

2017 CMP MONITORING & CONFORMANCE REPORT

APRIL 23

SANTA CLARA VALLEY TRANSPORTATION
AUTHORITY
Authored by: John Sighamony

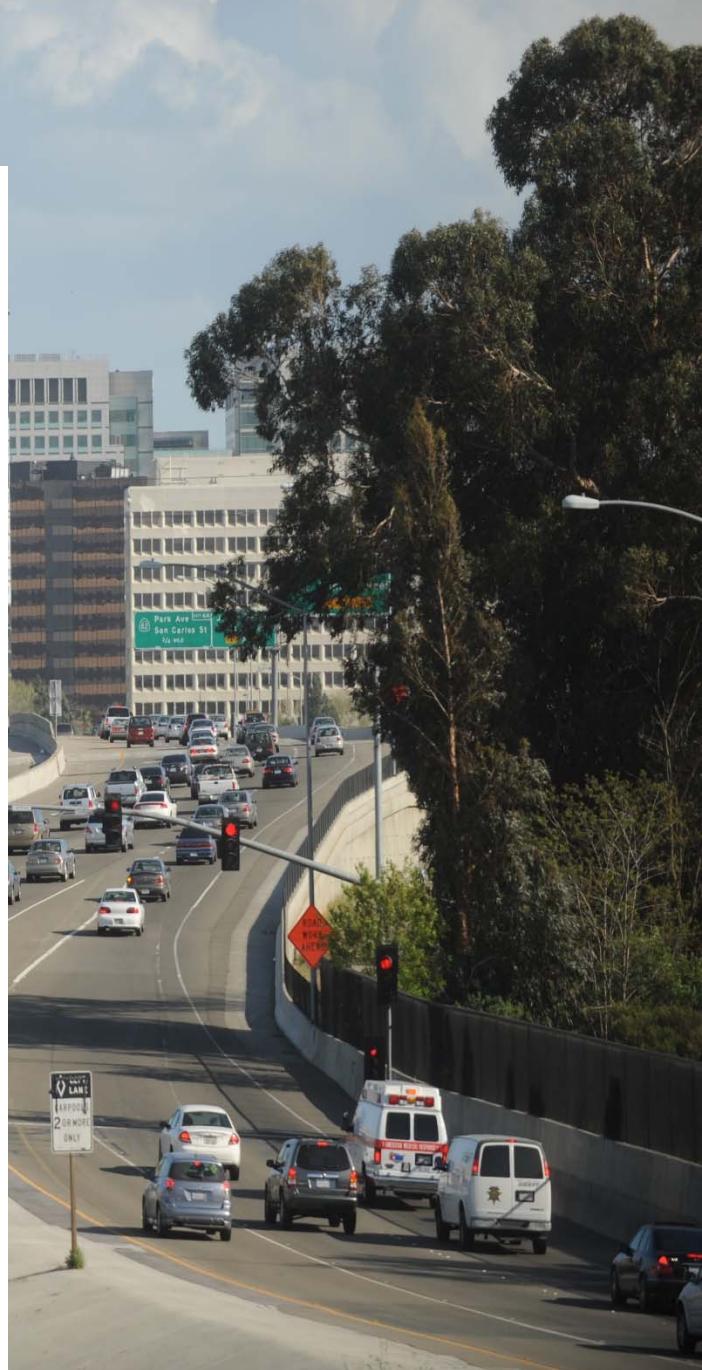


TABLE OF CONTENTS

EXECUTIVE SUMMARY	1
1 INTRODUCTION	5
2 LAND USE	7
3 USING BIG DATA	17
4 FREEWAY FINDINGS	26
5 GATEWAYS	61
A APPENDIX	70

LIST OF TABLES

TABLE 1.1 Level of Service (LOS) Standards	6
TABLE 2.1 Commercial and Industrial Job Densities (JOBS PER 1,000 SQ. FT.)	8
TABLE 2.2 Approved Residential Units, 2012-2017	10
TABLE 2.3 Job Change Estimates Based on Commercial/Industrial Approvals, 2012-2017	11
TABLE 2.4 Land Use Approvals Near Cores, Corridors and Station Areas, 2014-2017	12
TABLE 3.1 Freeway Level of Service Definitions	19
TABLE 4.1 Exempt Mixed-Flow Segments Operating at LOS F in 2017 (AM PEAK)	28
TABLE 4.2 Exempt Mixed-Flow Segments Operating at LOS F in 2017 (PM PEAK)	31
TABLE 4.3 Non-Exempt Mixed-Flow Segments Operating at LOS F in 2017 (AM PEAK)	34
TABLE 4.4 Non-Exempt Mixed-Flow Segments Operating at LOS F in 2017 (PM PEAK)	40
TABLE 4.5 Total HOV Miles with LOS F Categorized by Freeway Facility	46
TABLE 4.6 HOV Segments at LOS F – AM Peak Period	47
TABLE 4.7 HOV Segments at LOS F – PM Peak Period	51
TABLE 5.1 AM Peak Hour Inflow and Outflow Comparison Between 2016 & 2017	63
TABLE 5.2 PM Peak Hour Inflow and Outflow Comparison Between 2016 & 2017	66

LIST OF FIGURES

Figure 2.1 Approved Land Use Changes, 2013-2017	9
Figure 2.2 Approved Residential Units Near VTA'S Cores, Corridors and Station Areas (2015 Net Change)	13
Figure 2.3 Job Change Estimates Near VTA's Cores, Corridors, and Station Areas (2015 Net Change)	14
Figure 2.4 Residential Approvals Near VTA's Cores, Corridors, and Station Areas (2012-2017)	15
Figure 2.5 Job Change Estimates Near VTA's Cores, Corridors, and Station Areas (2012-2017)	16
Figure 3.1 Speed Density Curve	21
Figure 4.1 2017 Freeway Mixed-Flow Lane Mile Operation	27
Figure 4.2 2017 Freeway HOV Lane Mile Operation	45
Figure 4.3 Santa Clara Freeway Congestion Stratified by Duration of Congestion	55
Figure 4.4 Santa Clara Freeway Congestion Duration as a Percent of Total Dir. Miles	56
Figure 4.5 Congestion Duration as a Percent of Total Dir. Miles (SR 87 & 237)	57
Figure 4.6 Congestion Duration as a Percent of Total Dir. Miles (SR 17 & I-280)	58
Figure 4.7 Congestion Duration as a Percent of Total Dir. Miles (I-880 & I-680)	59
Figure 4.8 Congestion Duration as a Percent of Total Dir. Miles (SR 85 & US 101)	60
Figure 5.1 AM Peak Hour Gateway Inflows, 2010-2017	64
Figure 5.2 AM Peak Hour Gateway Outflows, 2010-2017	64
Figure 5.3 2017 AM Gateway Inflow vs. Outflow	65
Figure 5.4 PM Peak Hour Gateway Inflows, 2010-2017	67
Figure 5.5 PM Peak Hour Gateway Outflows, 2010-2017	67
Figure 5.6 2017 PM Gateway Inflow vs. Outflow	68



EXECUTIVE SUMMARY

2017 MONITORING AND
CONFORMANCE REPORT



Executive Summary

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 Level of Service (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 2017 Monitoring and Conformance Report features the reduced scope of data collection and analysis of each CMP element. The following summarizes the results of the 2017 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 2016, commercial and industrial approvals in 2015 resulted in an estimated decrease of 3,048 jobs. In 2017 Member Agencies approved 5,918 residential units, representing decrease from 2016 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 2016.

