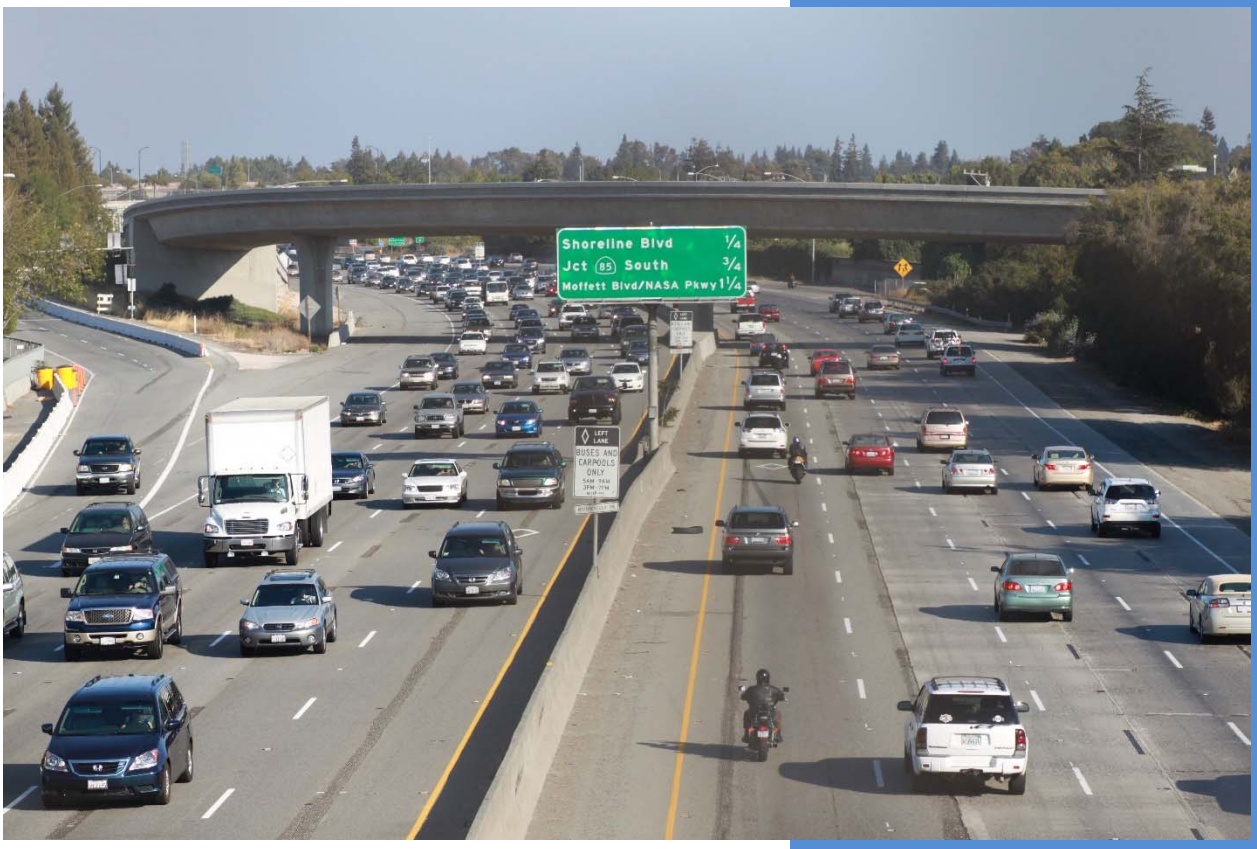
2015 CMP Monitoring and Conformance Report



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VTA

2015 CMP Monitoring and Conformance Report

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INTRODUCTION

State Statute 65089 requires Congestion Management Agencies (CMAs) to conduct analysis of all Congestion Management Program (CMP) roadways every two years to ensure Member Agencies – the cities, towns and county – are developing in a manner consistent with the CMP level of service standard of LOS E. As the responsible CMA for Santa Clara County, the Valley Transportation Authority (VTA) undertakes this analysis on an annual basis. VTA prepares the annual Monitoring and Conformance Report which documents the CMP conformance findings.

The scope of data collection is reduced every other year during odd-numbered years to minimize the costs of analyzing the CMP network annually. During the "off-years," the reduced scope of work includes only land use and freeway level of service data, and Deficiency Plan Status Reports. All other CMP elements are collected biennially as part of the full scope.

The 2015 Monitoring and Conformance Report feature the full scope of data collection and analysis of each CMP element. The following summarizes the results of the 2015 Monitoring Program.

LAND USE

VTA's Member Agencies, the cities, towns and County of Santa Clara, submit land use data to VTA in the form of residential and commercial/industrial project approvals for the prior fiscal year. The data reflects changes in residential dwelling units for approvals as well as estimate changes in commercial/industrial job approvals. Job change estimates are determined by applying job density values to square footage and land use type of commercial/industrial projects in order to estimate how many jobs are likely created or lost as a result of the land use approval.

All Member Agencies submitted land use data as required. Compared with 2014, commercial and industrial approvals in 2015 resulted in an estimated decrease of 3,048 jobs. In 2015 Member Agencies approved 5,918 residential units, representing decrease from 2014 of 1,407. Nearly half of the total residential units and one quarter of jobs approved were nears VTA's Cores, Corridors and Station areas. This represents moderate decrease from 2014.

FREEWAY

Aerial photography is used to collect traffic data to document congestion on all 313 directional miles of Santa Clara County's freeway system. The photographs are analyzed to determine the peak period of vehicle density which is used to determine level of service. Mixed-flow lanes are

treated as separate facilities from HOV lanes and their levels of service are calculated separately.

In 2015, there were 96 AM freeway segments (100 directional miles) and 82 PM freeway segments (81 directional miles) that operated at LOS F. These numbers are identified as a continuing growth trend in freeway traffic.

Segments that operated at LOS F when monitoring began in 1991 are exempt from CMP level of service standards. Of the freeway segments operating at LOS F, 73 AM and 56 PM freeway segments are considered deficient due to 1991 baseline exemption. Member Agencies with non-conforming facilities within their jurisdiction are encouraged to implement strategies listed in the Immediate Implementation Action List found in VTA's Requirements for Local Deficiency Plans.

CONFORMANCE FINDINGS

The 2015 Monitoring and Conformance Report find all Member Agencies in compliance with the CMP monitoring requirements.

1 INTRODUCTION

INTRODUCTION

California State Government Code 65089 mandates the creation of a Congestion Management Program (CMP) for each county to manage the effects of transportation and land use. It requires that all elements of the CMP be monitored at least biennially by the designated Congestion Management Agency (CMA) to determine if the county and city governments, known collectively as Member Agencies, are conforming to the level of service standard set by the CMA.

The Santa Clara Valley Transportation Authority (VTA) is the designated CMA for Santa Clara County and is in charge of monitoring the CMP network. VTA exceeds the state requirement by collecting data each year and producing an annual Monitoring and Conformance Report.

The high cost of data collection each year has resulted in reduced monitoring scope in the "off-years" or odd-numbered years while still meeting the requirements of the CMP statute. The 2014 report covers the full-scope year and includes all CMP elements for monitoring.

LEVEL OF SERVICE

Traffic congestion is monitored on the CMP roadway network which is comprised of freeways, state highways, expressways and principal arterials. Congestion is monitored in terms of level of service (LOS), a sliding scale from A though F where LOS A represents best traffic flow and LOS F represents significant traffic delay. Santa Clara County's LOS standard is LOS E. Table 1.1 provides a description of LOS standards.

TABLE 1.1 | LEVEL OF SERVICE DESCRIPTION

Level of Service	Description
A | B | C	Traffic can move relatively freely without significant delay
D	Delay becomes more noticeable
E	Traffic volumes are at or close to capacity, resulting in significant delays and average speeds that are no more than about one-third the uncongested speed
F	Traffic demand exceeds available capacity. Very slow speeds (stop-and-go), long delays (over one minute) and standing queues at signalized intersections.

CONFORMANCE STANDARD

To comply with the CMP standard, Member Agencies must demonstrate that all CMP roadways (excluding freeways) within their jurisdictions are operating at or above the CMP traffic level of

service standard of LOS E. Member Agencies that do not maintain the CMP LOS standard risk having their Proposition 111 (1991) gas tax subvention withheld. If the LOS standard cannot be met, a deficiency plan must be approved by VTA. Freeway segments and CMP intersections that operated at LOS F when monitoring began in 1991 are exempt from meeting the LOS E standard. Freeway LOS thresholds are taken from the Highway Capacity Manual with the exception of D/E and E/F thresholds which are selected by VTA for Santa Clara County conditions.

2 LAND USE

INTRODUCTION

California State CMA legislation requires Congestion Management Agencies to monitor land use changes within its jurisdiction. Each year, VTA monitors land use changes within Santa Clara County by requesting land use data from Member Agencies in terms of residential and commercial/industrial projects that have been approved.

METHODOLOGY

VTA collects land use data from Member Agencies each year to track decisions jurisdictions are making about land use. Member Agencies submit land use data for the prior fiscal year in the form of changes in dwelling units for residential approvals and changes in square footage for commercial and industrial approvals. This data is limited to tracking approvals only if those approvals do not result in construction during the reporting year or at all.

For commercial and industrial approvals, changes in square footage are used to estimate the number of jobs created or lost. Jobs are estimated by applying a job density value (measured in jobs per 1,000 sq. ft.) to the size of the site. Job density values vary depending on the specific land use type. The appropriate job density is multiplied by the square footage of each site to determine the number of estimated jobs. Table 2.1 shows the job density values per type of land use.

TABLE 2.1 | COMMERCIAL AND INDUSTRIAL JOB DENSITIES (JOBS PER 1,000 SQ. FT.)

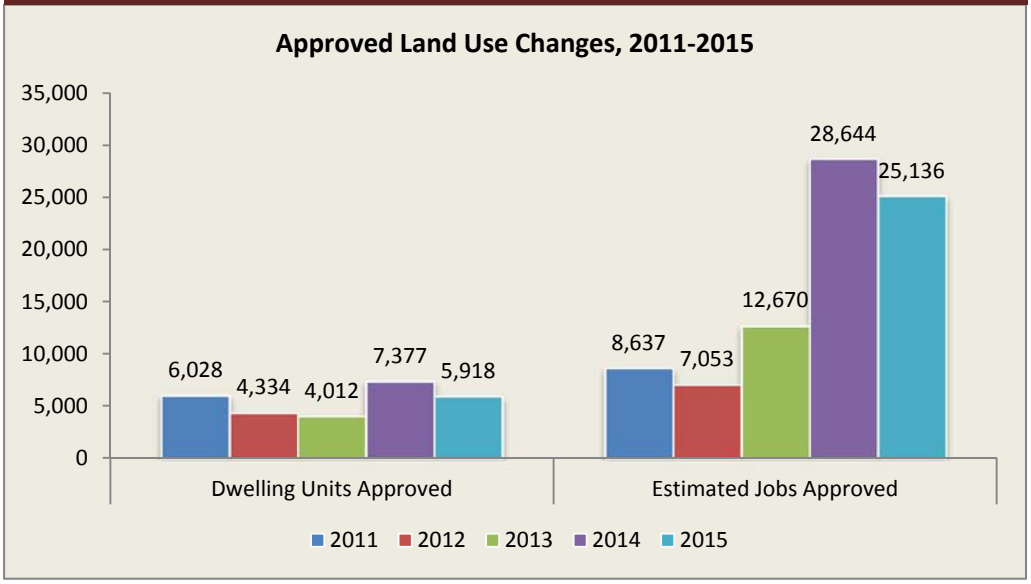
Density	Land Use
3.4	Office/Educational/Institutional/Hospital
3.1	Transportation
2.5	R&D Office
2.0	Hotel/Motel
1.75	Retail/Manufacturing
0.75	Non-Manufacturing
0	Park/Recreation/Agriculture/Cemetery/Urban Reserve

The focus of VTA's land use analysis are development approvals that provide the capacity to accommodate population and employment growth. The data is not a reflection in actual changes in residents or job creation. Rather, it is a measure of the trend in allocation of land for different purposes. In addition to the analyses included in this report, the data can be used to understand the current and projected demand in housing and employment. To better understand the employment data it is helpful to understand limitations that affect the data quality but are beyond the control of VTA and the Member Agencies:

- It is assumed commercial and industrial sites were fully occupied for employment uses.
- It is assumed that all jobs that can be accommodated on the existing site are lost when a commercial or industrial site is converted to a different type of land use. Under this methodology, commercial/industrial sites that are either underutilized or unoccupied assume a full reduction in employment even if few or any jobs are actually lost. To compensate for this, VTA requests Member Agencies to indicate in their land use data submittal whether jobs were lost during conversions to a different use. Since not all Member Agencies provided this data, our methodology assumes full employment for commercial/industrial conversions, which may negatively impact the job change estimate for 2015.

Despite these limitations, the analysis provides valuable information to illustrate the trend of land use development and where housing and employment growth is likely to occur, and where Member Agencies are actually targeting growth.

Figure 2.1 Approved Land Use Changes, 2011-2015



LAND USE ANALYSIS

As shown in Table 2.2, Member Agencies approved 5,918 residential units in 2015, a slight decrease from the previous year when 7,377 units were approved. Notably, the City of Mountain View saw a large increase in approvals from 399 units in 2014 to 1,051 units this year. San Jose continued to see approvals of several large mixed-use developments and approved the greatest number of units overall in 2015.

TABLE 2.2 | APPROVED RESIDENTIAL UNITS, 2010-2015

Member Agency	2010	2011	2012	2013	2014	2015
Campbell	1	27	195	12	21	273
Cupertino	0	1	0	-30	15	15
Gilroy	59	35	101	278	350	646
Los Altos	2	69	204	20	0	4
Los Altos Hills	0	5	1	7	0	3
Los Gatos	17	31	116	20	23	53
Milpitas	54	2,531	2,243	793	466	857
Monte Sereno	0	0	0	0	0	0
Morgan Hill	24	96	268	544	103	241
Mountain View	256	273	298	537	399	1,051
Palo Alto	86	47	1	2	311	18
San Jose	598	2,496	536	729	3,182	2,112
Santa Clara	766	102	48	140	1,363	572
Santa Clara County	2	0	0	369	0	0
Saratoga	3	0	2	8	0	0
Sunnyvale	2	315	321	583	1,144	73
Total	1,870	6,028	4,334	4,012	7,325	5,918

As shown in Table 2.3, commercial and industrial approvals in 2015 resulted in an estimated net decrease of 25,136. Compared to the previous year, job change estimates have decreased by approximately 3,000 when 28,644 jobs were estimated in 2014. This partly explained by a continuing increase in commercial development within the City of Santa Clara. Additionally, that Sunnyvale, Palo Alto, Mountain View and San Jose saw a large amount of approvals in 2015 due to mixed-use approvals on former industrial sites. However, most cities in the County did see a decrease in commercial development.

TABLE 2.3 | JOB CHANGE ESTIMATES BASED ON COMMERCIAL/INDUSTRIAL APPROVALS, 2010-2015

Member Agency	2010	2011	2012	2013	2014	2015
Campbell	7	-179	-140	0	9	-120
Cupertino	89	-3	432	277	700	21
Gilroy	227	56	0	39	639	10
Los Altos	0	-40	50	211	0	19
Los Altos Hills	0	0	0	0	0	0
Los Gatos	260	264	70	555	23	12
Milpitas	81	706	-1,176	-399	0	0
Monte Sereno	0	0	0	0	0	0
Morgan Hill	8	10	0	57	0	968
Mountain View	581	598	798	1,151	2,304	1,698
Palo Alto	656	4,584	585	924	-993	1,840
San Jose	733	853	1,247	4,211	7,913	3,510
Santa Clara	6,603	460	2,583	3,407	13,700	14,425
Santa Clara County	0	693	80	1,071	318	1,302
Saratoga	11	0	0	0	0	0
Sunnyvale	645	635	2,524	1,179	4,031	1,631
Total	9,902	8,636	7,053	12,683	28,644	25,136

PROXIMITY TO CORES, CORRIDORS AND STATION AREAS

In 2003, VTA in partnership with Member Agencies developed the Community Design & Transportation (CDT) program to craft best practices for land use and transportation. The CDT program established a framework of Cores, Corridors and Station Areas as priority areas identified by VTA and Member Agencies for targeting future growth and transportation investments. These areas are most likely to benefit from concentrated development due to its location near major transit corridors.

Spatial analysis was conducted on the land use data submitted by Member Agencies to determine the proximity of approved developments to the Cores, Corridors and Station Areas. Proximity is defined as a 1/3 mile within major transit stations and ¼ mile buffer from the cores, and future Bus Rapid Transit (BRT) corridors. The purpose of the spatial analysis is to illustrate where housing and employment growth is likely to occur and trend over time.

As shown in Table 2.4, there were 5,918 total residential units approved in 2015. Of these, 2,755 residential approvals (47 percent) were located within the Cores, Corridors and Station Areas. This is a decrease from 2014 when 66 percent of the potential growth in housing was planned near the targeted areas for development.

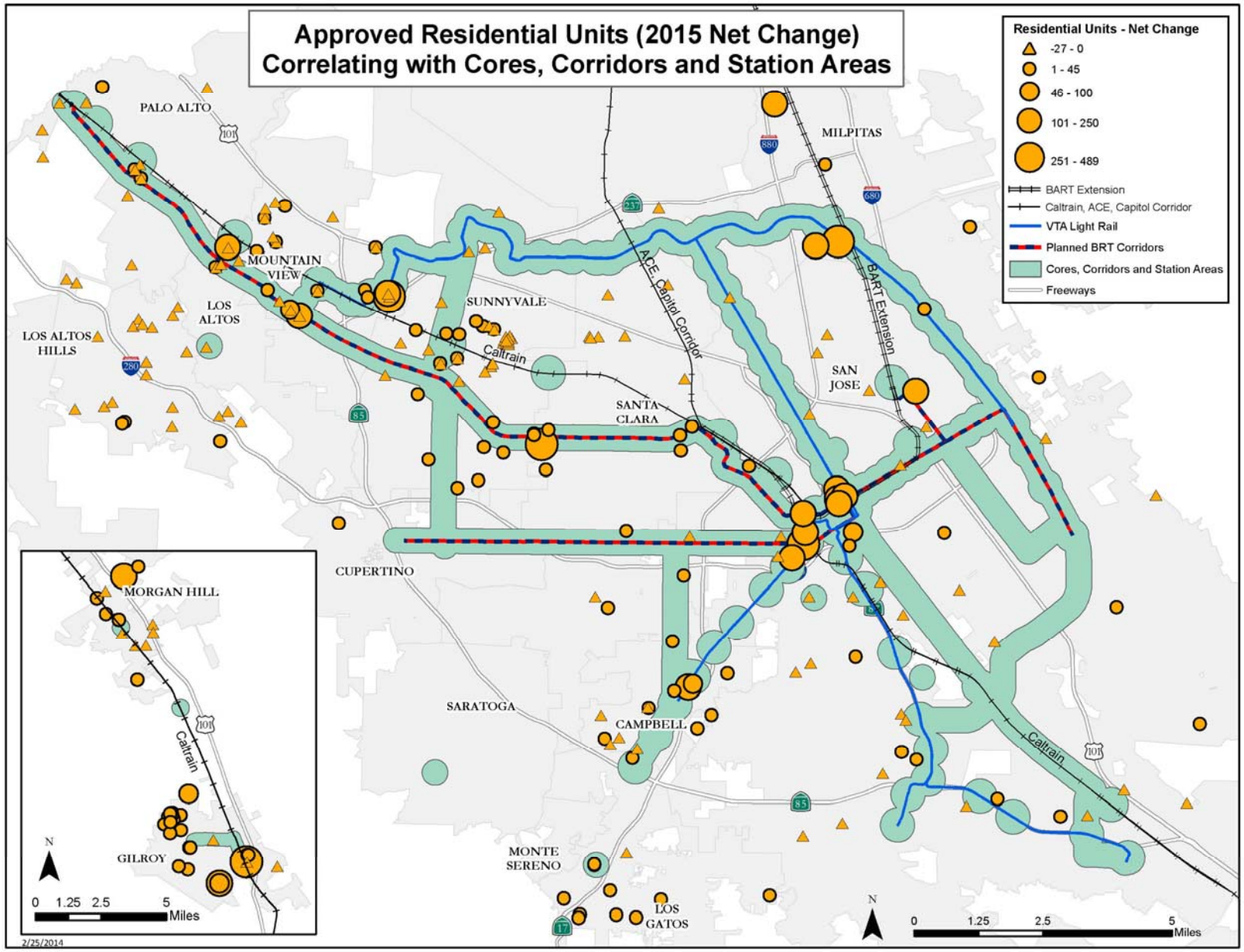
Of the 7,053 estimated increased jobs due to commercial/industrial development, 5,442 jobs or 22 percent were located within the Cores, Corridors and Station Areas. This is a decrease from

2014 when 37 percent of the commercial/industrial approvals were within the Cores, Corridors and Station Areas.

TABLE 2.4 | LAND USE APPROVALS NEAR CORES, CORRIDORS AND STATION AREAS, 2012-2015

	2015	2014	2013	2012
Residential Unit Approvals within CCSAs	2,755	2,855	1,982	2,855
Total Units	5,918	7,325	4,012	4,334
% near CCSAs	47%	66%	49%	66%
Job Change Estimates within CCSAs	5,442	2,610	6,966	2,610
Total Estimated Jobs	25,136	28,644	12,683	7,053
% near CCSAs	22%	37%	55%	37%

FIGURE 2.2 | APPROVED RESIDENTIAL UNITS NEAR VTA'S CORES, CORRIDORS AND STATION AREAS (2015 NET CHANGE)



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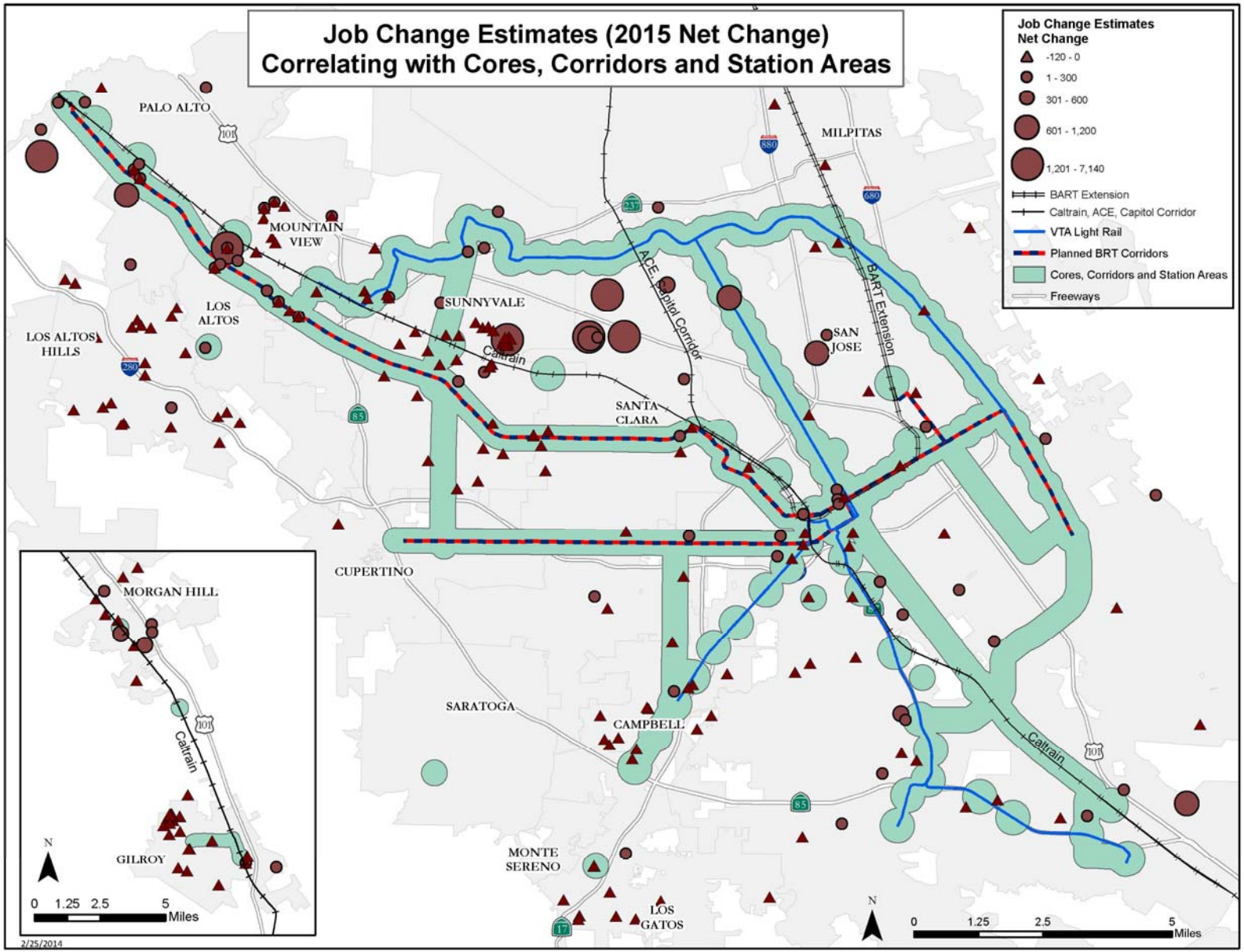


FIGURE 2.4 | RESIDENTIAL APPROVALS NEAR VTA'S CORES, CORRIDORS AND STATION AREAS (2010-2015)

