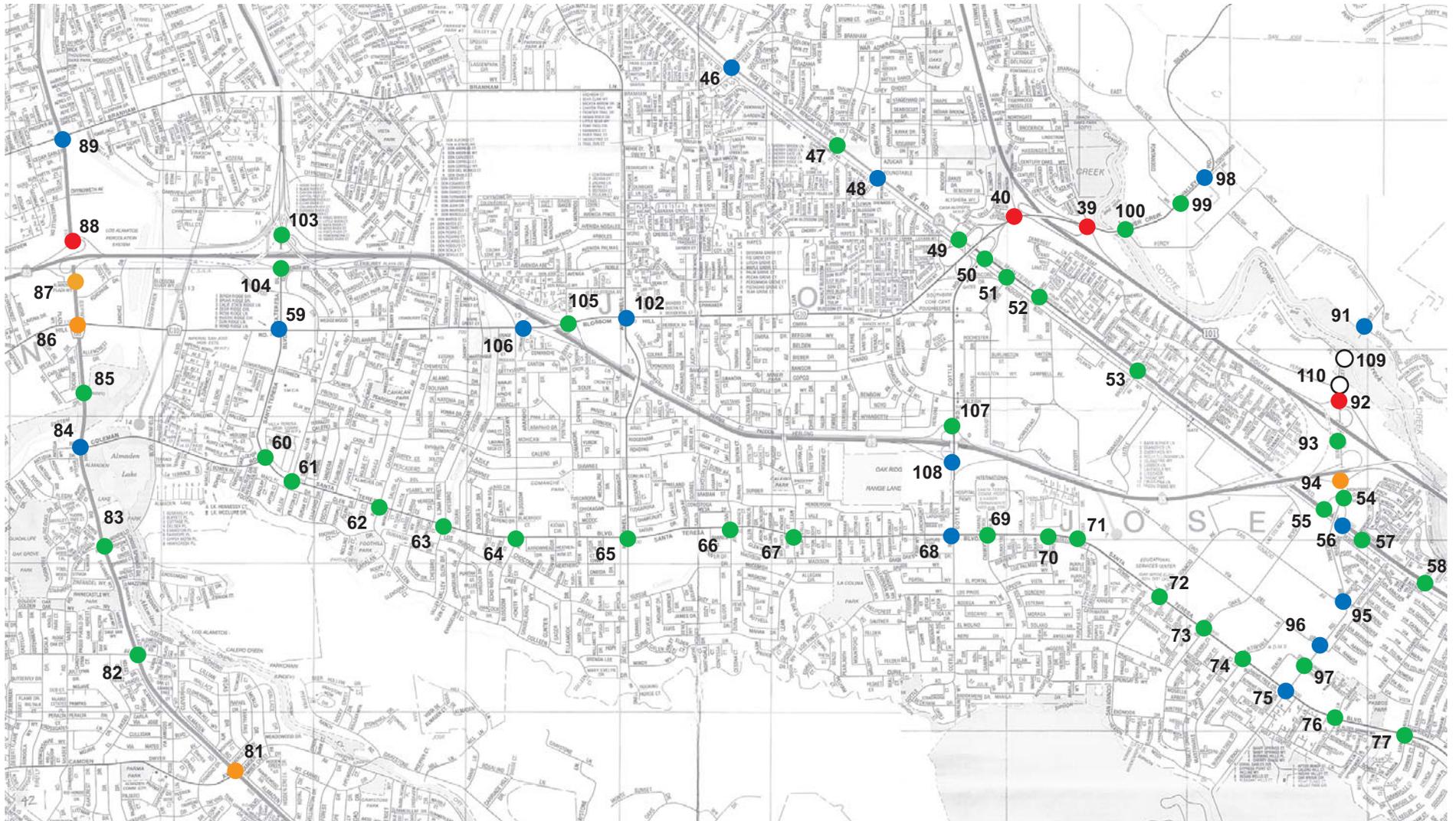
Source: AAA Map

Figure 35B

CITY OF SAN JOSE PROJECT CONDITIONS (2005 WITH PARTIAL CVSP)

Hexagon
Transportation Consultants, Inc.

CVSP



LEGEND

- = LOS A-C
- = LOS D
- = LOS E
- = LOS F
- = Unsignalized Study Intersection

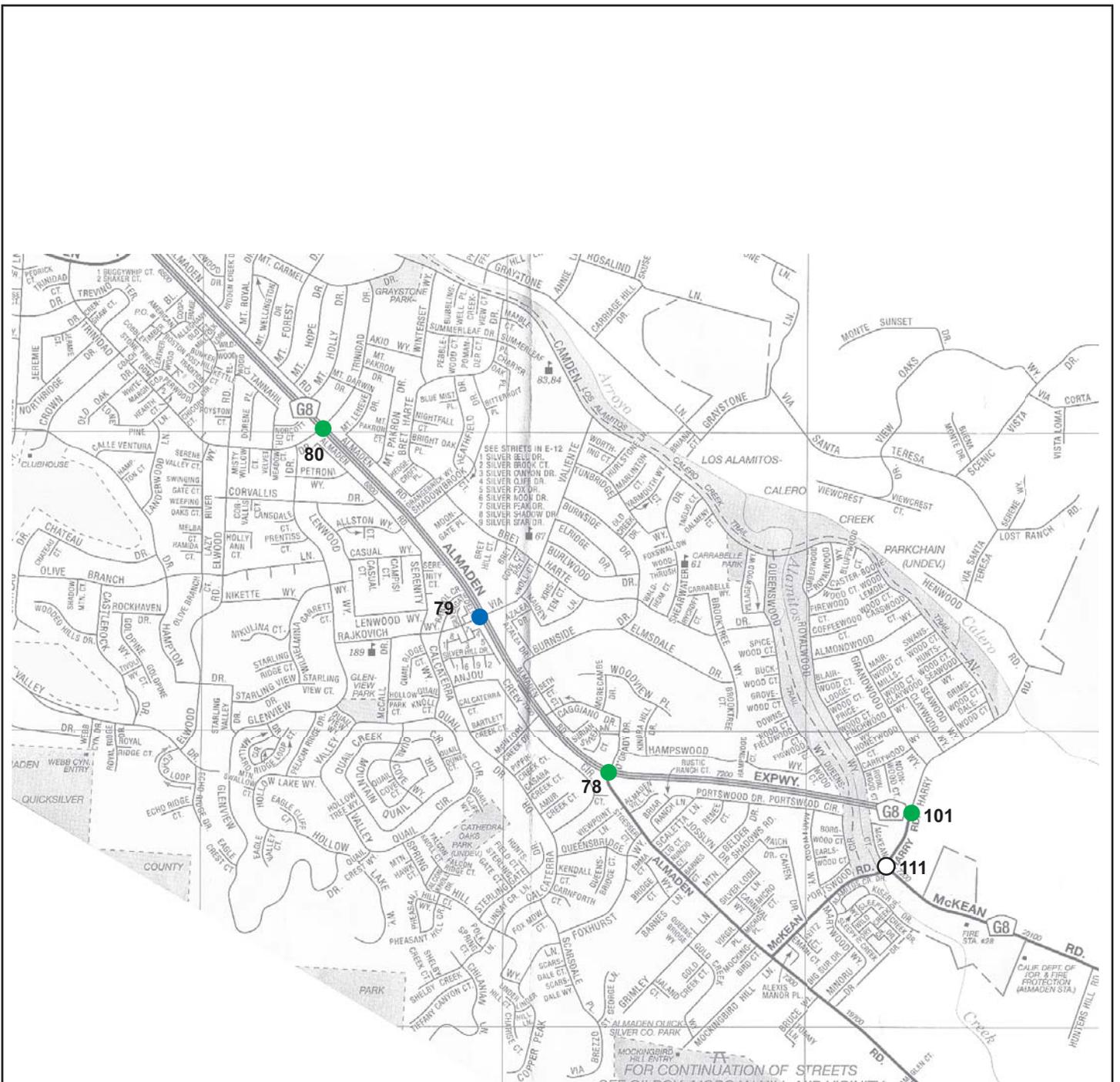
Hexagon
 Transportation Consultants, Inc.

Source: AAA Map

Figure 35C

CITY OF SAN JOSE PROJECT CONDITIONS (2005 WITH PARTIAL CVSP)

CVSP



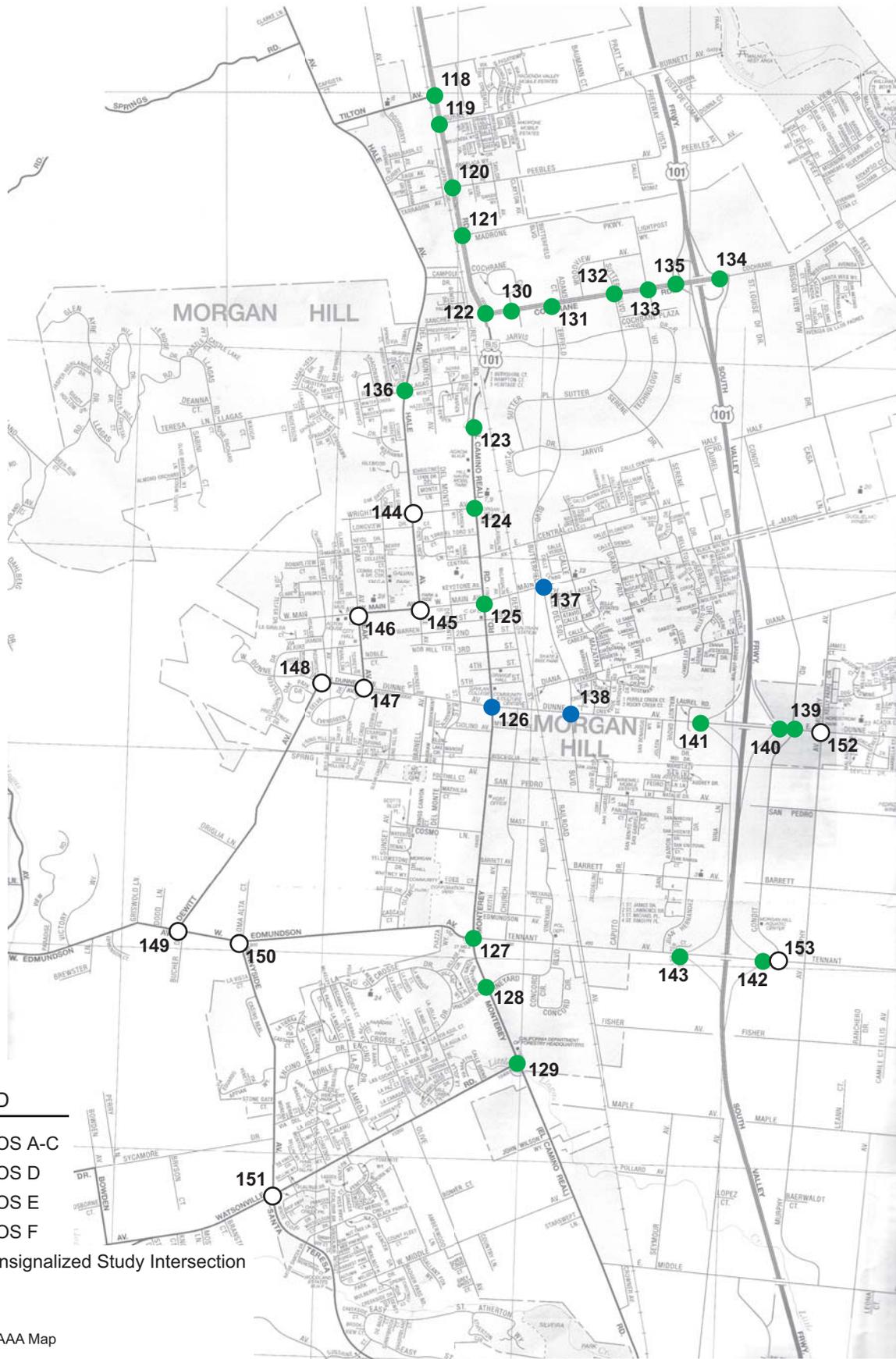
LEGEND

- = LOS A-C
- = LOS D
- = LOS E
- = LOS F
- = Unsignalized Study Intersection

Source: AAA Map

**CITY OF SAN JOSE PROJECT CONDITIONS
(2005 WITH PARTIAL CVSP)**

Figure 35D



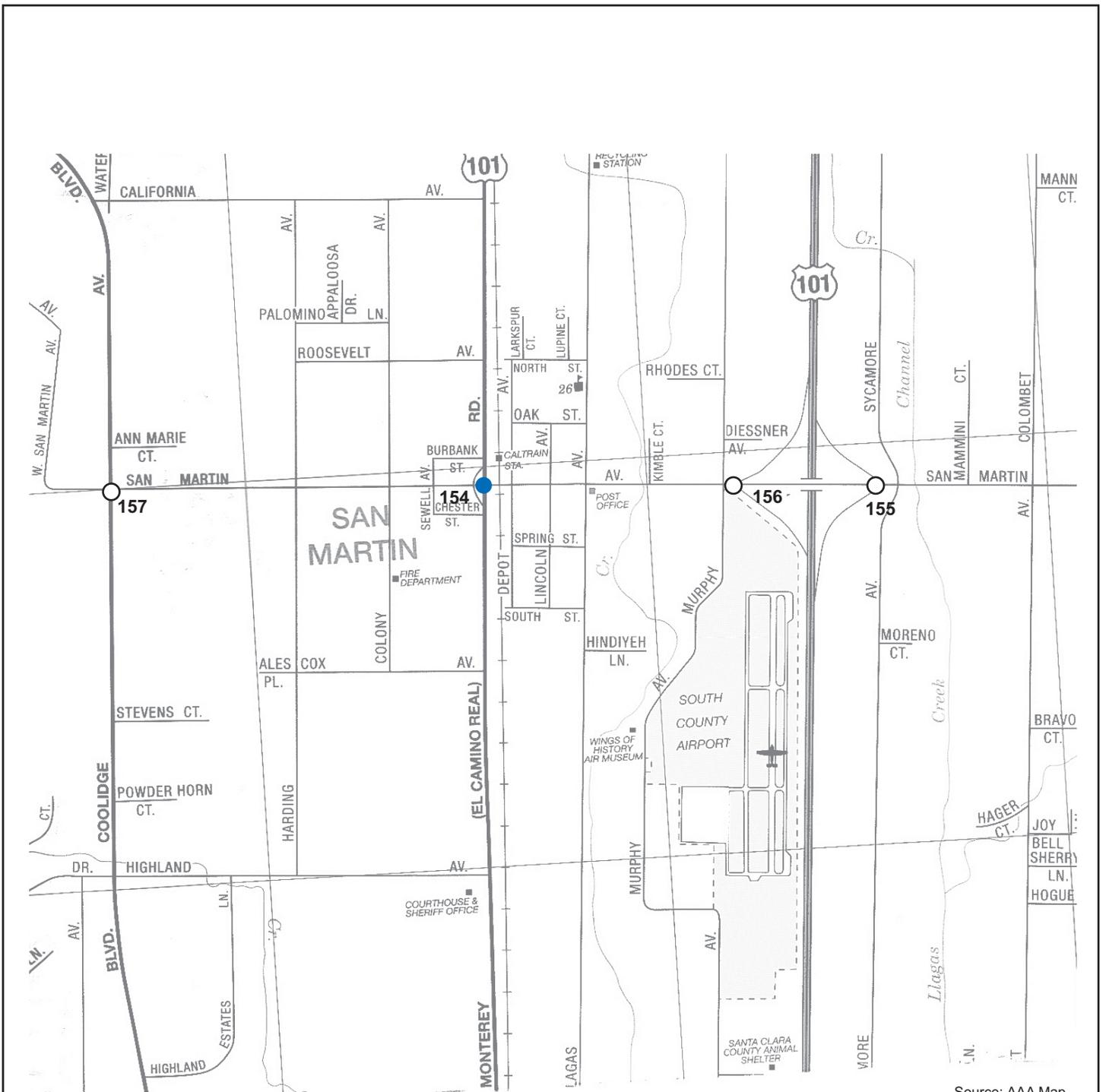
LEGEND

- = LOS A-C
- = LOS D
- = LOS E
- = LOS F
- = Unsignaled Study Intersection

Source: AAA Map

Figure 36

CITY OF MORGAN HILL PROJECT CONDITIONS (2005 WITH PARTIAL CVSP)