Transition to Big Data

Since 1997, VTA has used aerial photography to collect traffic data for freeway segments on a limited number of days. To address the limited data that could be obtained from aerial photography and to

make use of commercially available data sources, VTA decided to switch from aerial photography to Big Data. With Big Data, VTA is able to get much more refined data that is based on speed and can capture multiple days of information. VTA worked through the Systems Operations & Management (SOM) Working Group to develop a methodology for using Big Data through data provided by INRIX.

INRIX is one of the leading providers of real-time, historical, and predictive traffic information. The travel speed data collected by INRIX covered the entirety of Santa Clara County's freeway system and was reported for 513 roadway segments called Traffic Message Channels (TMC). INRIX reports the travel speed and travel time data for each TMC.

Freeway

Santa Clara County has approximately 155 miles of freeway, which constitute roughly 310 directional miles over eight freeways. These 310 directional miles can be divided into two groups: mixed flow and High Occupancy Vehicle (HOV) miles. Mixed flow miles account for all 310 miles of freeway in Santa Clara County, while the HOV miles account for 188 miles of freeway. The VTA annual CMP monitoring study monitors both the mixed flow and HOV miles for vehicle speeds and density along all freeways within the county. All freeways were evaluated during both the AM and PM peak periods. The primary findings of the freeway evaluation include:

Mixed-Flow Lanes

- 108 miles (35%) operate at LOS F (speeds less than 30 mph) for at least 15 minutes between 5:00 AM and 12:00 Noon. 97 miles (31%) operate at LOS F for at least 15 minutes between noon and 9:00 PM.
- The percentage of miles operating at LOS D, E, or F (speeds less than 62 mph) for at least 15 minutes were about 82% during the AM period and 71% for the PM period.
- Of the 108 congested freeway miles during the AM period, 20.4 miles are congested for less than an hour, 59.2 miles are congested for one to three hours, and 28.3 miles are congested for more than three hours.
- During the PM period, 13.4 miles are congested for less than one hour, 34.2 miles are congested one to three hours, and 49.5 miles are congested more than three hours.

High-Occupancy Vehicle (HOV) Lanes

- 56 miles (30%) operate at speeds less than 30 miles per hour during the AM period and 49 miles (26%) operate at less than 30 miles per hour for the PM period.
- The percentage of HOV directional miles operating at LOS D, E, or F (speeds less than 62 miles per hour) were 50% and 55% for the AM and PM periods, respectively.

Gateway Volumes

- Compared to 2016, the 3-hour counts for vehicles entering Santa Clara County during the AM period decreased by 2.5% but are similar to what was recorded in 2015.
- Vehicles exiting Santa Clara County during the AM 3-hour period increased by about 1,300 vehicles or 1.8%.
- Vehicles entering and exiting Santa Clara County during the PM 3-hour period both increased by 2.2% and 0.5%, respectively compared to 2016.

Conformance Findings

The 2017 Monitoring and Conformance Report find all Member Agencies in compliance with the CMP monitoring requirements.



CHAPTER 1 INTRODUCTION

2017 MONITORING AND
CONFORMANCE REPORT



Chapter One - Introduction

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 through 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.

CHAPTER 2

LAND USE

2017 MONITORING AND
CONFORMANCE REPORT



Chapter Two – 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.

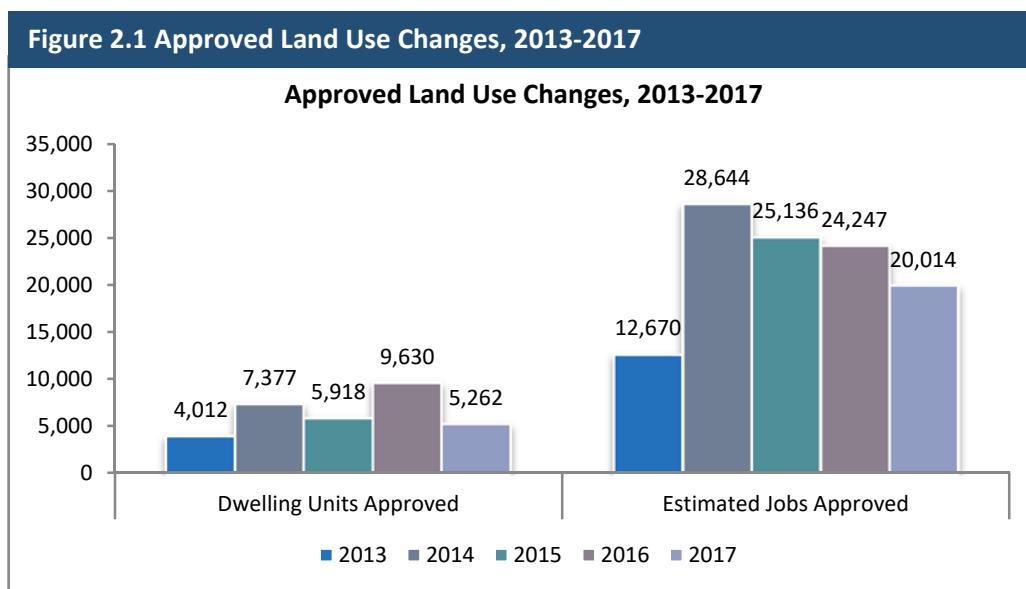
TABLE 2.1 | COMMERCIAL AND INDUSTRIAL JOB DENSITIES (JOBS PER 1,000 SQ. FT.)

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 2017.

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.



Land Use Approvals

As shown in Table 2.2, Member Agencies approved 5,262 residential units in 2017, a moderate decrease from the previous year when 9,630 units were approved. Notably, the Cities of Mountain View and Sunnyvale saw a large increase in approvals in 2017. San Jose and Santa Clara saw land use approvals trend downwards, although they still maintained the most number of residential approvals in the County.

TABLE 2.2 | APPROVED RESIDENTIAL UNITS, 2012-2017

Member Agency	2012	2013	2014	2015	2016	2017
Campbell	195	12	21	273	23	24
Cupertino	0	-30	15	15	788	19
Gilroy	101	278	350	646	810	810
Los Altos	204	20	0	4	4	27
Los Altos Hills	1	7	0	3	20	0
Los Gatos	116	20	23	53	6	18
Milpitas	2,243	793	466	857	0	177
Monte Sereno	0	0	0	0	0	0
Morgan Hill	268	544	103	241	372	84
Mountain View	298	537	399	1,051	277	344
Palo Alto	1	2	311	18	38	15
San Jose	536	729	3,182	2,112	4,127	1,662
Santa Clara	48	140	1,363	572	2,512	1,117
Santa Clara County	2	8	0	0	0	0
Saratoga	321	583	0	0	0	13
Sunnyvale	0	369	1,144	73	653	952
Total	4,334	4,012	7,377	5,918	9,630	5,262

As shown in Table 2.3, commercial and industrial approvals in 2017 resulted in an estimated net decrease of 20,014. Compared to the previous year, job change estimates have decreased by approximately 4,233 when 24,247 jobs were estimated in 2016. While this is considered a moderate decrease, the figures still rank fairly high since the past five years. There has been considerable growth in Sunnyvale due to the Peary Park Development, in Santa Clara due to the growth at the City Place site, and in San Jose where there continues to be redevelopment in the downtown core and on North First Street.