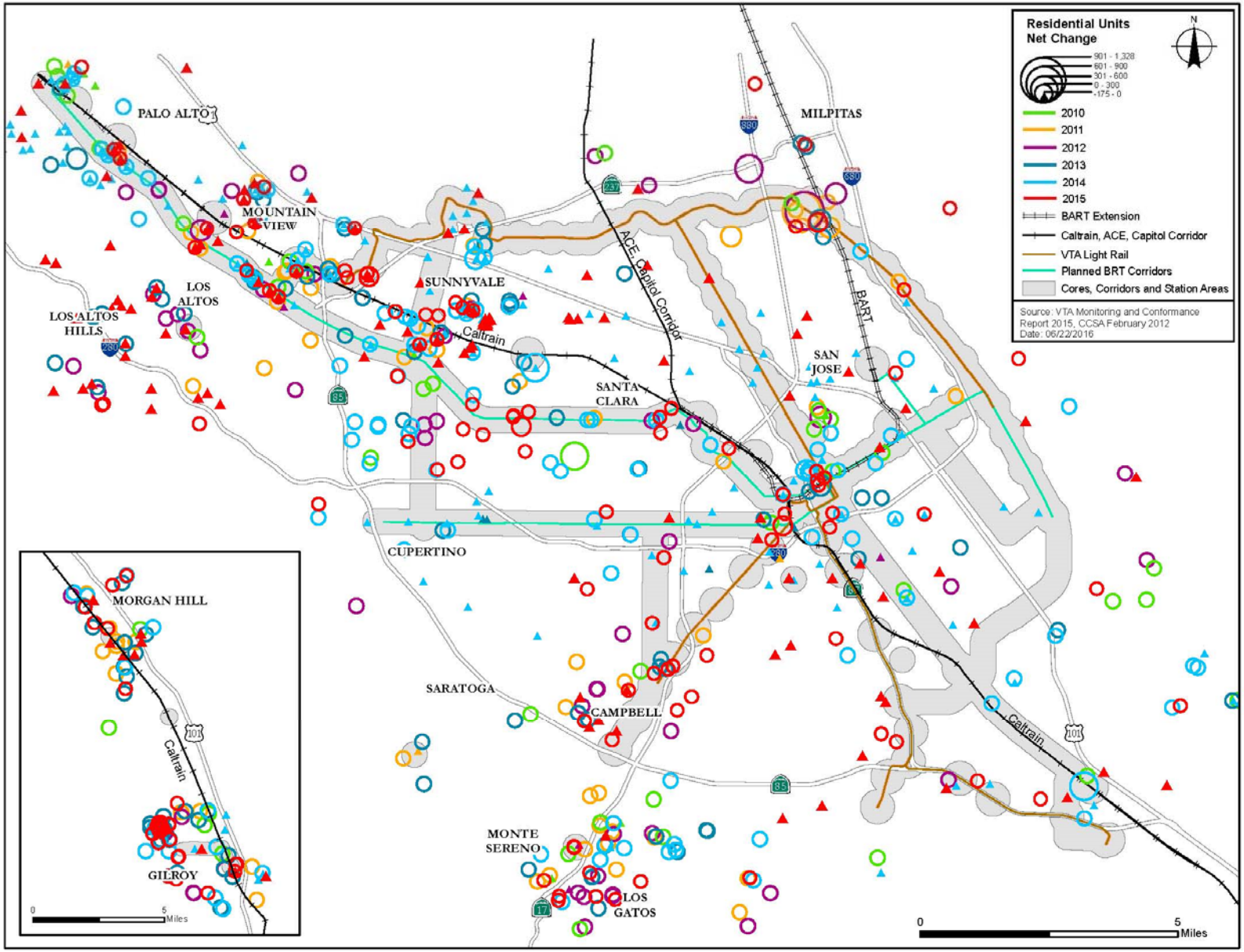
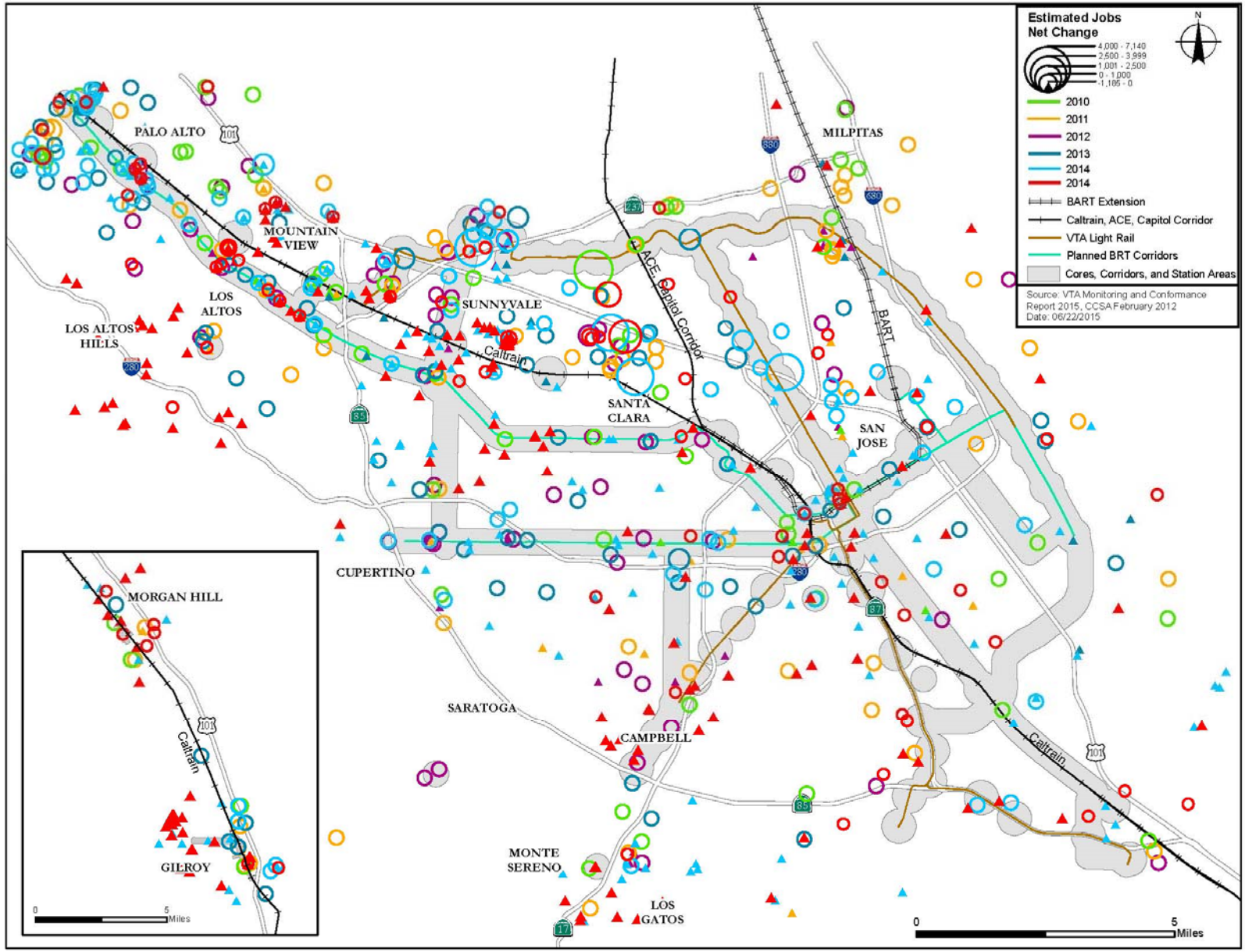


FIGURE 2.5 | JOB CHANGE ESTIMATES NEAR VTA'S CORES, CORRIDORS AND STATION AREAS (2010-2015)



3 FREEWAYS

INTRODUCTION

Level of service data is collected each year for all freeway segments in Santa Clara County. Two travel directions for each freeway produce approximately 310 directional miles and multiple travel lanes in each direction yield 859 mixed-flow and 190 HOV lane miles.

Since 1991, level of service data has been collected for freeway segments in the County to identify those segments that are operating below the CMP standard of LOS E. This chapter features an analysis of traffic conditions during the AM and PM peak periods for the freeway system in Santa Clara County. For the purpose of this analysis, mixed-flow and HOV lanes are treated as separate facilities. In addition to collecting freeway level of service data, traffic counts were collected at six freeway "gateway" locations at or near the county line to measure traffic flows in and out of Santa Clara County.

METHODOLOGY

Prior to the 1997 CMP Monitoring and Conformance Report, floating vehicle techniques were used to collect the travel speed data needed to monitor freeway operations. In addition to the travel speed data, mainline freeway traffic counts were manually collected for HOV and mixed flow lanes at 40 locations during the PM peak period. A combination of travel speed and mainline volumes enables the estimation of vehicle density.

Beginning in 1997, aerial photography techniques have been used to collect traffic data for freeway segments since it allowed an exact measurement of density. Travel speeds and flow rate, or traffic volumes, can then be estimated using density-speed-volume equations. The aerial photography approach, along with a calibrated density-speed curve, allowed for the collection of data that could be used to determine density, travel speed, and flow rate for every freeway segment in both the AM and PM peak periods.

LEVEL OF SERVICE DEFINITIONS

Table 3.1 defines the level of service thresholds used for freeway segments. Level of service is determined based on density in terms of passenger cars per mile per lane. The LOS density thresholds are based on VTA's Level of Service Analysis Guidelines (June 2003), which adopts the Highway Capacity Manual's (2000) values for LOS A/B, B/C and C/D. The D/E and E/F thresholds are calibrated for Santa Clara County conditions.

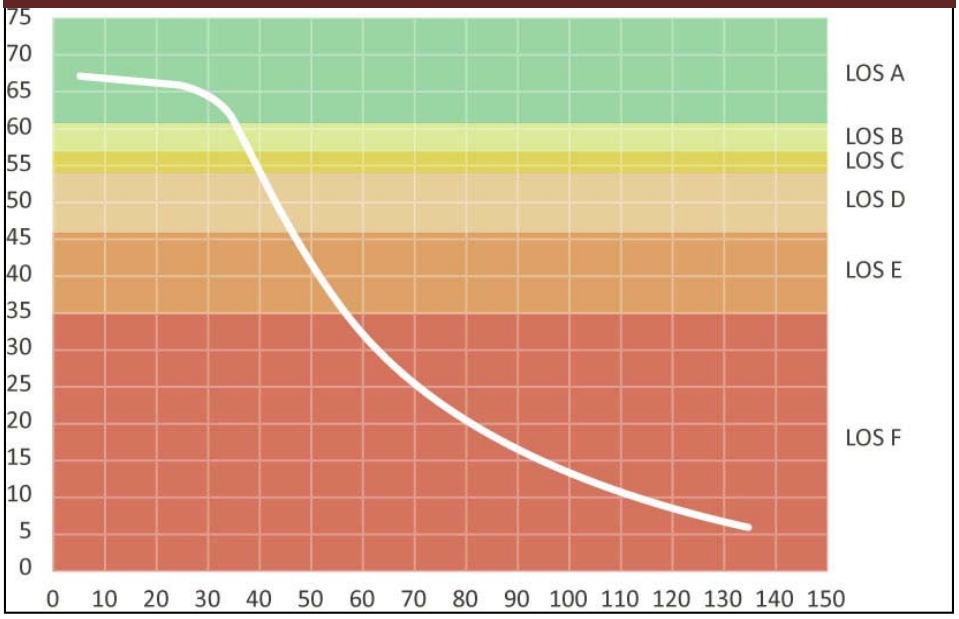
Table 3.1 | Freeway Level of Service Definitions

Level of Service	Density (passenger cars/mile/lane)	Travel Speed (MPH)	Description
A	≤ 11	60 – 65	Free Flow. Vehicles are completely unimpeded in their ability to maneuver within the traffic stream. The effects of minor incidents are easily absorbed.
B	11 < density ≤ 18	57 – 60	Reasonably Free Flow. The ability to maneuver within the traffic stream is only slightly restricted, and the general level of physical and psychological comfort provided to drivers is still high. The effects of minor incidents are easily absorbed.
C	18 < density ≤ 26	54 – 57	Stable Flow. Flows are approaching the range where small increases in traffic flows will cause substantial deterioration in service. Freedom to maneuver within the traffic stream is noticeably restricted, and lane changes require additional care and vigilance by the driver. Minor incidents may still be absorbed, but the local deterioration in service will be substantial. Queues may be expected to form behind any significant blockage.
D	26 < density ≤ 46	46 – 54	Unstable Flow. Small increases in traffic flows cause substantial deterioration in service. Freedom to maneuver within the traffic stream is severely limited, and the driver experiences drastically reduced physical and psychological comfort levels. Even minor incidents can be expected to create substantial queuing because the traffic stream has little space to absorb disruptions.
E	46 < density ≤ 58	35 – 46	Capacity Flow. Operations are extremely unstable, because there are virtually no usable gaps in the traffic stream. Any incident can be expected to produce a serious breakdown with extensive queuing.
F	> 58	< 35	Forced Flow. Level of service F describes forced or breakdown flow. Such conditions generally exist within queues forming behind breakdown points. Such breakdowns occur for a number of reasons: a temporary reduction in capacity caused by a traffic incident, or a recurring point of congestion caused by a merge, a weave segment, or lane drop.

SPEED MODEL CALIBRATION

While research shows that there is a direct relationship between speed and density, this relationship is less straightforward than the relationship between density, speed and volume when two of the three are known. The speed density curve was re-calibrated in 2001 to account for possible travel condition differences between 2001 and 1997, when the previous curve was calibrated. Research and review of several speed-density curves resulted in a new, single regime curve based on the Van Aerde equation which is shown in Figure 3.1.

Figure 3.1 Speed Density Curve



DATA COLLECTION

Two flight patterns are used to photograph Santa Clara County's freeway system. These patterns were defined such that each freeway segment could be photographed at a frequency of approximately one sample every 40 minute, or four times each flight. The morning surveys were conducted approximately from 6:15 AM to 9:45 AM and the evening surveys were conducted from approximately 3:15 PM to 6:45 PM. Two morning and two evening flights were scheduled of each roadway, providing a total of 16 photographs – 8 morning and 8 evening – of each freeway segment.

Aerial photography is traditionally scheduled for September but on occasion, can extend into October depending on the weather. This year, cloudy weather was not an encumbrance during the data collection effort, so no additional flights were conducted. Table 3.2 shows the data collection dates for the morning and evening flights.

Table 3.2 | Aerial Photography Data Collection Schedule

AM Flights	PM Flights
Thursday, September 11	Tuesday, September 9
Tuesday, September 16	Wednesday, September 10
Wednesday, October 8	Tuesday, September 16

The density of traffic between each pair of interchanges was estimated by counting the number of vehicles between each interchange in each photo. The photo that displayed the greatest vehicle density for each freeway segment was considered to represent the peak period and was selected for analysis in the chapter. The corresponding lengths and the number of lanes were also verified

from the photos. Vehicle counts were performed using four different categories: cars, buses, trucks and tractor-trailers. The buses, trucks and tractor-trailers were assigned passenger car equivalents (PCE) by applying a 1.5 PCE for trucks and buses, and 2.0 PCE for tractor-trailers.

The AM and PM peak period densities were compared to identify the most congested time for each segment. Then, using the speed-density curve described previously, the peak density is converted to speed, level of service and volume for each freeway segment. The LOS was determined directly from the density value using the thresholds listed in Table 4.1.

DEFICIENT FREEWAY SEGMENTS

Directional miles represent the number of miles of freeway for the two travel directions. One directional mile multiplied by the number of lanes results in the number of lane-miles for the segment. For the 2015 Monitoring Program, 96 segments, with a combined length of 100 directional miles, are operating at LOS F in the AM peak period. This includes three segments, with a combined length of approximately four miles, observed operating at LOS F for the first time since the baseline was established in 1991. In the PM peak period, 82 segments, with a combined length of 81 miles, are at LOS F. This includes two segments, with combined length of approximately five miles, observed operating at LOS F for the first time since establishing the baseline. In total, 171 out of 313 directional miles of freeway segments were found to be operating at LOS F in at least one of the peak periods, which is 10 more lane-miles than the 2014 results.

Of these miles, 27 miles during the AM and 25 miles during the PM were at LOS F in the baseline 1991 year and therefore, considered LOS-exempt. The remaining 73 directional miles during the AM and 56 directional miles during the PM are considered deficient.

Table 3.3 presents the mixed flow freeway segments that operated at LOS F in 2015 and operated at LOS F under the 1991 baseline conditions, making them exempt from CMP conformance requirements. Freeway mixed flow segments operating at LOS F in 2015 but not operating at LOS F in 1991 are considered non-exempt from CMP requirements and are shown in Table 3.4. The duration of congestion, in hours, is shown in parentheses in each of these tables. Duration of congestion was determined by reviewing density data to determine how long congestion lasted for each segment. Segments that are new to the list are shown in grey.

Table 3.3 Exempt Mixed-Flow Segments Operating at LOS F in 2015

#	Fwy	Dir	AM/PM	Segment	Length	LOS	Duration of Congestion
125	I-280	WB	AM	Meridian Ave. to SR 17 (I-880)	1.40	F	(3.0)
124	I-280	WB	AM	SR 17 (I-880) to Winchester Blvd.	0.55	F	(3.0)
123	I-280	WB	AM	Winchester Blvd. to Saratoga Ave.	1.37	F	(1.5)
122	I-280	WB	AM	Saratoga Ave. to Lawrence Expwy	1.19	F	(1.5)
121	I-280	WB	AM	Lawrence Expwy to Wolfe Rd.	1.24	F	(0.5)
40	I-680	SB	AM	Capitol Expwy to King Rd	1.00	F	(1.0)
39	I-680	SB	AM	King Rd to US 101	0.40	F	(3.0)
12	I-880	NB	AM	I-280 to Stevens Creek Blvd.	0.41	F	(1.5)
11	I-880	NB	AM	Stevens Creek Blvd. to Bascom	0.84	F	(2.0)
10	I-880	NB	AM	Bascom to The Alameda	0.82	F	(1.0)
9	I-880	NB	AM	The Alameda to Coleman Ave.	0.59	F	(1.5)
8	I-880	NB	AM	Coleman Av. to SR 87	0.51	F	(1.5)
7	I-880	NB	AM	SR 87 to N. First St.	0.40	F	(1.0)
6	I-880	NB	AM	First St. to US 101	0.49	F	(2.0)
17	I-880	SB	AM	Brokaw Rd. to US 101	1.29	F	(1.0)
30	SR 17	NB	AM	Bear Cr. to Saratoga-Los Gatos	2.90	F	(0.5)
89	SR 237	WB	AM	I-880 to McCarthy Blvd.	0.40	F	(3.0)
90	SR 237	WB	AM	McCarthy Blvd. to Zanker Rd.	0.94	F	(3.0)
171	SR 85	NB	AM	I-280 to Homestead Rd.	0.34	F	(1.5)
170	SR 85	NB	AM	Homestead Rd. to Fremont Rd.	1.00	F	(2.0)
289	US 101	NB	AM	I-280 to Santa Clara St.	0.88	F	(2.5)
290	US 101	NB	AM	Santa Clara St. to McKee Rd.	0.39	F	(3.5)
291	US 101	NB	AM	McKee Rd. to Old Oakland Rd.	1.58	F	(3.0)
292	US 101	NB	AM	Old Oakland Rd. to I-880	0.57	F	(3.0)
293	US 101	NB	AM	I-880 to Old Bayshore Rd.	0.50	F	(3.0)
294	US 101	NB	AM	Old Bayshore Rd. to N. First	0.49	F	(3.5)
295	US 101	NB	AM	N. First to Guadalupe (SR 87)	0.64	F	(3.0)
305	US 101	NB	AM	SR 85 to Shoreline Blvd.	0.28	F	(0.5)
306	US 101	NB	AM	Shoreline Blvd. to Rengstorff Ave.	1.01	F	(2.0)
274	US 101	SB	AM	Oregon Expwy to San Antonio Rd.	1.85	F	(0.5)
273	US 101	SB	AM	San Antonio Rd. to Rengstorff Ave.	0.71	F	(0.5)
136	I-280	EB	PM	SR 85 to DeAnza Blvd.	1.31	F	(1.0)
137	I-280	EB	PM	DeAnza Blvd. To Wolfe Rd.	1.06	F	(0.5)
138	I-280	EB	PM	Wolfe Rd to Lawrence Expwy	1.24	F	(0.5)
139	I-280	EB	PM	Lawrence Expwy to Saratoga Rd.	1.19	F	(1.5)
140	I-280	EB	PM	Saratoga Rd. to Winchester Blvd.	1.37	F	(0.5)
16	I-880	SB	PM	Montague Expwy to Brokaw Rd.	1.35	F	(0.5)

#	Fwy	Dir	AM/PM	Segment	Length	LOS	Duration of Congestion
17	I-880	SB	PM	Brokaw Rd. to US 101	1.29	F	(2.0)
18	I-880	SB	PM	US 101 to N. First St	0.49	F	(0.5)
19	I-880	SB	PM	N. First St. to SR 87	0.40	F	(0.5)
20	I-880	SB	PM	SR 87 to Coleman Rd.	0.51	F	(0.5)
85	SR 237	EB	PM	Middlefield Rd/Maude Ave. to US 101	0.71	F	(0.5)
81	SR 237	EB	PM	Lawrence Expwy to Great America	1.27	F	(3.0)
77	SR 237	EB	PM	McCarthy Blvd. To I-880	0.40	F	(0.5)
187	SR 85	SB	PM	SR 237 to El Camino Real	0.41	F	(1.0)
188	SR 85	SB	PM	El Camino Real to Fremont Rd.	1.89	F	(1.5)
308	US 101	NB	PM	San Antonio Rd. to Oregon Expwy	1.85	F	(3.0)
274	US 101	SB	PM	Oregon Expwy to San Antonio Rd.	1.85	F	(0.5)
273	US 101	SB	PM	San Antonio Rd. to Rengstorff Ave.	0.71	F	(2.0)
272	US 101	SB	PM	Rengstorff Av. To Shoreline Bl.	1.01	F	(0.5)
264	US 101	SB	PM	Great America Pkwy to Montague Expwy	0.75	F	(3.0)
263	US 101	SB	PM	Montague Expwy to De La Cruz Blvd.	1.28	F	(3.0)
261	US 101	SB	PM	SR 87 to N. First St.	0.64	F	(2.0)
260	US 101	SB	PM	N. First St. to Old Bayshore Rd.	0.49	F	(2.0)
259	US 101	SB	PM	Old Bayshore Rd. to I-880	0.50	F	(3.0)
258	US 101	SB	PM	I-880 to Old Oakland Rd.	0.57	F	(3.5)

Table 3.4 Non-Exempt Mixed-Flow Segments Operating at LOS F in 2015

#	Fwy	Dir	AM/PM	Segment	Length	LOS	Duration of Congestion
130	I-280	WB	AM	US 101 to McLaughlin	0.37	F	(3.0)
129	I-280	WB	AM	McLaughlin to 10th St.	0.92	F	(2.0)
128	I-280	WB	AM	10th St. to SR 87	1.20	F	(0.5)
127	I-280	WB	AM	SR 87 to Bird Ave.	0.35	F	(1.5)
126	I-280	WB	AM	Bird Av. to Meridian Ave.	1.07	F	(1.5)
120	I-280	WB	AM	Wolfe Rd. to DeAnza Blvd.	1.06	F	(1.0)
119	I-280	WB	AM	De Anza Blvd. To SR 85	1.31	F	(0.5)
118	I-280	WB	AM	SR 85 to Foothill Expwy	0.70	F	(1.5)
52	I-680	NB	AM	King Rd. to Capitol Expwy	1.00	F	(0.5)
53	I-680	NB	AM	Capitol Expwy to Alum Rock Ave.	0.31	F	(1.0)
54	I-680	NB	AM	Alum Rock Av. to McKee Rd.	0.64	F	(0.5)
41	I-680	SB	AM	Alum Rock to Capitol Expressway	0.31	F	(0.5)
13	I-880	SB	AM	Dixon Landing to SR 237	1.99	F	(0.5)
18	I-880	SB	AM	US 101 to N. 1st St.	0.49	F	(1.0)
19	I-880	SB	AM	N. 1st ST to SR 87	0.40	F	(1.0)