Source: AAA Map

LEGEND

- = LOS A-C
- = LOS D
- = LOS E
- = LOS F
- = Unsignalized Study Intersection

Figure 37

**CITY OF SAN MARTIN PROJECT CONDITIONS
(2005 WITH PARTIAL CVSP)**

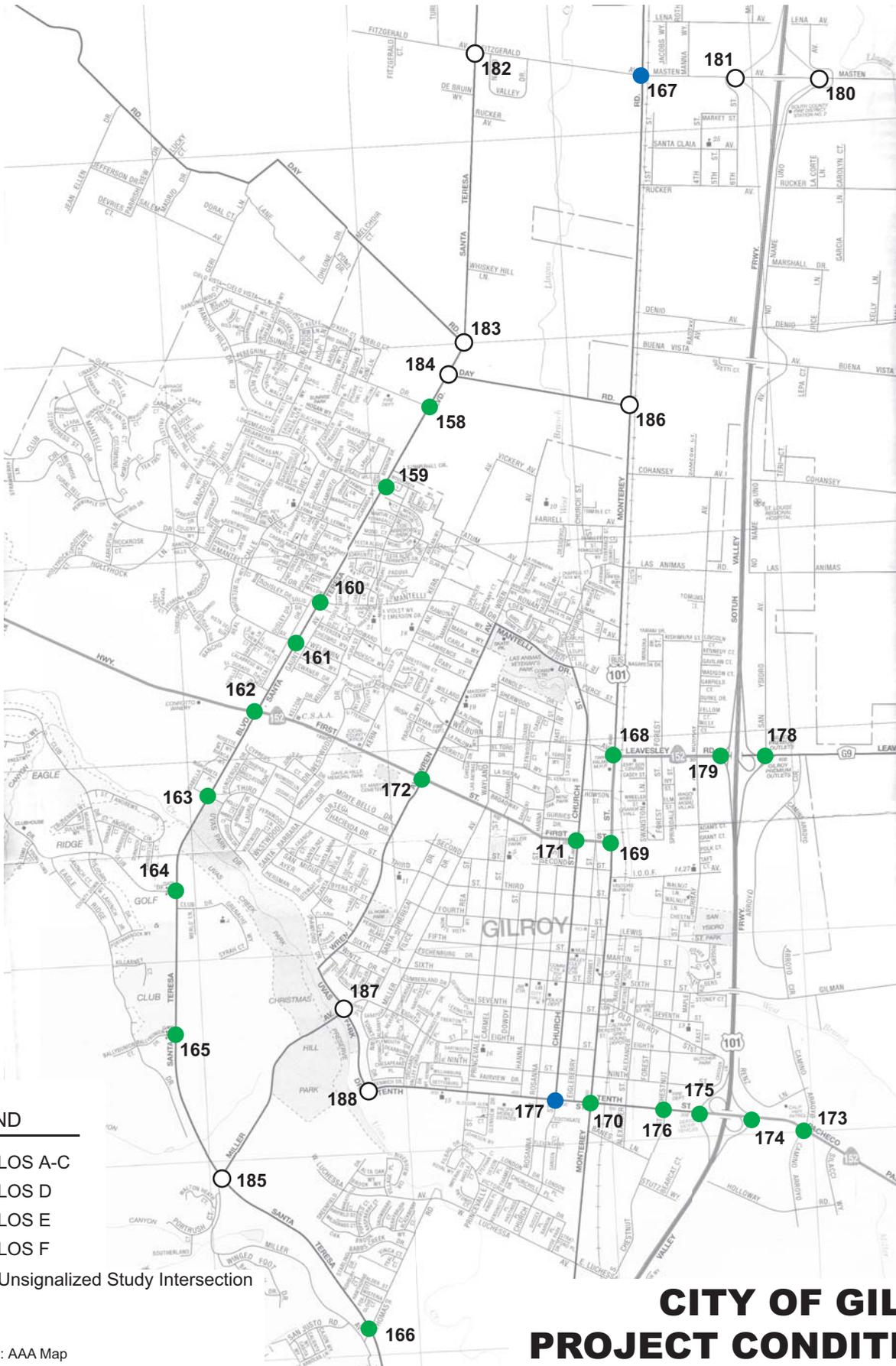


Figure 38

CITY OF GILROY PROJECT CONDITIONS (2005 WITH PARTIAL CVSP)

CVSP

LEGEND

- = LOS A-C
- = LOS D
- = LOS E
- = LOS F
- = Unsignalized Study Intersection

Source: AAA Map

**Table 20
Year 2005 Plus Partial CVSP Project Conditions Intersection Level of Service
(Impacted Intersections with Mitigation)**

Study Number	Peak Hour	Count Date	Background 2005 with CVRP		Project Conditions 2005 with Partial CVSP				2005w/CVSP Partial Mitigated/b/	
			Ave. Delay/a/	LOS	Ave. Delay/a/	LOS	Incr. In Crit. Delay	Incr. In Crit. V/C	Ave. Delay/a/	LOS
City of San Jose Signalized Intersections										
24	McLaughlin Avenue and Tully Road*	AM 11/09/04	49.4	D	47.8	D	-1.8	-0.013	41.1	D
		PM 09/09/04	74.7	E	77.7	E-	5.3	0.014		
26	Senter Road and Tully Road*	AM 09/08/04	42.4	D	42.5	D	0.2	0.004		
		PM 09/08/04	56.0	E+	56.1	E+	-0.5	-0.003		
28	Capitol Expressway and Quimby Road*	AM 03/05/03	59.0	E+	58.7	E+	-7.8	-0.034		
		PM 10/17/04	66.3	E	65.1	E	-19.2	-0.119		
29	Capitol Expressway and Aborn Road*	AM 01/01/04	88.2	F	85.4	F	-5.0	-0.012		
		PM 09/29/04	55.2	E+	55.6	E+	0.7	0.010		
30	Capitol Expressway and Silver Creek Road*	AM 01/01/04	158.7	F	146.9	F	-17.8	-0.041		
		PM 09/15/04	98.4	F	96.9	F	0.8	0.008		
32	Senter Road and Captiol Expressway*	AM 01/01/04	59.2	E+	58.7	E+	-1.3	-0.012		
		PM 10/05/04	48.0	D	48.2	D	1.2	0.013		
33	Snell Avenue and Capitol Expressway*	AM 01/01/04	42.4	D	42.9	D	0.8	0.010		
		PM 10/06/04	37.1	D+	36.3	D+	-1.5	-0.015		
39	US 101 and Blossom Hill Road (E)*	AM 09/29/04	46.1	D	48.5	D	2.9	0.009		
		PM 09/29/04	94.4	F	88.9	F	-7.3	-0.015		
40	US 101 and Blossom Hill Road (W)*	AM 09/30/04	125.7	F	120.3	F	-6.4	-0.014	37.0	D+
		PM 09/30/04	153.3	F	155.2	F	4.7	0.010		
81	Almaden Expressway and Camden Avenue*	AM 00/00/04	58.1	E+	58.7	E+	0.1	0.001		
		PM 10/12/04	58.0	E+	52.7	D-	-13.8	-0.044		
86	Almaden Expressway and Blossom Hill Road*	AM 00/00/04	51.8	D-	51.6	D-	-0.6	-0.002		
		PM 10/06/04	72.2	E	73.9	E	5.1	0.000		
87	Almaden Expressway and Almaden Plaza Way*	AM 00/00/04	22.6	C+	21.8	C+	-1.3	-0.025		
		PM 10/14/04	79.2	E-	81.1	F	10.8	-0.050		
88	Almaden Expressway and SR 85*	AM 00/00/04	21.2	C+	21.7	C+	-1.9	0.005		
		PM 10/14/04	97.4	F	93.1	F	-2.6	0.008		
92	US 101 and Bernal Road (E)	AM 05/19/05	161.2	F	163.6	F	3.9	0.009	35.5	D+
		PM 05/19/05	72.9	E	79.4	E-	6.6	0.015		
94	SR 85 and Bernal Road*	AM 09/21/04	93.3	F	40.0	D	-93.1	-0.247		
		PM 09/21/04	91.0	F	72.4	E	10.3	-0.011		
City of Morgan Hill Signalized Intersections										
138	Butterfield Boulevard and Dunne Avenue	AM 10/05/04	38.3	D+	38.2	D+	0.0	-0.002		
		PM 10/05/04	41.9	D	42.3	D	0.2	0.003		
City of Gilroy Signalized Intersections										
167	Monterey Road and Masten Avenue	AM 05/11/05	33.6	C-	33.0	C-	-1.4	-0.014		
		PM 05/11/05	41.3	D	40.2	D	-1.1	-0.016		
177	Church Street and Tenth Street	AM 10/25/05	17.0	B	16.8	B	-0.2	-0.004		
		PM 10/25/05	48.8	D	48.7	D	-0.2	0.001		

* Denotes CMP Designated Intersection

/a/ Reported delay based on average control delay as calculated by TRAFFIX using HCM 2000 methodology

 - Project Impact when compared to 2005 Plus CVRP

fund or contribute a fair-share towards each of the signal installations. The signal installations may require additional intersection improvements such as curb removal/reconstruction, adjustment of lane configurations and re-striping. Necessary improvements will be identified during the actual design of each signal.

Results of the signal warrant analysis are presented in Table 21. The signal warrant sheets are included in Appendix D.

Freeway Segment Levels of Service

Partial CVSP project traffic volumes on the freeway segments were estimated by adding to existing freeway volumes the estimated Partial CVSP project trips on freeway segments. The results of the analysis are summarized in Table 22.

The results show that the Partial CVSP traffic would have a significant impact on all 10 mixed-flow lanes and one HOV lane of the directional freeway segments identified to be impacted under the Full CVSP buildout project conditions. The same mitigation measures, or mitigation alternatives, identified for the Full CVSP buildout conditions would be required of the Partial CVSP development levels.

Project Roadway Segment Analysis

Traffic volumes for project conditions on each of the studied roadway segments were developed by adding to existing condition volumes the Partial CVSP project trips. The project trips were assigned to the roadway system in the same manner as with intersections. The roadway segment analysis indicates that all studied roadway segments are projected to operate at LOS D or better during both peak hours under background conditions. Table 23 presents the roadway segment analysis.

**Table 21
Signal Warrant Analysis Summary (Partial CVSP)**

Study Number	Intersection Name	Scenario							
		Existing		2005 + CVRP		2005 + Partial CVSP		2005 + CVSP	
		AM	PM	AM	PM	AM	PM	AM	PM
City of San Jose Unsignalized Intersections									
109	Eden Park Place & Silicon Valley Boulevard	No	No	No	No	No	No	No	No
110	Rue Ferrari & Silicon Valley Boulevard	No	No	Yes	No	Yes	Yes	Yes	Yes
111	McKean Road & Harry Road	No	No	Yes	No	Yes	No	Yes	Yes
112	Santa Teresa Boulevard & Cheltenham Way	No	No	No	Yes	No	No	No	No
113	Santa Teresa Boulevard & Bayliss Drive	No	No	Yes	No	No	No	No	No
114	McKean Road & Bailey Avenue	No	No	No	No	No	No	Yes	Yes
115	Santa Teresa Boulevard & Madrone Avenue	No	No	No	No	No	No	No	No
116	Hale Avenue & Tilton Avenue	No	No	No	No	No	No	No	No
117	Dougherty Avenue & Tilton Avenue	No	No	No	No	No	No	No	No
City of Morgan Hill Unsignalized Intersections									
144	Hale Avenue & Wright Avenue	No	No	Yes	No	Yes	No	Yes	No
145	Hale Avenue & Main Avenue	No	No	No	Yes	No	Yes	No	Yes
146	Peak Avenue & Main Avenue	No	No	No	No	No	No	No	No
147	Peak Avenue & Dunne Avenue	No	No	No	No	No	No	No	No
148	Dewitt Avenue & Dunne Avenue	No	No	No	No	No	No	No	No
149	Dewitt Avenue & Edmundson Avenue	No	No	No	No	No	No	No	No
150	Sunnyside Avenue & Edmundson Avenue	No	No	No	No	No	No	No	No
151	Santa Teresa Boulevard & Watsonville Road	No	No	No	Yes	No	Yes	Yes	Yes
152	Murphy Avenue & Dunne Avenue	Yes	No	Yes	No	Yes	No	Yes	No
153	Condit Road & Tennant Avenue	No	No	No	No	No	No	No	No
San Martin Unsignalized Intersections									
155	US 101 & San Martin Avenue (E)	Yes	No	Yes	No	Yes	No	Yes	No
156	US 101 & San Martin Avenue (W)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
157	Coolidge Avenue & San Martin Avenue	No	No	No	No	No	No	No	No
City of Gilroy Unsignalized Intersections									
180	US 101 & Masten Avenue (E)	No	No	Yes	No	Yes	No	Yes	No
181	US 101 & Masten Avenue (W)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
182	Santa Teresa Boulevard & Fitzgerald Avenue	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
183	Santa Teresa Boulevard & Day Road (N)	No	No	Yes	Yes	Yes	Yes	Yes	Yes
184	Santa Teresa Boulevard & Day Road (S)	No	No	Yes	Yes	Yes	Yes	Yes	Yes
185	Santa Teresa Boulevard & Miller Avenue	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes
186	Monterey Road & Day Road	Yes	No	Yes	No	Yes	Yes	Yes	Yes
187	Uvas Park Drive & Miller Avenue	No	No	No	Yes	No	Yes	No	Yes

Notes:

1. Warrant based on Caltrans Peak Hour Volume Warrant 11.

Table 22
Year 2005 With Partial CVSP Freeway Segment Level of Service Summary

Freeway	Segment	Direction	Peak Hour	Existing Plus Project Trips									Project Trips					
				Mixed-Flow					HOV				Total Volume	Mixed-Flow		HOV		
				Ave. Speed/a/	# of Lanes	Volume/a/	Density	LOS	Ave. Speed/a/	# of Lanes	Volume/a/	Density		LOS	Volume	% Capacity	Volume	% Capacity
US 101	SR 156 and SR 129	NB	AM	67	2	2,152	16.1	C	--	--	--	--	--	142	142	3.2%	--	--
			PM	67	2	1,368	10.2	B	--	--	--	--	--	28	28	0.6%	--	--
US 101	SR 129 and Betabel Rd	NB	AM	66	2	2,798	21.2	C	--	--	--	--	--	158	158	3.6%	--	--
			PM	67	2	1,240	9.3	A	--	--	--	--	--	30	30	0.7%	--	--
US 101	Betabel Rd and Bloomfield Ave/Hwy 25	NB	AM	66	2	2,668	20.2	C	--	--	--	--	--	158	158	3.6%	--	--
			PM	67	2	1,910	14.3	B	--	--	--	--	--	30	30	0.7%	--	--
US 101	Bloomfield Ave/ Hwy 25 and Monterey Rd	NB	AM	66	2	3,075	23.3	C	--	--	--	--	--	175	175	4.0%	--	--
			PM	66	2	2,943	22.3	C	--	--	--	--	--	43	43	1.0%	--	--
US 101	Monterey Rd and Pacheco Pass Hwy	NB	AM	67	3	2,829	14.1	B	--	--	--	--	--	219	219	3.2%	--	--
			PM	67	3	2,474	12.3	B	--	--	--	--	--	64	64	0.9%	--	--
US 101	Pacheco Pass Hwy and Leavesley Rd	NB	AM	66	3	4,041	20.4	C	--	--	--	--	--	281	281	4.1%	--	--
			PM	67	3	3,521	17.5	C	--	--	--	--	--	101	101	1.5%	--	--
US 101	Leavesley Rd and Masten Ave	NB	AM	66	3	4,085	20.6	C	--	--	--	--	--	325	325	4.7%	--	--
			PM	66	3	3,925	19.8	C	--	--	--	--	--	165	165	2.4%	--	--
US 101	Masten Ave and San Martin Ave	NB	AM	66	3	5,699	28.8	D	--	--	--	--	--	349	349	5.1%	--	--
			PM	66	3	4,147	20.9	C	--	--	--	--	--	187	187	2.7%	--	--
US 101	San Martin Ave and Tennant Ave	NB	AM	66	3	4,744	24.0	C	--	--	--	--	--	384	384	5.6%	--	--
			PM	67	3	3,019	15.0	B	--	--	--	--	--	209	209	3.0%	--	--
US 101	Tennant Ave and East Dunne Ave	NB	AM	32	3	6,353	66.2	F	--	--	--	--	--	403	403	5.8%	--	--
			PM	66	3	5,805	29.3	D	--	--	--	--	--	265	265	3.8%	--	--
US 101	East Dunne Ave and Cochrane Rd	NB	AM	46	3	6,900	50.0	E	--	--	--	--	--	410	410	5.9%	--	--
			PM	66	3	4,936	24.9	D	--	--	--	--	--	386	386	5.6%	--	--
US 101	Cochrane Rd and Coyote Creek Golf Dr	NB	AM	66	3	5,885	29.7	D	--	--	--	--	--	345	345	5.0%	--	--
			PM	66	3	4,519	22.8	C	--	--	--	--	--	359	359	5.2%	--	--
US 101	Coyote Creek Golf Dr and Bailey Ave	NB	AM	66	3	5,765	29.1	D	66	1	1,644	24.9	D	539	415	6.0%	124	6.9%
			PM	66	3	4,805	24.3	D	67	1	828	12.4	B	533	445	6.4%	88	4.9%
US 101	Bailey Ave and Coyote Valley Parkway	NB	AM	66	3	5,740	29.0	D	66	1	1,711	25.9	D	781	590	8.6%	191	10.6%
			PM	66	3	4,429	22.4	C	67	1	738	11.0	B	807	669	9.7%	138	7.7%
US 101	Coyote Valley Parkway and SR 85	NB	AM	64	3	6,724	35.0	D	67	1	997	14.9	B	781	584	8.5%	197	10.9%
			PM	66	3	4,424	22.3	C	67	1	744	11.1	B	808	664	9.6%	144	8.0%
US 101	SR 85 and Bernal Rd	NB	AM	67	3	4,183	20.8	C	67	1	1,126	16.8	C	679	563	8.2%	116	6.4%
			PM	66	3	5,116	25.8	D	67	1	1,085	16.2	C	641	566	8.2%	75	4.2%
US 101	Bernal Rd and Silver Creek Rd	NB	AM	66	3	5,801	29.3	D	67	1	1,259	18.8	C	970	851	12.3%	119	6.6%
			PM	66	3	4,739	23.9	C	67	1	425	6.3	A	864	779	11.3%	85	4.7%
US 101	Silver Creek Rd and Hellyer Ave	NB	AM	27	3	6,252	77.2	F	64	1	2,151	33.6	D	843	742	10.8%	101	5.6%
			PM	65	3	6,332	32.5	D	67	1	632	9.4	A	764	672	9.7%	92	5.1%
US 101	Hellyer Ave and Yerba Buena Rd	NB	AM	39	3	6,917	59.1	F	65	1	2,118	32.6	D	815	717	10.4%	98	5.4%
			PM	65	3	6,294	32.3	D	67	1	1,029	15.4	B	723	634	9.2%	89	4.9%
US 101	Yerba Buena Rd and Capitol Expwy	NB	AM	24	3	5,979	83.0	F	64	1	2,133	33.3	D	662	579	8.4%	83	4.6%
			PM	67	3	3,896	19.4	C	67	1	521	7.8	A	527	476	6.9%	51	2.8%
US 101	Capitol Expwy and Tully Rd	NB	AM	25	3	6,022	80.3	F	36	1	2,132	59.2	F	704	622	9.0%	82	4.6%
			PM	52	3	7,041	45.1	D	67	1	1,187	17.7	C	538	491	7.1%	47	2.6%
US 101	Tully Rd and Story Rd	NB	AM	59	3	7,112	40.2	D	59	1	2,255	38.2	D	637	562	8.1%	75	4.2%
			PM	63	3	6,888	36.4	D	67	1	907	13.5	B	495	458	6.6%	37	2.1%
US 101	Story Rd and I-280	NB	AM	50	3	6,929	46.2	E	65	1	2,077	32.0	D	386	329	4.8%	57	3.2%
			PM	67	3	3,015	15.0	B	67	1	887	13.2	B	222	205	3.0%	17	0.9%
SR 85	Bernal Rd and Cottle Rd	NB	AM	67	2	2,483	18.5	C	67	1	629	9.4	A	562	473	10.8%	89	4.9%
			PM	66	2	2,992	22.7	C	67	1	350	5.2	A	562	482	11.0%	80	4.4%
SR 85	Cottle Rd and Blossom Hill Rd	NB	AM	66	2	3,803	28.8	D	66	1	1,386	21.0	C	569	503	11.4%	66	3.7%
			PM	65	2	4,344	33.4	D	67	1	462	6.9	A	506	444	10.1%	62	3.4%
SR 85	Blossom Hill Rd and SR 87	NB	AM	13	2	3,201	123.1	F	48	1	2,218	46.2	E	579	521	11.8%	58	3.2%
			PM	58	2	4,825	41.6	D	67	1	648	9.7	A	463	415	9.4%	48	2.7%