TABLE 2.3 | JOB CHANGE ESTIMATES BASED ON COMMERCIAL/INDUSTRIAL APPROVALS, 2012-2017

Member Agency	2012	2013	2014	2015	2016	2017
Campbell	-140	0	9	-120	6	445
Cupertino	432	277	700	21	144	5
Gilroy	0	39	639	10	250	250
Los Altos	50	211	0	19	1	-6
Los Altos Hills	0	0	0	0	0	0
Los Gatos	70	555	23	12	2	9
Milpitas	-1,176	-399	0	0	0	18
Monte Sereno	0	0	0	0	0	0
Morgan Hill	0	57	0	968	170	133
Mountain View	798	1,151	2,304	1,698	3,017	3,017
Palo Alto	585	924	-993	1,840	1,809	1,257
San Jose	1,247	4,211	7,913	3,510	6,215	6,325
Santa Clara	2,583	3,394	13,700	14,245	5,733	2,090
Santa Clara County	0	1,071	318	1,302	0	304
Saratoga	2,524	0	0	0	0	0
Sunnyvale	80	1,179	4,031	1,631	6,900	6,167
Total	7,053	12,670	28,644	25,136	24,247	20,014

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 5,262 total residential units approved in 2016. Of these, 2,421 residential approvals, or 46 percent were located within the Cores, Corridors and Station Areas. This is an increase from 2016 when 37 percent of the potential growth in housing was planned near the targeted areas for development.

Of the 20,014 estimated jobs due to commercial/industrial development, 5,004 jobs or 25 percent were located within the Cores, Corridors and Station Areas. This is a decrease from 2014 when 41 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, 2014-2017

	2017	2016	2015	2014
Residential Unit Approvals within CCSAs	2,421	3,586	2,755	2,855
Total Units	5,262	9,630	5,918	7,325
% near CCSAs	46%	37%	47%	66%
Job Change Estimates within CCSAs	5,004	9,929	5,442	2,610
Total Estimated Jobs	20,014	24,247	25,136	28,644
% near CCSAs	25%	41%	22%	37%

FIGURE 2.2 | APPROVED RESIDENTIAL UNITS NEAR VTA'S CORES, CORRIDORS AND STATION AREAS (2012-2017)

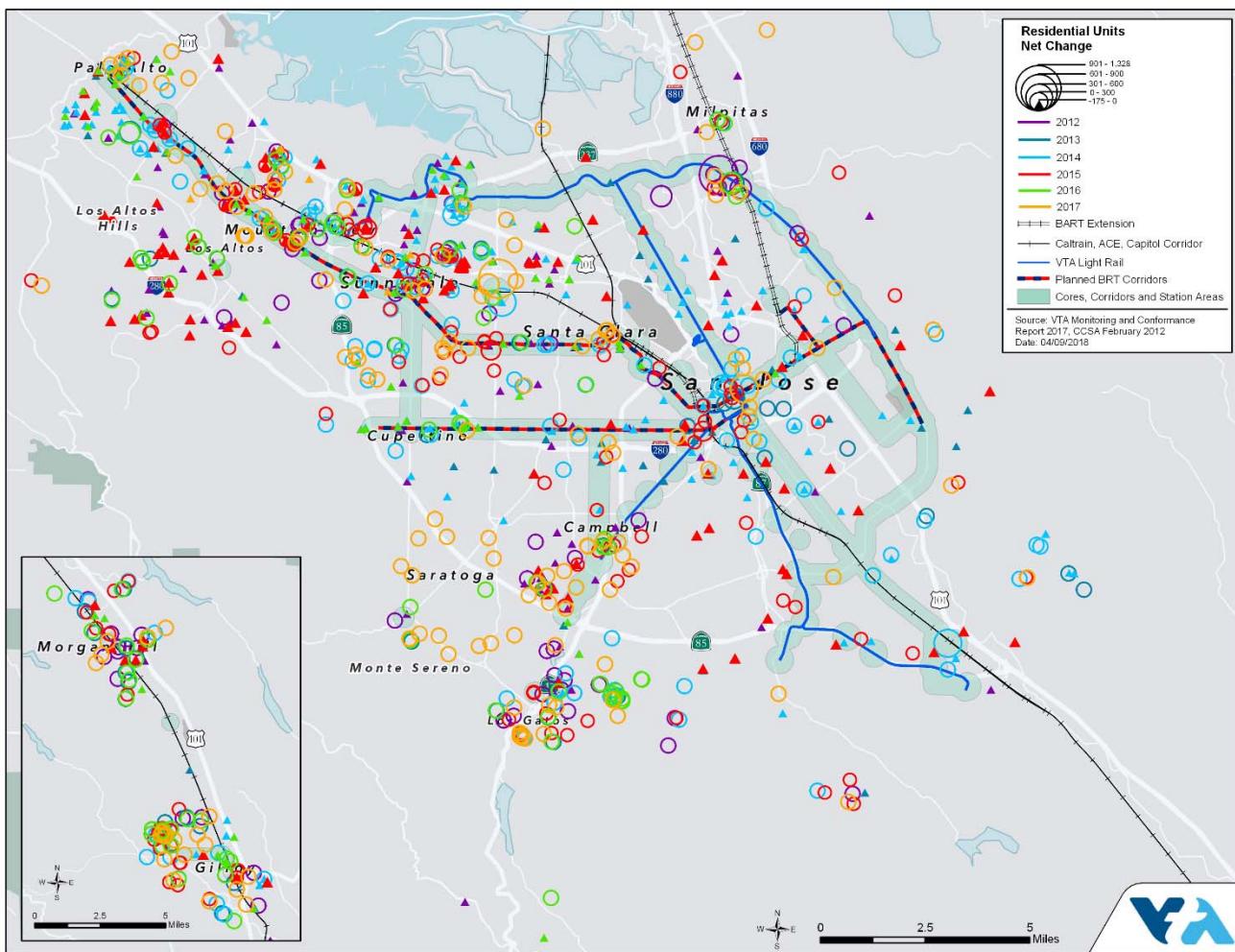


FIGURE 2.3 | APPROVED RESIDENTIAL UNITS NEAR VTA'S CORES, CORRIDORS AND STATION AREAS (2017 NET CHANGE)