#	Fwy	Dir	AM/PM	Segment	Length	LOS	Duration of Congestion
31	SR 17	NB	AM	Summit to Bear Cr.	4.06	F	(2.0)
27	SR 17	NB	AM	SR 85 to San Tomas	1.17	F	(0.5)
26	SR 17	NB	AM	San Tomas/Camden to Hamilton	1.82	F	(1.5)
25	SR 17	NB	AM	Hamilton to I-280	1.61	F	(1.0)
36	SR 17	SB	AM	Lark Ave. to Saratoga	1.81	F	(0.5)
91	SR 237	WB	AM	Zanker Rd to N. First St	1.61	F	(1.0)
92	SR 237	WB	AM	N. First St to Grt. America	1.00	F	(1.0)
93	SR 237	WB	AM	Grt. America to Lawrence Expwy	1.27	F	(0.5)
94	SR 237	WB	AM	Lawrence Expwy to N. Fair Oaks Ave.	0.63	F	(0.5)
95	SR 237	WB	AM	N. Fair Oaks Ave to Mathilda Ave.	0.96	F	(1.0)
182	SR 85	NB	AM	Blossom Hill Rd. to SR 87	1.27	F	(1.0)
181	SR 85	NB	AM	SR 87 to Almaden Expwy	0.94	F	(2.0)
180	SR 85	NB	AM	Almaden Expwy to Camden	1.97	F	(2.0)
179	SR 85	NB	AM	Camden to Union	1.17	F	(2.5)
178	SR 85	NB	AM	Union to Bascom	1.13	F	(2.0)
177	SR 85	NB	AM	Bascom to SR 17	0.27	F	(2.0)
176	SR 85	NB	AM	SR 17 to Winchester	0.50	F	(2.5)
175	SR 85	NB	AM	Winchester to Saratoga Ave.	2.68	F	(0.5)
173	SR 85	NB	AM	De Anza to Stevens Creek Blvd.	1.83	F	(1.0)
172	SR 85	NB	AM	Stevens Creek Blvd. to I-280	0.75	F	(1.0)
169	SR 85	NB	AM	Fremont Av. to El Camino Real	1.89	F	(1.0)
168	SR 85	NB	AM	El Camino Real to SR 237	0.41	F	(0.5)
70	SR 87	NB	AM	SR 85 to Capitol Expwy	1.09	F	(2.0)
71	SR 87	NB	AM	Capitol Expwy to Curtner	1.49	F	(4.0)
72	SR 87	NB	AM	Curtner to Almaden Expwy	0.73	F	(4.0)
73	SR 87	NB	AM	Almaden Expwy to Alma Ave.	0.69	F	(1.0)
74	SR 87	NB	AM	Alma Ave. to I-280	0.90	F	(0.5)
75	SR 87	NB	AM	I-280 to Julian St.	0.96	F	(3.0)
76	SR 87	NB	AM	Julian St. to Coleman St.	0.38	F	(3.0)
414	SR 87	NB	AM	Coleman St. to Taylor	0.41	F	(1.5)
309.02	US 101	NB	AM	San Martin Ave. to Tennant Ave.	3.55	F	(1.0)
309.01	US 101	NB	AM	Tennant to E. Dunne	0.96	F	(2.0)
276	US 101	NB	AM	East Dunne Ave. to Cochrane Ave.	1.82	F	(0.5)
283	US 101	NB	AM	Silver Crk Valley Rd. to Hellyer Rd.	1.84	F	(0.5)
284	US 101	NB	AM	Hellyer Rd. to Yerba Buena Rd.	0.90	F	(2.0)
285	US 101	NB	AM	Yerba Buena Rd. to Capitol Expwy	0.80	F	(2.0)
286	US 101	NB	AM	Capitol Expwy to Tully Rd.	1.33	F	(2.0)
287	US 101	NB	AM	Tully Rd. to Story Rd.	1.46	F	(1.5)

#	Fwy	Dir	AM/PM	Segment	Length	LOS	Duration of Congestion
288	US 101	NB	AM	Story Rd to I-280	0.38	F	(2.0)
296	US 101	NB	AM	SR 87 (Guadalupe) to De La Cruz Blvd.	0.77	F	(3.5)
297	US 101	NB	AM	De La Cruz Blvd. to Montague	1.28	F	(1.5)
298	US 101	NB	AM	Montague to Bower / Great American Pkwy	0.75	F	(1.5)
299	US 101	NB	AM	Bower Ave / Great American Pkwy to Lawrence Expwy	1.12	F	(1.0)
300	US 101	NB	AM	Lawrence Expwy to N. Fair Oaks Ave.	0.98	F	(2.0)
301	US 101	NB	AM	N. Fair Oaks to N. Mathilda Ave.	0.85	F	(0.5)
302	US 101	NB	AM	Mathilda to SR 237	0.35	F	(0.5)
303	US 101	NB	AM	SR 237 to Moffett Blvd.	1.68	F	(0.5)
304	US 101	NB	AM	Moffett Blvd. to SR 85	0.33	F	(1.0)
308	US 101	NB	AM	San Antonio Rd. to Oregon Expwy	1.85	F	(0.5)
309	US 101	NB	AM	Oregon Expwy to Embarcadero Rd.	0.15	F	(0.5)
130.1	I-280	EB	PM	Alpine Rd to Page Mill Rd	2.25	F	(0.5)
131	I-280	EB	PM	Page Mill to La Barranca	1.73	F	(0.5)
132	I-280	EB	PM	La Barranca to El Monte	1.60	F	(2.5)
133	I-280	EB	PM	El Monte to Magdalena	0.95	F	(3.0)
141	I-280	EB	PM	Winchester to I-880	0.55	F	(1.5)
142	I-280	EB	PM	I-880 to Meridian	1.40	F	(3.0)
143	I-280	EB	PM	Meridian to Bird	1.07	F	(2.0)
144	I-280	EB	PM	Bird Av. to SR 87	0.35	F	(2.0)
145	I-280	EB	PM	SR 87 to 10th	1.20	F	(2.0)
113.1	I-280	WB	PM	Page Mill to Alpine	2.25	F	(0.5)
47	I-680	SB	PM	Yosemite to Montague Expwy	0.77	F	(1.5)
46	I-680	SB	PM	Montague Exp. to Capitol Ave.	1.00	F	(2.0)
45	I-680	SB	PM	Capitol Ave. to Hostetter Rd.	0.31	F	(2.0)
44	I-680	SB	PM	Hostetter Rd. to Berryessa Rd.	0.94	F	(0.5)
10	I-880	NB	PM	N. Bascom Ave to The Alameda	0.82	F	(1.0)
9	I-880	NB	PM	The Alameda to Coleman	0.59	F	(1.5)
8	I-880	NB	PM	Coleman to SR 87	0.51	F	(1.5)
7	I-880	NB	PM	SR 87 to N. First St.	0.40	F	(1.5)
21	I-880	SB	PM	Coleman Ave. to The Alameda	0.59	F	(1.0)
22	I-880	SB	PM	The Alameda to Bascom Ave.	0.82	F	(0.5)
84	SR 237	EB	PM	US 101 to Mathilda Ave.	0.53	F	(2.0)
83	SR 237	EB	PM	Mathilda Ave. to N. Fair Oaks Ave.	0.96	F	(2.0)
82	SR 237	EB	PM	N. Fair Oaks Ave. to Lawrence Expwy	0.63	F	(3.0)
80	SR 237	EB	PM	Gr America Pkwy to N. First St.	1.00	F	(3.0)
78	SR 237	EB	PM	Zanker Rd. to McCarthy Blvd.	0.94	F	(1.0)
98	SR 237	WB	PM	Middlefield/Maude Ave. to Central	0.80	F	(1.0)

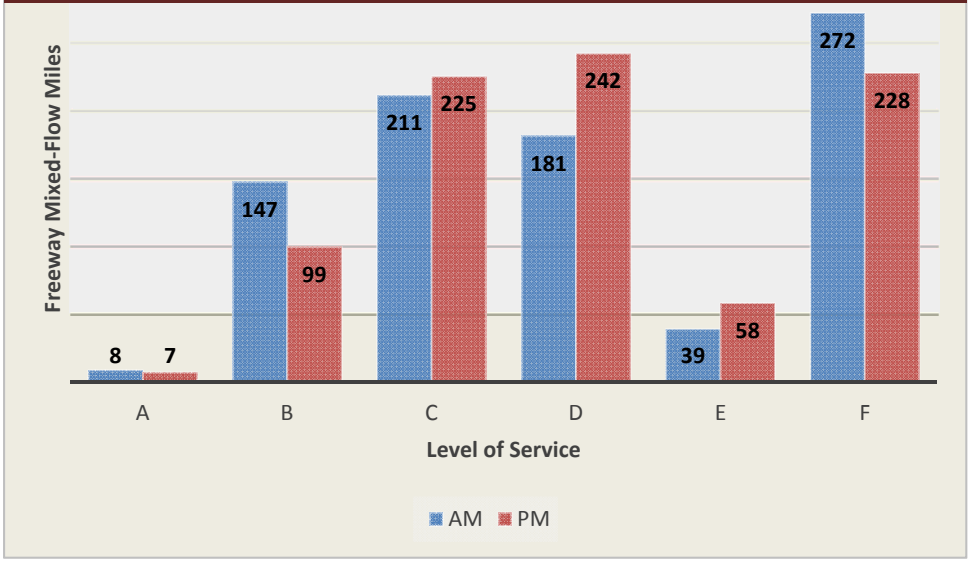
#	Fwy	Dir	AM/PM	Segment	Length	LOS	Duration of Congestion
99	SR 237	WB	PM	Central to SR 85	0.63	F	(0.5)
186	SR 85	SB	PM	Central Expwy to SR 237	0.47	F	(1.0)
191	SR 85	SB	PM	I-280 to Stevens Creek Blvd.	0.75	F	(0.5)
192	SR 85	SB	PM	Stevens Crk Blvd. to Saratoga-Sunnyvale	1.83	F	(3.0)
193	SR 85	SB	PM	Saratoga-Sunnyvale to Saratoga Ave.	1.83	F	(2.0)
194	SR 85	SB	PM	Saratoga-Sunnyvale to Winchester	2.68	F	(0.5)
195	SR 85	SB	PM	Winchester to SR 17	0.50	F	(1.0)
196	SR 85	SB	PM	SR 17 to Bascom	0.27	F	(1.5)
197	SR 85	SB	PM	Bascom to Union	1.13	F	(3.0)
198	SR 85	SB	PM	Union to Camden	1.17	F	(0.5)
419	SR 87	SB	PM	US 101 to Airport Pkwy	0.67	F	(1.0)
417	SR 87	SB	PM	Airport Pkwy to Taylor	1.87	F	(2.0)
415	SR 87	SB	PM	Taylor to Coleman	0.41	F	(2.5)
69	SR 87	SB	PM	Coleman to Julian	0.38	F	(2.0)
68	SR 87	SB	PM	Julian St. to I-280	0.96	F	(2.0)
67	SR 87	SB	PM	I-280 to Alma	0.90	F	(3.0)
66	SR 87	SB	PM	Alma to Almaden Expwy	0.69	F	(3.0)
65	SR 87	SB	PM	Almaden Expwy to Curtner	0.73	F	(1.0)
306	US 101	NB	PM	Shoreline to Rengstorff	1.01	F	(1.0)
307	US 101	NB	PM	Rengstorff to San Antonio	0.71	F	(2.5)
309	US 101	NB	PM	Oregon Expwy. to Embarcadero	0.15	F	(1.0)
275.08	US 101	SB	PM	Monterey Rd to Bloomfield Ave.	1.85	F	(2.5)
243	US 101	SB	PM	Burnett Ave (lane drop) to Cochrane	0.87	F	(1.0)
244	US 101	SB	PM	Sheller Ave/Coyote Crk to Burnett (Lane Drop)	2.57	F	(0.5)
265	US 101	SB	PM	Lawrence to Gr America Pkwy	1.12	F	(2.5)
266	US 101	SB	PM	N. Fair Oaks to Lawrence	0.98	F	(1.0)
267	US 101	SB	PM	Mathilda to N. Fair Oaks	0.85	F	(0.5)
268	US 101	SB	PM	SR 237 to Mathilda Ave	0.35	F	(0.5)
269	US 101	SB	PM	Moffett to SR 237	1.68	F	(1.0)
270	US 101	SB	PM	SR 85 to Moffett	0.33	F	(0.5)
275	US 101	SB	PM	Embarcadero to Oregon Expwy	0.15	F	(0.5)

MIXED-FLOW LEVEL OF SERVICE ANALYSIS

In 2015, there were 859 mixed flow lane-miles of freeway in Santa Clara County. Figure 3.2 summarizes the overall operation of the freeway system, including lane-miles operating at each LOS, regardless of

CMP exemption. These values are based on the most congested time recorded for each segment during the aerial data collection.

Figure 3.2 2015 Freeway Mixed-Flow Lane Mile Operation



In 2015, 272 (32%) and 228 (27%) mixed flow lane-miles operated at LOS F in the AM and PM observation periods, respectively. This represents an increase of 40 (5%) lane-miles in the AM period and an increase of 25 (3%) lane-miles in the PM period from 2014 conditions. Figures 3.3 and 3.4, show a graphical comparison between the 2014 and 2015 data in both AM and PM peak periods.

For the AM time period, LOS C, D, and E decreased by 1-3% in lane-miles. LOS A showed minimal difference in lane-miles, and LOS B increased 1% in lane-miles between 2014 and 2015. For the PM time period, LOS C and E decreased by 3% lane-miles while LOS B and D increased by 1-2% in lane-miles between 2014 and 2015. LOS A showed minimal difference in lane-miles.

Figure 3.3 Mixed Flow Lane Miles at Each LOS, 2011-2015 (AM Peak)

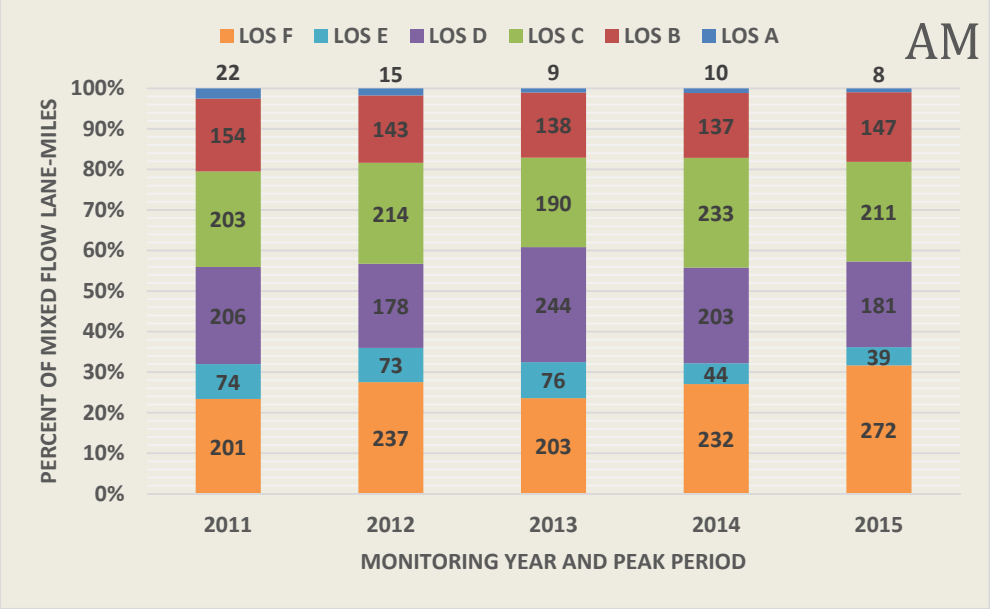


Figure 3.4 Mixed Flow Lane Miles at Each LOS, 2011-2015 (PM Peak)

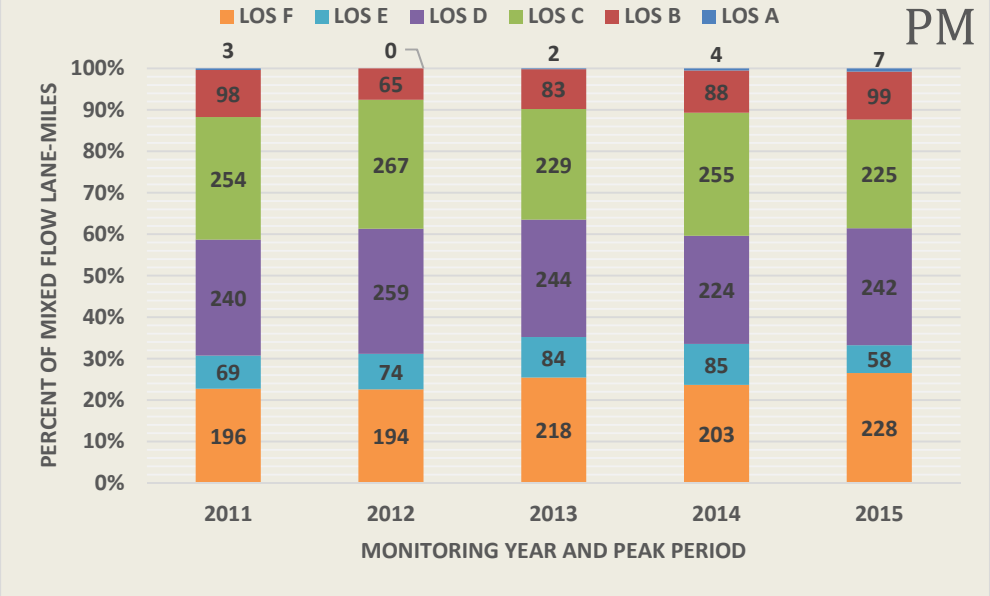


Figure 3.5 Mixed Flow Level of Service in the AM Peak Period

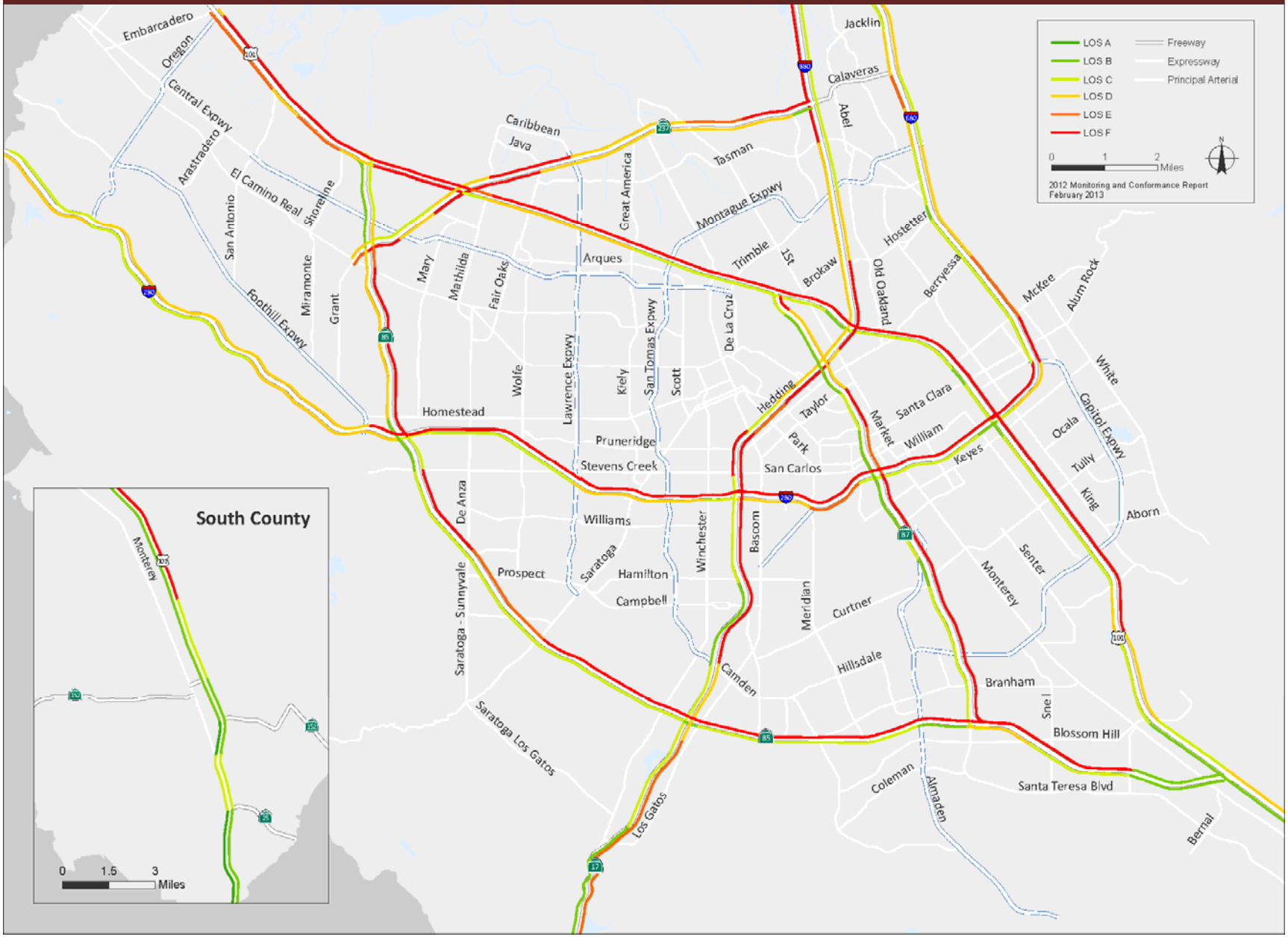
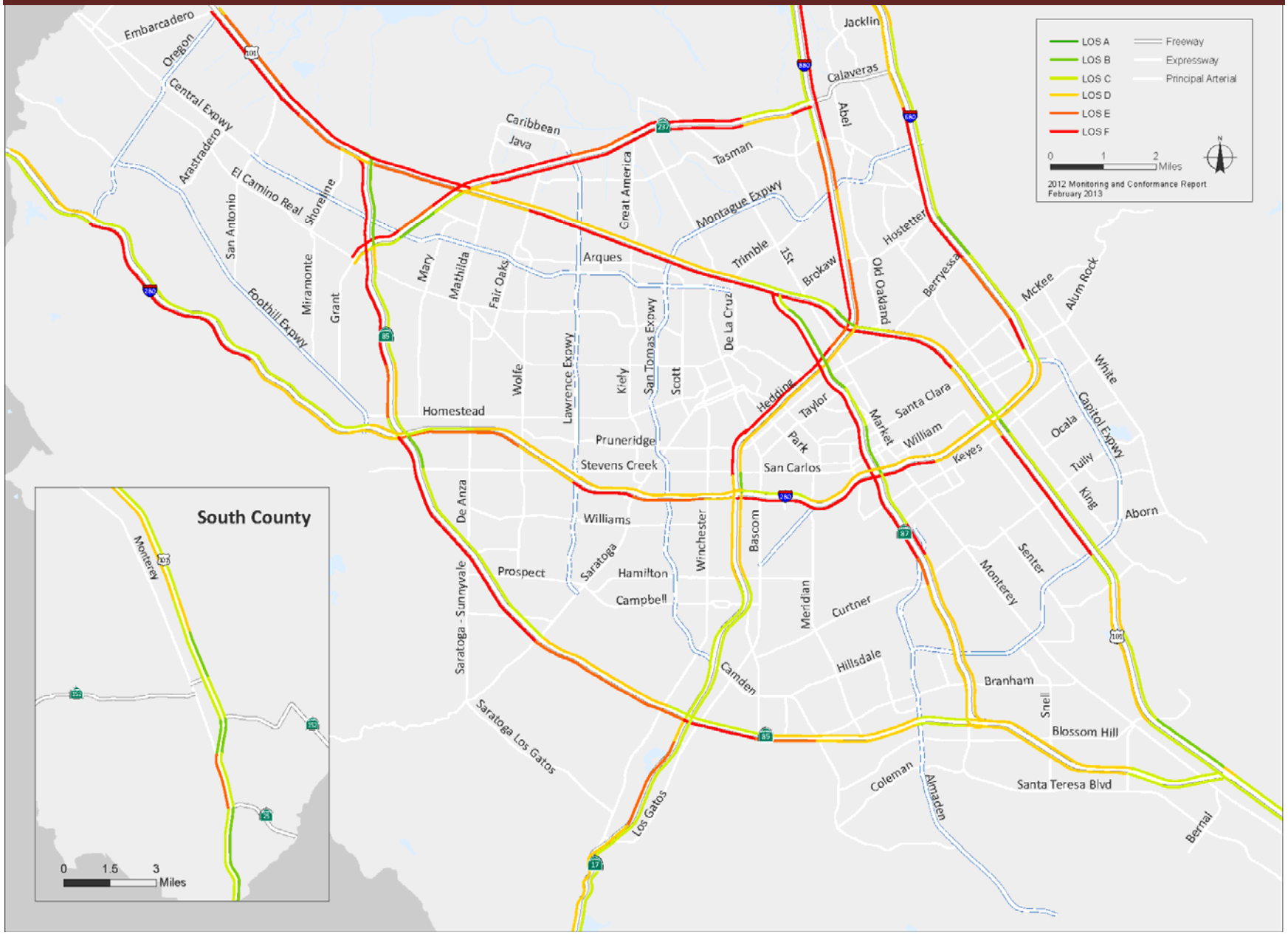


Figure 3.6 Mixed Flow Level of Service in the PM Peak Period

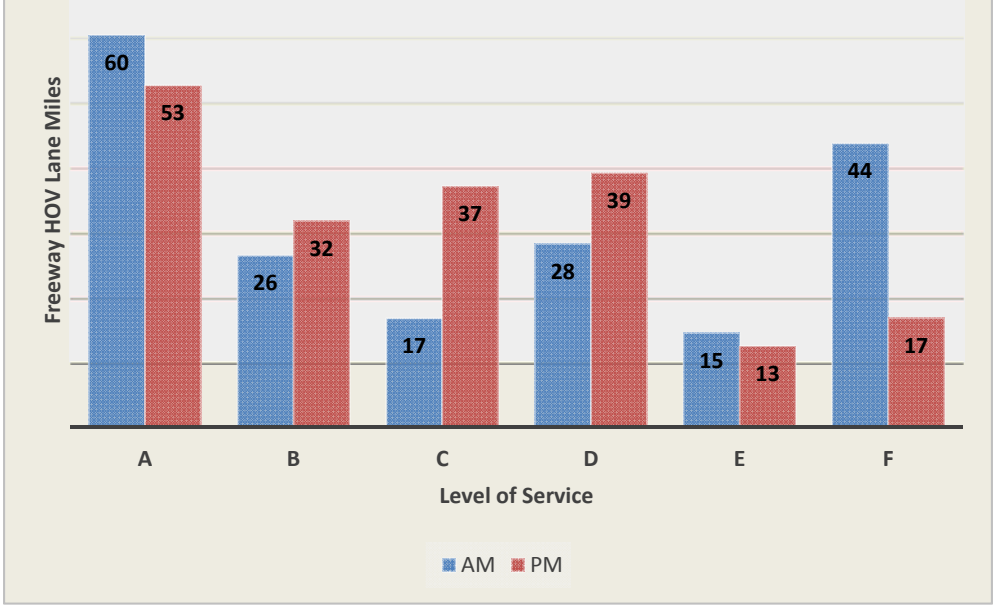


HOV LEVEL OF SERVICE ANALYSIS

There are 185 directional miles (190 lane-miles) of HOV lanes throughout the freeway network in Santa Clara County, including approximately five lane-miles (approximately 2.5 miles in both directions) of second HOV lanes added along US 101 between the SR 85 ramps/N. Shoreline Blvd. and Oregon Expressway between 2013 and 2014. Figure 6 shows the results of the HOV lane LOS analysis. About 69% of the HOV lanes operate at LOS D or better in the AM peak, down from 72% in 2014, while 85% operate at LOS D or better in the PM peak hour, down from 86% in 2014. Fewer segments operating at LOS E and LOS F in the PM peak than in the AM peak suggests that HOV lane use is more concentrated in the AM peak, resulting in slower speeds and a worse LOS during the morning. The overall decrease in HOV lanes operating at LOS D or better suggests generally higher concentrations of HOV lane use across the network.