Table 22
Year 2005 With Partial CVSP Freeway Segment Level of Service Summary

Freeway	Segment	Direction	Peak Hour	Existing Plus Project Trips										Project Trips				
				Mixed-Flow					HOV					Total Volume	Mixed-Flow		HOV	
				Ave. Speed/a/	# of Lanes	Volume/a/	Density	LOS	Ave. Speed/a/	# of Lanes	Volume/a/	Density	LOS		Volume	% Capacity	Volume	% Capacity
US 101	SR 156 and SR 129	SB	AM	67	2	971	7.2	A	--	--	--	--	--	31	31	0.7%	--	--
			PM	67	2	1,067	8.0	A	--	--	--	--	--	127	127	2.9%	--	--
US 101	SR 129 and Betabel Rd	SB	AM	67	2	1,774	13.2	B	--	--	--	--	--	34	34	0.8%	--	--
			PM	67	2	1,491	11.1	B	--	--	--	--	--	151	151	3.4%	--	--
US 101	Betabel Rd and Bloomfield Ave/Hwy 25	SB	AM	67	2	1,774	13.2	B	--	--	--	--	--	34	34	0.8%	--	--
			PM	66	2	3,191	24.2	D	--	--	--	--	--	151	151	3.4%	--	--
US 101	Bloomfield Ave/ Hwy 25 and Monterey Rd	SB	AM	67	2	2,455	18.3	C	--	--	--	--	--	45	45	1.0%	--	--
			PM	65	2	4,071	31.3	D	--	--	--	--	--	171	171	3.9%	--	--
US 101	Monterey Rd and Pacheco Pass Hwy	SB	AM	67	3	2,075	10.3	B	--	--	--	--	--	65	65	0.9%	--	--
			PM	67	3	3,837	19.1	C	--	--	--	--	--	217	217	3.1%	--	--
US 101	Pacheco Pass Hwy and Leavesley Rd	SB	AM	67	3	3,524	17.5	C	--	--	--	--	--	104	104	1.5%	--	--
			PM	66	3	4,431	22.4	C	--	--	--	--	--	271	271	3.9%	--	--
US 101	Leavesley Rd and Masten Ave	SB	AM	67	3	3,383	16.8	C	--	--	--	--	--	163	163	2.4%	--	--
			PM	66	3	5,481	27.7	D	--	--	--	--	--	331	331	4.8%	--	--
US 101	Masten Ave and San Martin Ave	SB	AM	67	3	3,604	17.9	C	--	--	--	--	--	184	184	2.7%	--	--
			PM	65	3	6,188	31.7	D	--	--	--	--	--	338	338	4.9%	--	--
US 101	San Martin Ave and Tennant Ave	SB	AM	67	3	3,223	16.0	C	--	--	--	--	--	203	203	2.9%	--	--
			PM	66	3	4,540	22.9	C	--	--	--	--	--	380	380	5.5%	--	--
US 101	Tennant Ave and East Dunne Ave	SB	AM	67	3	3,471	17.3	C	--	--	--	--	--	251	251	3.6%	--	--
			PM	66	3	5,939	30.0	D	--	--	--	--	--	399	399	5.8%	--	--
US 101	East Dunne Ave and Cochrane Rd	SB	AM	66	3	4,540	22.9	C	--	--	--	--	--	380	380	5.5%	--	--
			PM	65	3	6,053	31.0	D	--	--	--	--	--	393	393	5.7%	--	--
US 101	Cochrane Rd and Coyote Creek Golf Dr	SB	AM	66	3	4,980	25.2	D	--	--	--	--	--	430	430	6.2%	--	--
			PM	65	3	6,265	32.1	D	--	--	--	--	--	215	215	3.1%	--	--
US 101	Coyote Creek Golf Dr and Bailey Ave	SB	AM	67	3	3,913	19.5	C	67	1	753	11.2	B	576	493	7.1%	83	4.6%
			PM	66	3	5,249	26.5	D	66	1	1,683	25.5	D	462	299	4.3%	163	9.1%
US 101	Bailey Ave and Coyote Valley Parkway	SB	AM	66	3	5,097	25.7	D	67	1	912	13.6	B	1,109	937	13.6%	172	9.6%
			PM	66	3	5,395	27.2	D	66	1	1,412	21.4	C	1,007	845	12.2%	162	9.0%
US 101	Coyote Valley Parkway and SR 85	SB	AM	67	4	5,494	20.5	C	67	1	714	10.7	B	1,108	934	10.2%	174	9.7%
			PM	66	4	6,383	24.2	D	67	1	1,104	16.5	C	1,007	843	9.2%	164	9.1%
US 101	SR 85 and Bernal Rd	SB	AM	67	3	3,209	16.0	B	67	1	769	11.5	B	698	599	8.7%	99	5.5%
			PM	66	3	5,538	28.0	D	65	1	2,049	31.5	D	687	588	8.5%	99	5.5%
US 101	Bernal Rd and Silver Creek Rd	SB	AM	67	3	3,694	18.4	C	67	1	1,177	17.6	C	781	674	9.8%	107	5.9%
			PM	67	3	4,187	20.8	C	66	1	1,629	24.7	D	876	767	11.1%	109	6.1%
US 101	Silver Creek Rd and Hellyer Ave	SB	AM	66	3	5,159	26.1	D	67	1	1,036	15.5	B	705	609	8.8%	96	5.3%
			PM	66	3	5,496	27.8	D	67	1	1,032	15.4	B	838	746	10.8%	92	5.1%
US 101	Hellyer Ave and Yerba Buena Rd	SB	AM	64	3	6,903	36.0	D	67	1	762	11.4	B	655	563	8.2%	92	5.1%
			PM	65	3	6,375	32.7	D	66	1	1,409	21.3	C	804	715	10.4%	89	4.9%
US 101	Yerba Buena Rd and Capitol Expwy	SB	AM	66	3	4,273	21.6	C	67	1	734	11.0	B	577	513	7.4%	64	3.6%
			PM	66	3	4,631	23.4	C	67	1	1,148	17.1	C	749	671	9.7%	78	4.3%
US 101	Capitol Expwy and Tully Rd	SB	AM	62	3	6,944	37.3	D	67	1	1,057	15.8	B	481	434	6.3%	47	2.6%
			PM	37	3	6,743	60.7	F	66	1	1,917	29.0	D	700	633	9.2%	67	3.7%
US 101	Tully Rd and Story Rd	SB	AM	63	3	6,850	36.2	D	67	1	551	8.2	A	431	420	6.1%	11	0.6%
			PM	14	3	4,821	114.8	F	52	1	2,250	43.3	D	691	621	9.0%	70	3.9%
US 101	Story Rd and I-280	SB	AM	67	3	2,782	13.8	B	67	1	480	7.2	A	182	172	2.5%	10	0.6%
			PM	24	3	5,700	79.2	F	66	1	1,904	28.8	D	424	370	5.4%	54	3.0%
SR 85	Bernal Rd and Cottle Rd	SB	AM	67	2	2,641	19.7	C	67	1	267	4.0	A	568	501	11.4%	67	3.7%
			PM	66	2	3,654	27.7	D	67	1	613	9.1	A	557	484	11.0%	73	4.1%
SR 85	Cottle Rd and Blossom Hill Rd	SB	AM	64	2	4,505	35.2	D	67	1	798	11.9	B	463	405	9.2%	58	3.2%
			PM	65	2	4,291	33.0	D	67	1	852	12.7	B	573	521	11.8%	52	2.9%
SR 85	Blossom Hill Rd and SR 87	SB	AM	66	2	3,934	29.8	D	67	1	451	6.7	A	425	374	8.5%	51	2.8%
			PM	42	2	4,713	56.1	F	66	1	1,297	19.7	C	560	513	11.7%	47	2.6%

Box indicates significant impact

/a/ Source: Santa Clara Valley Transportation Authority Congestion Management Program Monitoring Study, 2005.

Table 23

Existing Plus Partial CVSP Roadway Segment Analysis

Segment	Direction	# Of Lanes	Capacity (vph)	Existing Conditions						Partial CVSP Trips				Existing + Partial CVSP					
				AM Peak-Hour			PM Peak-Hour			AM Peak-Hour		PM Peak-Hour		AM Peak-Hour			PM Peak-Hour		
				Volume	V/C	LOS	Volume	V/C	LOS	Volume	Increase	Volume	Increase	Volume	V/C	LOS	Volume	V/C	LOS
Bernal Rd																			
Monterey Rd and San Ignacio Ave	EB	3	3,600	1,141	0.317	A	1,445	0.401	A	114	10.0%	109	7.5%	1,255	0.349	A	1,554	0.432	A
	WB	3	3,600	1,725	0.479	A	1,159	0.322	A	35	2.0%	269	23.2%	1,760	0.489	A	1,428	0.397	A
San Ignacio Ave and Via Del Oro	EB	3	3,600	736	0.204	A	842	0.234	A	114	15.5%	109	12.9%	850	0.236	A	951	0.264	A
	WB	3	3,600	945	0.263	A	870	0.242	A	35	3.7%	269	30.9%	980	0.272	A	1,139	0.316	A
Via Del Oro and Santa Teresa Blvc	EB	3	3,600	731	0.203	A	669	0.186	A	16	2.2%	284	42.5%	747	0.208	A	953	0.265	A
	WB	3	3,600	648	0.180	A	772	0.214	A	126	19.4%	73	9.5%	774	0.215	A	845	0.235	A
Monterey Rd																			
Blossom Hill Rd and Bernal Rd	NB	2	2,400	860	0.358	A	555	0.231	A	273	31.7%	139	25.0%	1,133	0.472	A	694	0.289	A
	SB	2	2,400	488	0.203	A	634	0.264	A	83	17.0%	310	48.9%	571	0.238	A	944	0.393	A
Bernal Rd and Bailey Ave	NB	2	2,400	554	0.231	A	405	0.169	A	907	163.7%	687	169.6%	1,461	0.609	B	1,092	0.455	A
	SB	2	2,400	321	0.134	A	437	0.182	A	1,139	354.8%	601	137.5%	1,460	0.608	B	1,038	0.433	A
Bailey Ave and Cochrane Rd	NB	2	2,400	877	0.365	A	476	0.198	A	141	16.1%	155	32.6%	1,018	0.424	A	631	0.263	A
	SB	2	2,400	520	0.217	A	650	0.271	A	53	10.2%	236	36.3%	573	0.239	A	886	0.369	A
Cochrane Rd and Old Monterey Rc	NB	2	2,400	865	0.360	A	439	0.183	A	210	24.3%	103	23.5%	1,075	0.448	A	542	0.226	A
	SB	2	2,400	398	0.166	A	951	0.396	A	61	15.3%	198	20.8%	459	0.191	A	1,149	0.479	A
Santa Teresa Blvd																			
Cottle Rd and Bernal Rd	NB	3	3,600	528	0.147	A	595	0.165	A	337	63.8%	172	28.9%	865	0.240	A	767	0.213	A
	SB	3	3,600	594	0.165	A	612	0.170	A	43	7.2%	287	46.9%	637	0.177	A	899	0.250	A
Bernal Rd and Bailey Ave	NB	2	2,400	432	0.180	A	287	0.120	A	897	207.6%	460	160.3%	1,329	0.554	A	747	0.311	A
	SB	2	2,400	322	0.134	A	389	0.162	A	137	42.5%	739	190.0%	459	0.191	A	1,128	0.470	A
Bailey Ave and Tilton Ave	NB	1	1,200	358	0.298	A	168	0.140	A	128	35.8%	34	20.2%	486	0.405	A	202	0.168	A
	SB	1	1,200	137	0.114	A	344	0.287	A	30	21.9%	254	73.8%	167	0.139	A	598	0.498	A
Tilton Ave and Llagas Rd	NB	2	2,400	179	0.075	A	356	0.148	A	242	135.2%	4	1.1%	421	0.175	A	360	0.150	A
	SB	2	2,400	420	0.175	A	144	0.060	A	0	0.0%	359	249.3%	420	0.175	A	503	0.210	A
Watsonville Rd and San Martin Ave	NB	1	1,200	264	0.220	A	227	0.189	A	31	11.7%	0	0.0%	295	0.246	A	227	0.189	A
	SB	1	1,200	149	0.124	A	259	0.216	A	0	0.0%	44	17.0%	149	0.124	A	303	0.253	A
San Martin Ave and Fitzgerald Ave	NB	1	1,200	313	0.261	A	197	0.164	A	29	9.3%	1	0.5%	342	0.285	A	198	0.165	A
	SB	1	1,200	131	0.109	A	363	0.303	A	1	0.8%	26	7.2%	132	0.110	A	389	0.324	A
Bailey Ave																			
US 101 and Monterey Rd	EB	3	3,600	318	0.088	A	456	0.127	A	1,421	446.9%	1,153	252.9%	1,739	0.483	A	1,609	0.447	A
	WB	3	3,600	477	0.133	A	248	0.069	A	1,580	331.2%	1,432	577.4%	2,057	0.571	A	1,680	0.467	A
Monterey Rd and Santa Tera Blvc	EB	3	3,600	172	0.048	A	382	0.106	A	1,427	829.7%	1,338	350.3%	1,599	0.444	A	1,720	0.478	A
	WB	3	3,600	519	0.144	A	211	0.059	A	1,686	324.9%	1,502	711.8%	2,205	0.613	B	1,713	0.476	A
Santa Teresa Blvd and McKean Rc	EB	1	1,200	141	0.118	A	494	0.412	A	128	90.8%	164	33.2%	269	0.224	A	658	0.548	A
	WB	1	1,200	596	0.497	A	211	0.176	A	110	18.5%	150	71.1%	706	0.588	A	361	0.301	A
Cochrane Rd																			
Mission View Dr and US 101	EB	3	3,600	228	0.063	A	445	0.124	A	12	5.3%	17	3.8%	240	0.067	A	462	0.128	A
	WB	3	3,600	403	0.112	A	253	0.070	A	15	3.7%	14	5.5%	418	0.116	A	267	0.074	A
US 101 and Monterey Rd	EB	3	3,600	852	0.237	A	1,591	0.442	A	58	6.8%	147	9.2%	910	0.253	A	1,738	0.483	A
	WB	3	3,600	1,564	0.434	A	1,255	0.349	A	105	6.7%	58	4.6%	1,669	0.464	A	1,313	0.365	A
Watsonville Rd																			
Santa Teresa Blvd and Uvas Rd	NB	1	1,200	265	0.221	A	184	0.153	A	39	14.7%	9	4.9%	304	0.253	A	193	0.161	A
	SB	1	1,200	150	0.125	A	325	0.271	A	3	2.0%	50	15.4%	153	0.128	A	375	0.313	A
Uvas Rd and Day Rd	NB	1	1,200	234	0.195	A	147	0.123	A	102	43.6%	10	6.8%	336	0.280	A	157	0.131	A
	SB	1	1,200	114	0.095	A	258	0.215	A	4	3.5%	109	42.2%	118	0.098	A	367	0.306	A
Day Rd and Hwy 152	NB	1	1,200	201	0.168	A	111	0.093	A	101	50.2%	10	9.0%	302	0.252	A	121	0.101	A
	SB	1	1,200	101	0.084	A	215	0.179	A	4	4.0%	107	49.8%	105	0.088	A	322	0.268	A
Uvas Rd																			
Bailey Ave and Oak Glen Rd	NB	1	1,200	199	0.166	A	101	0.084	A	71	35.7%	2	2.0%	270	0.225	A	103	0.086	A
	SB	1	1,200	64	0.053	A	168	0.140	A	1	1.6%	68	40.5%	65	0.054	A	236	0.197	A
Oak Glen Rd and Watsonville Rd	NB	1	1,200	120	0.100	A	41	0.034	A	66	55.0%	0	0.0%	186	0.155	A	41	0.034	A
	SB	1	1,200	33	0.028	A	92	0.077	A	0	0.0%	62	67.4%	33	0.028	A	154	0.128	A
Edmundson Ave																			
Oak Glen Rd and Sunnyside Ave	EB	2	2,400	223	0.093	A	283	0.118	A	6	2.7%	0	0.0%	229	0.095	A	283	0.118	A
	WB	2	2,400	337	0.140	A	244	0.102	A	0	0.0%	0	0.0%	337	0.140	A	244	0.102	A
Sunnyside Ave and Monterey Rc	EB	2	2,400	334	0.139	A	239	0.100	A	6	1.8%	2	0.8%	340	0.142	A	241	0.100	A
	WB	2	2,400	172	0.072	A	356	0.148	A	2	1.2%	2	0.6%	174	0.073	A	358	0.149	A