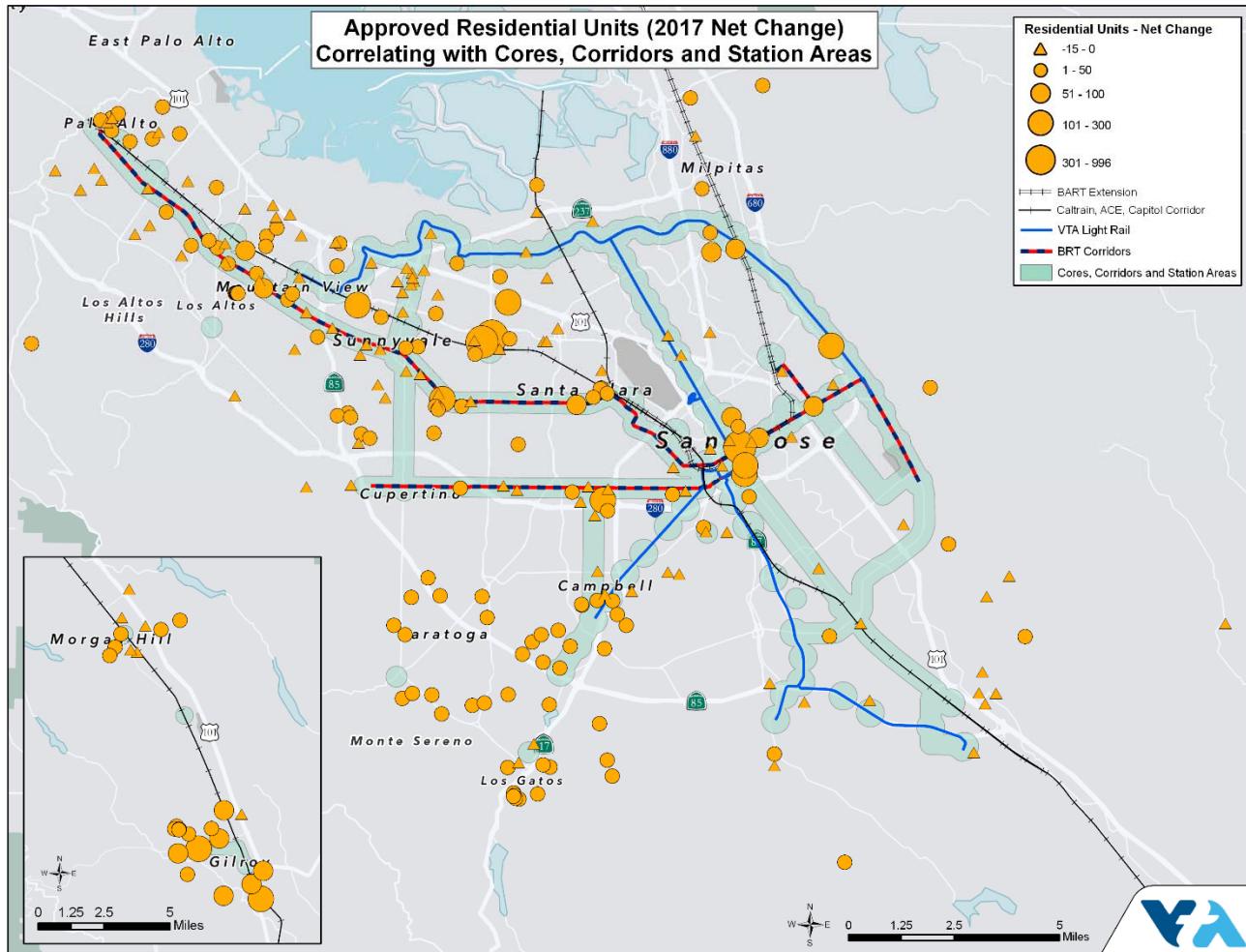


FIGURE 2.4 | JOB CHANGE ESTIMATES NEAR VTA'S CORES, CORRIDORS AND STATION AREAS (2012-2017)

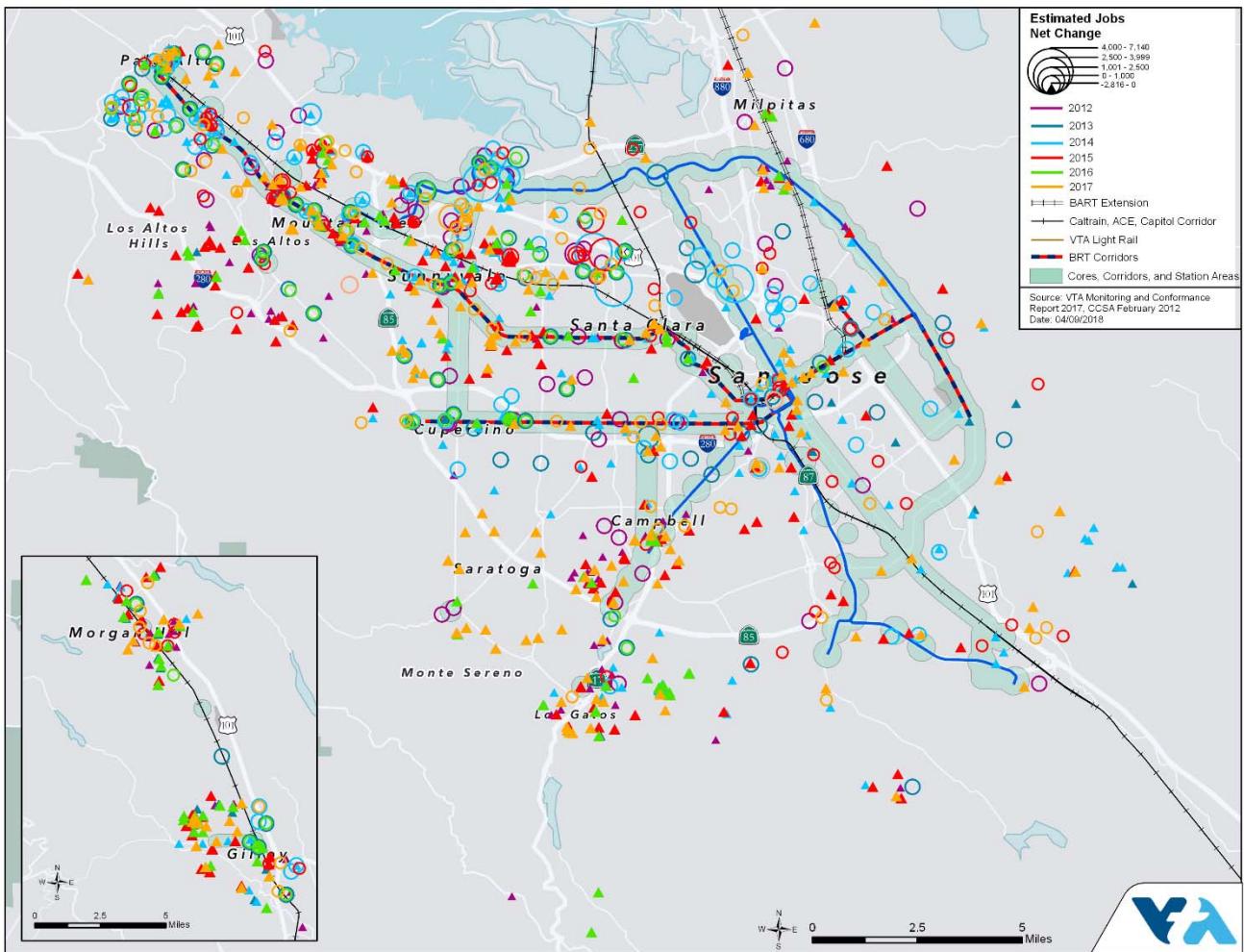
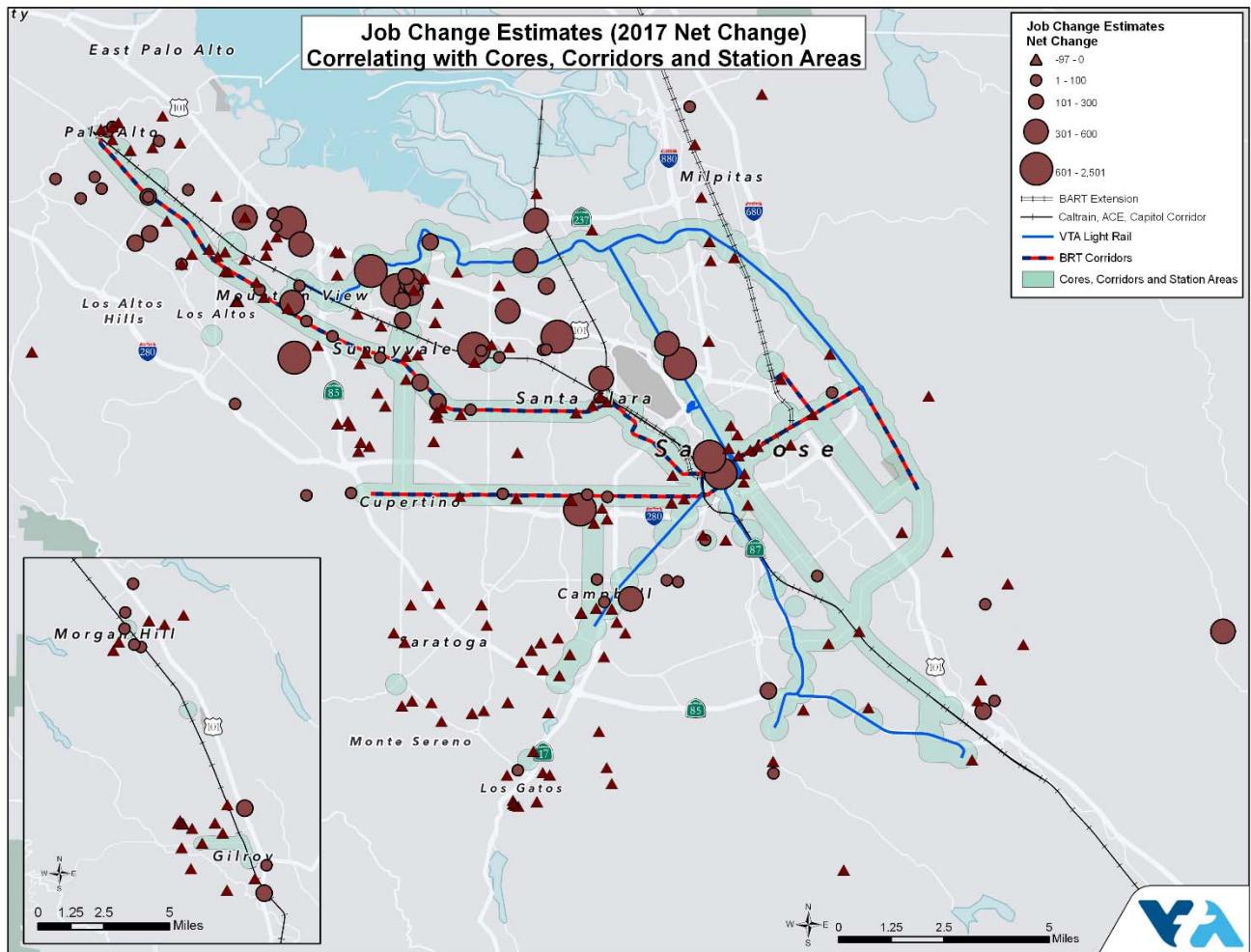