While a majority of segments operates above the LOS F standard, some segments of the HOV system operate at LOS F. These 50 segments (4 more than in 2014) account for 44 lane-miles (11 more than in 2014) during the AM peak and 17 lane-miles (8 more than in 2014) during the PM peak. This is approximately 23% of the HOV system in the AM peak and 9% of the HOV system in the PM peak.

Figure 3.7 2015 Freeway HOV Lane Mile Operation



In addition to the results for 2015, Figure 3.8 and Figure 3.9 detail the percent of HOV lane-miles operating at each LOS grade over the last five (5) years for the AM and PM peak periods, respectively. Comparing 2015 AM results to those of the previous years, the number of lane-miles operating at LOS D, E, or F has remained at roughly 40-45% of all HOV lane-miles; although, the

2015 results show lane-miles at LOS D, E, or F rose to 46%. The 2015 AM monitoring shows the number of HOV lane-miles at LOS D did not change, LOS E decreased by 5 lane-miles, and LOS F increased by 11 lane-miles from 2014 monitoring. Overall, the percentage of HOV lane-miles operating at LOS D, E, or F during the AM peak is up 4% from 2014 observations, suggesting a rise in the system wide density of traffic in HOV lanes.

During the PM peak over the last five (5) years, the number of lane-miles operating at LOS D, E, or F has remained at roughly 30-35% of all HOV lane-miles, except for a dip to 23% in 2011, which may be associated with changes in local and regional traffic during the recovering from the 2007-2008 recession. In 2015, lane-miles at LOS D, E, or F rose to 36%. The 2015 monitoring shows the number of HOV lane-miles at LOS D decreased by 2 lane-miles, LOS E decreased by 5 lane-miles, and LOS F increased by 7 lane-miles from the 2014 monitoring. The percentage of HOV lane-miles operating at LOS D, E, or F during the PM peak is up 2% from 2014 observations, suggesting a modest rise in the systemwide density of traffic in HOV lanes.

Figure 3.8 HOV Lane Miles at Each LOS, 2011-2015 (AM Peak)

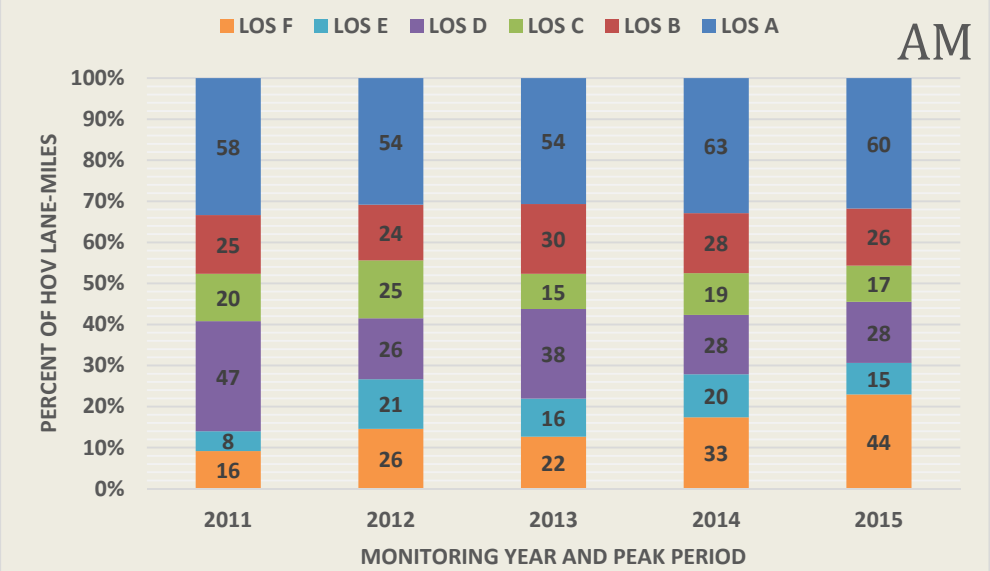


Figure 3.9 HOV Lane Miles at Each LOS, 2011-2015 (PM Peak)

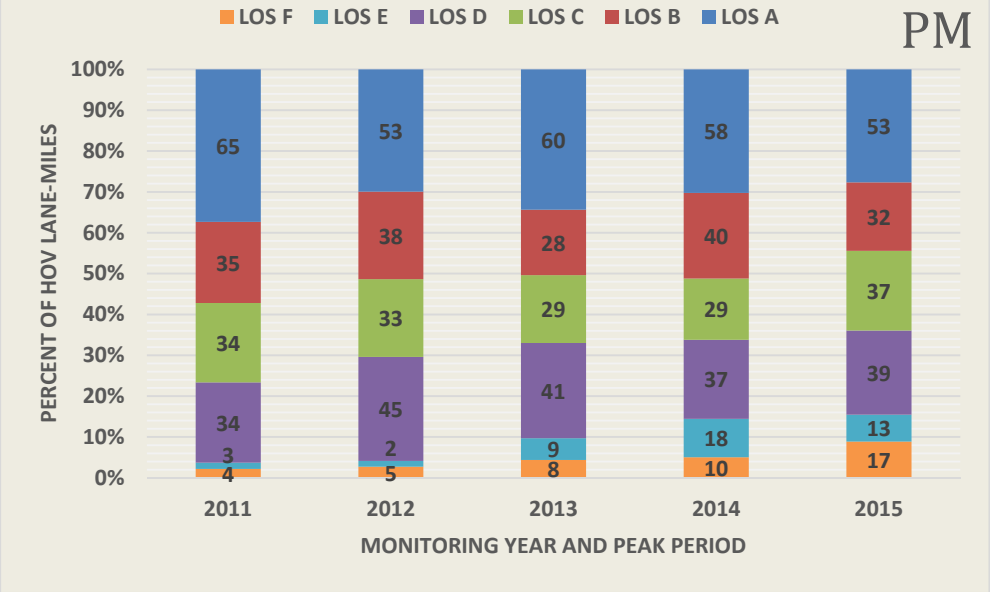


Table 3.5 and Table 3.6 present the list of HOV segments operating at LOS F in the AM and PM peaks, respectively. All segments in which the HOV lane operated at LOS F also had mixed flow operations at LOS F for 2015. HOV lanes experience two types of weaving movements: one in which drivers wishing to use the HOV lane merge from the adjacent mixed flow lanes and one in which HOV drivers wishing to exit the freeway merge into adjacent mixed flow lanes. When adjacent mixed flow lanes are congested, these merge movements can slow down vehicles in the HOV lane. The LOS F results in the HOV lanes may be the result of weaving movements rather than demand exceeding capacity. If this is the case, conditions could be improved through operational improvements such as direct interchange HOV lane connections or direct HOV-lane-to-off-ramp connections.

Figure 3.10 HOV Level of Service in the AM Peak Period

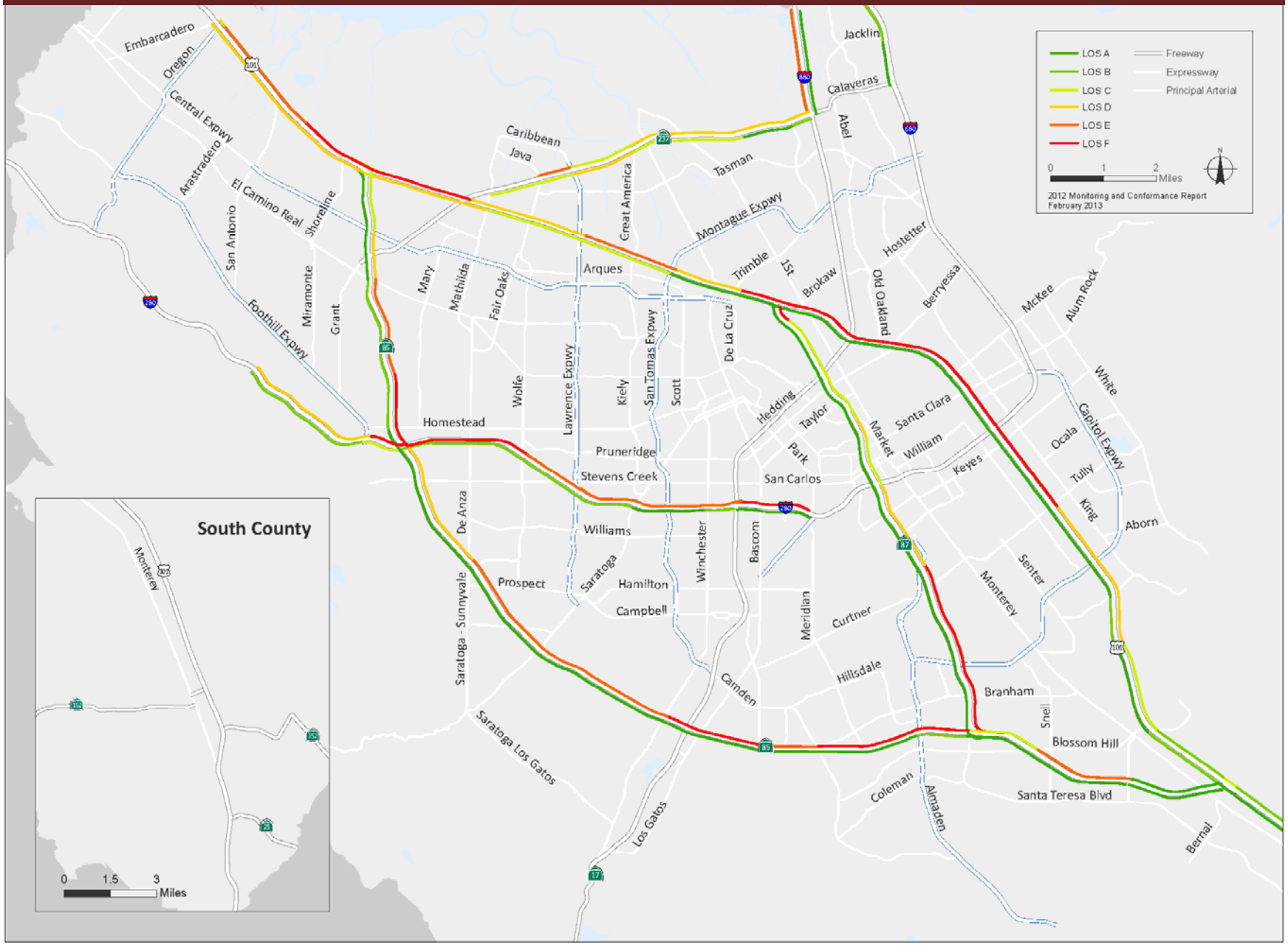


Figure 3.11 HOV Level of Service in the PM Peak Period

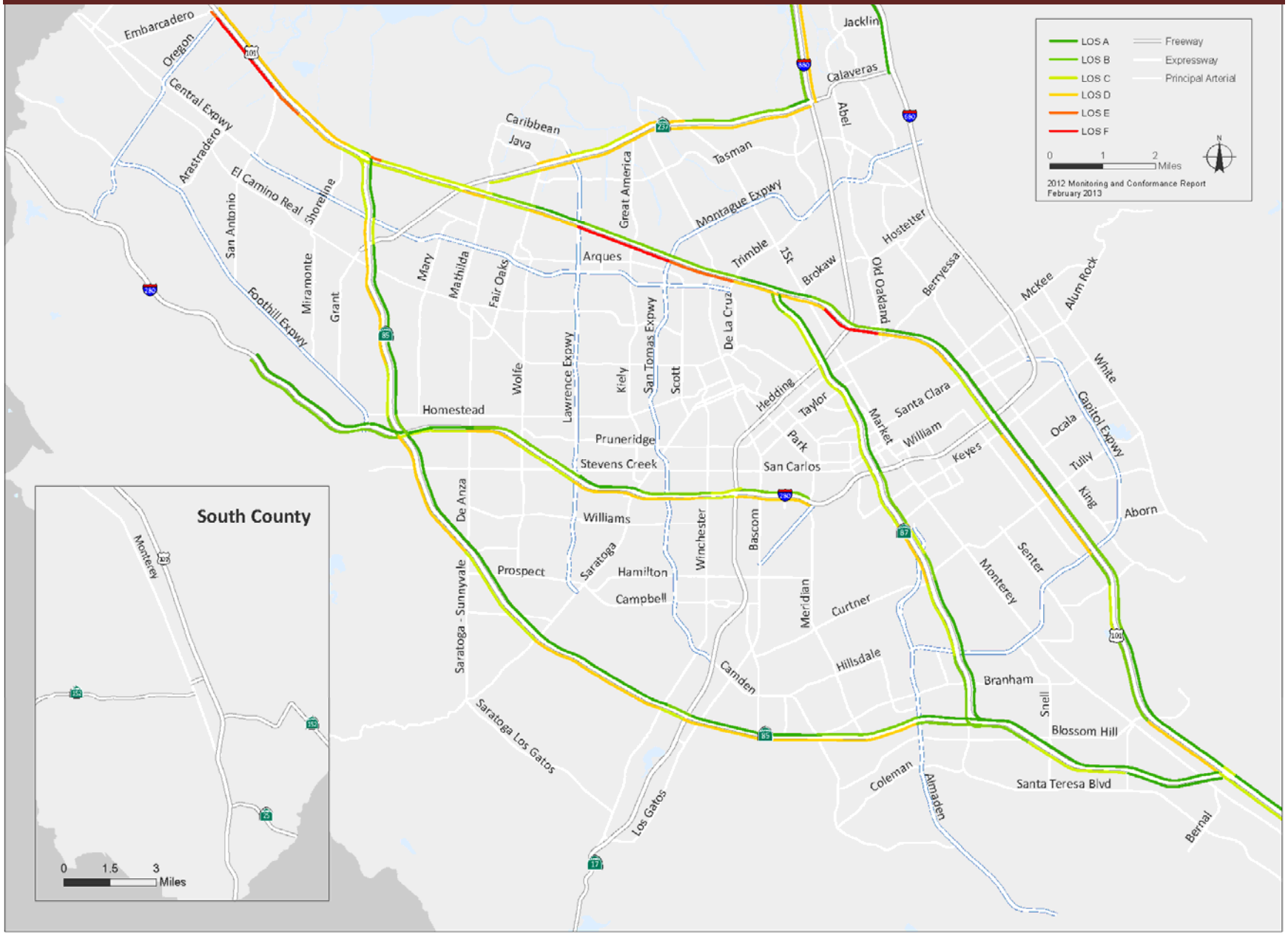


Table 3.5 HOV Segments at LOS F – AM Peak Period

ID	Freeway	Dir	From	To	Length
118	I-280	WB	SR 85	Foothill Expwy	0.7
121	I-280	WB	Lawrence Expwy	Wolfe Rd	1.2
122	I-280	WB	Saratoga Ave	Lawrence Expwy	1.2
123	I-280	WB	Winchester Blvd	Saratoga Ave	1.4
124	I-280	WB	I-880	Winchester Blvd	0.6
125	I-280	WB	Meridian Ave	I-880	1.4
5	I-880	NB	US 101	E. Brokaw Rd	1.3
89	SR 237	WB	I-880	McCarthy Blvd	0.4
90	SR 237	WB	McCarthy Blvd	Zanker Rd	0.9
91	SR 237	WB	Zanker Rd	N. First St	1.6
94	SR 237	WB	Lawrence Expwy	N. Fair Oaks Ave	0.6
169	SR 85	NB	W. Fremont Ave	EL Camino Real	1.9
170	SR 85	NB	W. Homestead Rd	W. Fremont Ave	1.0
171	SR 85	NB	I-280	W. Homestead Rd	0.3
172	SR 85	NB	Stevens Creek Blvd	I-280	0.8
173	SR 85	NB	Saratoga-Sunnyvale Rd	Stevens Creek Blvd	1.8
176	SR 85	NB	SR 17	Winchester Blvd	0.5
177	SR 85	NB	S. Bascom Ave	SR 17	0.3
178	SR 85	NB	Union Ave	S. Bascom Ave	1.1
179	SR 85	NB	Camden Ave	Union Ave	1.2
180	SR 85	NB	Almaden Expwy	Camden Ave	2.0
181	SR 85	NB	SR 87	Almaden Expwy	0.9
70	SR 87	NB	SR 85	Capitol Expwy	1.1
71	SR 87	NB	Capitol Expwy	Curtner Ave	1.5
72	SR 87	NB	Curtner Ave	Almaden Rd	0.7
75	SR 87	NB	I-280	Julian St	1.0
76	SR 87	NB	Julian St	Coleman Ave	0.4
414	SR 87	NB	Coleman Ave	Taylor St	0.4
284	US 101	NB	Hellyer Ave	Yerba Buena Rd	0.9
285	US 101	NB	Yerba Buena Rd	Capitol Expwy	0.8
287	US 101	NB	Tully Rd	Story Rd	1.5
288	US 101	NB	Story Rd	I-280	0.4
289	US 101	NB	I-280	Santa Clara St	0.9
290	US 101	NB	Santa Clara St	McKee Rd	0.4
291	US 101	NB	McKee Rd	Oakland Rd	1.6
292	US 101	NB	Oakland Rd	I-880	0.6
293	US 101	NB	I-880	Old Bayshore Hwy	0.5
294	US 101	NB	Old Bayshore Hwy	N. First St	0.5
295	US 101	NB	N. First St	Guadalupe Pkwy	0.6
296	US 101	NB	Guadalupe Pkwy	De La Cruz Blvd	0.8

ID	Freeway	Dir	From	To	Length
297	US 101	NB	De La Cruz Blvd	Montague Expwy / San Tomas Expwy	1.3
298	US 101	NB	Montague Expwy/San Tomas Expwy	Bower Ave / Great America Pkwy	0.8
299	US 101	NB	Bower Ave/Great American Pkwy	Lawrence Expwy	1.1
300	US 101	NB	Lawrence Expwy	N. Fair Oaks Ave	1.0
301	US 101	NB	N. Fair Oaks Ave	N. Mathilda Ave	0.9
302	US 101	NB	N. Mathilda Ave	SR 237	0.4
303	US 101	NB	SR 237	Moffett Blvd	1.7
304	US 101	NB	Moffett Blvd	SR 85	0.3
309	US 101	NB	Oregon Expwy	Embarcadero Rd	0.2
Total Congested Miles on I-280					6.5
Total Congested Miles on I-880					1.3
Total Congested Miles on SR 237					3.6
Total Congested Miles on SR 85					11.8
Total Congested Miles on SR 87					5.1
Total Congested Miles on US-101					16.9

Table 3.6 HOV Segments at LOS F – PM Peak Period

ID	Freeway	Dir	From	To	Length
136	I-280	EB	SR 85	De Anza Blvd	1.3
141	I-280	EB	Winchester Blvd	I-880	0.6
142	I-280	EB	I-880	Meridian Ave	1.4
80	SR 237	EB	Great America Pkwy	N. First St	1.0
81	SR 237	EB	Lawrence Expwy	Great America Pkwy	1.3
82	SR 237	EB	N. Fair Oaks Ave	Lawrence Expwy	0.6
186	SR 85	SB	Central Expwy	SR 237	0.5
191	SR 85	SB	I-280	Stevens Creek Blvd	0.8
192	SR 85	SB	Stevens Creek Blvd	Saratoga-Sunnyvale Rd	1.8
309	US 101	NB	Oregon Expwy	Embarcadero Rd	0.2
258	US 101	SB	I-880	Oakland Rd	0.6
259	US 101	SB	Old Bayshore Hwy	I-880	0.5
260	US 101	SB	N. First St	Old Bayshore Hwy	0.5
261	US 101	SB	Guadalupe Pkwy	N. First St	0.6
263	US 101	SB	Montague Expwy/San Tomas Expwy	De La Cruz Blvd	1.3
264	US 101	SB	Bower Ave/Great American Pkwy	Montague Expwy/San Tomas Expwy	0.8
265	US 101	SB	Lawrence Expwy	Bower Ave/Great American Pkwy	1.1
267	US 101	SB	N. Mathilda Ave	N. Fair Oaks Ave	0.9
268	US 101	SB	SR 237	Mathilda Ave	0.4
Total Congested Miles on I-280					3.3
Total Congested Miles on SR 237					2.9
Total Congested Miles on SR 85					3.1
Total Congested Miles on US 101					6.7

Table 3.7 2015 Freeway LOS – AM Peak Period

ID	Facility	Dir	From/To	From/To	Miles	Number of Lanes			Peak Photo Time	Max Density		LOS (Density)		Speed		Flow	
						Total	Mixed	HOV		Mixed	HOV	Mixed	HOV	Mixed	HOV	Mixed	HOV
31	SR 17	NB	Summit Rd	Bear Creek	4.06	2	2	0	08:00 - 08:20	105	0	F		13		2730	
30	SR 17	NB	Bear Creek	Saratoga	2.90	2	2	0	09:20 - 09:40	66	0	F		29		3830	
29	SR 17	NB	Saratoga	Lark Ave	1.81	2	2	0	09:20 - 09:40	42	0	D		52		4370	
28	SR 17	NB	Lark Ave	SR 85	0.46	2	2	0	07:40 - 08:00	47	0	E		46		4330	
27	SR 17	NB	SR 85	San Tomas/Camden	1.17	3	3	0	07:40 - 08:00	60	0	F		33		5940	
26	SR 17	NB	San Tomas/Camden	Hamilton	1.82	3	3	0	08:40 - 09:00	90	0	F		17		4590	
25	SR 17	NB	Hamilton	I-280	1.61	3	3	0	08:40 - 09:00	86	0	F		19		4910	
184	SR 85	NB	US 101	Cottle Rd	1.79	3	2	1	06:20 - 06:40	17	16	B	B	67	67	2270	1080
183	SR 85	NB	Cottle Rd	Blossom Hill Rd	1.96	3	2	1	07:20 - 07:40	47	36	E	D	46	61	4330	2200
182	SR 85	NB	Blossom Hill Rd	SR 87	1.27	3	2	1	07:20 - 07:40	65	54	F	E	29	38	3770	2060
181	SR 85	NB	SR 87	Almaden Expwy	0.94	3	2	1	07:20 - 07:40	84	106	F	F	19	12	3200	1280
180	SR 85	NB	Almaden Expwy	Camden Ave	1.97	3	2	1	08:20 - 08:40	78	62	F	F	22	32	3440	1990
179	SR 85	NB	Camden Ave	Union Ave	1.17	3	2	1	08:20 - 08:40	88	67	F	E	18	28	3170	1880
178	SR 85	NB	Union Ave	S. Bascom Ave	1.13	3	2	1	07:00 - 07:20	67	75	F	F	28	24	3760	1800
177	SR 85	NB	S. Bascom Ave	SR 17	0.27	3	2	1	07:00 - 07:20	105	101	F	F	13	14	2730	1420
176	SR 85	NB	SR 17	Winchester Blvd	0.50	3	2	1	08:40 - 09:00	80	88	F	F	21	18	3360	1590
175	SR 85	NB	Winchester Blvd	Saratoga Ave	2.68	3	2	1	07:20 - 07:40	69	50	F	E	27	42	3730	2100
174	SR 85	NB	Saratoga Ave	Saratoga-Sunnyvale Rd	2.19	3	2	1	07:20 - 07:40	56	43	E	D	36	51	4040	2200
173	SR 85	NB	Saratoga-Sunnyvale Rd	Stevens Creek Blvd	1.83	3	2	1	09:00 - 09:20	97	81	F	F	15	21	2910	1710
172	SR 85	NB	Stevens Creek Blvd	I-280	0.75	3	2	1	08:40 - 09:00	130	96	F	F	7	15	1820	1440
171	SR 85	NB	I-280	W. Homestead Rd	0.34	3	2	1	09:00 - 09:20	144	136	F	F	6	6	2080	820
170	SR 85	NB	W. Homestead Rd	W. Fremont Ave	1.00	3	2	1	08:40 - 09:00	121	101	F	F	9	14	2180	1420
169	SR 85	NB	W. Fremont Ave	EL Camino Real	1.89	3	2	1	08:40 - 09:00	88	65	F	F	18	29	3170	1890
168	SR 85	NB	EL Camino Real	SR 237	0.41	3	2	1	08:40 - 09:00	59	39	F	D	34	57	4020	2230
167	SR 85	NB	SR 237	Central Expwy	0.47	3	2	1	08:40 - 09:00	22	18	C	B	66	67	2910	1210
166	SR 85	NB	Central Expwy	US 101	1.24	3	2	1	07:00 - 07:20	23	25	C	C	66	66	3040	1650
70	SR 87	NB	SR 85	Capitol Expwy	1.09	3	2	1	08:40 - 09:00	106	97	F	F	12	15	2550	1460