Table 23
Existing Plus Partial CVSP Roadway Segment Analysis

Segment	Direction	# Of Lanes	Capacity (vph)	Existing Conditions						Partial CVSP Trips				Existing + Partial CVSP					
				AM Peak-Hour			PM Peak-Hour			AM Peak-Hour		PM Peak-Hour		AM Peak-Hour			PM Peak-Hour		
				Volume	V/C	LOS	Volume	V/C	LOS	Volume	Increase	Volume	Increase	Volume	V/C	LOS	Volume	V/C	LOS
Oak Glen Ave																			
Uvas Rd and Willow Springs Rd	NB	1	1,200	69	0.058	A	42	0.035	A	0	0.0%	0	0.0%	69	0.058	A	42	0.035	A
	SB	1	1,200	35	0.029	A	63	0.053	A	0	0.0%	0	0.0%	35	0.029	A	63	0.053	A
Willow Springs Rd and Edmunson Rd																			
	NB	1	1,200	93	0.078	A	105	0.088	A	0	0.0%	0	0.0%	93	0.078	A	105	0.088	A
	SB	1	1,200	99	0.083	A	77	0.064	A	0	0.0%	2	2.6%	99	0.083	A	79	0.066	A
Edmunson Rd and Watsonville Rd																			
	NB	1	1,200	34	0.028	A	28	0.023	A	6	17.6%	0	0.0%	40	0.033	A	28	0.023	A
	SB	1	1,200	16	0.013	A	47	0.039	A	0	0.0%	1	2.1%	16	0.013	A	48	0.040	A
Willow Springs Rd																			
Oak Glen Ave and Santa Tera Blvd																			
	NB	1	1,200	20	0.017	A	17	0.014	A	2	10.0%	0	0.0%	22	0.018	A	17	0.014	A
	SB	1	1,200	10	0.008	A	30	0.025	A	0	0.0%	3	10.0%	10	0.008	A	33	0.028	A
McKean Rd																			
Harry Rd and Bailey Ave																			
	NB	1	1,200	272	0.227	A	210	0.175	A	91	33.5%	60	28.6%	363	0.303	A	270	0.225	A
	SB	1	1,200	200	0.167	A	221	0.184	A	40	20.0%	140	63.3%	240	0.200	A	361	0.301	A
Malech Rd																			
Metcalf Rd and Bailey Ave																			
	NB	1	1,200	25	0.021	A	37	0.031	A	130	520.0%	0	0.0%	155	0.129	A	37	0.031	A
	SB	1	1,200	52	0.043	A	33	0.028	A	0	0.0%	8	24.2%	52	0.043	A	41	0.034	A
Metcalf Rd																			
San Felipe Rd and Malech Rd																			
	EB	1	1,200	52	0.043	A	11	0.009	A	6	11.5%	25	227.3%	58	0.048	A	36	0.030	A
	WB	1	1,200	12	0.010	A	46	0.038	A	24	200.0%	10	21.7%	36	0.030	A	56	0.047	A
Malech Rd and Monterey Rd																			
	EB	1	1,200	106	0.088	A	55	0.046	A	1	0.9%	29	52.7%	107	0.089	A	84	0.070	A
	WB	1	1,200	50	0.042	A	127	0.106	A	150	300.0%	6	4.7%	200	0.167	A	133	0.111	A
San Felipe Rd																			
Silver Creek Valley Rd and Metcalf Rd																			
	NB	1	1,200	24	0.020	A	33	0.028	A	6	25.0%	25	75.8%	30	0.025	A	58	0.048	A
	SB	1	1,200	10	0.008	A	34	0.028	A	24	240.0%	10	29.4%	34	0.028	A	44	0.037	A

Notes:
1. Capacity of roadways based on assumed capacity of 1,200 vphpl and existing lanes on roadway
2. Volumes based on 24-hour tube counts collected in June 2005

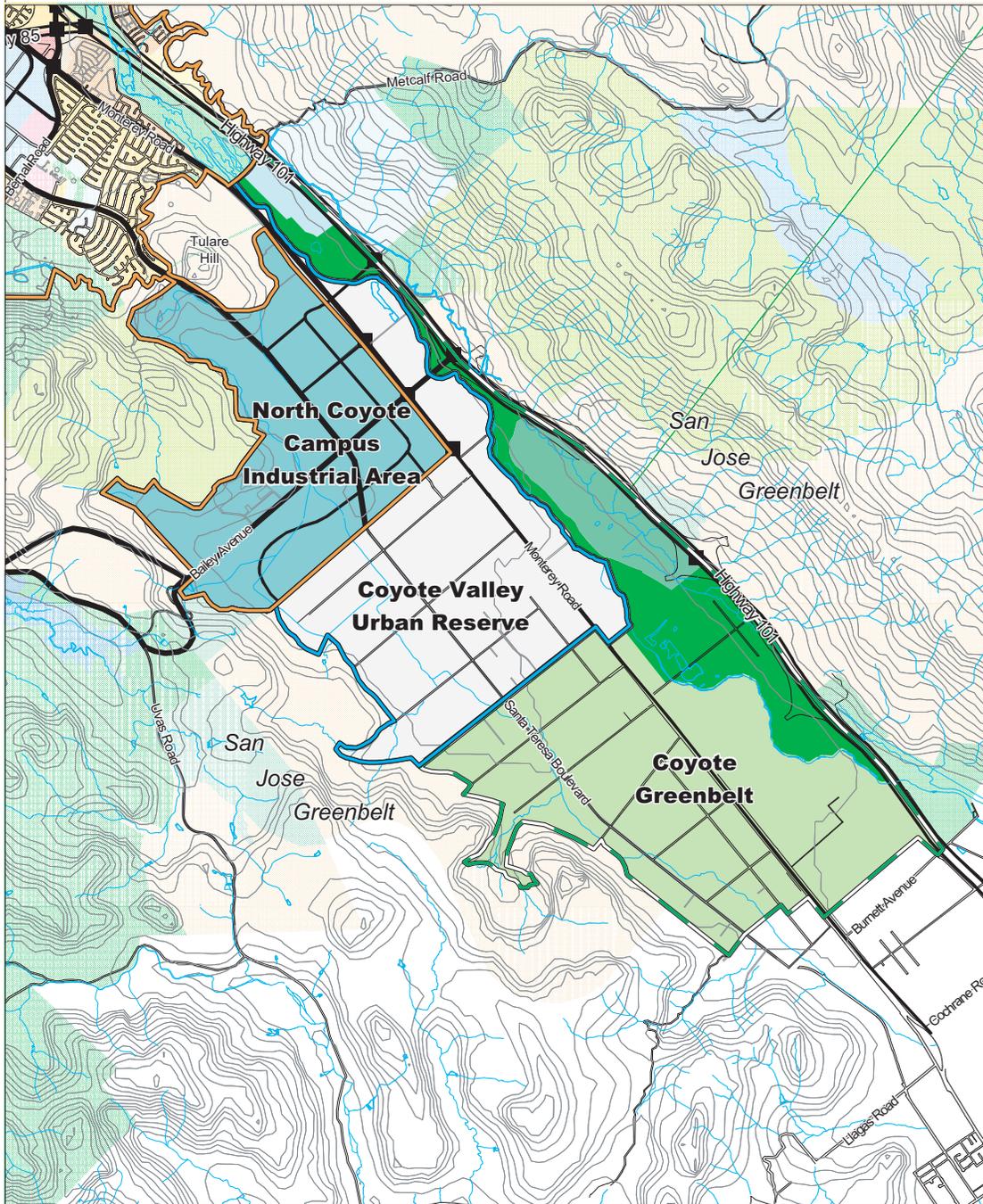
6. General Plan Amendment Analysis

This chapter presents the long-term traffic impacts on the transportation system associated with the land use and roadway network changes due to the proposed Coyote Valley Specific Plan (CVSP) development. The purpose of this GPA analysis is to evaluate the long-term (Horizon Year 2020) traffic impacts on the transportation system associated with the proposed CVSP development General Plan land use designation changes. This type of long-range analysis is required of all proposed land use changes within the City of San Jose, and therefore is being prepared to meet City of San Jose requirements. The methodology used for the analysis is that which is adopted by the City of San Jose, but has been adjusted for this analysis to encompass roadway facilities in South County. Future traffic volumes used in the General Plan analysis are consistent with ABAG projections and the VTA 2030 model.

General Plan Amendment Site Description

The CVSP General Plan Amendment sites GP06-02-04 and GPT06-02-04 (project area) consists of a total of 32 GPA sites within the area generally bounded by Tulare Hill to the north, Highway 101 and the eastern foothills to the east, the City of Morgan Hill to the south, and the Santa Teresa Hills to the west (see Figure 39). The project area totals approximately 7,000 acres. The current adopted General Plan land use designations for the project area consist of Light Industrial (Coyote Valley Research Park) and the Coyote Valley Urban Reserve. The proposed GPA involves changing the City's General Plan land use designations to include various densities of housing ranging from high-rise residential to low density single-family homes, and many other land uses including office, research and development, light industrial, and parks/open space. The proposed amendment also includes adjustments to the roadway network within Coyote Valley as described in the previous chapter. A separate analysis of the proposed network changes is not presented in this chapter because it would be a misrepresentation of roadway conditions. The roadway network changes proposed as part of the CVSP GPA will not occur without the identified land uses of the Coyote Valley Specific Plan.

Coyote Valley Area



- | | |
|---|---|
|  North Coyote Campus Industrial Area |  Urban Growth Boundary |
|  Coyote Valley Urban Reserve |  Urban Service Area |
|  Coyote Greenbelt | |

Scale: 1" = 3,500'



Coyote Valley Specific Plan

Map Prepared by:
City of San Jose, Planning Services Division, September 2002

Figure 39

PROPOSED GENERAL PLAN AMENDMENT SITE LOCATION

City of San Jose Traffic Forecasting Model Description

The City of San Jose's traffic forecasting model was developed to help the City project peak hour traffic impacts attributable to changes proposed to the City's General Plan. The model is implemented using the CUBE transportation planning software system and is consistent with the structures of the Metropolitan Transportation Commission's (MTC) BAYCAST regional model and VTA's VTP2030 model. The San Jose model includes the four elements traditionally associated with models of this kind. These elements include:

- Trip Generation,
- Trip Distribution,
- Mode Choice, and
- Traffic Assignment

The fundamental structure of the model includes a computer readable representation of the street system (highway network) that defines street segments (links) identified by end points (nodes). Each roadway link is further represented by key characteristics (link attributes) that describe the length, travel speeds, and vehicular capacity of the roadway segment. Small geographic areas (traffic analysis zones also called TAZ's) are used to quantify the planned land use activity throughout the City's planning area. The boundaries of these small geographic areas are typically defined by the modeled street system, as well as natural and man made barriers that have an effect on traffic access to the modeled network. Transit systems are represented in the model by transit networks that are also identifiable by links and nodes. Unlike the roadway network, the key link attributes of a transit link are operating speed and headways – elapsed time between successive transit services. Transit stops and “dwelling times” (the time allowed for passengers embarking and disembarking transit vehicles) are described as transit node attributes. Transit networks are further grouped by type of transit (rail versus bus) and operator (VTA bus versus AC Transit bus). Transit accessibility for each TAZ is evaluated by proximity to transit stops or stations, and the connectivity of transit lines to destinations.

The socioeconomic data for each TAZ in the model includes information about the number of households (stratified by household income and structure type), population, average income, population age distribution, and employment (stratified by groupings of Standard Industrial Codes). The worker per household ratios and auto ownership within a TAZ are calculated based on these factors and the types and densities of residences. The model projects trip generation rates and the traffic attributable to residents and resident workers, categorized by trip purposes, using set trip generation formulas. The trip generation formulas were originally estimated by the Metropolitan Transportation Commission in 1997 based on 1990 U.S. Census data and the 1994 San Francisco Bay Region Travel Survey. The formulas were calibrated to 2000 U.S. Census data to more accurately reflect travel frequency for Bay Area residents.

Travel times within and between TAZs (intra-zonal, inter-zonal and terminal times) are developed from the network being modeled. Travel times within zones (intra-zonal travel times) are derived for each zone based on half its average travel time to the nearest three adjacent zones. Time to walk to and from the trip maker's car (terminal times) are also added. The projected daily trips are distributed using a standard gravity model and friction factors calibrated for the modeling region, which presently consists of 13 counties. The City of San Jose CUBE Model is capable of estimating up to 7 modes of transportation – auto drive alone, auto shared ride 2+ occupants, auto shared ride 3+ passengers, rail transit, bus transit, bicycle, and walk. Time-of-day factors and directionality factors are then applied to automobile trips occurring during the AM peak hour, AM 3-hour peak period, PM peak hour, and PM 3-hour peak period before the traffic is assigned to the roadway networks. The assignment of the trip tables to the roadway

network uses a route selection procedure based on minimum travel time paths (as opposed to minimum travel distance paths) between TAZs and is done using a capacity-constrained user equilibrium-seeking process. This capacity constrained traffic assignment process enables the model to reflect diversion of traffic around congested areas of the overall street system. High Occupancy Vehicle (HOV) lanes on freeways, expressways, and on-ramps are specifically dealt with in the model network, with access restricted to auto-shared-ride mode trips only, similar to real world operations of roadway facilities with HOV lanes.

Transit use is modeled for peak and non-peak periods based on computed transit levels of services (speeds and wait times). Based on the conditions that influence transit speeds and wait times (such as traffic congestion), transit use numbers are modified to reflect the likelihood of transit use, based on the constraints to the system. This feedback loop is a modern enhancement in the model to address the dynamics of transit ridership related to the expansion or contraction of roadway capacities. The Model is also calibrated to project freight truck and delivery truck traffic in 2-axle, 3-axle, and 4+ axle categories. Truck volumes are assigned to those segments of the roadway network where truck traffic is permitted.

In addition to providing projected peak hour and peak period volumes and ratios comparing projected traffic volume to available roadway capacity (V/C ratios) on each roadway segment, the model provides information on vehicle-miles and vehicle-hours of travel by facility type (freeway, expressways, arterial streets, etc.). These informational reports can be used to compare projected conditions under the current General Plan with the impacts of proposed land use amendments. The San Jose traffic forecasting model is intended for use as a "macro analysis tool," that projects probable future conditions and is best used when comparing alternative future scenarios. It is not designed to answer "micro analysis level" operational questions.

General Plan Amendment Methodology

For proposed land use amendments that are not exempt and are located outside the three special policy subareas (North San Jose subarea, Evergreen subarea and South San Jose subarea), the determination of significance will be based on the extent to which the proposed land use change contributes to projected peak hour travel and congestion in the vicinity of the proposed land use amendment area. The analysis done for these amendments normally includes a quantification of increased trips across regional screenlines near the project and a proximity analysis. The proximity analysis, typically included as part of a GPA analysis, was not completed as part of this project's GPA analysis. The proximity analysis, as entailed in the term, is designed to measure the traffic impacts in a small area. As defined in established criteria, the scope of a proximity analysis encompasses an area of about 1.5 miles or less in radius. With the approximately 7,000 acres covered in the Coyote Valley Specific Plan, the proximity analysis and its methodology was determined by the City of San Jose to be impractical for implementation on such a large project area. In lieu of the proximity analysis, the screenline analysis was expanded to include facilities between North San Jose and Gilroy and a cordon line analysis was also completed. Though a cordon line analysis is not normally completed for single land use amendments, the large size of the proposed CVSP amendment justified the need.

The significant impact criteria applicable to the proposed GPA of the Coyote Valley Specific Plan (City of San Jose file numbers GP06-02-04 and GPT06-02-04) are described below.

Regional Vehicle Miles Traveled and Vehicle Hours Traveled Analysis

In general, whenever new trips are added to the transportation system, Vehicle Miles Traveled (VMT)

and Vehicle Hours Traveled (VHT) will increase proportionally to the number of trips being added. There are several types of land use changes that can be exceptions to this generalization.

Land use changes that tend to minimize the increase in VMT and VHT are land use changes that involve adding new housing closer to jobs, or new jobs closer to housing.

In an area dominated by housing, adding jobs without displacing housing, while increasing trips, can actually reduce VMT and VHT by reducing commute distances (i.e., VMT) and by reducing travel made in the peak direction, which reduces VHT. These types of land use changes can cause trips to be internalized within the Planning Area in which the change is proposed and can reduce through trips in the adjacent Planning Areas, thereby reducing VMT and VHT.

Adding jobs and displacing housing in an area dominated by housing will usually reduce VMT and VHT because the displaced trips, usually traveling in the peak direction, are eliminated (thus reducing VMT and VHT). The substituted trips are usually shorter in length (thus reducing VMT) and travel mainly in the non-peak direction (thus reducing VHT). This type of land use change will cause trips to be internalized within the Planning Area in which the change is proposed and will reduce through trips in some adjacent Planning Areas, both as a result of the internalization as well as the reduced number of trips made from households.

In an area dominated by jobs, adding more jobs will increase both VMT and VHT. If the immediate area is already congested, the VHT will increase by more than the VMT because the additional congestion caused by the new trips affects the travel time of all trips in the area. This condition can result in an overall decrease in average speeds on the transportation system.