FIGURE 2.5 | JOB CHANGE ESTIMATES NEAR VTA'S CORES, CORRIDORS AND STATION AREAS (2017 NET CHANGE)



CHAPTER 3

USING BIG

DATA



2017 MONITORING AND
CONFORMANCE REPORT

Chapter 3 – Using Big Data

Performance Measures

Performance measures are a critical component of the CMP. Levels of acceptable transportation system performance vary among state and local agencies. Therefore, performance measures must be tailored to the specific needs of each area or jurisdiction and established in cooperation with the state agencies as well as the local agencies within the area boundaries. For the CMP, the quality of traffic service is based on performance measures such as speed and/or traffic density. The Highway Capacity Manual (HCM) defines level of service (LOS) as a quantitative stratification of performance measures that represent quality of service. The HCM also notes that the density is the official performance measure of freeway LOS as measured in passenger cars per mile per lane.

Level of Service (LOS)

Santa Clara VTA has adopted freeway LOS thresholds based on traffic density. The thresholds are from the HCM 2000 density values from LOS A through LOS C. For LOS D through F, the HCM thresholds have been modified to better describe local conditions in Santa Clara County. A related performance measure to density is travel speed which may be easier to understand from the driver's perspective. LOS A represents the best travel conditions from the driver's perspective where roadways are free flow, and LOS F represents congested or stop-and-go conditions.

Table 3.1 lists the level of service descriptions used for freeway segments and the corresponding density thresholds. This table also shows the approximate speed thresholds related to the density ranges. These speed thresholds and their relationship to density and LOS are based on data collected at four freeway locations in Santa Clara County in 2013.

In this study, the LOS determinations are based on travel speed data for both mixed flow and HOV lanes. However, density and flow are also estimated based on a mathematical relationship between speeds, density, and flow calibrated to Santa Clara County conditions.

Duration of Congestion

One of the goals of the CMP is to improve the reliability of the transportation system. The variability or change in congestion on a day-to-day basis provides a measure of reliability. There are two types of congestion: recurring and non-recurring congestion. Recurring congestion is generally predictable, regularly occurring, and typically caused by excess demand compared to the capacity of the freeway system. Non-recurring congestion is caused by traffic crashes, weather conditions, work zones, or special events. This study calculated the recurrent traffic congestion which refers to recurring delays during commute hours when vehicle demand exceeds capacity on certain freeways and/or routes in the county.

The duration of recurring congestion was calculated for each freeway segment using the LOS standards and the reported travel speeds. For any segment, the time interval for which travel speed was less than 30 miles per hour (i.e. LOS F) was classified as a “congested time interval.”

TABLE 3.1 – FREEWAY LEVEL OF SERVICE DEFINITIONS

Level of Service	Density (passenger cars/mile/lane)	Travel Speed (MPH)	Description
A	≤ 11	≥ 67	Free Flow. Vehicles are completely unimpeded in their ability to maneuver within the traffic stream. The effects of minor incidents are easily absorbed.
B	$11 < \text{density} \leq 18$	$65 \leq \text{speed} < 67$	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	$18 < \text{density} \leq 26$	$62 \leq \text{speed} < 65$	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	$26 < \text{density} \leq 46$	$42 \leq \text{speed} < 62$	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	$46 < \text{density} \leq 58$	$30 \leq \text{speed} < 42$	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	< 30	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.

Source: Density thresholds are from the “Traffic Level of Service Analysis Guidelines,” *Santa Clara VTA Congestion Management Program*, 2003. Speed thresholds, rounded to the nearest whole number, were estimated based on the mathematical relationship between density and speed calibrated to Santa Clara County conditions based on data collection in the Fall of 2013.

Density-Speed-Flow Relationship

According to traffic flow theory, freeways can carry the highest volumes when traffic is moving at speeds between 30 and 35 miles per hour (mph). Above this speed, the increasing gaps between vehicles results in a decrease in the density of cars and, therefore, the flow. Below this speed, the traffic stream is dense, but does not move fast enough to produce optimal flow. Therefore, travel speeds less than 30 to 35 mph may indicate that the freeway segment is operating under congested conditions and that any traffic count observed during the peak hour may not represent the actual traffic demand. To determine the relationship between density, speed, and volumes, data must be collected and calibration of the relationships established.

Data Collection

Prior to the 1997 CMP Monitoring and Conformance Report, floating vehicle survey 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 enabled the estimation of vehicle density.

Beginning in 1997 until 2016, aerial photography techniques were used to collect traffic data for freeway segments, a technique that allows direct measurement of density. Travel speeds and flow volumes were then estimated using a mathematical relationship between density, speed, and flow. While aerial photography was the most precise method for collecting freeway density measurements, the expense of flying airplanes limited the amount of data that could be collected to only one or two days per year.

To address the limited data that could be obtained from aerial photography and to make use of commercially available data sources, the 2017 CMP used INRIX speed data. INRIX is one of the leading providers of real-time, historical, and predictive traffic information. INRIX works by combining anonymous, real-time GPS probe data from more than 70 million devices of commercial fleet, delivery, taxi vehicles, and smart phone users across the U.S. (INRIX, 2012). This data source allows Santa Clara VTA to look at a full year of travel speed information at 15-minute intervals for all freeway miles in the county.