Table 3.7 2015 Freeway LOS – AM Peak Period

ID	Facility	Dir	From/To	From/To	Miles	Number of Lanes			Peak Photo Time	Max Density		LOS (Density)		Speed		Flow	
						Total	Mixed	HOV		Mixed	HOV	Mixed	HOV	Mixed	HOV	Mixed	HOV
71	SR 87	NB	Capitol Expwy	Curtner	1.49	3	2	1	08:40 - 09:00	117	107	F	F	10	12	2340	1290
72	SR 87	NB	Curtner	Almaden Rd	0.73	3	2	1	08:40 - 09:00	115	91	F	F	10	17	2300	1550
73	SR 87	NB	Almaden Rd	Alma Ave	0.69	3	2	1	08:00 - 08:20	81	49	F	E	21	43	3410	2110
74	SR 87	NB	Alma Ave	I-280	0.90	3	2	1	08:40 - 09:00	60	57	F	E	33	36	3960	2060
75	SR 87	NB	I-280	Julian St	0.96	3	2	1	08:40 - 09:00	111	96	F	F	11	15	2450	1440
76	SR 87	NB	Julian St	Coleman Ave	0.38	3	2	1	08:00 - 08:20	98	68	F	F	15	27	2940	1840
414	SR 87	NB	Coleman St	Taylor St	0.41	3	2	1	08:40 - 09:00	81	60	F	F	21	33	3410	1980
416	SR 87	NB	Taylor St	Skyport Dr	1.87	3	2	1	09:40 - 10:00	41	33	D	D	54	64	4430	2120
418	SR 87	NB	Skyport Dr	US 101	0.67	3	2	1	08:00 - 08:20	45	17	D	B	48	67	4320	1140
309.11	US 101	NB	SR 156	SR 129	1.78	2	2	0	08:00 - 08:20	14	0	B		67		1870	
309.1	US 101	NB	SR 129	Betabel Rd	1.61	2	2	0	06:40 - 07:00	17	0	B		67		2270	
309.09	US 101	NB	Betabel Rd	Bloomfield Ave	4.15	2	2	0	06:40 - 07:00	21	0	C		66		2780	
309.08	US 101	NB	Bloomfield Ave	Monterey Rd	1.85	2	2	0	06:20 - 06:40	30	0	D		65		3900	
309.07	US 101	NB	Monterey Rd	Pacheco Pass Hwy	1.11	3	3	0	06:40 - 07:00	17	0	B		67		3400	
309.06	US 101	NB	Pacheco Pass Hwy	Leavesley Rd	1.46	3	3	0	06:40 - 07:00	19	0	C		66		3770	
309.05	US 101	NB	Leavesley Rd	Buena Vista Ave	1.60	3	3	0	06:20 - 06:40	24	0	C		66		4760	
309.04	US 101	NB	Buena Vista Ave	Masten Ave	1.16	3	3	0	07:40 - 08:00	19	0	C		66		3770	
309.03	US 101	NB	Masten Ave	San Martin Ave	2.17	3	3	0	06:20 - 06:40	26	0	C		66		5150	
309.02	US 101	NB	San Martin Ave	Tennant Ave	3.55	3	3	0	06:20 - 06:40	71	0	F		26		5540	
309.01	US 101	NB	Tennant Ave	East Dunne Ave	0.96	3	3	0	07:20 - 07:40	98	0	F		15		4410	
276	US 101	NB	East Dunne Ave	Cochrane Rd	1.82	3	3	0	06:40 - 07:00	62	0	F		32		5960	
277	US 101	NB	Cochrane Rd	Burnett Ave (Lane Drop)	0.87	4	3	1	06:20 - 06:40	29	23	D	C	65	66	5660	1520
278	US 101	NB	Burnett Ave (Lane Drop)	Sheller Ave	2.57	4	3	1	06:20 - 06:40	24	24	C	C	66	66	4760	1590
279	US 101	NB	Sheller Ave	Lane Drop (SB)	4.32	4	3	1	06:20 - 06:40	28	28	D	D	66	66	5150	1850
280	US 101	NB	Lane Drop (SB)	SR 85	1.00	4	3	1	07:20 - 07:40	36	21	D	C	61	66	6590	1390

Table 3.7 2015 Freeway LOS – AM Peak Period

ID	Facility	Dir	From/To	From/To	Miles	Number of Lanes			Peak Photo Time	Max Density		LOS (Density)		Speed		Flow	
						Total	Mixed	HOV		Mixed	HOV	Mixed	HOV	Mixed	HOV	Mixed	HOV
281	US 101	NB	SR 85	Bernal Rd	0.20	4	3	1	07:20 - 07:40	31	25	D	C	65	66	6050	1650
282	US 101	NB	Bernal Rd	Silver Creek Valley Rd	1.48	4	3	1	06:20 - 06:40	21	14	C	B	66	67	4160	940
283	US 101	NB	Silver Creek Valley Rd	Hellyer Ave	1.84	4	3	1	08:00 - 08:20	75	35	F	D	24	62	5400	2170
284	US 101	NB	Hellyer Ave	Yerba Buena Rd	0.90	4	3	1	08:20 - 08:40	94	76	F	F	16	23	4520	1750
285	US 101	NB	Yerba Buena Rd	Capitol Expwy	0.80	4	3	1	08:20 - 08:40	86	64	F	F	19	30	4910	1920
286	US 101	NB	Capitol Expwy	Tully Rd	1.33	4	3	1	08:00 - 08:20	77	51	F	F	23	41	5320	2100
287	US 101	NB	Tully Rd	Story Rd	1.46	4	3	1	08:00 - 08:20	73	79	F	F	25	22	5480	1740
288	US 101	NB	Story Rd	I-280	0.38	4	3	1	08:00 - 08:20	82	100	F	F	20	14	4920	1400
289	US 101	NB	I-280	Santa Clara St	0.88	4	3	1	08:20 - 08:40	115	116	F	F	10	10	3450	1160
290	US 101	NB	Santa Clara St	McKee Rd	0.39	4	3	1	08:20 - 08:40	110	97	F	F	11	15	3630	1460
291	US 101	NB	McKee Rd	Oakland Rd	1.58	4	3	1	08:00 - 08:20	88	62	F	F	18	32	4760	1990
292	US 101	NB	Oakland Rd	I-880	0.57	4	3	1	08:20 - 08:40	80	100	F	F	21	14	5040	1400
293	US 101	NB	I-880	Old Bayshore Hwy	0.50	4	3	1	08:20 - 08:40	132	96	F	F	7	15	2780	1440
294	US 101	NB	Old Bayshore Hwy	N. First St	0.49	4	3	1	08:00 - 08:20	141	136	F	F	6	6	2540	820
295	US 101	NB	N. First St	Guadalupe Pkwy	0.64	4	3	1	08:00 - 08:20	112	112	F	F	11	11	3700	1240
296	US 101	NB	Guadalupe Pkwy	De La Cruz Blvd	0.77	4	3	1	08:00 - 08:20	118	105	F	F	10	13	3540	1370
297	US 101	NB	De La Cruz Blvd	Montaque Expwy/Santa Tomas Expwy	1.28	4	3	1	08:00 - 08:20	79	81	F	F	22	21	5220	1710
298	US 101	NB	Montaque Expwy/Santa Tomas Expwy	Bower Ave/Great America Pkwy	0.75	4	3	1	07:40 - 08:00	80	68	F	F	21	27	5040	1840
299	US 101	NB	Bower Ave / Great American Pkwy	Lawrence Expwy	1.12	4	3	1	08:00 - 08:20	82	75	F	F	20	24	4920	1800
300	US 101	NB	Lawrence Expwy	N. Fair Oaks Ave	0.98	4	3	1	09:00 - 09:20	84	74	F	F	19	24	4790	1780
301	US 101	NB	N. Fair Oaks Ave	N. Mathilda Ave	0.85	4	3	1	09:00 - 09:20	85	84	F	F	19	19	4850	1600
302	US 101	NB	N. Mathilda Ave	SR 237	0.35	4	3	1	09:00 - 09:20	77	122	F	F	23	9	5320	1100
303	US 101	NB	SR 237	Moffett Blvd	1.68	4	3	1	09:00 - 09:20	121	121	F	F	9	9	3270	1090
304	US 101	NB	Moffett Blvd	SR 85	0.33	4	3	1	09:00 - 09:20	102	92	F	F	13	16	3980	1480
305	US 101	NB	SR 85	N. Shoreline Blvd	0.38	5	4	1	07:20 - 07:40	100	54	F	E	14	38	5600	2060
306	US 101	NB	N. Shoreline Blvd	Rengstorff Ave	1.01	4	3	1	07:40 - 08:00	69	36	F	D	27	61	5590	4400
307	US 101	NB	Rengstorff Ave	San Antonio Ave	0.71	4	3	1	08:00 - 08:20	50	22	E	C	42	66	6300	2910

Table 3.7 2015 Freeway LOS – AM Peak Period

ID	Facility	Dir	From/To	From/To	Miles	Number of Lanes			Peak Photo Time	Max Density		LOS (Density)		Speed		Flow	
						Total	Mixed	HOV		Mixed	HOV	Mixed	HOV	Mixed	HOV	Mixed	HOV
308	US 101	NB	San Antonio Ave	Oregon Expwy	1.85	4	3	1	07:40 - 08:00	60	33	F	D	33	64	5940	3380
309	US 101	NB	Oregon Expwy	Embarcadero Rd	0.15	4	3	1	07:40 - 08:00	76	61	F	F	23	32	5250	1960
88	SR 237	EB	El Camino Real	SR 85	0.40	2	2	0	08:20 - 08:40	41	0	D		54		4430	
87	SR 237	EB	SR 85	Central Pkwy	0.63	2	2	0	08:20 - 08:40	58	0	E		35		4060	
86	SR 237	EB	Central Pkwy	Maude Ave	0.80	2	2	0	08:20 - 08:40	37	0	D		59		4370	
85	SR 237	EB	Maude Ave	US 101	0.71	2	2	0	08:20 - 08:40	33	0	D		64		4230	
84	SR 237	EB	US 101	Mathilda Ave	0.53	2	2	0	09:00 - 09:20	31	0	D		65		4030	
83	SR 237	EB	Mathilda Ave	N. Fair Oaks Ave	0.96	3	2	1	08:00 - 08:20	35	14	D	B	62	67	4340	940
82	SR 237	EB	N. Fair Oaks Ave	Lawrence Expwy	0.63	3	2	1	07:20 - 07:40	28	30	D	B	66	65	3670	1950
81	SR 237	EB	Lawrence Expwy	Great America Pkwy	1.27	3	2	1	08:20 - 08:40	33	15	D	B	64	67	4230	1010
80	SR 237	EB	Great America Pkwy	N. First St	1.00	3	2	1	08:00 - 08:20	40	15	D	B	55	67	4400	1010
79	SR 237	EB	N. First St	Zanker Rd	1.61	3	2	1	08:00 - 08:20	46	17	D	B	47	67	4330	1140
78	SR 237	EB	Zanker Rd	McCarthy Blvd	0.94	3	2	1	09:00 - 09:20	25	15	C	B	66	67	3300	1010
77	SR 237	EB	McCarthy Blvd	I-880	0.40	3	2	1	08:00 - 08:20	21	16	C	B	66	67	2860	1080
130.1	I-280	EB	Alpine Rd	Page Mill Rd	2.25	4	4	0	09:00 - 09:20	30	0	D		65		7800	
131	I-280	EB	Page Mill Rd	La Barranca Rd	1.73	4	4	0	08:20 - 08:40	23	0	C		66		6080	
132	I-280	EB	La Barranca Rd	El Monte Rd	1.60	4	4	0	08:20 - 08:40	21	0	C		66		5550	
133	I-280	EB	El Monte Rd	Magdalena Ave	0.95	4	4	0	07:40 - 08:00	24	0	C		66		6340	
134	I-280	EB	Magdalena Ave	Foothill Expwy	2.65	4	3	1	08:20 - 08:40	29	11	D	A	65	67	5660	740
135	I-280	EB	Foothill Expwy	SR 85	0.70	4	3	1	07:40 - 08:00	26	8	C	A	66	67	5150	540
136	I-280	EB	SR 85	De Anza Blvd	1.31	4	3	1	07:20 - 07:40	22	12	C	B	66	67	4360	810
137	I-280	EB	De Anza Blvd	Wolfe Rd	1.06	4	3	1	07:40 - 08:00	26	14	C	B	66	67	5150	940
940	I-280	EB	Wolfe Rd	Lawrence Expwy	1.24	4	3	1	07:40 - 08:00	28	19	D	C	66	66	5510	1260
139	I-280	EB	Lawrence Expwy	Saratoga Ave	1.19	4	3	1	07:20 - 07:40	25	17	C	B	66	67	4950	1140
140	I-280	EB	Saratoga Ave	Winchester Blvd	1.37	4	3	1	07:20 - 07:40	36	9	D	A	61	67	6590	610
141	I-280	EB	Winchester Blvd	I-880	0.55	4	3	1	07:40 - 08:00	25	10	C	A	66	67	4950	670
142	I-280	EB	I-880	Meridian Ave	1.40	4	3	1	08:20 - 08:40	56	19	E	C	36	66	6050	1260
143	I-280	EB	Meridian Ave	Bird Ave	1.07	4	4	0	08:20 - 08:40	53	0	E		39		8270	

Table 3.7 2015 Freeway LOS – AM Peak Period

ID	Facility	Dir	From/To	From/To	Miles	Number of Lanes			Peak Photo Time	Max Density		LOS (Density)		Speed		Flow	
						Total	Mixed	HOV		Mixed	HOV	Mixed	HOV	Mixed	HOV	Mixed	HOV
144	I-280	EB	Bird Ave	SR 87	0.35	4	4	0	08:20 - 08:40	27	0	D		66		7080	
145	I-280	EB	SR 87	10th St	1.20	4	4	0	07:20 - 07:40	20	0	C		66		5280	
146	I-280	EB	10th St	McLaughlin Ave	0.92	4	4	0	07:20 - 07:40	23	0	C		66		6080	
147	I-280	EB	McLaughlin Ave	US 101	0.37	4	4	0	07:40 - 08:00	21	0	C		66		5550	
51	I-680	NB	US 101	King Rd	0.40	4	4	0	07:40 - 08:00	25	0	C		66		6600	
52	I-680	NB	King Rd	Capitol Expwy	1.00	4	4	0	07:40 - 08:00	75	0	F		24		7200	
53	I-680	NB	Capitol Expwy	Alum Rock Ave	0.31	4	4	0	07:40 - 08:00	87	0	F		18		6270	
54	I-680	NB	Alum Rock Ave	McKee Rd	0.64	4	4	0	07:40 - 08:00	66	0	F		29		7660	
55	I-680	NB	McKee Rd	Berryessa Rd	1.47	4	4	0	07:40 - 08:00	38	0	D		58		8820	
56	I-680	NB	Berryessa Rd	Hostetter Rd	0.94	4	4	0	07:40 - 08:00	34	0	D		63		8570	
57	I-680	NB	Hostetter Rd	Capitol Ave	0.31	4	4	0	07:40 - 08:00	33	0	D		64		8450	
58	I-680	NB	Capitol Ave	Montague Expwy	1.00	4	4	0	07:40 - 08:00	38	0	D		58		8820	
59	I-680	NB	Montague Expwy	Yosemite Dr	0.77	4	4	0	07:40 - 08:00	24	0	C		66		6340	
60	I-680	NB	Yosemite Dr	Calaveras Blvd/SR 237	0.69	4	4	0	08:20 - 08:40	27	0	D		66		7080	
61	I-680	NB	Calaveras Blvd/SR 237	Jacklin Rd	0.85	3	3	0	08:20 - 08:40	52	0	E		40		6240	
62	I-680	NB	Jacklin Rd	Scott Creek Rd	1.57	3	3	0	08:20 - 08:40	38	0	D		58		6620	
12	I-880	NB	I-280	Stevens Cr	0.41	3	3	0	08:40 - 09:00	103	0	F		13		4020	
11	I-880	NB	Stevens Cr	N. Bascom Ave	0.84	3	3	0	07:40 - 08:00	134	0	F		7		2820	
10	I-880	NB	N. Bascom Ave	The Alameda	0.82	3	3	0	08:40 - 09:00	91	0	F		17		4650	
9	I-880	NB	The Alameda	Coleman Ave	0.59	3	3	0	08:20 - 08:40	88	0	F		18		4760	
8	I-880	NB	Coleman Ave	SR 87	0.51	3	3	0	08:20 - 08:40	81	0	F		21		5110	
7	I-880	NB	SR 87	N. 1st St	0.40	3	3	0	08:40 - 09:00	86	0	F		19		4910	
6	I-880	NB	N. 1st St	US 101	0.49	3	3	0	07:40 - 08:00	83	0	F		20		4980	
5	I-880	NB	US 101	E. Brokaw Rd	1.29	3	3	0	08:20 - 08:40	43	15	D	B	51	67	6580	1010
4	I-880	NB	E. Brokaw Rd	Montague Expwy	1.35	3	3	0	06:40 - 07:00	27	10	D	A	66	67	5310	670
3	I-880	NB	Montague Expwy	Great Mall Pkwy	0.98	3	3	0	06:20 - 06:40	25	17	C	B	66	67	4950	1140
2	I-880	NB	Great Mall Pkwy	SR 237	0.72	3	3	0	08:20 - 08:40	26	20	C	C	66	66	5150	1320

Table 3.7 2015 Freeway LOS – AM Peak Period

ID	Facility	Dir	From/To	From/To	Miles	Number of Lanes			Peak Photo Time	Max Density		LOS (Density)		Speed		Flow	
						Total	Mixed	HOV		Mixed	HOV	Mixed	HOV	Mixed	HOV	Mixed	HOV
1	I-880	NB	SR 237	Dixon Landing	1.99	4	3	1	07:40 - 08:00	23	17	C	B	66	67	5170	1140
32	SR 17	SB	I-280	Hamilton	1.61	3	3	0	08:40 - 09:00	22	0	C		66		4360	
33	SR 17	SB	Hamilton	San Tomas/Camden	1.82	3	3	0	07:40 - 08:00	16	0	B		67		3620	
34	SR 17	SB	San Tomas/Camden	SR 85	1.17	3	3	0	07:40 - 08:00	18	0	B		67		3600	
35	SR 17	SB	SR 85	Lark Ave	0.46	2	2	0	09:20 - 09:40	15	0	B		67		2000	
36	SR 17	SB	Lark Ave	Saratoga	1.81	2	2	0	08:40 - 09:00	74	0	F		24		3560	
37	SR 17	SB	Saratoga	Bear Creek	2.90	2	2	0	09:20 - 09:40	24	0	C		66		3170	
38	SR 17	SB	Bear Creek	Summit Rd	4.06	2	2	0	09:20 - 09:40	21	0	C		66		2780	
185	SR 85	SB	US 101	Central Expwy	1.24	3	2	1	08:20 - 08:40	14	7	B	A	67	67	1870	470
186	SR 85	SB	Central Expwy	SR 237	0.47	3	2	1	07:00 - 07:20	16	11	B	A	67	67	2130	740
187	SR 85	SB	SR 237	EL Camino Real	0.41	4	3	1	08:20 - 08:40	26	4	C	A	66	67	4290	270
188	SR 85	SB	EL Camino Real	W. Fremont Ave	1.89	3	2	1	08:20 - 08:40	28	10	D	A	66	67	3670	670
189	SR 85	SB	W. Fremont Ave	W. Homestead Rd	1.00	3	2	1	08:20 - 08:40	32	14	D	B	64	67	4100	940
190	SR 85	SB	W. Homestead Rd	I-280	0.41	3	2	1	08:00 - 08:20	18	7	B	A	67	67	2400	470
191	SR 85	SB	I-280	Stevens Creek Blvd	0.75	3	2	1	08:00 - 08:20	15	2	B	A	67	67	2400	140
192	SR 85	SB	Stevens Creek Blvd	Saratoga-Sunnyvale Rd	1.83	3	2	1	08:40 - 09:00	16	7	B	A	67	67	2130	470
193	SR 85	SB	Saratoga-Sunnyvale Rd	Saratoga Ave	2.19	3	2	1	07:20 - 07:40	19	9	C	A	66	67	2510	610
194	SR 85	SB	Saratoga Ave	Winchester Blvd	2.68	3	2	1	08:40 - 09:00	24	9	C	A	66	67	3170	610
195	SR 85	SB	Winchester Blvd	SR 17	0.50	3	2	1	07:20 - 07:40	24	8	C	A	66	67	3170	540
196	SR 85	SB	SR 17	S. Bascom Ave	0.27	3	2	1	07:20 - 07:40	16	9	B	A	67	67	2130	610
197	SR 85	SB	S. Bascom Ave	Union Ave	1.13	3	2	1	07:20 - 07:40	22	9	C	A	66	67	2910	610
198	SR 85	SB	Union Ave	Camden Ave	1.17	3	2	1	08:00 - 08:20	31	10	D	A	65	67	4030	670
199	SR 85	SB	Camden Ave	Almaden Expwy	1.97	3	2	1	08:00 - 08:20	25	5	C	A	66	67	3300	340
200	SR 85	SB	Almaden Expwy	SR 87	0.94	3	2	1	08:00 - 08:20	20	7	C	A	66	67	2640	470
201	SR 85	SB	SR 87	Blossom Hill Rd	1.27	3	2	1	08:20 - 08:40	27	8	D	A	66	67	3540	540
202	SR 85	SB	Blossom Hill Rd	Cottle Rd	1.96	3	2	1	08:20 - 08:40	30	8	D	A	65	67	3900	540
203	SR 85	SB	Cottle Rd	US 101	1.79	3	2	1	08:20 - 08:40	13	6	B	A	67	67	1730	410

Table 3.7 2015 Freeway LOS – AM Peak Period

ID	Facility	Dir	From/To	From/To	Miles	Number of Lanes			Peak Photo Time	Max Density		LOS (Density)		Speed		Flow	
						Total	Mixed	HOV		Mixed	HOV	Mixed	HOV	Mixed	HOV	Mixed	HOV
419	SR 87	SB	US 101	Skyport Dr	0.67	3	2	1	08:00 - 08:20	29	8	D	A	65	67	3770	540
417	SR 87	SB	Skyport Dr	Taylor St	1.87	3	2	1	08:00 - 08:20	13	2	B	A	67	67	1730	140
415	SR 87	SB	Taylor St	Coleman St	0.41	3	2	1	07:00 - 07:20	18	7	B	A	67	67	2400	470
69	SR 87	SB	Coleman Ave	Julian St	0.38	3	2	1	08:00 - 08:20	32	7	D	A	64	67	4100	470
68	SR 87	SB	Julian St	I-280	0.96	3	2	1	07:00 - 07:20	20	6	C	A	66	67	2640	410
67	SR 87	SB	I-280	Alma Ave	0.90	3	2	1	08:00 - 08:20	19	8	C	A	66	67	2510	540
66	SR 87	SB	Alma Ave	Almaden Rd	0.69	3	2	1	07:20 - 07:40	23	4	C	A	66	67	3040	270
65	SR 87	SB	Almaden Rd	Curtner	0.73	3	2	1	08:00 - 08:20	18	6	B	A	67	67	2400	410
64	SR 87	SB	Curtner	Capitol Expwy	1.49	3	2	1	07:20 - 07:40	17	5	B	A	67	67	2270	340
63	SR 87	SB	Capitol Expwy	SR 85	1.09	3	2	1	08:00 - 08:20	29	6	D	A	65	67	3770	410
275	US 101	SB	Embarcadero Rd	Oregon Expwy	0.15	4	3	1	07:40 - 08:00	25	33	C	D	66	64	4950	2120
274	US 101	SB	Oregon Expwy	San Antonio Ave	1.85	4	3	1	08:20 - 08:40	62	29	F	D	32	65	5960	3020
273	US 101	SB	San Antonio Ave	Rengstorff Ave	0.71	4	3	1	09:20 - 09:40	96	34	F	D	15	63	4320	4290
272	US 101	SB	Rengstorff Ave	N. Shoreline Blvd	1.01	4	3	1	09:20 - 09:40	36	24	D	C	61	66	6590	3170
271	US 101	SB	N. Shoreline Blvd	SR 85	0.38	4	3	1	08:20 - 08:40	40	15	D	B	55	67	6600	1010
270	US 101	SB	SR 85	Moffett Blvd	0.33	4	3	1	09:00 - 09:20	36	47	D	E	61	46	6590	2170
269	US 101	SB	Moffett Blvd	SR 237	1.68	4	3	1	08:00 - 08:20	30	31	D	D	55	67	5850	2020
268	US 101	SB	SR 237	N. Mathilda Ave	0.35	4	3	1	07:40 - 08:00	22	34	C	D	66	63	4360	2150
267	US 101	SB	N. Mathilda Ave	N. Fair Oaks Ave	0.85	4	3	1	09:00 - 09:20	22	21	C	C	66	66	4360	1390
266	US 101	SB	N. Fair Oaks Ave	Lawrence Expwy	0.98	4	3	1	08:00 - 08:20	35	19	D	C	62	66	6510	1260
265	US 101	SB	Lawrence Expwy	Bower Ave/Great American Pkwy	1.12	4	3	1	08:20 - 08:40	29	13	D	B	65	67	5660	880
264	US 101	SB	Bower Ave/Great American Pkwy	Montaque Expwy/Santa Tomas Expwy	0.75	4	3	1	07:40 - 08:00	23	12	C	B	66	67	4560	810
263	US 101	SB	Montaque Expwy/Santa Tomas Expwy	De La Cruz Blvd	1.28	4	3	1	08:20 - 08:40	28	14	D	B	66	67	5510	940
262	US 101	SB	De La Cruz Blvd	Guadalupe Pkwy	0.77	4	3	1	07:40 - 08:00	21	7	C	A	66	67	4160	470
261	US 101	SB	Guadalupe Pkwy	N. First St	0.64	4	3	1	07:40 - 08:00	16	6	B	A	67	67	3200	410
260	US 101	SB	N. First St	Old Bayshore Hwy	0.49	4	3	1	08:00 - 08:20	20	9	C	A	66	67	3960	610