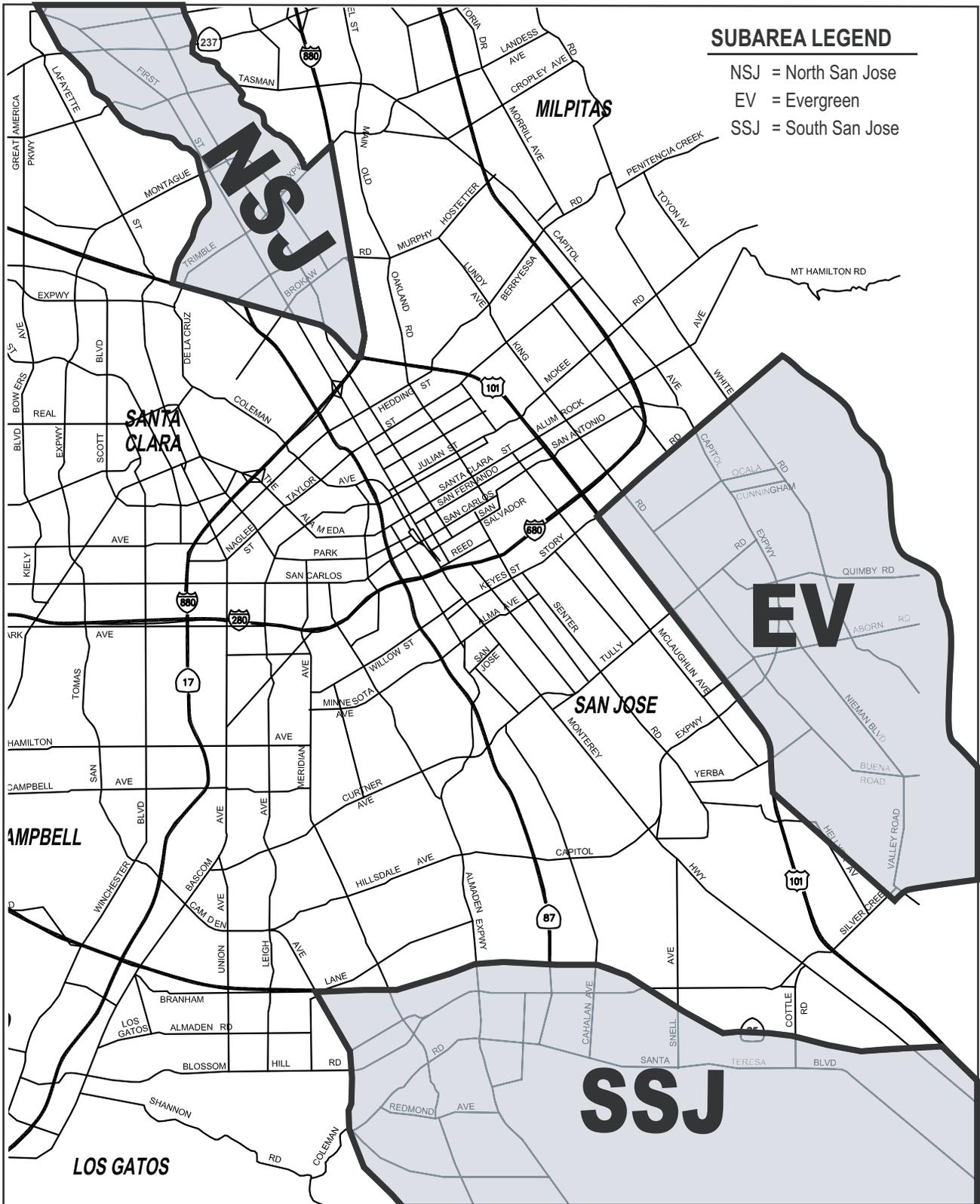
Comparisons between the VMT and VHT for the adopted General Plan base case condition the proposed General Plan Amendment are made to determine the effects of the proposed land use changes. There are no impact criteria for VMT and VHT project level analysis, therefore the analysis is provided for informational purposes only.

Special Subareas (Cordon Line Analysis) Methodology

The City has identified geographic subareas within which localized near term congestion resulted in the adoption of an Area Development Policy that determines how traffic and traffic infrastructure are managed within that area. For the purposes of General Plan CUBE analyses, the specific geographic areas within which land use changes would be assumed to impact the transportation system in these special policy subareas are shown on Figure 40. Both the screenlines and the thresholds of significance reflect the sensitivity of impacts in these areas, and the City's adopted policies. Land use amendments that would contribute substantially to peak direction traffic are expected to result in impacts on the local and regional roadway systems in these subareas.

A cordon line analysis by trip table was performed for the proposed General Plan land use amendments. This subarea trip table analysis calculates the total number of trips traveling in and out of each of the three subareas. The incremental increase in peak direction traffic across the cordon line (which is also the subarea boundary) that would result from the proposed land use amendments, will be calculated and compared to the base case (existing General Plan).

In addition to this trip table analysis, the report prepared for land use amendments proposed within the three special policy subareas must identify the total increase in AM and PM peak hour trips attributable to the proposed amendment.



SUBAREA LEGEND
NSJ = North San Jose
EV = Evergreen
SSJ = South San Jose

Figure 40

SPECIAL SUBAREAS

Screenline Analysis Methodology

Proposed land use amendments that are not exempt and are located outside the three special policy subareas require a screenline analysis that quantifies trips across regional screenlines near the project area. Regional screenlines are delineated along transportation barriers, manmade or natural, that have a substantial capacity-constraining effect on local and regional travel. Regional screenlines are an excellent method for capturing travel characteristics at a macroscopic level. Aspects of travel behavior, such as the volume and capacity of multiple roadway links, can be evaluated as a group. Instead of evaluating individual link volume and capacity, links affected by an amendment are evaluated collectively at or near all of the screenlines within the proposed amendment’s area by summing up volume and capacity of all roadway links that cross each screenline. The screenline analysis normally only includes peak direction analysis across screenlines within the City of San Jose. The methodology used to evaluate the screenlines for this analysis was adjusted to include off-peak as well as peak direction analysis and an expanded study area to include regional screenlines in south county.

The methodology to evaluate grouped volume-to-capacity ratio is the aggregated V/C ratio. Aggregated V/C can be computed for: (1) all links, and (2) congested links only, on a screenline affected by an amendment. Aggregated volume-to-capacity ratios (Agg. V/C) and aggregated volume-to-capacity ratios for congested links (Agg. E/F V/C), are computed at the regional screenline that is impacted by a proposed amendment. The screenline analysis measures area-wide traffic tendencies and impacts. Because regional screenlines are typically contiguous lines stretching for miles.

Roadway links are grouped by level of congestion. Roadway links with a volume-to-capacity ratio (V/C ratio) greater than 0.9 are treated as congested links. Average roadway capacities are also computed and paired with aggregated V/C for evaluation of significant impacts. Average link capacity is calculated by dividing the total capacity of all evaluated links by the number of links evaluated, and is compared to the total increase in volumes on all links evaluated. Average congested link capacity is calculated for congested links only, and is compared to the total increase in volumes on the congested links evaluated.

Thresholds of Significance

The traffic impact from a proposed land use amendment will be significant if the CUBE model analysis concludes that the proposed amendment causes one of the following to occur in either the AM or PM peak hour:

- Total peak hour trips increase by 0.10 percent or more for all trips originating in and/or destined for Santa Clara County; or
- Peak direction volumes across any one of the special subarea cordon lines shown on Figure 40 increases by the following percentages; or

North San Jose	0.15%
Evergreen	0.05%
South San Jose	0.15%

- The aggregated V/C ratios of nearby regional screenlines increase in the peak direction by at least 0.01 and total volumes on the same links increase in the peak direction by at least 5% of average link capacity; or
- The aggregated E/F link V/C ratios of nearby regional screenlines increase in the peak direction

by at least 0.005, and total volumes on the same E/F links increase in the peak direction by at least 2.5% of average congested link capacity.

A more detailed description of significant impact criteria, as well as definitions for the terms discussed under the significant impact criteria section above, are contained in the document titled *Methodology for Preparing Long Term Traffic Impact Assessments*, City of San Jose Department of Transportation, 2005/2006. This document is provided in Appendix F.

General Plan Amendment Analysis

Consistent with City policies and practice, the CUBE model used to evaluate traffic impacts for this proposed amendment includes all of the major infrastructure identified in the General Plan *Land Use/Transportation Diagram*, including infrastructure that is not yet built and/or funded.

The current adopted General Plan land use designations for Coyote Valley consist of only industrial uses in the North Coyote Valley area that allow for 34,554 jobs. The proposed land use change would result in an increase of 24,285 jobs and add residential land uses to allow for 25,491 households. The households and jobs data are contained in Appendix F.

Regional Vehicle Miles Traveled and Vehicle Hours Traveled Analysis

Comparisons between the regional VMT and VHT for the adopted General Plan base case condition versus the proposed General Plan Amendment (CVSP) is presented in Table 24. As shown in Table 24 the regional VMT would increase by approximately 6.5 percent during the AM peak hour and 6.0 percent during the PM peak hour, which correspond to increases of 248,055 and 267,008 vehicle-miles, respectively. The proposed GPA would cause the regional VHT to increase by approximately 16 percent during the AM peak hour and 15 percent during the PM peak hour, which correspond to increases of 30,295 and 49,656 vehicle-hours, respectively. There are no impact criteria for VMT and VHT project level analysis, therefore the analysis is provided for informational purposes only.

Table 24
CVSP Regional VMT & VHT Comparison Summary

	AM Peak Hour				PM Peak Hour			
	Base	CVSP Project	Change	% Change	Base	CVSP Project	Change	% Change
Regional VHT	189,041	219,336	30,295	16.026%	332,813	382,469	49,656	14.920%
Regional VMT	3,812,731	4,060,786	248,055	6.506%	4,464,240	4,731,248	267,008	5.981%

Significant impact = 0.2%

Source: City of San Jose General Plan Amendment Land Use + Network CVSP Analysis, December 7, 2006.

Special Subareas (Cordon Line) Analysis

The cumulative cordon line analysis is based on the boundaries identified in Figure 40. Changes in peak direction volumes crossing the identified boundaries are used to determine the effects of the land use adjustments. The results of the cordon line analysis for the CVSP GPA are presented in Table 25.

**Table 25
CVSP Cordon Line Analysis**

	AM Peak Hour				PM Peak Hour			
	Base Volume	CVSP Project Volume	Volume Change	% Change	Base Volume	CVSP Project Volume	Volume Change	% Change
Evergreen	16,807	17,070	263	1.565%	18,413	18,691	278	1.510%
North San Jose	32,313	32,287	-26	-0.080%	36,619	36,581	-38	-0.104%
South San Jose	17,379	19,907	2,528	14.546%	19,105	22,019	2,914	15.253%
Countywide	358,236	369,808	11,572	3.230%	439,639	453,202	13,563	3.085%

- Bold indicates significant impact.

Source: City of San Jose General Plan Amendment Land Use + Network CVSP Analysis, December 7, 2006.

Based on the cordon line analysis, trips will increase countywide by 3.230% and 3.085% during the AM and PM peak hours, respectively.

Impact: Based on the cordon line impact criteria, the increase in peak hour trips constitute a significant adverse traffic impact.

Additionally, the increase in trips across the Evergreen and South San Jose subarea cordon lines shown in Table 25 will increase by more than the identified threshold percentages for each subarea.

Impact: Based on the cordon line impact criteria, the increase in peak hour trips across the subarea cordon lines constitute a significant adverse traffic impact.

Screenline Analysis

The detailed screenline results for each of the studied links are contained in Appendix F and summarized in Table 26. One hundred sixty-seven total links grouped into sixteen sets were included in the analysis during each of the peak hours. The sixteen link sets are described below.

- Link Set #1 includes five links north of Cochrane, in the northbound direction.
- Link Set #2 includes five links north of Cochrane, in the southbound direction.
- Link Set #3 includes five links south of San Martin, in the northbound direction.
- Link Set #4 includes five links south of San Martin, in the southbound direction.
- Link Set #5 includes six links north of Leavesley, in the northbound direction.

- Link Set #6 includes six links north of Leavesley, in the southbound direction.
- Link Set #7 includes sixteen links south of I-280, in the northbound direction.
- Link Set #8 includes seventeen links south of I-280, in the southbound direction.
- Link Set #9 includes ten links north of SR-17 & I-880, in the northbound direction.
- Link Set #10 includes eleven links north of SR-17 & I-880, in the southbound direction.
- Link Set #11 includes seventeen links south of Capitol Expressway, in the northbound direction.
- Link Set #12 includes seventeen links south of Capitol Expressway, in the southbound direction.
- Link Set #13 includes ten links west of US-101, in the westbound direction.
- Link Set #14 includes ten links west of US-101, in the eastbound direction.
- Link Set #15 includes thirteen links south of SR-85, in the northbound direction.
- Link Set #16 includes fourteen links south of SR-85, in the southbound direction.

Table 26 shows that 38 and 42 links operate at either LOS E or F during the AM and PM peak hours, respectively. The proposed land use amendment would result in significant impacts on all 16 of the link sets analyzed during at least one peak hour. A total of 10 of the LOS E/F link sets would be significantly impacted by the proposed land use amendment during at least one peak hour. It should be noted that several of the identified screenline impacts would be to the off peak direction of the links crossing the screenlines.

- The proposed land use change will result in the aggregated V/C ratios of nearby regional screenlines to increase in the peak direction by at least 0.01 and total volumes on the same links to increase in the peak direction by at least 5% of average link capacity on 11 and 12 of the link sets studied during the AM and PM peak hours, respectively; and
- The proposed land use change will result in the aggregated E/F link V/C ratios of nearby regional screenlines to increase in the peak direction by at least 0.005, and total volumes on the same E/F links to increase in the peak direction by at least 2.5% of average congested link capacity on six of the link sets studied during both the AM and PM peak hours.

Impact: Based on the screenline impact criteria, the increases in V/C and the corresponding increases in traffic volumes on all studied links constitute a significant adverse traffic impact. The results of the screenline analysis are shown in Table 26. The detailed screenline analysis results for the project GPA scenario are contained in Appendix F.

General Plan Amendment Impacts

Consistent with City policies and practice, the CUBE model used to evaluate traffic impacts for this proposed amendment includes all of the major transportation infrastructure identified in the General Plan *Land Use/Transportation Diagram*, including infrastructure that is not yet built and/or funded. Therefore, additions to the transportation system, either added roadway or transit capacity, will not be available to mitigate any significant transportation impacts. It is expected that the proposed general plan amendment will make a fair-share contribution towards the cost of construction of the improvements.

General Plan Policies

Impacts from a proposed General Plan amendment can be reduced by conformance with General Plan policies, including the following:

- *Services and Facilities Level of Service Policy #5* - requires that the minimum overall performance of City streets during peak travel periods should be level of service “D”. To meet that goal, the policy states that development proposals should be reviewed for their measurable impacts on the level of service and should be required to provide appropriate mitigation measures if they have the potential to reduce the level of service to “D” or worse.

Results of the traffic analysis indicate that the proposed amendment will add traffic to streets already identified as operating at unacceptable levels. According to the general plan policy and impact criteria, this constitutes a significant impact. In accordance with the City’s level of service policy, any impacts would then have to be mitigated before the project could be approved.

- *Transportation Policy # 1 (Thoroughfares)* states that inter-neighborhood movement of people and goods should occur on thoroughfares and is discouraged on neighborhood streets.
- *Transportation Policy #3 (Thoroughfares)* states that public street right-of-way dedication and improvements should be required as development occurs. Ultimate thoroughfare right-of-way should be no less than the dimensions as shown on the Land Use/Transportation Diagram except when a lesser right-of-way will avoid significant social, neighborhood or environmental impacts and perform the same traffic movement function.
- *Transportation Policy #8 (Thoroughfares)* states that vehicular, bicycle, and pedestrian safety should be an important factor in the design of streets and roadways.
- *Transportation Policy #9 (Impacts on Local Neighborhoods)* states that neighborhood streets should be designed to discourage through traffic and unsafe speeds. If neighborhood streets are used for through traffic or if they are traveled at unsafe speeds, law enforcement and traffic operations techniques should be employed to mitigate these conditions.
- *Transportation Policy #11 (Transit Facilities)* states that the City should cooperate with transportation agencies to achieve the following objectives for the County’s public transit system:
 - Provide all segments of the City’s population, including the handicapped, elderly, youth and economically disadvantaged, with adequate access to public transit. Public transit should be designed to be an attractive, convenient, dependable and safe alternative to the automobile.
 - Enhance transit service in major commute corridors, and provide convenient transfers between public transit systems and other modes of travel.
- *Transportation Policy #16 (Pedestrian Facilities)* states that pedestrian travel should be encouraged as a viable mode of movement between high density residential and commercial areas throughout the City and in activity areas such as schools, parks, transit stations, and in urban areas, particularly the Downtown Core Area and neighborhood business districts by providing safe and convenient pedestrian facilities.
- *Transportation Policy #41 (Bicycling)* states that the City should develop a safe, direct, and well-maintained transportation bicycle network linking residences, employment centers, schools, parks and transit facilities and should promote bicycling as an alternative mode of transportation for commuting as well as for recreation.

- *Transportation Policy #42 (Bicycling)* states that bike lanes are considered generally appropriate on arterial and major collector streets. Right-of-way requirements for bike lanes should be considered in conjunction with planning the major thoroughfares network and in implementing street improvement projects.

- *Transportation Policy #43 (Bicycling)* states that priority improvements to the Transportation Bicycle Network should include:
 - Bike routes linking light rail stations to nearby neighborhoods.
 - Bike paths along designated trails and pathways corridors.
 - Bike paths linking residential areas to major employment centers.

7.

Cumulative General Plan Amendment Analysis

This chapter presents the long-term traffic impacts on the transportation system associated with the land use and roadway network changes due to the proposed Coyote Valley Specific Plan (CVSP) development as well as all other pending, or cumulative, General Plan Amendments (GPA) for the Winter 2007 cycle in the City of San Jose.

Cumulative General Plan Amendment Methodology

In addition to the evaluation of impacts due to an individual land use change, a cumulative analysis that includes all currently proposed General Plan land use and transportation adjustments throughout the city must be evaluated. The context of the cumulative impacts analysis will be the land uses and time frame assumed in the currently adopted General Plans of the City of San Jose and projections of ABAG and the VTA 2030 model.