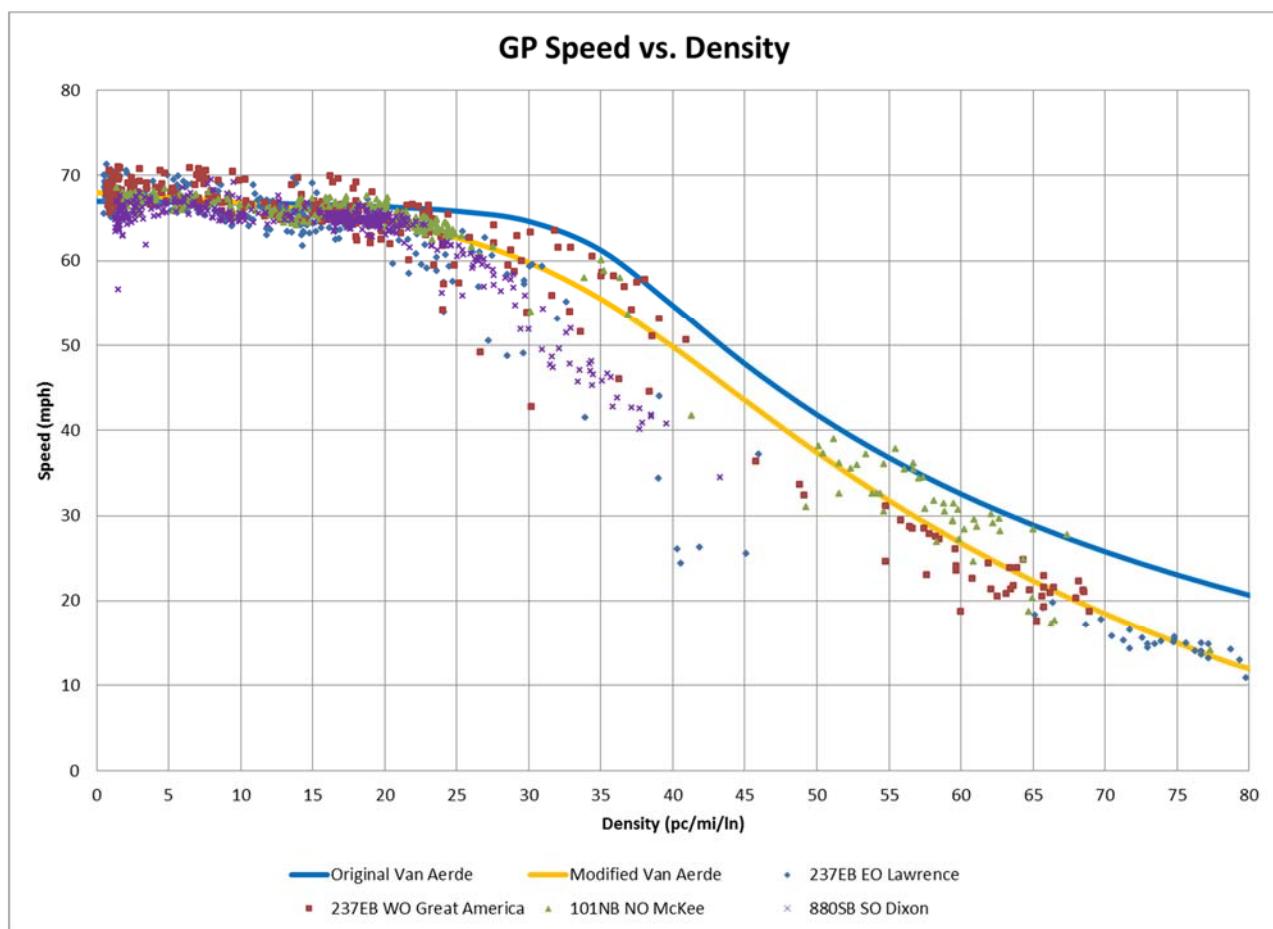
Speed Model Calibration

Density, speed, and volume are mathematically related and knowing any two of them will allow the calculation of the third. If an analyst only has one of the three types of data, a mathematical relationship is needed to estimate the other two. Between 2001 and 2016, the CMP used the Van Aerde equation to develop a speed-density curve to estimate speed and vehicle flow from the aerial photography density measurements. This Van Aerde equation was calibrated to conditions near

Washington D.C. around the year 2000 and at that time was found to reasonably represent conditions in Santa Clara County.

The 2017 CMP will be directly measuring speed instead of density. Recalibration of the relationships was necessary since deriving density from speed requires a more precise calibration than deriving speed from density. The Van Aerde equation was recalibrated based on data collected in 2013 at four freeway locations in Santa Clara County. Figure 3.1 shows the 2001 Van Aerde Curve (used between 2001 and 2016 to derive speed from density) and the updated Van Aerde Curve based on 2013 data (used for the 2017 study to derive density from speed). As shown, the updated curve better matches collected data in 2013.

FIGURE 3.1 – 2001 (ORIGINAL) VAN AERDE AND 2013 (MODIFIED) VAN AERDE DENSITY-SPEED MODEL FOR GENERAL PURPOSE LANES



Data Processing

Mixed Flow Lanes

The commercial speed data collected by INRIX for 2017 was used as the source for the 2017 CMP analysis. The travel speed data covered the entirety of Santa Clara County's freeway system and was reported for 513 roadway segments called Traffic Message Channels (TMC). INRIX reports the travel speed and travel time data for each TMC.

Segmentation for previous CMP studies was generally based on easily observable landmarks such as freeway overpasses. The endpoints for TMC segments are generally the merge and diverge points for ramps on the freeway rather than the overpasses. Consequently, the TMC segments used in this 2017 study are more detailed than the previous segmentation, allowing for more resolution of the locations and duration of congestion. It should also be noted that the ends of CMP segments do not generally align with the ends of the TMC segments. Hence, a TMC segment is either partially or fully contained within the prior CMP segment.

The open source software R was used for INRIX data processing in this study. This software is widely used for managing medium size quantities of data, as was the case with this study.

The INRIX data processing for mixed flow lanes consisted of five steps described below.

1. Filter raw data
2. Calculate the 20th percentile speed (i.e. equivalent to 80th percentile travel time)
3. Determine LOS based on travel speeds
4. Calculate the duration of congestion.

Filter Raw Data

The travel speed data from INRIX for all freeway TMC segments in Santa Clara County were extracted based on the “data quality scores.” INRIX includes a data quality score that accompanies every INRIX data point:

- A score of 30 includes data obtained from real-time sources;
- A score of 20 includes data obtained from a mix of real-time and historical sources; and
- A score of 10 includes data generated exclusively from historical sources.

The travel speed information for all freeway TMC segments that had a score of 30 for the year 2017 was compiled for all the freeways. It was observed that all the freeways had very few or no missing data for TMC segments using the real time data (score of 30) except for SR 85 Southbound. Since SR 85 Southbound did not have enough real-time data, the threshold was lowered so that both real-time and historic data were used for SR 85 Southbound.

In addition to the travel speed data for each TMC segment, other reported statistics include link identifier, i.e. TMC code, road number for each TMC code categorized by the facility, start and end GPS coordinate information for the TMC segment, length of the TMC segment, and travel time for each TMC segment. These statistics are reported for each 15-minute time interval throughout the day, i.e. for 24 hours. After extracting the INRIX data for a year (12 months) for all freeways within Santa Clara County, the data was then filtered to include only midweek days (i.e. Tuesday through Thursday) for the months of September and October. This filtering was done to be consistent with the prior years' CMP monitoring months.