Table 3.7 2015 Freeway LOS – AM Peak Period

ID	Facility	Dir	From/To	From/To	Miles	Number of Lanes			Peak Photo Time	Max Density		LOS (Density)		Speed		Flow	
						Total	Mixed	HOV		Mixed	HOV	Mixed	HOV	Mixed	HOV	Mixed	HOV
259	US 101	SB	Old Bayshore Hwy	I-880	0.50	4	3	1	08:20 - 08:40	10	4	A	A	67	67	2010	270
258	US 101	SB	I-880	Oakland Rd	0.57	4	3	1	07:40 - 08:00	19	5	C	A	66	67	3770	340
257	US 101	SB	Oakland Rd	McKee Rd	1.58	4	3	1	07:40 - 08:00	16	9	B	A	67	67	3200	610
256	US 101	SB	McKee Rd	Santa Clara St	0.39	4	3	1	08:20 - 08:40	17	5	B	A	67	67	3400	340
255	US 101	SB	Santa Clara St	I-280	0.88	4	3	1	07:40 - 08:00	18	7	B	A	67	67	3600	470
254	US 101	SB	I-280	Story Rd	0.38	4	3	1	08:20 - 08:40	13	2	B	A	67	67	2600	140
253	US 101	SB	Story Rd	Tully Rd	1.46	4	3	1	07:40 - 08:00	17	4	B	A	67	67	3400	270
252	US 101	SB	Tully Rd	Capitol Expwy	1.33	4	3	1	07:40 - 08:00	21	4	C	A	66	67	4160	270
251	US 101	SB	Capitol Expwy	Yerba Buena Rd	0.80	4	3	1	07:40 - 08:00	19	7	C	A	66	67	3770	470
250	US 101	SB	Yerba Buena Rd	Hellyer Ave	0.90	4	3	1	07:40 - 08:00	27	10	D	A	66	67	5310	670
249	US 101	SB	Hellyer Ave	Silver Creek Valley Rd	1.84	4	3	1	07:40 - 08:00	25	8	C	A	66	67	4950	540
248	US 101	SB	Silver Creek Valley Rd	Bernal Rd	1.48	4	3	1	07:40 - 08:00	15	7	B	A	67	67	3000	470
247	US 101	SB	Bernal Rd	SR 85	0.20	4	3	1	08:00 - 08:20	15	5	B	A	67	67	3000	340
246	US 101	SB	SR 85	Lane Drop (SB)	1.00	5	4	1	07:20 - 07:40	15	11	B	A	67	67	3990	740
245	US 101	SB	Lane Drop (SB)	Sheller Ave	4.32	4	3	1	07:40 - 08:00	18	10	B	A	67	67	3600	670
244	US 101	SB	Sheller Ave	Burnett Ave (Lane Drop)	2.57	4	3	1	08:00 - 08:20	15	15	B	B	67	67	3000	1010
243	US 101	SB	Burnett Ave (Lane Drop)	Cochrane Rd	0.87	3	3	0	07:40 - 08:00	21	0	C		66		4160	
242	US 101	SB	Cochrane Rd	East Dunne Ave	1.82	3	3	0	07:40 - 08:00	14	0	B		67		2800	
275.01	US 101	SB	East Dunne Ave	Tennant Ave	0.96	3	3	0	08:20 - 08:40	15	0	B		67		3000	
275.02	US 101	SB	Tennant Ave	San Martin Ave	3.55	3	3	0	09:00 - 09:20	16	0	B		67		3200	
275.03	US 101	SB	San Martin Ave	Masten Ave	2.17	3	3	0	08:00 - 08:20	14	0	B		67		2800	
275.04	US 101	SB	Masten Ave	Buena Vista Ave	1.16	3	3	0	07:40 - 08:00	13	0	B		67		2600	
275.05	US 101	SB	Buena Vista Ave	Leavesley Rd	1.60	3	3	0	07:40 - 08:00	14	0	B		67		2800	
275.06	US 101	SB	Leavesley Rd	Pacheco Pass Hwy	1.46	3	3	0	09:20 - 09:40	14	0	B		67		2800	
275.07	US 101	SB	Pacheco Pass Hwy	Monterey Rd	1.11	3	3	0	06:40 - 07:00	9	0	A		67		1810	

Table 3.7 2015 Freeway LOS – AM Peak Period

ID	Facility	Dir	From/To	From/To	Miles	Number of Lanes			Peak Photo Time	Max Density		LOS (Density)		Speed		Flow	
						Total	Mixed	HOV		Mixed	HOV	Mixed	HOV	Mixed	HOV	Mixed	HOV
275.08	US 101	SB	Monterey Rd	Bloomfield Ave	1.85	2	2	0	07:40 - 08:00	16	0	B		67		2130	
275.09	US 101	SB	Bloomfield Ave	Betabel Rd	4.15	2	2	0	07:40 - 08:00	15	0	B		67		2000	
275.1	US 101	SB	Betabel Rd	SR 129	1.61	2	2	0	06:20 - 06:40	13	0	B		67		1730	
275.11	US 101	SB	SR 129	SR 156	1.78	2	2	0	08:00 - 08:20	8	0	A		67		1080	
89	SR 237	WB	I-880	McCarthy Blvd	0.40	3	2	1	09:00 - 09:20	140	74	F	F	6	24	1680	1780
90	SR 237	WB	McCarthy Blvd	Zanker Rd	0.94	3	2	1	08:00 - 08:20	129	70	F	E	7	26	2170	1820
91	SR 237	WB	Zanker Rd	N. First St	1.61	3	2	1	08:20 - 08:40	90	63	F	F	17	31	3060	1960
92	SR 237	WB	N. First St	Great America Pkwy	1.00	3	2	1	08:00 - 08:20	66	45	F	D	29	48	3830	2160
93	SR 237	WB	Great America Pkwy	Lawrence Expwy	1.27	3	2	1	07:20 - 07:40	72	34	F	D	25	63	3600	2150
94	SR 237	WB	Lawrence Expwy	N. Fair Oaks Ave	0.63	3	2	1	07:20 - 07:40	88	104	F	F	18	13	3170	1360
95	SR 237	WB	N. Fair Oaks Ave	Mathilda Ave	0.96	3	3	0	09:00 - 09:20	92	0	F		16		4420	
96	SR 237	WB	Mathilda Ave	US 101	0.53	2	2	0	09:00 - 09:20	49	0	E		43		4220	
97	SR 237	WB	US 101	Maude Ave	0.71	2	2	0	09:00 - 09:20	26	0	C		66		3440	
98	SR 237	WB	Maude Ave	Central Pkwy	0.80	2	2	0	08:00 - 08:20	25	0	C		66		3440	
99	SR 237	WB	Central Pkwy	SR 85	0.63	2	2	0	08:00 - 08:20	51	0	E		41		4190	
100	SR 237	WB	SR 85	El Camino Real	0.40	2	2	0	07:20 - 07:40	41	0	D		54		4430	
130	I-280	WB	US 101	McLaughlin Ave	0.37	4	4	0	08:20 - 08:40	96	0	F		15		5760	
129	I-280	WB	McLaughlin Ave	10th St	0.92	4	4	0	08:20 - 08:40	80	0	F		21		6720	
128	I-280	WB	10th St	SR 87	1.20	4	4	0	08:20 - 08:40	59	0	F		34		8030	
127	I-280	WB	SR 87	Bird Ave	0.35	4	4	0	07:40 - 08:00	101	0	F		14		5660	
126	I-280	WB	Bird Ave	Meridian Ave	1.07	4	4	0	07:40 - 08:00	89	0	F		18		6410	
125	I-280	WB	Meridian Ave	I-880	1.40	4	3	1	07:40 - 08:00	94	80	F	F	16	21	5120	1680
124	I-280	WB	I-880	Winchester Blvd	0.55	4	3	1	08:20 - 08:40	111	107	F	F	11	12	3670	1290
123	I-280	WB	Winchester Blvd	Saratoga Ave	1.37	4	3	1	08:20 - 08:40	85	79	F	F	19	22	4850	1740
122	I-280	WB	Saratoga Ave	Lawrence Expwy	1.19	4	3	1	08:20 - 08:40	86	68	F	F	19	27	4910	1840
121	I-280	WB	Lawrence Expwy	Wolfe Rd	1.24	4	3	1	08:20 - 08:40	92	62	F	F	16	32	4420	1990

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ID	Facility	Dir	From/To	From/To	Miles	Number of Lanes			Peak Photo Time	Max Density		LOS (Density)		Speed		Flow	
						Total	Mixed	HOV		Mixed	HOV	Mixed	HOV	Mixed	HOV	Mixed	HOV
120	I-280	WB	Wolfe Rd	De Anza Blvd	1.06	4	3	1	08:20 - 08:40	77	52	F	E	23	40	5320	2080
119	I-280	WB	De Anza Blvd	SR 85	1.31	4	3	1	08:20 - 08:40	76	51	F	E	23	41	5250	2100
118	I-280	WB	SR 85	Foothill Expwy	0.70	4	3	1	08:20 - 08:40	73	64	F	F	25	30	5480	1920
117	I-280	WB	Foothill Expwy	Magdalena Ave	2.65	4	3	1	09:00 - 09:20	43	51	D	E	51	41	6580	2100
116	I-280	WB	Magdalena Ave	El Monte Rd	0.95	4	4	0	09:00 - 09:20	52	0	E		40		8320	
115	I-280	WB	El Monte Rd	La Barranca Rd	1.60	4	4	0	09:00 - 09:20	49	0	E		43		8430	
114	I-280	WB	La Barranca Rd	Page Mill Rd	1.73	4	4	0	08:20 - 08:40	32	0	D		64		8200	
113.1	I-280	WB	Page Mill Rd	Alpine Rd	2.25	4	4	0	08:20 - 08:40	24	0	C		66		6340	
50	I-680	SB	Scott Creek Rd	Jacklin Rd	1.57	4	3	1	08:20 - 08:40	24	21	C	C	66	66	4760	1390
49	I-680	SB	Jacklin Rd	Calaveras Blvd/SR 237	0.85	4	3	1	09:20 - 09:40	27	9	D	A	66	67	5310	610
48	I-680	SB	Calaveras Blvd/SR 237	Yosemite Dr	0.69	4	4	0	07:40 - 08:00	23	0	C		66		6080	
47	I-680	SB	Yosemite Dr	Montague Expwy	0.77	4	4	0	09:00 - 09:20	23	0	C		66		6080	
46	I-680	SB	Montague Expwy	Capitol Ave	1.00	4	4	0	07:40 - 08:00	21	0	C		66		5550	
45	I-680	SB	Capitol Ave	Hostetter Rd	0.31	4	4	0	07:40 - 08:00	18	0	B		67		4790	
44	I-680	SB	Hostetter Rd	Berryessa Rd	0.94	4	4	0	09:00 - 09:20	20	0	C		66		5280	
43	I-680	SB	Berryessa Rd	McKee Rd	1.47	4	4	0	08:20 - 08:40	20	0	C		66		5280	
42	I-680	SB	McKee Rd	Alum Rock Ave	0.64	4	4	0	08:20 - 08:40	43	0	D		51		8780	
41	I-680	SB	Alum Rock Ave	Capitol Expwy	0.31	4	4	0	08:20 - 08:40	74	0	F		24		7110	
40	I-680	SB	Capitol Expwy	King Rd	1.00	4	4	0	07:40 - 08:00	86	0	F		19		7190	
39	I-680	SB	King Rd	US 101	0.40	4	4	0	08:20 - 08:40	103	0	F		13		5360	
13	I-880	SB	Dixon Landing	SR 237	1.99	4	3	1	08:40 - 09:00	79	56	F	E	22	36	5910	2020
14	I-880	SB	SR 237	Great Mall Pkwy	0.72	3	3	0	07:40 - 08:00	40	19	D	C	55	66	6600	1260
15	I-880	SB	Great Mall Pkwy	Montague Expwy	0.98	3	3	0	07:40 - 08:00	37	17	D	B	59	67	6550	1140
16	I-880	SB	Montague Expwy	E. Brokaw Rd	1.35	3	3	0	07:40 - 08:00	46	11	D	A	47	67	6490	740
17	I-880	SB	E. Brokaw Rd	US 101	1.29	3	3	0	07:40 - 08:00	98	43	F	D	15	51	4410	2200
18	I-880	SB	US 101	N. 1st ST	0.49	3	3	0	07:40 - 08:00	91	0	F		17		4650	
19	I-880	SB	N. 1st ST	SR 87	0.40	3	3	0	08:00 - 08:20	80	0	F		21		5040	

Table 3.7 2015 Freeway LOS – AM Peak Period																	
ID	Facility	Dir	From/To	From/To	Miles	Number of Lanes			Peak Photo Time	Max Density		LOS (Density)		Speed		Flow	
						Total	Mixed	HOV		Mixed	HOV	Mixed	HOV	Mixed	HOV	Mixed	HOV
20	I-880	SB	SR 87	Coleman Ave	0.51	3	3	0	08:00 - 08:20	30	0	D		65		5850	
21	I-880	SB	Coleman Ave	The Alameda	0.59	3	3	0	07:40 - 08:00	27	0	D		66		5310	
22	I-880	SB	The Alameda	N. Bascom Ave	0.82	3	3	0	09:20 - 09:40	27	0	D		66		5310	
23	I-880	SB	N. Bascom Ave	Stevens Cr	0.84	3	3	0	07:40 - 08:00	55	0	E		37		6110	
24	I-880	SB	Stevens Cr	I-280	0.41	3	3	0	07:00 - 07:20	21	0	C		66		4160	

Table 3.8 2015 Freeway LOS – PM Peak Period																	
						Number of Lanes				Max Density		LOS (Density)		Speed		Flow	
ID	Facility	Dir	From/To	From/To	Miles	Total	Mixed	HOV	Peak Photo Time	Mixed	HOV	Mixed	HOV	Mixed	HOV	Mixed	HOV
31	SR 17	NB	Summit Rd	Bear Creek	4.06	2	2	0	15:20 - 15:40	24	0	C		66		3170	
30	SR 17	NB	Bear Creek	Saratoga	2.90	2	2	0	17:20 - 17:40	22	0	C		66		2910	
29	SR 17	NB	Saratoga	Lark Ave	1.81	2	2	0	16:00 - 16:20	30	0	D		65		3900	
28	SR 17	NB	Lark Ave	SR 85	0.46	2	2	0	16:00 - 16:20	24	0	C		66		3170	
27	SR 17	NB	SR 85	San Tomas/Camden	1.17	3	3	0	17:00 - 17:20	23	0	C		66		4560	
26	SR 17	NB	San Tomas/Camden	Hamilton	1.82	3	3	0	16:40 - 17:00	30	0	D		65		5850	
25	SR 17	NB	Hamilton	I-280	1.61	3	3	0	15:20 - 15:40	22	0	C		66		4360	
184	SR 85	NB	US 101	Cottle Rd	1.79	3	2	1	16:00 - 16:20	18	7	B	A	67	70	2400	490
183	SR 85	NB	Cottle Rd	Blossom Hill Rd	1.96	3	2	1	17:00 - 17:20	29	12	D	B	65	70	3770	840
182	SR 85	NB	Blossom Hill Rd	SR 87	1.27	3	2	1	17:20 - 17:40	28	10	D	A	66	70	3670	700
181	SR 85	NB	SR 87	Almaden Expwy	0.94	3	2	1	17:20 - 17:40	20	9	C	A	66	70	2640	630
180	SR 85	NB	Almaden Expwy	Camden Ave	1.97	3	2	1	17:40 - 18:00	27	11	D	A	66	70	3540	770
179	SR 85	NB	Camden Ave	Union Ave	1.17	3	2	1	17:20 - 17:40	33	11	D	A	66	70	4230	770
178	SR 85	NB	Union Ave	S. Bascom Ave	1.13	3	2	1	17:40 - 18:00	22	7	C	A	66	70	2910	490
177	SR 85	NB	S. Bascom Ave	SR 17	0.27	3	2	1	17:20 - 17:40	27	11	D	A	66	70	3540	770
176	SR 85	NB	SR 17	Winchester Blvd	0.50	3	2	1	17:00 - 17:20	20	12	C	B	66	70	2640	840
175	SR 85	NB	Winchester Blvd	Saratoga Ave	2.68	3	2	1	18:00 - 18:20	26	8	C	A	66	70	3440	560
174	SR 85	NB	Saratoga Ave	Saratoga-Sunnyvale Rd	2.19	3	2	1	17:40 - 18:00	20	8	C	A	66	70	2640	560
173	SR 85	NB	Saratoga-Sunnyvale Rd	Stevens Creek Blvd	1.83	3	2	1	17:20 - 17:40	24	8	C	A	66	70	3170	560
172	SR 85	NB	Stevens Creek Blvd	I-280	0.75	3	2	1	17:00 - 17:20	12	6	B	A	67	70	1600	420
171	SR 85	NB	I-280	W. Homestead Rd	0.34	3	2	1	16:00 - 16:20	14	7	B	A	67	70	2240	490

Table 3.8 2015 Freeway LOS – PM Peak Period																	
						Number of Lanes				Max Density		LOS (Density)		Speed		Flow	
ID	Facility	Dir	From/To	From/To	Miles	Total	Mixed	HOV	Peak Photo Time	Mixed	HOV	Mixed	HOV	Mixed	HOV	Mixed	HOV
170	SR 85	NB	W. Homestead Rd	W. Fremont Ave	1.00	3	2	1	18:00 - 18:20	28	12	D	B	66	70	3670	840
169	SR 85	NB	W. Fremont Ave	EL Camino Real	1.89	3	2	1	15:40 - 16:00	26	6	C	A	66	70	3440	420
168	SR 85	NB	EL Camino Real	SR 237	0.41	3	2	1	17:40 - 18:00	21	7	C	A	66	70	2780	490
167	SR 85	NB	SR 237	Central Expwy	0.47	3	2	1	16:40 - 17:00	23	7	C	A	66	70	3040	490
166	SR 85	NB	Central Expwy	US 101	1.24	3	2	1	16:00 - 16:20	14	7	B	A	67	70	1870	490
70	SR 87	NB	SR 85	Capitol Expwy	1.09	3	2	1	15:20 - 15:40	20	6	C	A	66	70	2640	420
71	SR 87	NB	Capitol Expwy	Curtner	1.49	3	2	1	15:20 - 15:40	29	12	D	B	65	70	3770	840
72	SR 87	NB	Curtner	Almaden Rd	0.73	3	2	1	17:00 - 17:20	36	23	D	C	61	70	4400	1610
73	SR 87	NB	ALMADEN RD	Alma Ave	0.69	3	2	1	17:40 - 18:00	48	15	E	B	45	70	4320	1050
74	SR 87	NB	Alma Ave	I-280	0.90	3	2	1	16:40 - 17:00	33	20	D	C	64	70	4230	1400
75	SR 87	NB	I-280	Julian St	0.96	3	2	1	15:20 - 15:40	11	10	A	A	67	70	1480	700
76	SR 87	NB	Julian St	Coleman Ave	0.38	3	2	1	16:40 - 17:00	25	10	C	A	66	70	3300	700
414	SR 87	NB	Coleman Ave	Taylor St	0.41	3	2	1	17:00 - 17:20	18	7	B	A	67	70	2400	490
416	SR 87	NB	Taylor St	Skyport Dr	1.87	3	2	1	17:00 - 17:20	17	6	B	A	67	70	2270	420
418	SR 87	NB	Skyport Dr	US 101	0.67	3	2	1	17:40 - 18:00	18	4	B	A	67	70	2400	280
309.11	US 101	NB	SR 156	SR 129	1.78	2	2	0	18:20 - 18:40	24	0	C		66		3170	
309.1	US 101	NB	SR 129	Betabel Rd	1.61	2	2	0	15:40 - 16:00	18	0	B		67		2400	
309.09	US 101	NB	Betabel Rd	Bloomfield Ave	4.15	2	2	0	15:20 - 15:40	15	0	B		67		2000	
309.08	US 101	NB	Bloomfield Ave	Monterey Rd	1.85	2	2	0	17:00 - 17:20	22	0	C		66		2910	
309.07	US 101	NB	Monterey Rd	Pacheco Pass Hwy	1.11	3	3	0	17:40 - 18:00	11	0	A		67		2220	
309.06	US 101	NB	Pacheco Pass Hwy	Leavesley Rd	1.46	3	3	0	16:40 - 17:00	17	0	B		67		3400	

Table 3.8 2015 Freeway LOS – PM Peak Period

ID	Facility	Dir	From/To	From/To	Miles	Number of Lanes			Peak Photo Time	Max Density		LOS (Density)		Speed		Flow	
						Total	Mixed	HOV		Mixed	HOV	Mixed	HOV	Mixed	HOV	Mixed	HOV
309.05	US 101	NB	Leavesley Rd	Buena Vista Ave	1.60	3	3	0	15:40 - 16:00	20	0	C		66		3960	
309.04	US 101	NB	Buena Vista Ave	Masten Ave	1.16	3	3	0	15:20 - 15:40	17	0	B		67		3400	
309.03	US 101	NB	Masten Ave	San Martin Ave	2.17	3	3	0	17:40 - 18:00	15	0	B		67		3000	
309.02	US 101	NB	San Martin Ave	Tennant Ave	3.55	3	3	0	15:20 - 15:40	16	0	B		67		3200	
309.01	US 101	NB	Tennant Ave	East Dunne Ave	0.96	3	3	0	15:40 - 16:00	21	0	C		66		4160	
276	US 101	NB	East Dunne Ave	Cochrane Rd	1.82	3	3	0	15:20 - 15:40	25	0	C		66		4950	
277	US 101	NB	Cochrane Rd	Burnett Ave (Lane Drop)	0.87	4	3	1	15:20 - 15:40	20	9	C	A	66	70	3960	630
278	US 101	NB	Burnett Ave (Lane Drop)	Sheller Ave	2.57	4	3	1	17:20 - 17:40	17	26	B	C	67	70	3400	1820
279	US 101	NB	Sheller Ave	Lane Drop (SB)	4.32	4	3	1	17:20 - 17:40	16	11	B	A	67	70	3200	770
280	US 101	NB	Lane Drop (SB)	SR 85	1.00	4	3	1	15:40 - 16:00	18	13	B	B	67	70	3600	910
281	US 101	NB	SR 85	Bernal Rd	0.20	4	3	1	18:20 - 18:40	25	20	C	C	66	70	4950	1400
282	US 101	NB	Bernal Rd	Silver Creek Valley Rd	1.48	4	3	1	17:20 - 17:40	21	6	C	A	66	70	4160	420
283	US 101	NB	Silver Creek Valley Rd	Hellyer Ave	1.84	4	3	1	17:00 - 17:20	28	13	D	B	66	70	5510	910
284	US 101	NB	Hellyer Ave	Yerba Buena Rd	0.90	4	3	1	17:00 - 17:20	35	12	D	B	62	70	6510	840
285	US 101	NB	Yerba Buena Rd	Capitol Expwy	0.80	4	3	1	17:00 - 17:20	20	11	C	A	66	70	3960	770
286	US 101	NB	Capitol Expwy	Tully Rd	1.33	4	3	1	16:40 - 17:00	31	11	D	A	65	70	6050	770
287	US 101	NB	Tully Rd	Story Rd	1.46	4	3	1	16:40 - 17:00	26	9	C	A	66	70	5150	630
288	US 101	NB	Story Rd	I-280	0.38	4	3	1	17:00 - 17:20	15	10	B	A	67	70	3000	700
289	US 101	NB	I-280	Santa Clara St	0.88	4	3	1	15:40 - 16:00	20	9	C	A	66	70	3960	630
290	US 101	NB	Santa Clara St	McKee Rd	0.39	4	3	1	15:40 - 16:00	23	10	C	A	66	70	4560	700
291	US 101	NB	McKee Rd	Oakland Rd	1.58	4	3	1	15:20 - 15:40	24	5	C	A	66	70	4760	350
292	US 101	NB	Oakland Rd	I-880	0.57	4	3	1	16:40 - 17:00	18	7	B	A	67	70	3600	490