The cumulative impact analysis includes the evaluation of impacts on regional screenlines within the vicinity of the individual General Plan amendments and changes (net increases or decreases) in regional VMT and VHT as was done for the proposed General Plan Amendment. Additionally, the cumulative analysis also identifies the total increases in peak direction volume across all three subarea cordon lines shown in Figure 40, and the total net increase in trips, including the percentage of total trips countywide this represents. These three increments of change will be identified as an average for all roadways within the County of Santa Clara.

Thresholds of Significance

Cumulative impacts will be considered significant if any one of the following occurs during either the AM or PM peak hour:

- Average VMT and VHT both increase by 0.10 percent for all roadways in Santa Clara County; or
- Total peak hour trips increase by 0.10 percent or more for all trips originating in and/or destined for Santa Clara County; or
- Peak direction volumes across any one of the special subarea cordon lines shown on Figure 40 increases by the following percentages; or

North San Jose	0.15%
Evergreen	0.05%
South San Jose	0.15%

- The aggregated V/C ratios of nearby regional screenlines increase in the peak direction by at least 0.01 and total volumes on the same links increase in the peak direction by at least 5% of average link capacity; or
- The aggregated E/F link V/C ratios of nearby regional screenlines increase in the peak direction by at least 0.005, and total volumes on the same E/F links increase in the peak direction by at least 2.5% of average congested link capacity; or

If one or more of these thresholds is exceeded, the proposed General Plan amendments would have cumulatively significant adverse impacts. The extent to which any individual GPA contributes in a meaningful way to that cumulative impact will be evaluated on a case by case basis. If the cumulative impact is generally proximate to a proposed GPA site, and if the impact is to facilities that are also impacted by the proposed GPA, even if the individual GPA's impacts are less than significant, the proposed GPA should be assumed to result in a cumulatively considerable contribution to a significant cumulative impact. Depending on the circumstances, including number, size, and location of the various amendments, the cumulative analysis may conclude that one or more individually proposed amendments would have significant cumulative impacts, or that none of the individually proposed amendments would have substantially greater impacts than any other.

A more detailed description of significant impact criteria, as well as definitions for the terms discussed under the significant impact criteria section above, are contained in the document titled *Methodology for Preparing Long Term Traffic Impact Assessments*, City of San Jose Department of Transportation, 2005/2006. This document is provided in Appendix F.

Cumulative General Plan Analysis

In total, 47 land use and network amendments are included in the analysis. Figure 41 identifies the approximate location of each of the land use amendments. The following land use amendments were evaluated for cumulative impacts:

Land Use and Network Amendments

1 GP03-02-02*	13 GP05-03-08	25 GP06-04-05	37 GP06-07-02
2 GP03-02-05	14 GP06-03-01	26 GP05-05-01	38 GP06-07-03
3 GP05-02-02	15 GP03-04-08	27 GP05-05-02	39 GP06-07-04
4 GP05-02-03	16 GP04-04-02	28 GP05-05-03	40 GP06-07-05
5 GP05-02-04	17 GP05-04-03	29 GP05-06-01	41 GP05-08-01
6 GP05-02-05	18 GP05-04-08	30 GP05-06-02	42 GP05-08-01*
7 GP05-02-06	19 GP05-04-09	31 GP05-06-03	43 GP05-08-02
8 GP06-02-01	20 GP06-04-01	32 GP05-06-04	44 GP06-08-01
9 GP06-02-02	21 GP06-04-01*	33 GP02-07-03	45 GP04-09-01
10 GP05-03-02	22 GP06-04-02	34 GP05-07-01	46 GP04-10-01
11 GP05-03-05	23 GP06-04-03	35 GP05-07-02	47 CVSP
12 GP05-03-07	24 GP06-04-04	36 GP06-07-01	

*Signifies network amendment

City of San Jose General Plan Amendment Special Subarea Boundaries

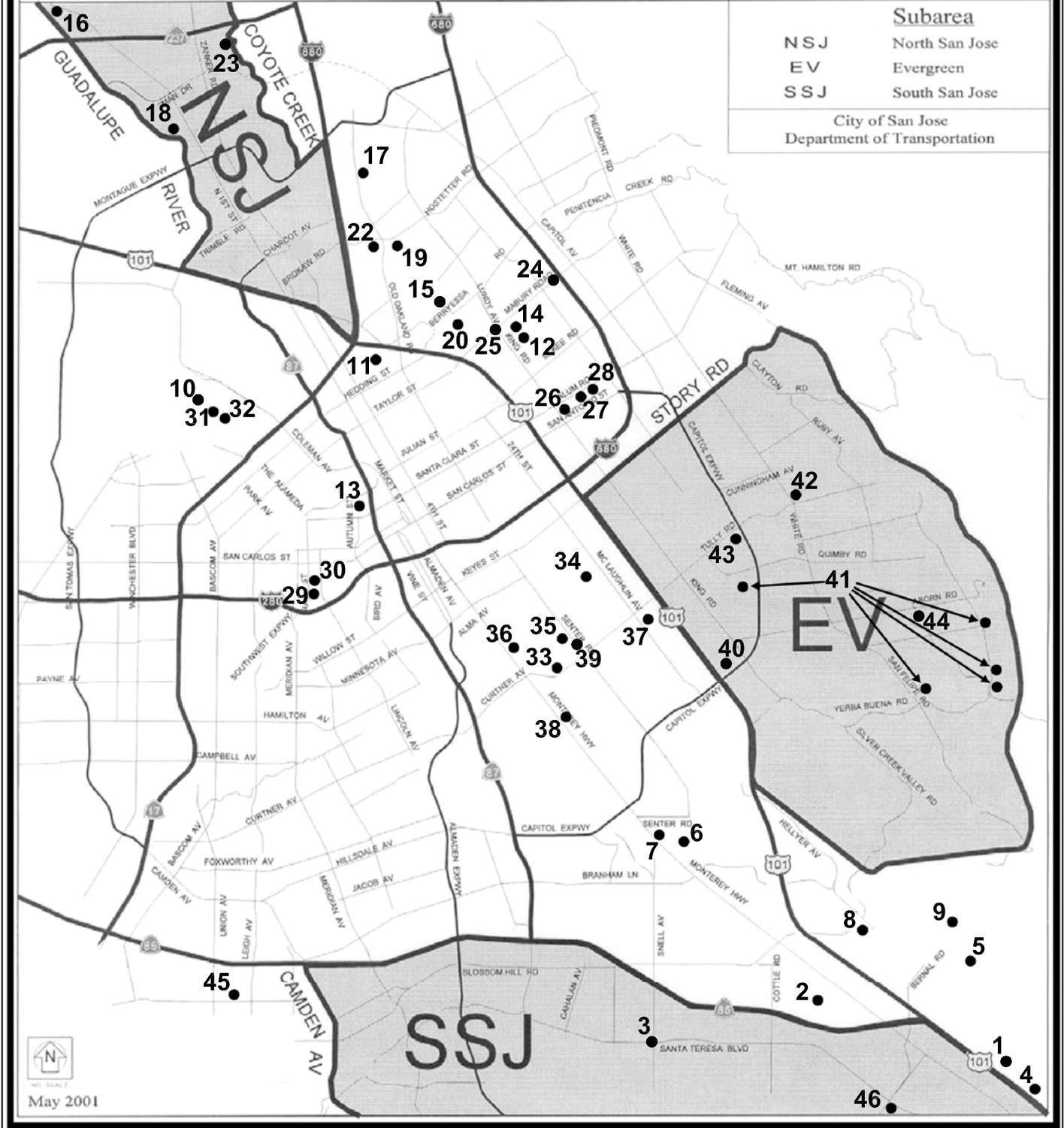


Figure 41

CUMULATIVE GENERAL PLAN AMENDMENT SITE LOCATIONS

Cumulative Analysis Description

The timing and construction of the Coyote Valley Specific Plan will be driven largely by market forces with no anticipated date for complete buildout of the plan. Therefore, the cumulative analysis consists of two cumulative scenarios to account for a partial plan completion that will provide for up to 20,000 jobs and 10,000 residential units as well as the full buildout of CVSP. As such, all analysis is presented for an “CVSP Full Buildout” and “CVSP 20,000J + 10,000HH” scenario. Each scenario includes the same 47 proposed land use adjustments.

The 47 proposed land use and network amendments would produce a combined net change of 40,975 additional households and 5,772 added jobs relative to the current adopted General Plan under the CVSP Full Buildout scenario. Under the CVSP 20,000J + 10,000HH scenario, the 47 proposed land use and network amendments would produce a combined net change of 26,275 additional households and a decrease of 25,984 jobs relative to the current adopted General Plan.

The proposed land use and network changes were evaluated to determine the effects of the amendments on the citywide transportation system. Increases in peak direction volumes across the identified screenlines for the Special Subareas, changes in Vehicle Miles Traveled (VMT) and Vehicle Hours Traveled (VHT), and a re-examination of all LOS E/F links evaluated for each of the General Plan amendments due to the land use adjustments were analyzed. Appendix F contains the land use data for the 47 proposed General Plan Amendments.

Regional Vehicle Miles Traveled and Vehicle Hours Traveled Analysis

Comparisons between the regional VMT and VHT for the adopted General Plan base case condition versus all of the proposed General Plan Amendments (cumulative GPA scenarios) are presented in Table 27. As shown in Table 27 the regional VHT will increase 19.687% in the AM and 7.800% in the PM peak hours while regional VMT will increase 5.452% in the AM and 3.615% in the PM peak hours under the CVSP Full Buildout scenario. Under the CVSP 20,000J + 10,000HH scenario, the regional VHT will increase 14.597% in the AM and 12.052% in the PM peak hours while regional VMT will increase 3.743% in the AM and 2.378% in the PM peak hours.

Impact: Based on the cumulative impact criteria, the increases in VMT and VHT under both CVSP scenarios constitute a cumulatively significant adverse traffic impact. The technical model outputs used to prepare the VMT and VHT analysis by City of San Jose for the cumulative CVSP GPA scenarios is contained in Appendix F.

Special Subareas (Cordon Line) Analysis

The cumulative cordon line analysis is based on the boundaries identified in Figure 40. Changes in peak direction volumes crossing the identified boundaries are used to determine the effects of the land use adjustments. The results of the cordon line analysis for the cumulative CVSP GPA scenarios are presented in Table 28.

Based on the cordon line analysis, trips will increase countywide by 4.518% and 4.149% during the AM and PM peak hours, respectively, under the CVSP Full Buildout scenario. Under the CVSP 20,000J + 10,000HH scenario, the trips will increase countywide by 2.275% and 1.933% during the AM and PM peak hours, respectively.

**Table 27
Cumulative Regional VMT & VHT Comparison Summary**

	AM Peak Hour				PM Peak Hour			
	Base	CVSP Project	Change	% Change	Base	CVSP Project	Change	% Change
CVSP Full Buildout								
Regional VHT	190,829	228,397	37,568	19.687%	335,123	361,263	26,140	7.800%
Regional VMT	3,867,924	4,078,787	210,863	5.452%	4,524,689	4,688,260	163,571	3.615%
CVSP 20k J + 10k HH								
Regional VHT	190,829	218,684	27,855	14.597%	335,123	375,512	40,389	12.052%
Regional VMT	3,867,924	4,012,697	144,773	3.743%	4,524,689	4,632,292	107,603	2.378%

Significant impact = 0.2%

- **Bold** indicates cumulatively significant impact that CVSP contributes to.

Source: City of San Jose General Plan Amendment Winter 2007 Cumulative (CVSP & CVSP 20,000J + 10,000HH) Analysis, December 5, 2006.

**Table 28
Cumulative Cordon Line Analysis**

	AM Peak Hour				PM Peak Hour					
	Base Volume	Winter '07 Cumulative Volume	Volume Change	% Change	Base Volume	Winter '07 Cumulative Volume	Volume Change	% Change		
CVSP Full Buildout										
Evergreen	16,807	19,114	2,307	13.726%	*A	18,413	20,474	2,061	11.193%	*A
North San Jose	32,313	32,415	102	0.316%	*B	36,619	36,708	89	0.243%	*B
South San Jose	17,379	19,839	2,460	14.155%	*A	19,105	21,943	2,838	14.855%	*A
Countywide	358,236	374,422	16,186	4.518%	*A	439,639	457,880	18,241	4.149%	*A
CVSP 20k J + 10k HH										
Evergreen	16,807	19,024	2,217	13.191%	*A	18,413	20,357	1,944	10.558%	*A
North San Jose	32,313	32,599	286	0.885%	*B	36,619	36,858	239	0.653%	*B
South San Jose	17,379	19,219	1,840	10.587%	*A	19,105	21,004	1,899	9.940%	*A
Countywide	358,236	366,385	8,149	2.275%	*A	439,639	448,139	8,500	1.933%	*A

- **Bold** indicates cumulatively significant impact that CVSP contributes to.

Source: City of San Jose General Plan Amendment Winter 2007 Cumulative (CVSP & CVSP 20,000J + 10,000HH) Analysis, December 5, 2006.

*A This significant impact is mostly attributable to GP05-08-01 and CVSP

*B This significant impact is mostly attributable to GP05-03-05, GP05-08-01, GP06-03-01, GP06-04-01, GP06-04-02, GP05-06-01, GP05-06-02, and CVSP

Impact: Based on the cumulative impact criteria, the increase in peak hour trips countywide under both CVSP scenarios constitutes a cumulatively significant adverse traffic impact.

Additionally, the increase in trips across the Evergreen, South San Jose, and North San Jose subarea cordon lines shown in Table 28 will increase by more than the identified threshold percentages for each subarea.

Impact: Based on the cumulative impact criteria, the increase in peak hour trips across the subarea cordon lines under both CVSP scenarios constitutes a cumulatively significant adverse traffic impact.

The detailed cordon line analysis results for the cumulative CVSP GPA scenarios are contained in Appendix F.

Screenline Analysis

The detailed screenline results for the links are contained in Appendix F and summarized in Tables 29 and 30. Two hundred eighty total links grouped into 31 sets were included in the analysis during each of the cumulative CVSP GPA scenarios. The 31 link sets are described below.

- Link Set #1 includes seven links south of SR-17.
- Link Set #2 includes seven links north of SR-17 & I-880.
- Link Set #3 includes seven links south of US 101.
- Link Set #4 includes six links west of I-880 & 10th.
- Link Set #5 includes eight links east of US-101.
- Link Set #6 includes six links west of US-101.
- Link Set #7 includes six links south of Jackson.
- Link Set #8 includes nine links west of I-680.
- Link Set #9 includes four links north of US-101 & I-880.
- Link Set #10 includes nine links west of I-880 & 10th.
- Link Set #11 includes seven links along Coyote Creek
- Link Set #12 includes nine links south of Naglee, Jackson, & Mabury
- Link Set #13 includes eleven links south of I-280
- Link Set #14 includes ten links north of I-280 & I-680
- Link Set #15 includes nine links along Guadalupe River
- Link Set #16 includes five links north of Cochrane, in the northbound direction.
- Link Set #17 includes five links north of Cochrane, in the southbound direction.
- Link Set #18 includes five links south of San Martin, in the northbound direction.
- Link Set #19 includes five links south of San Martin, in the southbound direction.
- Link Set #20 includes six links north of Leavesley, in the northbound direction.
- Link Set #21 includes six links north of Leavesley, in the southbound direction.
- Link Set #22 includes sixteen links south of I-280, in the northbound direction.
- Link Set #23 includes seventeen links south of I-280, in the southbound direction.
- Link Set #24 includes ten links north of SR-17 & I-880, in the northbound direction.
- Link Set #25 includes eleven links north of SR-17 & I-880, in the southbound direction.
- Link Set #26 includes seventeen links south of Capitol Expressway, in the northbound direction.
- Link Set #27 includes seventeen links south of Capitol Expressway, in the southbound direction.
- Link Set #28 includes ten links west of US-101, in the westbound direction.
- Link Set #29 includes ten links west of US-101, in the eastbound direction.