Calculate the 20th Percentile Speed (80th Percentile Travel Time)

As described above, the travel speed data were extracted for midweek days from September and October for each 15-minute time interval during the AM and PM periods for all the freeways. In this step, the 20th percentile travel speeds were calculated for each TMC segment for each 15-minute period for the two months (i.e. September, and October). The 20th percentile speed is defined as the speed that 20 percent of days during the analysis period do not exceed. In other words, on 80 percent of the days during the analysis period, vehicles go faster than this speed during a particular 15-minute time period, and 20 percent of days go at or below this speed. This measure is selected to avoid the days with the slowest (i.e. worst) speeds due to collisions, construction, and special events. This 20th percentile speed is assumed to represent the worst-case perceived “typical” day for that TMC segment during that 15-minute time period. This is in accordance with the assumption that the worst speeds below the 20th percentile speed values correspond to non-recurrent congestion.

The 20th percentile speed, representative of the 80th percentile travel time, was selected for each TMC segment for each 15-minute period of data. For example, the speed for 7:30 – 7:45 AM for a TMC segment on a freeway corridor may be based on September 20, 2017 while the speed for 7:45 – 8:00 AM is from October 11, 2017 for the same TMC segment. Hence, the travel speeds selected for each 15-minute period for each TMC segment are representative of the “typical congestion” on the TMC segment during the “typical” CMP monitoring months.

Determine LOS Based on Travel Speeds

The levels of service for the AM and PM peak periods are extracted from the speeds for each TMC segment of a freeway facility by direction. The minimum value of all of the 20th percentile speed values for a TMC segment between 5:00 AM and 11:59 AM is used to determine the AM travel speed and LOS of the respective TMC segment. Similarly, the minimum value of all the 20th percentile speed values for a TMC segment between 12:00 PM and 8:59 PM is used to extract the PM travel speed, and thereby the LOS for PM peak hour.

Calculate the Duration of Congestion

The duration of congestion for the AM and PM peak periods was determined from the speed contour maps for each TMC segment of a freeway facility by direction. The number of 15-minute periods for each TMC between 5:00 AM and 11:59 AM operating below 30 mph (LOS F per Table 3.1) is the AM period duration of congestion. Similarly, the time period between noon and 8:59 PM where the travel speed values are less than 30 mph are termed as the PM period duration of congestion.

HOV Lanes

The commercial speed data available from INRIX for 2017 are currently not able to separate out HOV lane performance data, as INRIX compiles mobile device signals for all lanes and there is not enough geographic specificity to identify separate lanes. Therefore, floating vehicle surveys were performed for all Santa Clara County freeway facilities with HOV lanes. The floating car surveys used the same TMC segmentation as the INRIX data to be consistent. The morning surveys were conducted from 6:15 AM to 9:45 AM while the evening surveys were conducted from 3:15 PM to 6:45 PM. The time periods are generally consistent with the data collection methodology used for the aerial photography methods performed in previous years.

The floating vehicle surveys were performed for two mid-week days for each HOV freeway facility. The surveys were conducted at about 45-minute time intervals within the survey period during the morning and evening. The speeds obtained from both survey days were compared to see if there were significant differences between the travel speeds. In the case where no major differences were found, the travel speeds were averaged and the resulting travel speed value was estimated for each TMC segment. In case of significant differences between the two travel speeds, the following checks were performed:

- Checked the INRIX data for both the days to determine if there was a collision, construction/work zone, and/or special event;
- Followed up with the data collection firm to determine if there was unusual activity, or problems;
- Based on the INRIX data check, and discussions with the firm, abnormal data were eliminated and the resulting travel speed value was associated with the TMC segment.

For the 2017 floating car surveys, the following data were removed from the analysis:

- The data for TMC segments on US 101 NB for PM peak period on day 1 were considered abnormal based on a review of the INRIX travel time data and were removed from the analysis.
- The data for TMC segments on I-880 NB for the PM peak period on day 2 were excluded based on a review of the INRIX travel times and the floating vehicle findings.

- The data for TMC segment 105N04357 (SR 237 off-ramp to Great Mall Parkway) on I-880 SB for the PM peak period on day 2 were considered outliers based on other data sources and were removed from the analysis.
- The data for TMC segment 105-04833 (Magdalena Avenue On-Ramp to Foothill Boulevard off-ramp) on I-280 EB for the AM peak period on day 1 were considered outliers and were removed from the analysis.

The LOS for the HOV facilities were also determined directly from the travel speed values of the TMC segments, using the thresholds for travel speeds listed in Table 3.1. The HOV lane speed data, LOS, density, and flow by TMC segment for AM and PM peak periods are included in the appendix.

CHAPTER 4

FREEWAY

FINDINGS

2017 MONITORING AND
CONFORMANCE REPORT

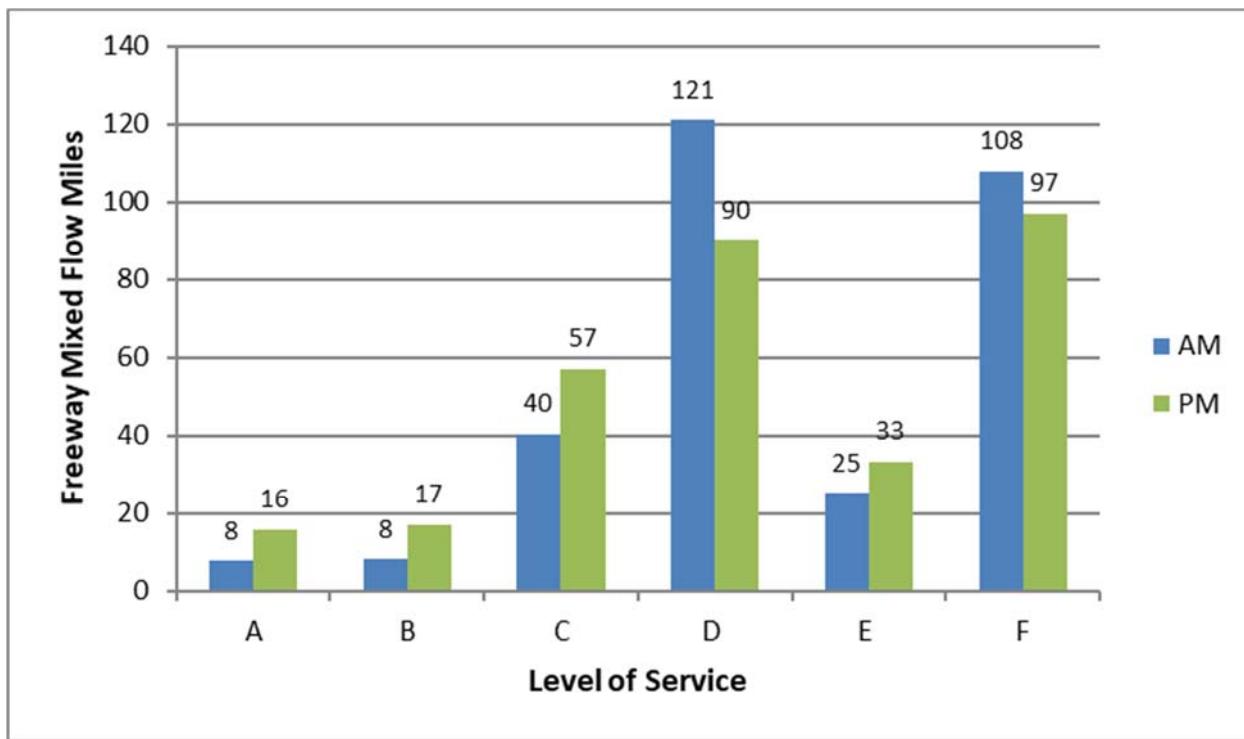


Chapter 4 – Freeway Findings

Mixed Flow Operations

Directional miles represent the number of miles of freeway for the two travel directions. In 2017, there were 310 mixed flow directional miles in Santa Clara County. FIGURE 4.1 summarizes the overall operation of the freeway system, including miles operating at each LOS, regardless of the CMP exemption. These values are based on the most congested 15-minute period for the months of September and October.