Table 3.8 2015 Freeway LOS – PM Peak Period

ID	Facility	Dir	From/To	From/To	Miles	Number of Lanes			Peak Photo Time	Max Density		LOS (Density)		Speed		Flow	
						Total	Mixed	HOV		Mixed	HOV	Mixed	HOV	Mixed	HOV	Mixed	HOV
293	US 101	NB	I-880	Old Bayshore Hwy	0.50	4	3	1	16:20 - 16:40	10	4	A	A	67	70	2010	280
294	US 101	NB	Old Bayshore Hwy	N. First St	0.49	4	3	1	15:20 - 15:40	19	14	C	B	66	70	3770	980
295	US 101	NB	N. First St	Guadalupe Pkwy	0.64	4	3	1	15:20 - 15:40	15	27	B	D	67	70	3000	1890
296	US 101	NB	Guadalupe Pkwy	De La Cruz Blvd	0.77	4	3	1	17:00 - 17:20	21	9	C	A	66	70	4160	630
297	US 101	NB	De La Cruz Blvd	Montaque Expwy/Santa Tomas Expwy	1.28	4	3	1	17:00 - 17:20	28	7	D	A	66	70	5510	490
298	US 101	NB	Montaque Expwy/Santa Tomas Expwy	Bower Ave/Great America Pkwy	0.75	4	3	1	17:20 - 17:40	26	8	C	A	66	70	5850	560
299	US 101	NB	Bower Ave/Great American Pkwy	Lawrence Expwy	1.12	4	3	1	17:20 - 17:40	31	13	D	B	65	70	6050	910
300	US 101	NB	Lawrence Expwy	N. Fair Oaks Ave	0.98	4	3	1	17:00 - 17:20	28	9	D	A	66	70	5510	630
301	US 101	NB	N. Fair Oaks Ave	N. Mathilda Ave	0.85	4	3	1	17:00 - 17:20	30	14	D	B	65	70	5850	980
302	US 101	NB	N. Mathilda Ave	SR 237	0.35	4	3	1	17:00 - 17:20	23	14	C	B	66	70	4560	980
303	US 101	NB	SR 237	Moffett Blvd	1.68	4	3	1	17:40 - 18:00	30	19	D	C	65	70	5850	1330
304	US 101	NB	Moffett Blvd	SR 85	0.33	4	3	1	16:20 - 16:40	28	21	D	C	66	70	5510	1470
305	US 101	NB	SR 85	N. Shoreline Blvd	0.38	5	4	1	16:40 - 17:00	47	28	E	D	46	70	8650	1960
306	US 101	NB	N. Shoreline Blvd	Rengstorff Ave	1.01	4	3	1	16:40 - 17:00	94	19	F	C	16	70	4520	2660
307	US 101	NB	Rengstorff Ave	San Antonio Ave	0.71	4	3	1	16:40 - 17:00	95	21	F	C	15	70	4280	2940
308	US 101	NB	San Antonio Ave	Oregon Expwy	1.85	4	3	1	17:00 - 17:20	74	40	F	D	24	60	5330	3840
309	US 101	NB	Oregon Expwy	Embarcadero Rd	0.15	4	3	1	16:20 - 16:40	99	61	F	F	14	40	4160	2440
88	SR 237	EB	El Camino Real	SR 85	0.40	2	2	0	17:00 - 17:20	12	0	B		67		1600	
87	SR 237	EB	SR 85	Central Pkwy	0.63	2	2	0	15:40 - 16:00	26	0	C		66		3440	
86	SR 237	EB	Central Pkwy	Maude Ave	0.80	2	2	0	17:40 - 18:00	25	0	C		66		3300	
85	SR 237	EB	Maude Ave	US 101	0.71	2	2	0	17:20 - 1740	93	0	F		16		2980	
84	SR 237	EB	US 101	Mathilda Ave	0.53	2	2	0	16:20 - 16:40	94	0	F		16		3010	

Table 3.8 2015 Freeway LOS – PM Peak Period

ID	Facility	Dir	From/To	From/To	Miles	Number of Lanes			Peak Photo Time	Max Density		LOS (Density)		Speed		Flow	
						Total	Mixed	HOV		Mixed	HOV	Mixed	HOV	Mixed	HOV	Mixed	HOV
83	SR 237	EB	Mathilda Ave	N. Fair Oaks Ave	0.96	3	2	1	17:20 - 17:40	92	34	F	D	16	70	2950	2380
82	SR 237	EB	N. Fair Oaks Ave	Lawrence Expwy	0.63	3	2	1	16:20 - 16:40	100	83	F	F	14	20	2800	1660
81	SR 237	EB	Lawrence Expwy	Great America Pkwy	1.27	3	2	1	17:20 - 17:40	82	63	F	F	20	40	3280	2520
80	SR 237	EB	Great America Pkwy	N. First St	1.00	3	2	1	18:00 - 18:40	97	65	F	F	15	30	2910	1950
79	SR 237	EB	N. First St	Zanker Rd	1.61	3	2	1	17:00 - 17:20	65	41	F	D	29	60	3770	2460
78	SR 237	EB	Zanker Rd	McCarthy Blvd	0.94	3	2	1	17:00 - 17:20	35	30	D	D	62	70	4340	2100
77	SR 237	EB	McCarthy Blvd	I-880	0.40	3	2	1	16:20 - 16:40	64	27	F	D	30	70	3960	1890
130.1	I-280	EB	Alpine Rd	Page Mill Rd	2.25	4	4	0	16:40 - 17:00	83	0	F		20		6640	
131	I-280	EB	Page Mill Rd	La Barranca Rd	1.73	4	4	0	17:20 - 17:40	71	0	F		26		7390	
132	I-280	EB	La Barranca Rd	El Monte Rd	1.60	4	4	0	16:20 - 16:40	71	0	F		26		7390	
133	I-280	EB	El Monte Rd	Magdalena Ave	0.95	4	4	0	16:20 - 16:40	80	0	F		21		6720	
134	I-280	EB	Magdalena Ave	Foothill Expwy	2.65	4	3	1	15:20 - 15:40	33	23	D	C	64	70	6340	1610
135	I-280	EB	Foothill Expwy	SR 85	0.70	4	3	1	15:20 - 15:40	35	20	D	C	62	70	6510	1400
136	I-280	EB	SR 85	De Anza Blvd	1.31	4	3	1	17:20 - 17:40	84	59	F	F	19	40	4760	2360
137	I-280	EB	De Anza Blvd	Wolfe Rd	1.06	4	3	1	18:20 - 18:40	83	53	F	E	20	40	4980	2120
138	I-280	EB	Wolfe Rd	Lawrence Expwy	1.24	4	3	1	17:20 - 17:40	63	56	F	E	31	40	5860	2240
139	I-280	EB	Lawrence Expwy	Saratoga Ave	1.19	4	3	1	18:00 - 18:20	72	55	F	E	25	40	5400	2200
140	I-280	EB	Saratoga Ave	Winchester Blvd	1.37	4	3	1	17:20 - 17:40	70	46	F	D	26	50	5460	2300
141	I-280	EB	Winchester Blvd	I-880	0.55	4	3	1	17:20 - 17:40	89	67	F	F	18	30	4810	2010
142	I-280	EB	I-880	Meridian Ave	1.40	4	3	1	17:20 - 17:40	110	83	F	F	11	20	3630	1660
143	I-280	EB	Meridian Ave	Bird Ave	1.07	4	4	0	17:20 - 17:40	99	0	F		14		5550	
144	I-280	EB	Bird Ave	SR 87	0.35	4	4	0	18:20 - 18:40	71	0	F		26		7390	

Table 3.8 2015 Freeway LOS – PM Peak Period

ID	Facility	Dir	From/To	From/To	Miles	Number of Lanes			Peak Photo Time	Max Density		LOS (Density)		Speed		Flow	
						Total	Mixed	HOV		Mixed	HOV	Mixed	HOV	Mixed	HOV	Mixed	HOV
145	I-280	EB	SR 87	10th St	1.20	4	4	0	17:00 - 17:20	72	0	F		25		7200	
146	I-280	EB	10th St	McLaughlin Ave	0.92	4	4	0	17:00 - 17:20	42	0	D		52		8740	
147	I-280	EB	McLaughlin Ave	US 101	0.37	4	4	0	17:20 - 17:40	28	0	D		66		7340	
51	I-680	NB	US 101	King Rd	0.40	4	4	0	17:40 - 18:00	22	0	C		66		5810	
52	I-680	NB	King Rd	Capitol Expwy	1.00	4	4	0	17:00 - 17:20	32	0	D		64		8200	
53	I-680	NB	Capitol Expwy	Alum Rock Ave	0.31	4	4	0	17:00 - 17:20	36	0	D		61		8790	
54	I-680	NB	Alum Rock Ave	McKee Rd	0.64	4	4	0	16:20 - 16:40	23	0	C		66		6080	
55	I-680	NB	McKee Rd	Berryessa Rd	1.47	4	4	0	15:20 - 15:40	22	0	C		66		5810	
56	I-680	NB	Berryessa Rd	Hostetter Rd	0.94	4	4	0	15:20 - 15:40	18	0	B		67		4790	
57	I-680	NB	Hostetter Rd	Capitol Ave	0.31	4	4	0	16:20 - 16:40	21	0	C		66		5550	
58	I-680	NB	Capitol Ave	Montague Expwy	1.00	4	4	0	17:00 - 17:20	18	0	B		67		4790	
59	I-680	NB	Montague Expwy	Yosemite Dr	0.77	4	4	0	15:20 - 15:40	21	0	C		66		5550	
60	I-680	NB	Yosemite Dr	Calaveras Blvd/SR 237	0.69	4	4	0	18:20 - 18:40	19	0	C		66		5020	
61	I-680	NB	Calaveras Blvd/SR 237	Jacklin Rd	0.85	3	3	0	18:00 - 18:20	44	0	D		50		6600	
62	I-680	NB	Jacklin Rd	Scott Creek Rd	1.57	3	3	0	18:00 - 18:20	48	0	E		45		6480	
12	I-880	NB	I-280	Stevens Cr	0.41	3	3	0	16:20 - 16:40	17	0	B		67		3400	
11	I-880	NB	Stevens Cr	N. Bascom Ave	0.84	3	3	0	17:40 - 18:00	54	0	E		38		6160	
10	I-880	NB	N. Bascom Ave	The Alameda	0.82	3	3	0	17:40 - 18:00	86	0	F		19		4910	
9	I-880	NB	The Alameda	Coleman Ave	0.59	3	3	0	17:00 - 17:20	103	0	F		13		4020	
8	I-880	NB	Coleman Ave	SR 87	0.51	3	3	0	17:00 - 17:20	76	0	F		23		5250	
7	I-880	NB	SR 87	N. 1st St	0.40	3	3	0	16:20 - 16:40	71	0	F		26		5540	

Table 3.8 2015 Freeway LOS – PM Peak Period

ID	Facility	Dir	From/To	From/To	Miles	Number of Lanes			Peak Photo Time	Max Density		LOS (Density)		Speed		Flow	
						Total	Mixed	HOV		Mixed	HOV	Mixed	HOV	Mixed	HOV	Mixed	HOV
6	I-880	NB	N. 1st St	US 101	0.49	3	3	0	16:20 - 16:40	49	0	E		45		6480	
5	I-880	NB	US 101	E. Brokaw Rd	1.29	3	3	0	17:40 - 18:00	22	10	C	A	66	70	4360	700
4	I-880	NB	E. Brokaw Rd	Montague Expwy	1.35	3	3	0	18:00 - 18:20	32	23	D	C	64	70	6150	1610
3	I-880	NB	Montague Expwy	Great Mall Pkwy	0.98	3	3	0	16:00 - 16:20	32	23	D	C	64	70	6150	1610
2	I-880	NB	Great Mall Pkwy	SR 237	0.72	3	3	0	15:20 - 15:40	32	13	D	B	64	70	6150	910
1	I-880	NB	SR 237	Dixon Landing	1.99	4	3	1	17:00 - 17:20	42	40	D	D	52	60	7430	2400
32	SR 17	SB	I-280	Hamilton	1.61	3	3	0	15:40 - 16:00	33	0	D		64		6340	
33	SR 17	SB	Hamilton	San Tomas/Camden	1.82	3	3	0	16:00 - 16:20	30	0	D		65		6630	
34	SR 17	SB	San Tomas/Camden	SR 85	1.17	3	3	0	16:00 - 16:20	28	0	D		66		5510	
35	SR 17	SB	SR 85	Lark Ave	0.46	2	2	0	15:20 - 15:40	52	0	E		40		4160	
36	SR 17	SB	Lark Ave	Saratoga	1.81	2	2	0	17:00 - 17:20	58	0	E		35		4060	
37	SR 17	SB	Saratoga	Bear Creek	2.90	2	2	0	16:00 - 16:20	44	0	D		50		4400	
38	SR 17	SB	Bear Creek	Summit Rd	4.06	2	2	0	16:00 - 16:20	45	0	D		48		4320	
185	SR 85	SB	US 101	Central Expwy	1.24	3	2	1	17:20 - 17:40	39	43	D	D	57	60	4450	2580
186	SR 85	SB	Central Expwy	SR 237	0.47	3	2	1	17:20 - 17:40	89	79	F	F	18	30	3210	2370
187	SR 85	SB	SR 237	EL Camino Real	0.41	4	3	1	16:40 - 17:00	86	58	F	E	19	40	4090	2320
188	SR 85	SB	EL Camino Real	W. Fremont Ave	1.89	3	2	1	16:00 - 16:20	79	46	F	D	22	50	3480	2300
189	SR 85	SB	W. Fremont Ave	W. Homestead Rd	1.00	3	2	1	15:40 - 16:00	56	36	E	D	36	70	4040	2520
190	SR 85	SB	W. Homestead Rd	I-280	0.41	3	2	1	15:40 - 16:00	31	26	D	C	65	70	4030	1820
191	SR 85	SB	I-280	Stevens Creek Blvd	0.75	3	2	1	17:20 - 17:40	100	106	F	F	14	20	3360	2120
192	SR 85	SB	Stevens Creek Blvd	Saratoga-Sunnyvale Rd	1.83	3	2	1	17:20 - 17:40	102	71	F	F	13	30	2660	2130

Table 3.8 2015 Freeway LOS – PM Peak Period																	
						Number of Lanes				Max Density		LOS (Density)		Speed		Flow	
ID	Facility	Dir	From/To	From/To	Miles	Total	Mixed	HOV	Peak Photo Time	Mixed	HOV	Mixed	HOV	Mixed	HOV	Mixed	HOV
193	SR 85	SB	Saratoga-Sunnyvale Rd	Saratoga Ave	2.19	3	2	1	17:20 - 17:40	77	45	F	D	23	50	3550	2250
194	SR 85	SB	Saratoga Ave	Winchester Blvd	2.68	3	2	1	17:00 - 17:20	62	44	F	D	32	50	3970	2200
195	SR 85	SB	Winchester Blvd	SR 17	0.50	3	2	1	17:00 - 17:20	79	44	F	D	22	50	3480	2200
196	SR 85	SB	SR 17	S. Bascom Ave	0.27	3	2	1	18:00 - 18:20	131	33	F	D	7	70	1840	2310
197	SR 85	SB	S. Bascom Ave	Union Ave	1.13	3	2	1	16:00 - 16:20	102	48	F	E	13	50	2660	2400
198	SR 85	SB	Union Ave	Camden Ave	1.17	3	2	1	16:00 - 16:20	61	42	F	D	32	60	3910	2520
199	SR 85	SB	Camden Ave	Almaden Expwy	1.97	3	2	1	17:00 - 17:20	46	30	D	D	47	70	4330	1960
200	SR 85	SB	Almaden Expwy	SR 87	0.94	3	2	1	15:40 - 16:00	22	22	C	C	66	70	2910	1540
201	SR 85	SB	SR 87	Blossom Hill Rd	1.27	3	2	1	17:40 - 18:00	46	28	D	D	47	70	4330	1960
202	SR 85	SB	Blossom Hill Rd	Cottle Rd	1.96	3	2	1	17:00 - 17:20	31	21	D	C	65	70	4030	1470
203	SR 85	SB	Cottle Rd	US 101	1.79	3	2	1	15:40 - 16:00	23	17	C	B	66	70	3040	1190
419	SR 87	SB	US 101	Skyport Dr	0.67	3	2	1	17:40 - 18:00	109	32	F	D	12	70	2620	2240
417	SR 87	SB	Skyport Dr	Taylor St	1.87	3	2	1	17:40 - 18:00	96	21	F	C	15	70	2880	1470
415	SR 87	SB	Taylor St	Coleman St	0.41	3	2	1	18:20 - 18:40	91	36	F	D	17	70	3100	2520
69	SR 87	SB	Coleman Ave	Julian St	0.38	3	2	1	18:20 - 18:40	77	34	F	D	23	70	3550	2380
68	SR 87	SB	Julian St	I-280	0.96	3	2	1	17:00 - 17:20	80	39	F	D	21	60	3360	2380
67	SR 87	SB	I-280	Alma Ave	0.90	3	2	1	17:00 - 17:20	95	47	F	E	15	50	2850	2350
66	SR 87	SB	Alma Ave	Almaden Rd	0.69	3	2	1	16:00 - 16:20	80	34	F	D	21	70	3360	2380
65	SR 87	SB	Almaden Rd	Curtner	0.73	3	2	1	17:40 - 18:00	68	52	F	E	15	50	2850	2350
64	SR 87	SB	Curtner	Capitol Expwy	1.49	3	2	1	16:40 - 17:00	48	24	E	C	45	70	4320	1680
63	SR 87	SB	Capitol Expwy	SR 85	1.09	3	2	1	16:20 - 16:40	29	17	D	B	65	70	3770	1190

Table 3.8 2015 Freeway LOS – PM Peak Period

ID	Facility	Dir	From/To	From/To	Miles	Number of Lanes			Peak Photo Time	Max Density		LOS (Density)		Speed		Flow	
						Total	Mixed	HOV		Mixed	HOV	Mixed	HOV	Mixed	HOV	Mixed	HOV
275	US 101	SB	Embarcadero Rd	Oregon Expwy	0.15	4	3	1	17:00 - 17:20	103	41	F	D	13	60	4020	2460
274	US 101	SB	Oregon Expwy	San Antonio Ave	1.85	4	3	1	17:00 - 17:20	83	29	F	D	20	70	4980	3250
273	US 101	SB	San Antonio Ave	Rengstorff Ave	0.71	4	3	1	17:40 - 18:00	128	21	F	C	8	70	3080	2940
272	US 101	SB	Rengstorff Ave	N. Shoreline Blvd	1.01	4	3	1	17:40 - 18:00	77	26	F	C	23	70	5320	3640
271	US 101	SB	N. Shoreline Blvd	SR 85	0.38	4	3	1	17:20 - 17:40	44	45	D	D	50	50	6600	2250
270	US 101	SB	SR 85	Moffett Blvd	0.33	4	3	1	17:20 - 17:40	87	48	F	E	18	50	4700	2400
269	US 101	SB	Moffett Blvd	SR 237	1.68	4	3	1	17:20 - 17:40	74	52	F	E	24	40	5330	2080
268	US 101	SB	SR 237	N. Mathilda Ave	0.35	4	3	1	16:20 - 16:40	90	62	F	F	17	40	4590	2480
267	US 101	SB	N. Mathilda Ave	N. Fair Oaks Ave	0.85	4	3	1	16:20 - 16:40	63	61	F	F	31	40	5860	2440
266	US 101	SB	N. Fair Oaks Ave	Lawrence Expwy	0.98	4	3	1	15:20 - 15:40	90	90	F	F	17	20	4590	1800
265	US 101	SB	Lawrence Expwy	Bower Ave/Great American Pkwy	1.12	4	3	1	16:20 - 16:40	106	92	F	F	12	20	3820	1840
264	US 101	SB	Bower Ave/Great American Pkwy	Montaque Expwy/Santa Tomas Expwy	0.75	4	3	1	15:20 - 15:40	113	101	F	F	11	20	3730	2020
263	US 101	SB	Montaque Expwy/Santa Tomas Expwy	De La Cruz Blvd	1.28	4	3	1	16:40 - 17:00	102	76	F	F	13	30	3980	2280
262	US 101	SB	De La Cruz Blvd	Guadalupe Pkwy	0.77	4	3	1	18:20 - 18:40	53	35	E	D	39	70	6210	2450
261	US 101	SB	Guadalupe Pkwy	N. First St	0.64	4	3	1	18:20 - 18:40	89	89	F	F	18	20	4810	1780
260	US 101	SB	N. First St	Old Bayshore Hwy	0.49	4	3	1	17:00 - 17:20	149	79	F	F	6	30	2690	2370
259	US 101	SB	Old Bayshore Hwy	I-880	0.50	4	3	1	17:00 - 17:20	132	72	F	F	7	30	2780	2160
258	US 101	SB	I-880	Oakland Rd	0.57	4	3	1	17:40 - 18:00	106	91	F	F	12	20	3820	1820
257	US 101	SB	Oakland Rd	McKee Rd	1.58	4	3	1	17:20 - 17:40	49	34	E	D	43	70	6330	2380
256	US 101	SB	McKee Rd	Santa Clara St	0.39	4	3	1	15:40 - 16:00	30	28	D	D	65	70	5850	1960
255	US 101	SB	Santa Clara St	I-280	0.88	4	3	1	16:20 - 16:40	35	21	D	C	62	70	6510	1470
254	US 101	SB	I-280	Story Rd	0.38	4	3	1	17:20 - 17:40	29	23	D	C	65	70	5660	1610

Table 3.8 2015 Freeway LOS – PM Peak Period

ID	Facility	Dir	From/To	From/To	Miles	Number of Lanes			Peak Photo Time	Max Density		LOS (Density)		Speed		Flow	
						Total	Mixed	HOV		Mixed	HOV	Mixed	HOV	Mixed	HOV	Mixed	HOV
253	US 101	SB	Story Rd	Tully Rd	1.46	4	3	1	17:40 - 18:00	43	27	D	D	51	70	6580	1890
252	US 101	SB	Tully Rd	Capitol Expwy	1.33	4	3	1	17:00 - 17:20	29	21	D	C	65	70	5660	1610
251	US 101	SB	Capitol Expwy	Yerba Buena Rd	0.80	4	3	1	16:40 - 17:00	21	16	C	B	66	70	4160	1120
250	US 101	SB	Yerba Buena Rd	Hellyer Ave	0.90	4	3	1	17:00 - 17:20	30	21	D	C	65	70	5850	1470
249	US 101	SB	Hellyer Ave	Silver Creek Valley Rd	1.84	4	3	1	15:40 - 16:00	28	17	D	B	66	70	5510	1190
248	US 101	SB	Silver Creek Valley Rd	Bernal Rd	1.48	4	3	1	15:40 - 16:00	18	14	B	B	67	70	3600	980
247	US 101	SB	Bernal Rd	SR 85	0.20	4	3	1	15:20 - 15:40	29	20	D	C	65	70	5660	1400
246	US 101	SB	SR 85	Lane Drop (SB)	1.00	5	4	1	16:20 - 16:40	28	29	D	D	66	70	7340	2030
245	US 101	SB	Lane Drop (SB)	Sheller Ave	4.32	4	3	1	15:40 - 16:00	27	26	D	C	66	70	5310	1820
244	US 101	SB	Sheller Ave	Burnett Ave (Lane Drop)	2.57	4	3	1	16:40 - 17:00	61	56	F	E	32	40	5860	2240
243	US 101	SB	Burnett Ave (Lane Drop)	Cochrane Rd	0.87	3	3	0	16:40 - 17:00	76	0	F		23		5250	
242	US 101	SB	Cochrane Rd	East Dunne Ave	1.82	3	3	0	16:20 - 16:40	43	0	D		51		6580	
275.01	US 101	SB	East Dunne Ave	Tennant Ave	0.96	3	3	0	16:20 - 16:40	46	0	D		47		6490	
275.02	US 101	SB	Tennant Ave	San Martin Ave	3.55	3	3	0	17:20 - 17:40	47	0	E		46		6490	
275.03	US 101	SB	San Martin Ave	Masten Ave	2.17	3	3	0	15:40 - 16:00	31	0	D		65		6050	
275.04	US 101	SB	Masten Ave	Buena Vista Ave	1.16	3	3	0	17:20 - 17:40	25	0	C		66		4950	
275.05	US 101	SB	Buena Vista Ave	Leavesley Rd	1.60	3	3	0	15:20 - 15:40	26	0	C		66		5150	
275.06	US 101	SB	Leavesley Rd	Pacheco Pass Hwy	1.46	3	3	0	16:40 - 17:00	23	0	C		66		4560	
275.07	US 101	SB	Pacheco Pass Hwy	Monterey Rd	1.11	3	3	0	15:40 - 16:00	35	0	D		62		6510	
275.08	US 101	SB	Monterey Rd	Bloomfield Ave	1.85	2	2	0	17:20 - 17:40	76	0	F		23		3500	
275.09	US 101	SB	Bloomfield Ave	Betabel Rd	4.15	2	2	0	17:20 - 17:40	21	0	C		66		2780	
275.1	US 101	SB	Betabel Rd	SR 129	1.61	2	2	0	15:40 - 16:00	22	0	C		66		2910	

Table 3.8 2015 Freeway LOS – PM Peak Period																	
						Number of Lanes				Max Density		LOS (Density)		Speed		Flow	
ID	Facility	Dir	From/To	From/To	Miles	Total	Mixed	HOV	Peak Photo Time	Mixed	HOV	Mixed	HOV	Mixed	HOV	Mixed	HOV
275.11	US 101	SB	SR 129	SR 156	1.78	2	2	0	15:20 - 15:40	14	0	B		67		1870	
89	SR 237	WB	I-880	McCarthy Blvd	0.40	3	2	1	17:40 - 18:00	18	10	B	A	67	70	2400	700
90	SR 237	WB	McCarthy Blvd	Zanker Rd	0.94	3	2	1	18:00 - 18:20	27	18	D	B	66	70	4250	1260
91	SR 237	WB	Zanker Rd	N. First St	1.61	3	2	1	17:20 - 17:40	41	15	D	B	54	70	4430	1050
92	SR 237	WB	N. First St	Great America Pkwy	1.00	3	2	1	17:00 - 17:20	37	12	D	B	59	70	4370	840
93	SR 237	WB	Great America Pkwy	Lawrence Expwy	1.27	3	2	1	17:20 - 17:40	32	10	D	A	64	70	4100	700
94	SR 237	WB	Lawrence Expwy	N. Fair Oaks Ave	0.63	3	2	1	17:20 - 17:40	58	45	E	D	35	50	4060	2250
95	SR 237	WB	N. Fair Oaks Ave	Mathilda Ave	0.96	3	3	0	17:40 - 18:00	58	0	E		35		6090	
96	SR 237	WB	Mathilda Ave	US 101	0.53	2	2	0	17:40 - 18:00	33	0	D		64		4230	
97	SR 237	WB	US 101	Maude Ave	0.71	2	2	0	17:40 - 18:00	53	0	E		39		4140	
98	SR 237	WB	Maude Ave	Central Pkwy	0.80	2	2	0	17:40 - 18:00	73	0	F		25		3650	
99	SR 237	WB	Central Pkwy	SR 85	0.63	2	2	0	18:00 - 18:20	59	0	F		34		4020	
100	SR 237	WB	SR 85	El Camino Real	0.40	2	2	0	17:20 - 17:40	32	0	D		64		4100	
130	I-280	WB	US 101	McLaughlin Ave	0.37	4	4	0	15:20 - 15:40	23	0	C		66		6080	
129	I-280	WB	McLaughlin Ave	10th St	0.92	4	4	0	15:20 - 15:40	27	0	D		66		7080	
128	I-280	WB	10th St	SR 87	1.20	4	4	0	17:00 - 17:20	25	0	C		66		6600	
127	I-280	WB	SR 87	Bird Ave	0.35	4	4	0	18:00 - 18:20	47	0	E		46		8650	
126	I-280	WB	Bird Ave	Meridian Ave	1.07	4	4	0	17:20 - 17:40	48	0	E		45		8640	
125	I-280	WB	Meridian Ave	I-880	1.40	4	3	1	17:20 - 17:40	25	14	C	B	66	70	5610	980
124	I-280	WB	I-880	Winchester Blvd	0.55	4	3	1	17:20 - 17:40	37	20	D	C	59	70	6550	1400
123	I-280	WB	Winchester Blvd	Saratoga Ave	1.37	4	3	1	18:20 - 18:40	42	13	D	B	52	70	6560	910