**Table 29
Cumulative General Plan Amendment Impact Summary (CVSP Full Buildout)**

										AM Peak Hour				PM Peak Hour					
										Base Volume	Winter '07 Cumulative Volume	Volume Change	% Change	Base Volume	Winter '07 Cumulative Volume	Volume Change	% Change		
Trip Analysis																			
	Evergreen									16,807	19,114	2,307	13.726%	*A	18,413	20,474	2,061	11.193%	*A
	North San Jose									32,313	32,415	102	0.316%	*B	36,619	36,708	89	0.243%	*B
	South San Jose									17,379	19,839	2,460	14.155%	*A	19,105	21,943	2,838	14.855%	*A
	Countywide									358,236	374,422	16,186	4.518%	*A	439,639	457,880	18,241	4.149%	*A
Regional VMT/VHT Analysis																			
	Regional VHT									190,829	228,397	37,568	19.687%		335,123	361,263	26,140	7.800%	
	Regional VMT									3,867,924	4,078,787	210,863	5.452%	*A	4,524,689	4,688,260	163,571	3.615%	*A
Screenline Analysis																			
Link Set	All Links	# of Links	Base Volume	Base V/C	Cumulative Volume	Cumulative V/C	Volume Change	V/C Change	5% Capacity	# of Links	Base Volume	Base V/C	Cumulative Volume	Cumulative V/C	Volume Change	V/C Change	5% Capacity		
1	S/o SR-17	7	13,466	0.932	14,061	0.973	595	0.041	103	*C	7	14,762	1.022	15,184	1.051	423	0.029	103	*C
2	N/o SR-17 & I-880	7	18,028	1.030	18,921	1.081	893	0.051	125	*C	7	19,604	1.120	20,265	1.158	661	0.038	125	*C
3	S/o US-101	7	14,702	0.886	15,280	0.920	577	0.035	118	*C	7	15,664	1.066	15,768	1.073	105	0.007	122	
4	W/o I-880 & 10th	6	14,733	1.151	15,474	1.209	741	0.058	106	*C	6	15,217	1.189	15,272	1.193	55	0.004	106	
5	E/o US-101	8	23,056	0.917	24,388	0.970	1332	0.053	157	*D	8	25,372	1.009	26,381	1.049	1,009	0.040	157	*D
6	W/o US-101	6	13,208	0.815	13,877	0.857	669	0.041	135	*E	6	14,833	0.916	14,981	0.925	148	0.009	135	
7	S/o Jackson	6	20,692	1.000	22,044	1.065	1,352	0.065	172	*D	6	23,878	1.154	24,894	1.203	991	0.049	172	*D
8	W/o I-680	9	20,073	0.826	20,424	0.841	351	0.014	135	*E	9	21,068	0.941	21,440	0.957	372	0.017	124	*E
9	N/o US-101 & I-880	4	13,287	1.107	13,752	1.146	465	0.039	150	*F	4	14,749	1.229	14,928	1.244	179	0.015	150	*F
10	W/o I-880 & 10th	9	21,765	1.072	22,905	1.128	1,140	0.056	112	*F	9	23,307	1.148	23,497	1.157	190	0.009	112	
11	Coyote Creek	7	16,066	1.027	16,999	1.086	933	0.060	111	*F	7	18,517	1.119	18,881	1.141	364	0.022	118	*F
12	S/o Naglee/Jackson/Mabury	9	15,046	0.965	15,968	1.024	922	0.059	86	*G	9	15,447	0.990	15,693	1.006	246	0.016	86	*G
13	S/o I-280	11	19,897	0.809	20,885	0.849	989	0.040	111	*I	11	20,852	0.931	21,639	0.966	788	0.035	112	*I
14	N/o I-280 & I-680	10	16,270	0.741	17,060	0.777	790	0.036	109	*I	10	18,259	0.832	18,632	0.849	373	0.017	109	*I
15	Guadalupe River	9	15,608	0.796	16,622	0.848	1,013	0.052	108	*I	9	17,764	0.906	18,372	0.937	608	0.031	108	*I
16	N/o Cochrane (NB)	5	10,796	0.960	10,843	0.964	47	0.004	112		5	6,686	0.594	7,660	0.681	975	0.087	112	*H
17	N/o Cochrane (SB)	5	6,530	0.580	7,632	0.678	1,101	0.098	112	*H	5	11,898	1.058	11,858	1.054	-40	-0.004	112	
18	S/o San Martin (NB)	5	7,788	0.692	7,498	0.666	-291	-0.026	112		5	4,112	0.366	4,519	0.402	407	0.036	112	*H
19	S/o San Martin (SB)	5	4,593	0.408	5,093	0.453	500	0.044	112	*H	5	8,755	0.778	8,401	0.747	-354	-0.031	112	
20	N/o Leavesley (NB)	6	7,851	0.692	7,594	0.669	-257	-0.023	94		6	4,760	0.419	5,138	0.453	378	0.033	94	*H
21	N/o Leavesley (SB)	6	5,791	0.510	6,258	0.551	467	0.041	94	*H	6	8,598	0.758	8,349	0.736	-249	-0.022	94	
22	S/o I-280 (NB)	16	27,846	0.941	30,012	1.014	2,166	0.073	92	*I	16	17,170	0.580	17,928	0.606	758	0.026	92	*H
23	S/o I-280 (SB)	17	18,759	0.517	19,161	0.529	402	0.011	106	*H	17	33,071	0.912	35,512	0.980	2,441	0.067	106	*I
24	N/o SR-17 & I-880 (NB)	10	26,616	1.065	27,866	1.115	1,250	0.050	125	*I	10	17,975	0.719	17,756	0.710	-219	-0.009	125	
25	N/o SR-17 & I-880 (SB)	11	15,084	0.517	15,015	0.514	-69	-0.002	132		11	29,364	1.006	30,174	1.033	811	0.028	132	*I
26	S/o Capitol Exp (NB)	16	25,173	0.696	27,727	0.767	2,554	0.071	112	*H	16	20,386	0.564	21,726	0.601	1,340	0.037	112	*H
27	S/o Capitol Exp (SB)	16	17,978	0.497	19,020	0.526	1,042	0.029	112	*H	16	27,018	0.747	29,098	0.805	2,080	0.058	112	*H
28	W/o US-101 (WB)	10	5,762	0.450	5,794	0.453	31	0.002	64		10	6,027	0.471	6,309	0.493	282	0.022	64	*H
29	W/o US-101 (EB)	10	4,949	0.387	5,578	0.436	629	0.049	64	*H	10	7,210	0.563	6,846	0.535	-364	-0.028	64	
30	S/o SR-85 (NB)	13	24,053	0.767	28,485	0.909	4,432	0.141	120	*H	13	20,710	0.661	24,232	0.773	3,521	0.112	120	*H
31	S/o SR-85 (SB)	14	19,222	0.563	22,177	0.649	2,956	0.087	121	*H	14	26,081	0.764	30,269	0.886	4,188	0.123	121	*H

**Table 29
Cumulative General Plan Amendment Impact Summary (CVSP Full Buildout)**

Link Set	E/F Links	AM Peak Hour									PM Peak Hour								
		# of Links	Base Volume	Base V/C	Cumulative Volume	Cumulative V/C	Volume Change	V/C Change	2.5% Capacity		# of Links	Base Volume	Base V/C	Cumulative Volume	Cumulative V/C	Volume Change	V/C Change	2.5% Capacity	
1	S/o SR-1 7	5	11,512	1.037	11,711	1.055	199	0.018	55	*C	5	11,183	1.135	11,428	1.160	245	0.025	49	*C
2	N/o SR-17 & I-880	5	16,881	1.214	17,611	1.267	731	0.053	69	*C	6	18,893	1.203	19,519	1.243	626	0.040	65	*C
3	S/o US-1 01	4	11,191	1.008	11,283	1.016	92	0.008	69	*C	4	13,036	1.174	13,084	1.179	48	0.004	69	
4	W/o I-880 & 10th	6	14,733	1.151	15,474	1.209	741	0.058	53	*C	5	14,675	1.203	14,746	1.209	70	0.006	61	*C
5	E/o US-1 01	7	19,349	0.972	20,182	1.014	833	0.042	71	*D	8	25,372	1.009	26,381	1.049	1,009	0.040	78	*D
6	W/o US-101	3	8,720	0.872	9,333	0.933	613	0.061	83	*E	5	13,330	1.050	13,511	1.064	182	0.014	63	*E
7	S/o Jackson	4	18,530	1.084	19,407	1.135	878	0.051	106	*D	6	23,878	1.154	24,894	1.203	991	0.049	86	*D
8	W/o I-680	1	2,410	0.890	2,449	0.910	38	0.020	67		4	15,043	1.010	15,548	1.043	505	0.034	93	*E
9	N/o US-101 & I-880	4	13,287	1.107	13,752	1.146	465	0.039	75	*F	4	14,749	1.229	14,928	1.244	179	0.015	75	*F
10	W/o I-880 & 10th	7	20,796	1.124	21,912	1.184	1,116	0.060	66	*F	9	23,307	1.148	23,497	1.157	190	0.009	56	*F
11	Coyote Creek	7	16,066	1.027	16,999	1.086	933	0.060	55	*F	7	18,517	1.119	18,881	1.141	364	0.022	59	*F
12	S/o Naglee/Jackson/Mabury	9	15,046	0.965	15,968	1.024	922	0.059	43	*G	8	14,178	1.035	14,358	1.048	180	0.013	42	*G
13	S/o I-280	8	17,597	0.983	18,560	1.037	963	0.054	55	*I	8	18,406	1.000	19,037	1.035	631	0.034	57	*I
14	N/o I-280 & I-680	2	6,746	1.038	6,795	1.045	50	0.008	81		5	10,751	1.000	10,774	1.002	23	0.002	53	
15	Guadalupe River	3	11,320	1.002	12,023	1.064	703	0.062	94	*I	3	12,557	1.111	12,893	1.141	336	0.030	94	*I
16	N/o Cochrane (NB)	2	8,374	1.080	8,334	1.075	-40	-0.005	96		3	0	0.000	0	0.000	0	0.000	0	
17	N/o Cochrane (SB)	0	0	0.000	0	0.000	0	0.000	0		0	9,817	1.148	9,750	1.140	-67	-0.008	71	
18	S/o San Martin (NB)	1	5,900	1.009	5,741	0.981	-159	-0.027	146		1	0	0.000	0	0.000	0	0.000	0	
19	S/o San Martin (SB)	0	0	0.000	0	0.000	0	0.000	0		0	6,125	1.047	6,071	1.038	-55	-0.009	146	
20	N/o Leavesley (NB)	2	6,247	0.968	6,051	0.938	-195	-0.030	80		1	0	0.000	0	0.000	0	0.000	0	
21	N/o Leavesley (SB)	1	613	1.022	611	1.018	-3	-0.004	15		0	5,925	1.013	5,726	0.979	-198	-0.034	146	
22	S/o I-280 (NB)	13	25,514	0.966	27,337	1.035	1,823	0.069	50	*I	15	3,772	0.993	3,793	0.998	21	0.006	95	
23	S/o I-280 (SB)	0	0	0.000	0	0.000	0	0.000	0		1	30,332	0.958	32,192	1.017	1,860	0.059	52	*I
24	N/o SR-17 & I-880 (NB)	8	25,468	1.190	26,557	1.241	1,088	0.051	66	*I	8	7,083	0.944	6,964	0.929	-119	-0.016	93	
25	N/o SR-17 & I-880 (SB)	0	0	0.000	0	0.000	0	0.000	0		2	26,233	1.232	27,175	1.276	942	0.044	66	*I
26	S/o Capitol Exp (NB)	4	8,901	0.908	9,552	0.975	651	0.066	61	*I	6	3,528	0.929	3,619	0.952	91	0.024	95	
27	S/o Capitol Exp (SB)	0	0	0.000	0	0.000	0	0.000	0		1	15,806	0.914	16,324	0.944	518	0.030	72	*I
28	W/o US-101 (WB)	1	1,716	0.953	1,677	0.932	-39	-0.022	45		1	0	0.000	0	0.000	0	0.000	0	
29	W/o US-101 (EB)	0	0	0.000	0	0.000	0	0.000	0		0	1,806	1.003	1,793	0.996	-13	-0.007	45	
30	S/o SR-85 (NB)	5	8,197	0.959	9,072	1.061	875	0.102	106	*H	4	8,151	0.953	9,335	1.092	1,185	0.139	106	*H
31	S/o SR-85 (SB)	2	16,469	0.958	19,111	1.111	2,642	0.154	86	*H	2	15,098	1.041	17,503	1.207	2,405	0.166	90	*H

Notes:
 - Bold indicates cumulatively significant impact that CVSP contributes to.

- *A This significant impact is mostly attributable to GP05-08-01 and CVSP
- *B This significant impact is mostly attributable to GP05-03-05, GP05-08-01, GP06-03-01, GP06-04-01, GP06-04-02, GP05-06-01, GP05-06-02, and CVSP
- *C This significant impact is mostly attributable to GP05-03-05, GP05-08-01, GP06-03-01, GP06-04-01, and CVSP
- *D This significant impact is mostly attributable to GP05-03-07, GP05-08-01, GP06-03-01, GP06-04-01, GP06-04-05, and CVSP
- *E This significant impact is mostly attributable to GP05-03-07, GP05-08-01, GP06-03-01, GP06-04-01, and CVSP
- *F This significant impact is mostly attributable to GP06-04-02, GP05-08-01, and CVSP
- *G This significant impact is mostly attributable to GP05-06-01, GP05-06-02, GP05-08-01, and CVSP
- *H This significant impact is mostly attributable to CVSP
- *I This significant impact is mostly attributable to GP05-08-01 and CVSP

Source: City of San Jose General Plan Amendment Winter 2007 Cumulative (CVSP) Analysis, December 5, 2006.

**Table 30
Cumulative General Plan Amendment Impact Summary (CVSP 20k J + 10k HH)**

										AM Peak Hour				PM Peak Hour					
Trip Analysis		Base Volume	Winter '07 Cumulative Volume	Volume Change	% Change		Base Volume	Winter '07 Cumulative Volume	Volume Change	% Change		Base Volume	Winter '07 Cumulative Volume	Volume Change	% Change				
	Evergreen	16,807	19,024	2,217	13.191%	*A	18,413	20,357	1,944	10.558%	*A	18,413	20,357	1,944	10.558%	*A			
	North San Jose	32,313	32,599	286	0.885%	*B	36,619	36,858	239	0.653%	*B	36,619	36,858	239	0.653%	*B			
	South San Jose	17,379	19,219	1,840	10.587%	*A	19,105	21,004	1,899	9.940%	*A	19,105	21,004	1,899	9.940%	*A			
	Countywide	358,236	366,385	8,149	2.275%	*A	439,639	448,139	8,500	1.933%	*A	439,639	448,139	8,500	1.933%	*A			
										AM Peak Hour				PM Peak Hour					
Regional VMT/VHT Analysis		Base Volume	Winter '07 Cumulative Volume	Volume Change	% Change		Base Volume	Winter '07 Cumulative Volume	Volume Change	% Change		Base Volume	Winter '07 Cumulative Volume	Volume Change	% Change				
	Regional VHT	190,829	218,684	27,855	14.597%		335,123	375,512	40,389	12.052%		335,123	375,512	40,389	12.052%				
	Regional VMT	3,867,924	4,012,697	144,773	3.743%	*A	4,524,689	4,632,292	107,603	2.378%	*A	4,524,689	4,632,292	107,603	2.378%	*A			
										AM Peak Hour				PM Peak Hour					
Screenline Analysis		# of Links	Base Volume	Base V/C	Cumulative Volume	Cumulative V/C	Volume Change	V/C Change	5% Capacity		# of Links	Base Volume	Base V/C	Cumulative Volume	Cumulative V/C	Volume Change	V/C Change	5% Capacity	
1	S/o SR-17	7	13,466	0.932	14,035	0.990	839	0.058	103	*C	7	14,762	1.022	15,284	1.058	523	0.036	103	*C
2	N/o SR-17 & I-880	7	18,028	1.030	18,894	1.080	866	0.049	125	*C	7	19,604	1.120	20,448	1.168	844	0.048	125	*C
3	S/o US-101	7	14,702	0.886	15,447	0.931	745	0.045	118	*C	7	15,664	1.066	15,734	1.070	70	0.005	122	
4	W/o I-880 & 10th	6	14,733	1.151	15,275	1.193	542	0.042	106	*C	6	15,217	1.189	15,713	1.228	496	0.039	106	*C
5	E/o US-101	8	23,056	0.917	24,337	0.968	1,281	0.051	157	*D	8	25,372	1.009	26,465	1.052	1,093	0.043	157	*D
6	W/o US-101	6	13,208	0.815	14,257	0.880	1,049	0.065	135	*E	6	14,833	0.916	15,156	0.936	323	0.020	135	*E
7	S/o Jackson	6	20,692	1.000	21,751	1.051	1,059	0.051	172	*D	6	23,878	1.154	25,072	1.211	1,068	0.058	172	*D
8	W/o I-680	9	20,073	0.826	20,614	0.848	541	0.022	135	*E	9	21,068	0.941	21,435	0.957	367	0.016	124	*E
9	N/o US-101 & I-880	4	13,287	1.107	13,710	1.143	424	0.035	150	*F	4	14,749	1.229	14,946	1.245	197	0.016	150	*F
10	W/o I-880 & 10th	9	21,765	1.072	22,913	1.129	1,147	0.057	112	*F	9	23,307	1.148	23,955	1.180	649	0.032	112	*F
11	Coyote Creek	7	16,066	1.027	16,879	1.079	812	0.052	111	*F	7	18,517	1.119	18,837	1.138	320	0.019	118	*F
12	S/o Naglee/Jackson/Mabury	9	15,046	0.965	15,754	1.010	707	0.045	86	*G	9	15,447	0.990	16,174	1.037	727	0.047	86	*G
13	S/o I-280	11	19,897	0.809	20,644	0.839	747	0.030	111	*I	11	20,852	0.931	21,574	0.963	722	0.032	112	*I
14	N/o I-280 & I-680	10	16,270	0.741	16,820	0.766	550	0.025	109	*I	10	18,259	0.832	18,757	0.855	498	0.023	109	*I
15	Guadalupe River	9	15,608	0.796	16,642	0.849	1,034	0.053	108	*I	9	17,764	0.906	18,690	0.954	926	0.047	108	*I
16	N/o Cochrane (NB)	5	10,796	0.960	10,520	0.935	-277	-0.025	112		5	6,686	0.594	7,126	0.633	440	0.039	112	*H
17	N/o Cochrane (SB)	5	6,530	0.580	7,008	0.623	478	0.042	112	*H	5	11,898	1.058	11,565	1.028	-333	-0.030	112	
18	S/o San Martin (NB)	5	7,788	0.692	7,546	0.671	-242	-0.022	112		5	4,112	0.366	4,405	0.392	293	0.026	112	*H
19	S/o San Martin (SB)	5	4,593	0.408	4,923	0.438	330	0.029	112	*H	5	8,755	0.778	8,442	0.750	-313	-0.028	112	
20	N/o Leavesley (NB)	6	7,851	0.692	7,655	0.674	-196	-0.017	94		6	4,760	0.419	5,049	0.445	289	0.025	94	*H
21	N/o Leavesley (SB)	6	5,791	0.510	6,125	0.540	334	0.029	94	*H	6	8,598	0.758	8,334	0.734	-264	-0.023	94	
22	S/o I-280 (NB)	16	27,846	0.941	29,351	0.992	1,505	0.051	92	*I	16	17,170	0.580	17,364	0.587	194	0.007	92	*H
23	S/o I-280 (SB)	17	18,759	0.517	18,493	0.510	-266	-0.007	106		17	33,071	0.912	35,100	0.968	2,029	0.056	106	*I
24	N/o SR-17 & I-880 (NB)	10	26,616	1.065	27,780	1.111	1,164	0.047	125	*I	10	17,975	0.719	17,650	0.706	-325	-0.013	125	
25	N/o SR-17 & I-880 (SB)	11	15,084	0.517	14,798	0.507	-286	-0.010	132		11	29,364	1.006	30,321	1.038	957	0.033	132	*I
26	S/o Capitol Exp (NB)	16	25,173	0.696	26,761	0.740	1,588	0.044	112	*H	16	20,386	0.564	20,550	0.568	164	0.005	112	*H
27	S/o Capitol Exp (SB)	16	17,978	0.497	17,813	0.493	-165	-0.005	112		16	27,018	0.747	28,476	0.788	1,458	0.040	112	*H
28	W/o US-101 (WB)	10	5,762	0.450	5,439	0.425	-323	-0.025	64		10	6,027	0.471	6,035	0.471	8	0.001	64	
29	W/o US-101 (EB)	10	4,949	0.387	5,282	0.413	332	0.026	64	*H	10	7,210	0.563	6,559	0.512	-651	-0.051	64	
30	S/o SR-85 (NB)	13	24,053	0.767	26,302	0.839	2,249	0.072	120	*H	13	20,710	0.661	21,357	0.681	648	0.021	120	*H
31	S/o SR-85 (SB)	14	19,222	0.563	19,702	0.577	480	0.014	121	*H	14	26,081	0.764	28,022	0.821	1,941	0.057	121	*H

**Table 30
Cumulative General Plan Amendment Impact Summary (CVSP 20k J + 10k HH)**

Link Set	E/F Links	AM Peak Hour								PM Peak Hour									
		# of Links	Base Volume	Base V/C	Cumulative Volume	Cumulative V/C	Volume Change	V/C Change	2.5% Capacity	# of Links	Base Volume	Base V/C	Cumulative Volume	Cumulative V/C	Volume Change	V/C Change	2.5% Capacity		
1	S/o SR-17	5	11,512	1.037	11,875	1.070	363	0.033	55	*C	6	13,501	1.076	13,971	1.113	470	0.037	52	*C
2	N/o SR-17 & I-880	5	16,881	1.214	17,617	1.267	737	0.053	69	*C	6	18,893	1.203	19,742	1.257	849	0.054	65	*C
3	S/o US-101	5	12,566	0.974	13,030	1.010	465	0.036	64	*C	4	13,036	1.174	13,073	1.178	37	0.003	69	
4	W/o I-880 & 10th	5	14,256	1.169	14,778	1.211	522	0.043	61	*C	6	15,217	1.189	15,713	1.228	496	0.039	53	*C
5	E/o US-101	6	18,967	0.983	19,826	1.027	859	0.045	80	*D	7	21,098	1.060	21,842	1.098	743	0.037	71	*D
6	W/o US-101	3	9,085	0.882	9,766	0.948	680	0.066	85	*E	5	13,330	1.050	13,528	1.065	198	0.016	63	*E
7	S/o Jackson	4	18,530	1.084	19,169	1.121	640	0.037	106	*D	5	22,367	1.183	23,487	1.243	994	0.059	94	*D
8	W/o I-680	2	8,953	0.869	9,462	0.919	509	0.049	128	*E	4	15,043	1.010	15,366	1.031	323	0.022	93	*E
9	N/o US-101 & I-880	4	13,287	1.107	13,710	1.143	424	0.035	75	*F	4	14,749	1.229	14,946	1.245	197	0.016	75	*F
10	W/o I-880 & 10th	8	21,244	1.112	22,216	1.163	972	0.051	59	*F	9	23,307	1.148	23,955	1.180	649	0.032	56	*F
11	Coyote Creek	6	13,963	1.078	14,456	1.116	493	0.038	53	*F	7	18,517	1.119	18,837	1.138	320	0.019	59	*F
12	S/o Naglee/Jackson/Mabury	9	15,046	0.965	15,754	1.010	707	0.045	43	*G	8	14,178	1.035	14,882	1.086	704	0.051	42	*G
13	S/o I-280	6	14,476	1.012	15,026	1.051	550	0.038	59	*I	7	16,044	1.028	16,427	1.053	383	0.025	55	*I
14	N/o I-280 & I-680	2	6,746	1.038	6,711	1.032	-35	-0.005	81		5	10,751	1.000	10,756	1.001	5	0.001	53	
15	Guadalupe River	4	12,840	0.988	13,381	1.029	542	0.042	81	*I	4	14,151	1.080	14,764	1.127	613	0.047	81	*I
16	N/o Cochrane (NB)	2	8,374	1.080	8,235	1.063	-139	-0.018	96		3	0	0.000	0	0.000	0	0.000	0	
17	N/o Cochrane (SB)	0	0	0.000	0	0.000	0	0.000	0		0	9,817	1.148	9,561	1.118	-256	-0.030	71	
18	S/o San Martin (NB)	1	5,900	1.009	5,764	0.985	-136	-0.023	146		1	0	0.000	0	0.000	0	0.000	0	
19	S/o San Martin (SB)	0	0	0.000	0	0.000	0	0.000	0		0	6,125	1.047	6,075	1.038	-50	-0.009	146	
20	N/o Leavesley (NB)	2	6,247	0.968	6,116	0.948	-131	-0.020	80		1	0	0.000	0	0.000	0	0.000	0	
21	N/o Leavesley (SB)	1	613	1.022	610	1.017	-3	-0.005	15		0	5,925	1.013	5,812	0.994	-113	-0.019	146	
22	S/o I-280 (NB)	13	25,796	0.975	26,857	1.015	1,061	0.040	50	*I	13	3,772	0.993	3,795	0.999	24	0.006	95	
23	S/o I-280 (SB)	0	0	0.000	0	0.000	0	0.000	0		1	27,585	0.976	28,989	1.026	1,404	0.050	54	*I
24	N/o SR-17 & I-880 (NB)	8	25,468	1.190	26,503	1.238	1,034	0.048	66	*I	8	7,083	0.944	6,880	0.917	-203	-0.027	93	
25	N/o SR-17 & I-880 (SB)	0	0	0.000	0	0.000	0	0.000	0		2	26,233	1.232	27,385	1.286	1,152	0.054	66	*I
26	S/o Capitol Exp (NB)	4	8,901	0.908	9,494	0.969	594	0.061	61	*I	6	3,528	0.929	3,571	0.940	42	0.011	95	
27	S/o Capitol Exp (SB)	0	0	0.000	0	0.000	0	0.000	0		1	15,806	0.914	16,213	0.937	407	0.024	72	*I
28	W/o US-101 (WB)	1	1,716	0.953	1,693	0.940	-24	-0.013	45		1	0	0.000	0	0.000	0	0.000	0	
29	W/o US-101 (EB)	0	0	0.000	0	0.000	0	0.000	0		0	1,806	1.003	1,785	0.992	-21	-0.011	45	
30	S/o SR-85 (NB)	5	16,469	0.958	17,833	1.037	1,364	0.079	86	*H	4	8,150	0.953	8,204	0.959	54	0.006	106	
31	S/o SR-85 (SB)	1	6,253	1.069	5,789	0.990	-464	-0.079	146		2	15,098	1.041	16,108	1.111	1,011	0.070	90	*H

Notes:
 - Bold indicates cumulatively significant impact that CVSP contributes to.

- *A This significant impact is mostly attributable to GP05-08-01 and CVSP
- *B This significant impact is mostly attributable to GP05-03-05, GP05-08-01, GP06-03-01, GP06-04-01, GP06-04-02, GP05-06-01, GP05-06-02, and CVSP
- *C This significant impact is mostly attributable to GP05-03-05, GP05-08-01, GP06-03-01, GP06-04-01, and CVSP
- *D This significant impact is mostly attributable to GP05-03-07, GP05-08-01, GP06-03-01, GP06-04-01, GP06-04-05, and CVSP
- *E This significant impact is mostly attributable to GP05-03-07, GP05-08-01, GP06-03-01, GP06-04-01, and CVSP
- *F This significant impact is mostly attributable to GP06-04-02, GP05-08-01, and CVSP
- *G This significant impact is mostly attributable to GP05-06-01, GP05-06-02, GP05-08-01, and CVSP
- *H This significant impact is mostly attributable to CVSP
- *I This significant impact is mostly attributable to GP05-08-01 and CVSP

Source: City of San Jose General Plan Amendment Winter 2007 Cumulative (CVSP 20k J + 10k HH) Analysis, December 5, 2006.

- Link Set #30 includes thirteen links south of SR-85, in the northbound direction.
- Link Set #31 includes fourteen links south of SR-85, in the southbound direction.

Tables 29 and 30 show that all studied links operate at either LOS E or F during the AM and/or PM peak hours in at least one direction. Table 29 shows that the proposed land use amendments would result in significant impacts on each of the studied link sets during at least one peak hour under the CVSP Full Buildout scenario. Table 30 shows that the proposed land use amendments would result in a significant impact on all link sets, with the exception of the link set west of US 101 (westbound), during at least one peak hour under the CVSP 20,000J + 10,000HH scenario. A total of 22 of the LOS E/F link sets would be significantly impacted by the proposed land use amendments during at least one peak hour under both cumulative scenarios. It should be noted that several of the identified screenline impacts would be to the off peak direction of the links crossing the screenlines.

- The proposed cumulative land use changes will result in the aggregated V/C ratios of nearby regional screenlines to increase in the peak direction by at least 0.01 and total volumes on the same links to increase in the peak direction by at least 5% of average link capacity on all of the link sets studied during at least one peak hour under the CVSP Buildout scenario and 30 of the 31 link sets studied during at least one peak hour under the CVSP 20,000J + 10,000HH scenario; and
- The proposed cumulative land use changes will result in the aggregated E/F link V/C ratios of nearby regional screenlines to increase in the peak direction by at least 0.005, and total volumes on the same E/F links to increase in the peak direction by at least 2.5% of average congested link capacity on 22 of the link sets studied during at least one peak hour.

Impact: Based on the cumulative screenline impact criteria, the increases in V/C and the corresponding increases in traffic volumes on all studied link sets under both cumulative scenarios, constitute a cumulatively significant adverse traffic impact.

CVSP GPA Site Contribution to Cumulative Impacts

The cumulative analysis for proposed Winter 2007 General Plan Amendments identifies several traffic impacts to facilities throughout the city and county. The cumulative impacts are summarized in Tables 29 and 30. A description of the contribution of the CVSP GPA site to the identified cumulative impacts are described below. It is expected that the proposed general plan amendment will make a fair-share contribution towards the cost of construction of needed improvements to the transportation system.

Countywide trip analysis indicated that the proposed land use amendments would cumulatively impact transportation facilities countywide. The proposed CVSP GPA site contributes to the identified countywide impact under both scenarios analyzed.

The cordon analysis for the special subareas indicated that the proposed land use amendments would cumulatively impact the Evergreen, North San Jose, and South San Jose subareas. The proposed CVSP GPA site contributes to the identified impacts to all the special subareas under both scenarios analyzed.

The regional impacts on VMT and VHT were found to be largely caused by the proposed GP05-08-01 (Evergreen) and CVSP GPA projects.

All 31 link sets analyzed as part of the cumulative analysis were shown to be impacted by the proposed GPAs. The proposed CVSP GPA site contributes to the identified impacts to all the link sets analyzed

under both scenarios, as noted in Tables 29 and 30.

8. Conclusions

The potential impacts of the proposed development levels of the Coyote Valley Specific Plan were evaluated in accordance with the standards and methodologies set forth by the Cities of San Jose, Morgan Hill, San Martin, and Gilroy and the Santa Clara Valley Transportation Authority (VTA). The VTA administers the county Congestion Management Program (CMP).

The study included the analysis of AM and PM peak-hour traffic conditions for 187 existing signalized intersections, 60 future Coyote Valley intersections and 52 directional freeway segments.

Project Impacts

Intersection Impacts

Results of the intersection level of service analysis show that 14 of the 187 study intersections would be impacted by the project according to applicable level of service standards. The location of each of the mitigated intersections is presented below:

- 11 intersections are located in San Jose
- 1 intersection is located in Morgan Hill
- 1 intersection is located in San Martin
- 1 intersection is located in Gilroy

Proposed mitigation measures are presented in Chapter 4.

Freeway Segment Impacts

The results of the freeway segment analysis showed that 10 of the 52 mixed-flow lanes and one of the 28 HOV lanes on the directional freeway segments studied would be impacted by the project according to CMP level of service standards for freeways. Mitigation of freeway facility impacts would require

widening of the freeways. The feasibility of freeway widening may be constrained by the acquisition and cost of right-of-way and substantial cost for one single development. Therefore, for this particular project, these impacts must be considered significant and unavoidable. Should it be deemed that widening of the freeway is feasible and necessary, the project along with other projects within Santa Clara County could contribute towards the funding of the widening. A fee collection program would need to be established and specific improvements identified. The forthcoming, Valley Transportation Authority *South County Circulation Study* may identify improvements to regional facilities, including freeways, which a regional funding plan could be used to fund.

There are measures that could reduce the impacts. The measures primarily consist of transit improvements and enhancements as outlined below:

- Enhancement of CalTrain service
- Extension of LRT lines
- Enhanced Bus Service

Transit Service

The Coyote Valley development would generate about 302,780 daily new person trips, with about 4% percent (12,942 trips) being made using one or more transit modes. About 50% (6,410 trips) of the total transit trips would stay within Coyote Valley. These estimates equate to approximately 3,250 transit trips during each of the peak hours originating outside of Coyote Valley with destinations within Coyote Valley and 3,250 transit trips originating and with destinations within Coyote Valley.

Transit Service Improvements

The evaluation of project conditions on transit service showed that due to the size of the project, demand for transit service would justify the need for enhancement of existing service serving Coyote Valley, but would not create the need for new transit facilities beyond those proposed as part of the project's internal transit system. The City of San Jose has endorsed VTA's Community Design and Transportation (CDT) Program and will incorporate guidelines and recommendations of the VTA, CMP, and CDT Program when appropriate and applicable in regards to future transit facilities.

CalTrain Service. A new multi-modal transit station is being proposed as an element of the proposed CVSP project. The station will be located south of the Monterey Road and Bailey Road interchange. Once this station is open, CalTrain will be available to serve commuters to and from the project area. Currently, CalTrain service through Coyote Valley is northbound only during the AM, and southbound only during the PM commute periods. However, VTA is planning to begin operating some contraflow services, and once the contraflow service is operational, commuters from San Francisco south will be able to reach the North Coyote Station via CalTrain. A minimum of one train would be provided in each direction every hour. It is likely, that trains would run every 30-minutes during the peak commute hours. Each train would have a capacity of 750 passengers, assuming a per car capacity of 150 passengers and five car trains. With a total of eight trains, four running in each direction, the trains could serve up to 6,000 seated passengers during the peak hours. It is anticipated that the contraflow service will be operational by the time the full CVSP development is completed. It is reasonable to expect that the majority of the increased transit demand due to CVSP will be served by the CalTrain system. Between 2,000 and 3,000 additional CalTrain riders are projected to be attributable to the proposed project.

Bus Service. Local and Express bus services are projected to carry the balance of the additional peak hour person trips that are projected to be using transit services. Local and Express buses could carry an

additional 500 to 600 bus riders that would be attributable to the proposed project. The frequency of bus service and expansion of express bus service during peak commute periods would need to be increased to serve the increase in demand.

Pedestrian and Bicycle Facilities

With the large amount of planned development, increases in pedestrians and bicyclists along with the vehicular traffic can be expected within Coyote Valley. Existing pedestrian facilities will be improved and future development designed to better serve pedestrians. As development progresses within Coyote Valley, the following pedestrian and bicycle facility enhancements will occur:

- Sidewalks and bicycle facilities will be constructed along the minor streets of the new roadway system that will serve pedestrians and bicyclists more efficiently than the major arterials that serve large volumes of vehicular traffic. Bicycle facilities will be provided on all major streets where feasible.
- Enhance the existing bicycle facilities between San Jose and Morgan Hill. The enhancements will provide for continuous bicycle connections from southern San Jose through, Coyote Valley and into Morgan Hill. The VTA's *Santa Clara Countywide Bicycle Plan* identifies improvements to the Coyote Creek Trail between Hellyer Avenue and Anderson Lake and bicycle facility improvements along McKean Road from Harry Road to Bailey Avenue.

The City of San Jose has endorsed VTA's Community Design and Transportation (CDT) Program and will incorporate guidelines and recommendations of the *Santa Clara Countywide Bicycle Plan* and CDT Program when appropriate and applicable in regards to future pedestrian and bicycle facilities.

General Plan Amendment Analysis

An analysis of long-term traffic impacts on the countywide transportation system associated with the land use changes due to the proposed development levels for Coyote Valley as well as all other pending General Plan Amendments (GPA) in the City of San Jose was also completed. Future traffic volumes used in the General Plan analysis are consistent with ABAG projections and the VTA 2030 model. The analysis indicates that the proposed development levels for Coyote Valley would result in a significant increase in jobs and households in Coyote Valley. The traffic associated with the growth would result in increases in peak direction volumes across the identified screenlines for the Special Subareas, Vehicle Miles Traveled, Vehicle Hours Traveled, and the number of links operating at LOS E/F. As part of the traffic analysis for the project, mitigation for each of the identified impacts was identified to meet the City's level of service policy. The proposed mitigation measures would serve to reduce impacts and be in conformance with General Plan policies. It is expected that the proposed general plan amendment will make a fair-share contribution towards the cost of construction of the improvements.

Year 2030 Long-Term Analysis

Long-term traffic analysis of the proposed development levels for Coyote Valley as well as land use growth and transportation improvements within South County and Monterey Bay indicate that the proposed development levels will have adverse impacts on the major regional transportation facilities serving Coyote Valley. Traffic associated with the Coyote Valley development levels as well as other future growth will cause regional transportation facilities already projected to operate at unacceptable levels to worsen. The project shall contribute its fair-share towards funding of regional transportation improvements. Potential roadway facility improvements will be identified in the forthcoming VTA *South County Circulation Study*. The Year 2030 analysis is included in Appendix G of this report.