Table 3.8 2015 Freeway LOS – PM Peak Period

ID	Facility	Dir	From/To	From/To	Miles	Number of Lanes			Peak Photo Time	Max Density		LOS (Density)		Speed		Flow	
						Total	Mixed	HOV		Mixed	HOV	Mixed	HOV	Mixed	HOV	Mixed	HOV
122	I-280	WB	Saratoga Ave	Lawrence Expwy	1.19	4	3	1	15:20 - 15:40	25	17	C	B	66	70	4950	1190
121	I-280	WB	Lawrence Expwy	Wolfe Rd	1.24	4	3	1	18:00 - 18:20	24	9	C	A	66	70	4760	630
120	I-280	WB	Wolfe Rd	De Anza Blvd	1.06	4	3	1	18:00 - 18:20	27	13	D	B	66	70	5310	910
119	I-280	WB	De Anza Blvd	SR 85	1.31	4	3	1	17:00 - 17:20	21	8	C	A	66	70	4160	560
118	I-280	WB	SR 85	Foothill Expwy	0.70	4	3	1	15:40 - 16:00	20	10	C	A	66	70	3960	700
117	I-280	WB	Foothill Expwy	Magdalena Ave	2.65	4	3	1	17:00 - 17:20	24	13	C	B	66	70	4760	910
116	I-280	WB	Magdalena Ave	El Monte Rd	0.95	4	4	0	18:20 - 18:40	22	0	C		66		5810	
115	I-280	WB	El Monte Rd	La Barranca Rd	1.60	4	4	0	16:40 - 17:00	20	0	C		66		5280	
114	I-280	WB	La Barranca Rd	Page Mill Rd	1.73	4	4	0	17:20 - 17:40	23	0	C		66		6080	
113.1	I-280	WB	Page Mill Rd	Alpine Rd	2.25	4	4	0	17:20 - 17:40	69	0	F		27		7460	
50	I-680	SB	Scott Creek Rd	Jacklin Rd	1.57	4	3	1	17:40 - 18:00	22	5	C	A	66	70	4360	350
49	I-680	SB	Jacklin Rd	Calaveras Blvd/SR 237	0.85	4	3	1	16:40 - 17:00	29	7	D	A	65	70	5660	490
48	I-680	SB	Calaveras Blvd/SR 237	Yosemite Dr	0.69	4	4	0	18:00 - 18:20	55	0	E		37		8140	
47	I-680	SB	Yosemite Dr	Montague Expwy	0.77	4	4	0	18:00 - 18:20	71	0	F		26		7390	
46	I-680	SB	Montague Expwy	Capitol Ave	1.00	4	4	0	18:00 - 18:20	82	0	F		20		6560	
45	I-680	SB	Capitol Ave	Hostetter Rd	0.31	4	4	0	17:00 - 17:20	87	0	F		18		6270	
44	I-680	SB	Hostetter Rd	Berryessa Rd	0.94	4	4	0	17:40 - 18:00	59	0	F		34		8030	
43	I-680	SB	Berryessa Rd	McKee Rd	1.47	4	4	0	17:40 - 18:00	45	0	D		48		8640	
42	I-680	SB	McKee Rd	Alum Rock Ave	0.64	4	4	0	17:40 - 18:00	51	0	E		41		8370	
41	I-680	SB	Alum Rock Ave	Capitol Expwy	0.31	4	4	0	16:20 - 16:40	27	0	D		66		7080	
40	I-680	SB	Capitol Expwy	King Rd	1.00	4	4	0	15:20 - 15:40	24	0	C		66		6970	

Table 3.8 2015 Freeway LOS – PM Peak Period																	
						Number of Lanes				Max Density		LOS (Density)		Speed		Flow	
ID	Facility	Dir	From/To	From/To	Miles	Total	Mixed	HOV	Peak Photo Time	Mixed	HOV	Mixed	HOV	Mixed	HOV	Mixed	HOV
39	I-680	SB	King Rd	US 101	0.40	4	4	0	16:40 - 17:00	18	0	B		67		4790	
13	I-880	SB	Dixon Landing	SR 237	1.99	4	3	1	15:40 - 16:00	24	21	C	C	66	70	5390	1470
14	I-880	SB	SR 237	Great Mall Pkwy	0.72	3	3	0	16:00 - 16:20	21	13	C	B	66	70	4160	910
15	I-880	SB	Great Mall Pkwy	Montague Expwy	0.98	3	3	0	17:20 - 17:40	37	21	D	C	59	70	6550	1470
16	I-880	SB	Montague Expwy	E. Brokaw Rd	1.35	3	3	0	17:20 - 17:40	86	42	F	D	19	60	4910	2520
17	I-880	SB	E. Brokaw Rd	US 101	1.29	3	3	0	17:20 - 17:40	83	50	F	E	20	50	4980	2500
18	I-880	SB	US 101	N. 1st St	0.49	3	3	0	18:00 - 18:20	97	0	F		15		4370	
19	I-880	SB	N. 1st St	SR 87	0.40	3	3	0	17:20 - 17:40	71	0	F		26		5540	
20	I-880	SB	SR 87	Coleman Ave	0.51	3	3	0	18:00 - 18:20	91	0	F		17		4650	
21	I-880	SB	Coleman Ave	The Alameda	0.59	3	3	0	18:00 - 18:20	90	0	F		17		4590	
22	I-880	SB	The Alameda	N. Bascom Ave	0.82	3	3	0	18:00 - 18:20	78	0	F		22		5150	
23	I-880	SB	N. Bascom Ave	Stevens Cr	0.84	3	3	0	18:00 - 18:20	55	0	E		37		6110	
24	I-880	SB	Stevens Cr	I-280	0.41	3	3	0	17:40 - 18:00	26	0	C		66		5150	

FREEWAY GATEWAY COUNTS

Santa Clara County has, in effect, four "gateways." These gateways are the locations through which traffic from other parts of the region enter and exit Santa Clara County. The four gateways and the freeways that serve them are:

- **Peninsula**: This gateway connects Santa Clara County to destinations on the peninsula including San Mateo County and San Francisco. The freeways serving this gateway are US 101 and I-280.
- **East Bay**: Connecting Santa Clara County to the East Bay counties of Alameda and Contra Costa. This connection is primarily served by I-680 and I-880.
- **Santa Cruz**: This gateway connects to the southwest and includes Santa Cruz County. SR 17 is the primary freeway connection.
- **Southern**: The fourth gateway connects Santa Clara County to the southern counties of San Benito and Monterey. This connection is primarily served by US 101.

These four gateways are served by six (6) freeways. In addition to the aerial photography data, direct ground traffic counts were collected at these freeway locations at or near the county line. Observations were made using video recording techniques with manual counts of vehicles conducted via review of the videos. Counts were collected from 6:30 AM to 9:30 AM and from 4:00 PM to 7:00 PM in each direction on September 14, 2015 or September 17, 2015.

METHODOLOGY

Direct ground traffic counts are collected each year at these six freeway gateway locations at or near the county line. Vehicle counts are recorded in 15-minute intervals from 6:30 AM to 9:30 AM and 4:00 PM to 7:00 PM in each direction on a Tuesday, Wednesday or Thursday during the month of September. The one-hour period with the greatest vehicle volume recorded is considered the peak hour. The following figures and analyses in this section are based on peak hour volumes.

Gateway counts were collected at the freeway locations specified. To determine total gateway flow, a comprehensive count is needed to include urban arterials and rural roads that also carry vehicles across the county line.

SPEED-THROUGHPUT RELATIONSHIP

Traffic engineering theory states that freeways carry the highest volumes of traffic, or achieve close to optimal flow when traffic speeds are around 30 to 35 miles per hour. At this speed, a combination of moderate speed and high vehicle density results in more vehicles passing given a count location. Above 35 miles per hour, the increasing gap between speeding vehicles decreases vehicle density and therefore, the flow rate. Below this speed, traffic is denser but the slower speeds mean fewer vehicles are passing the count location. This results in increased vehicle density despite lower vehicle counts.

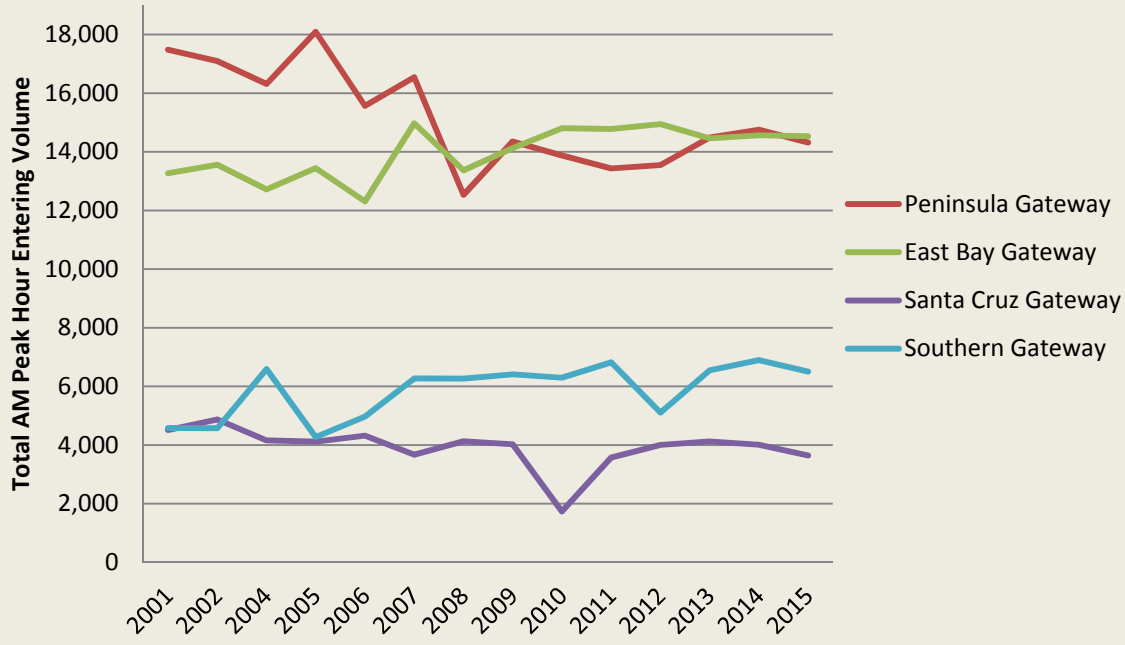
When considering the relationship between vehicle speed and vehicle volume, it should be noted that vehicle volume alone is not indicative of a change in roadway operations. Rather, increased vehicle volumes may reflect travel speeds that are approaching optimal flow, or speeds around 30-35 miles per hour.

AM PEAK HOUR INFLOW

The total inflow gateway volumes during the AM peak hour decreased by 3% over 2014 volumes. Total outflow volumes increased by 4.9% overall. The ratio of inflow to outflow during the AM peak hour changes from 1.45 in 2014 to 1.35 in 2015. These numbers account only for the volumes on freeways at each gateway and are not intended as total gateway flows.

Figure 3.12 shows how AM inflows have varied over the last 15 years of data collection. As this figure shows, the Peninsula and the East Bay gateways have remained fairly consistent in recent years compared to findings before about 2008. The Santa Cruz and Southern gateways have also been fairly consistent but had unusual drops in 2010 and 2012, respectively. As this figure shows, the Peninsula and the East Bay gateways have remained fairly consistent in recent years compared to findings before about 2008. The Santa Cruz and Southern gateways have also been fairly consistent but had unusual drops in 2010 and 2012, respectively.

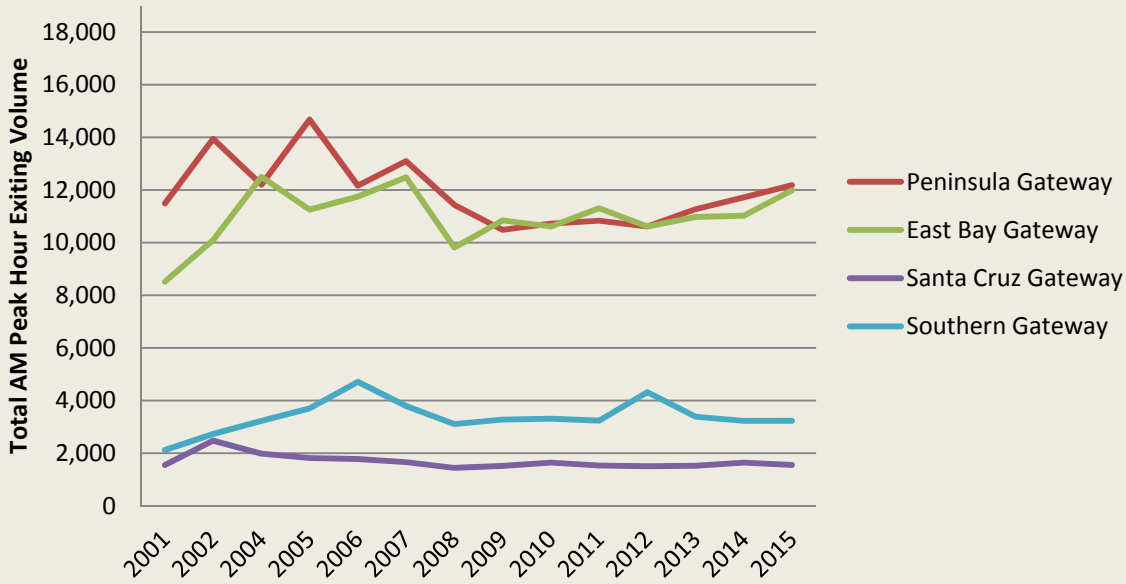
Figure 3.12 AM Peak Hour Gateway Inflows, 2001-2015



AM PEAK HOUR OUTFLOW

The trend for the outflows over the last 15 years is shown in Figure 3.13 for each of the four gateways. Vehicle outflow counts in the AM peak hour have been consistent over the last 5 years except for the Southern gateway, which had an unusual increase in 2012. Vehicle outflows have shown a consistent increase for the Peninsula and East Bay gateways in past three years.

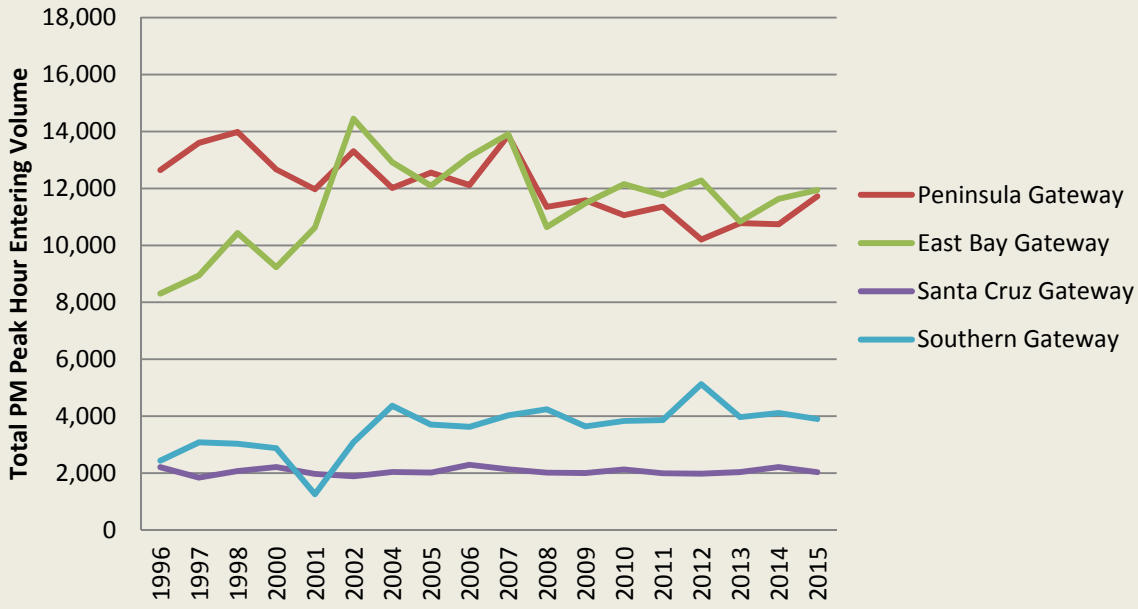
Figure 3.13 AM Peak Hour Gateway Outflows, 2001-2015



PM PEAK HOUR INFLOW

The total inflow gateway volumes during the PM peak hour increased by 3% over 2014 volumes. Total outflow volumes showed the opposite with a slight 1.9% decrease in volume for vehicles leaving Santa Clara County via the six freeways. This has resulted in a change from about 0.78 entering vehicles for every exiting vehicle in 2014 to 0.82 in 2015. These numbers account only for the volumes on freeways at each gateway, and are not intended as total gateway flows. A screenline of each gateway would include urban arterials and rural highways that also carry traffic to and from the county. Figure 3.14 presents a comparison between the counts performed for this study and those conducted for 2014.

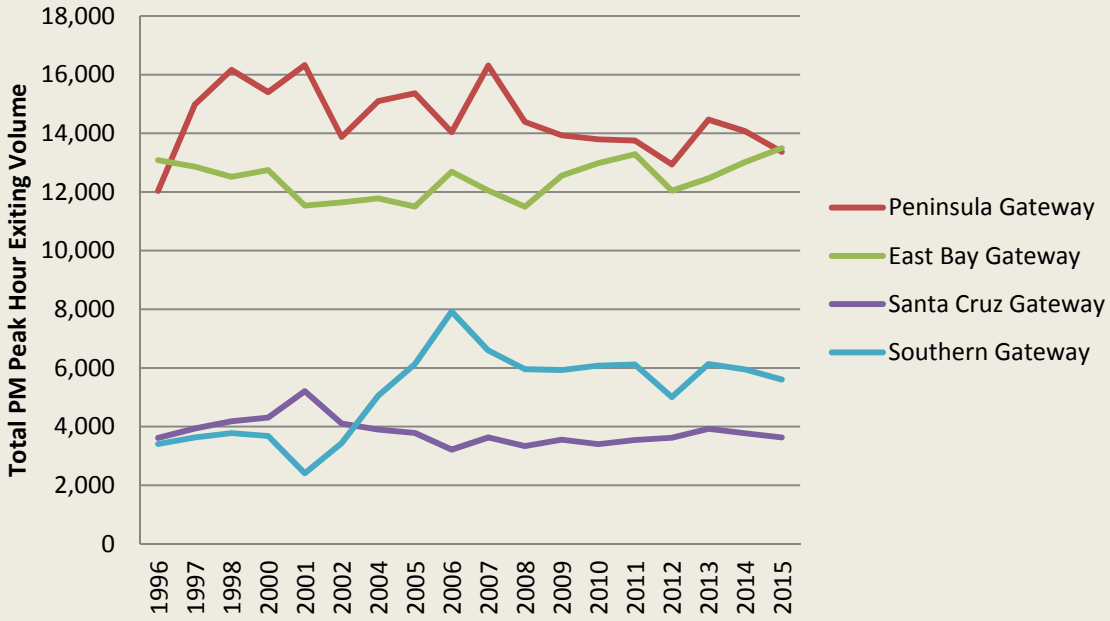
Figure 3.14 PM Peak Hour Gateway Inflows, 1997-2015



PM PEAK HOUR OUTFLOW

The Southern gateway experienced significant growth between 2001 and 2006 but has remained relatively level since 2008 with an outlier dip in 2012. The Santa Cruz gateway experienced growth until 2001. In 2005, its volume dropped to roughly 1996 levels, and it has remained constant since then. Exiting volumes to the Peninsula showed large variation until 2008 and have been relatively consistent since then other than a notable drop in 2012. The 2015 exiting volumes to the Peninsula show a decrease of 5% from 2014 volumes. East Bay gateway volumes have fluctuated over the years the data has been collected, and they generally account for about 12,500 vehicles in the PM peak with higher values before 2000 and some growth between 2008 and 2014. The 2015 existing volumes to the East Bay show an increase of 3.7% from 2014 volumes.

Figure 3.15 PM Peak Hour Gateway Outflows, 1997-2014



INFLOWS VS. OUTFLOWS

In the AM peak period, traffic flowing into Santa Clara County exceeded outflows for all four gateways as shown in Figure 3.16. On average, there has been about a 23% difference between inflows and outflows over the last 20 years with outflows being higher during the PM peak hour. Results from 2015 showed outflows to be about 22% greater than inflows, which is a 6% decrease from what was recorded in 2014 (28%).

As shown in Figure 3.17, the traffic flow is reverse for the PM peak period.

Figure 3.16 2014 AM Gateway Inflow vs. Outflow

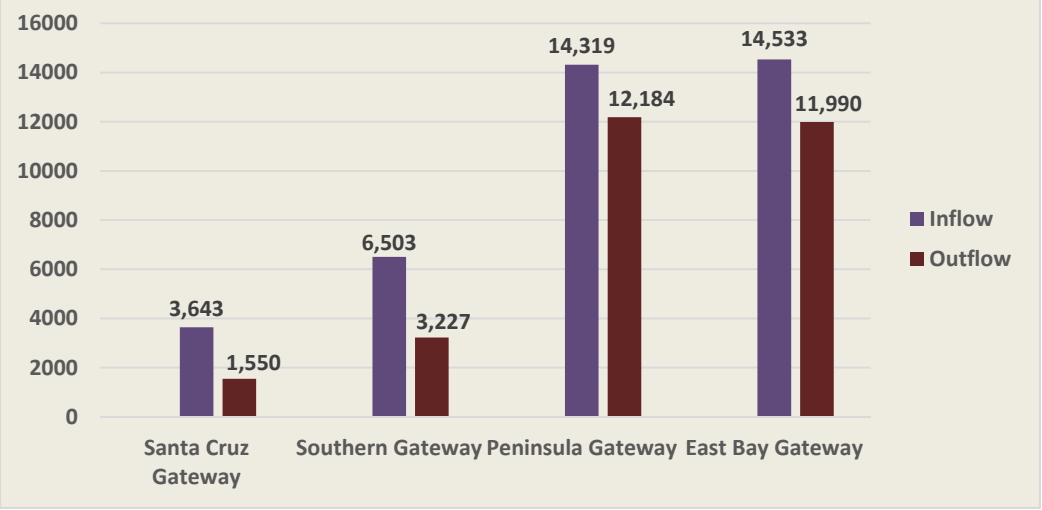
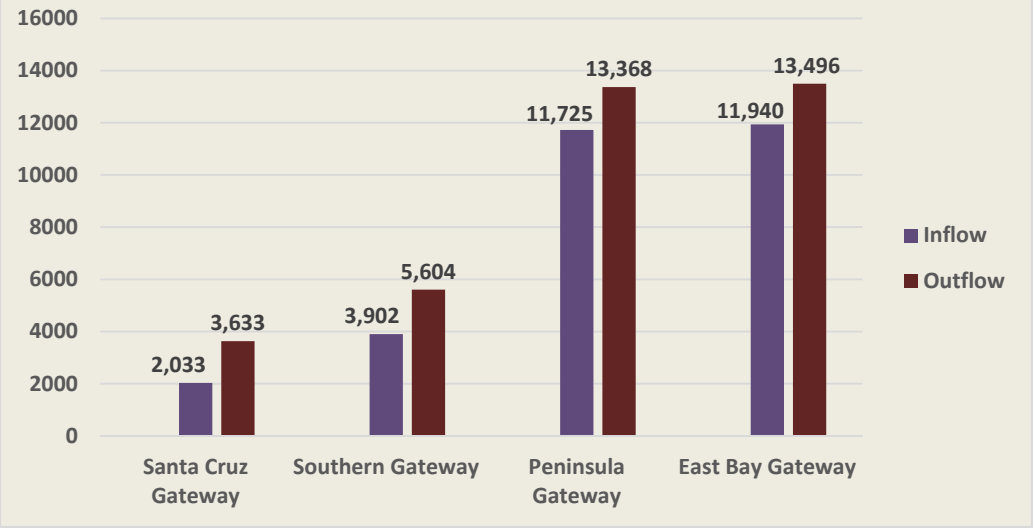


Figure 3.17 2014 PM Gateway Inflow vs. Outflow



9 CONFORMANCE FINDINGS

The conformance findings for the 2015 Monitoring Program is presented below.

LAND USE SUBMISSION

All Member Agencies have complied with the CMP land use data requirement.

FREEWAY SEGMENTS

96 freeway segments (100 miles) operated at LOS F during the AM peak period and 82 freeway segments (81 miles) operated at LOS F in the PM peak period. Of these, 27 AM and 25 PM segments operated at LOS F in the 1991 baseline year and therefore, LOS-exempt. This results in 73 deficient AM segments and 56 deficient PM miles.

Member Agencies with deficient freeway segments located within their jurisdiction are not penalized due to the regional nature of freeway congestion. However, they are encouraged to implement strategies listed in the Immediate Implementation Action List found in the *CMP Deficiency Plan Guidelines.*