FIGURE 4.1 – 2017 MIXED FLOW FREEWAY MILES LEVEL OF SERVICE



In 2017, 108 (35%) and 97 (31%) mixed flow miles operated at LOS F for at least 15-minutes during the AM and PM peak periods, respectively. Table (AM Period) and Table 4.24.2 (PM Period) show the mixed flow freeway segments that operated at LOS F in 2017 and operated at LOS F under the 1991 baseline conditions, making them exempt from CMP conformance requirements. Given the change to TMC segmentation, the segment is considered exempt in 2017 if the TMC is partially or fully in one of the previously exempt freeway segments. These exempt segments account for about 25% and 33% of the 108 miles and 97 miles operating at LOS F for the AM and PM periods, respectively. The average duration of congestion for each segment is about 2.6 hours for the AM period and 3.4 hours for the PM period.

TABLE 4.1: EXEMPT FREEWAY SEGMENTS OPERATING AT LOS F IN 2017 FOR THE AM PERIOD

AM Period Exempt Freeway Segments						
TMC	Fwy	Dir	Segment	Length	LOS	Duration of Congestion (hours)
105N05144	SR 237	WB	McCarthy Blvd DIAG. Off-Ramp to McCarthy Blvd DIAG. On-Ramp	0.57	F	5.00
105-05143	SR 237	WB	McCarthy Blvd DIAG. On-Ramp to Zanker Rd DIAG. Off-Ramp	0.29	F	4.75
105N05143	SR 237	WB	Zanker Rd DIAG. Off-Ramp to Zanker Rd DIAG. On-Ramp	0.35	F	4.00
105P05137	SR 17	NB	Bear Creek Road DIAG. Off-Ramp to Bear Creek Road DIAG. On-Ramp	0.19	F	2.50
105+04645	SR 17	NB	Santa Cruz DIAG. Off-Ramp to Saratoga Los Gatos Rd DIAG. Off-Ramp	0.78	F	0.25
105P04645	SR 17	NB	Saratoga Los Gatos Rd DIAG. Off-Ramp to Saratoga Los Gatos Rd DIAG. On-Ramp	0.30	F	2.75
105P04823	I 280	NB	SR-280 DIAG. Off-Ramp to SR-280 DIAG. On-Ramp	0.50	F	3.50
105+04824	I 280	NB	SR-280 DIAG. On-Ramp to Menker Ave DIAG. On-Ramp	0.39	F	3.75
105P04824	I 280	NB	Menker Ave DIAG. On-Ramp to Leland Ave DIAG. On-Ramp	0.26	F	3.75
105P04825	I 280	NB	SR-17 DIAG. Off-Ramp to SR-17 DIAG. On-Ramp	0.76	F	4.25
105+04826	I 280	NB	SR-17 DIAG. On-Ramp to Winchester Blvd DIAG. Off-Ramp	0.20	F	3.75
105P04826	I 280	NB	Winchester Blvd DIAG. Off-Ramp to Winchester Blvd DIAG. On-Ramp	0.33	F	3.00
105+04827	I 280	NB	Winchester Blvd DIAG. On-Ramp to Saratoga Ave DIAG. Off-Ramp	0.68	F	2.75
105P04827	I 280	NB	Saratoga Ave DIAG. Off-Ramp to Saratoga Ave DIAG. On-Ramp	0.56	F	2.50
105+04828	I 280	NB	Saratoga Ave DIAG. On-Ramp to Lawrence Expy DIAG. Off-Ramp	0.74	F	2.50
105P04828	I 280	NB	Lawrence Expy DIAG. Off-Ramp to Lawrence Expy	0.28	F	2.50
105+04829	I 280	NB	Lawrence Expy to Stevens Creek Blvd DIAG. Off-Ramp	0.24	F	2.50
105P04829	I 280	NB	Stevens Creek Blvd DIAG. Off-Ramp to Stevens Creek Blvd DIAG. On-Ramp	0.30	F	2.00
105+04830	I 280	NB	Stevens Creek Blvd DIAG. On-Ramp to Wolfe Rd DIAG. Off-Ramp	0.45	F	2.00
105P04830	I 280	NB	Wolfe Rd DIAG. Off-Ramp to Wolfe Rd DIAG. On-Ramp	0.45	F	1.75
105P04346	I 880	NB	I-280 DIAG. Off-Ramp to I-280 DIAG. On-Ramp	0.90	F	1.25
105P04347	I 880	NB	Stevens Creek Blvd DIAG. Off-Ramp to Stevens Creek Blvd DIAG. On-Ramp	0.39	F	2.00
105+04348	I 880	NB	Stevens Creek Blvd DIAG. On-Ramp to Bascom Ave DIAG. Off-Ramp	0.48	F	2.25

AM Period Exempt Freeway Segments						
TMC	Fwy	Dir	Segment	Length	LOS	Duration of Congestion (hours)
105P04348	I 880	NB	Bascom Ave DIAG. Off-Ramp to Bascom Ave DIAG. On-Ramp	0.27	F	2.00
105+04349	I 880	NB	Bascom Ave DIAG. On-Ramp to The Alameda DIAG. Off-Ramp	0.51	F	2.00
105P04349	I 880	NB	The Alameda DIAG. Off-Ramp to The Alameda DIAG. On-Ramp	0.38	F	2.00
105+04350	I 880	NB	The Alameda DIAG. On-Ramp to Coleman Ave L. Off-Ramp	0.30	F	2.50
105P04350	I 880	NB	Coleman Ave L. Off-Ramp to Coleman Ave DIAG. On-Ramp	0.38	F	2.50
105+04351	I 880	NB	Coleman Ave DIAG. On-Ramp to 1st St DIAG. Off-Ramp	0.41	F	2.50
105P04351	I 880	NB	1st St DIAG. Off-Ramp to 1nd St DIAG. On-Ramp	0.38	F	2.25
105+04352	I 880	NB	1nd St DIAG. On-Ramp to US-101 DIAG. Off-Ramp	0.14	F	2.25
105P04352	I 880	NB	US-101 DIAG. Off-Ramp to US-101 DIAG. On-Ramp	0.34	F	2.75
105P04353	I 880	NB	Old Bayshore Hwy L. Off-Ramp to Old Bayshore Hwy DIAG. On-Ramp	0.26	F	0.50
105N04354	I 880	SB	Brokaw Rd DIAG. Off-Ramp to Brokaw Rd DIAG. On-Ramp	0.60	F	0.50
105-04353	I 880	SB	Brokaw Rd DIAG. On-Ramp to Old Bayshore Hwy DIAG. Off-Ramp	0.46	F	1.00
105N04353	I 880	SB	Old Bayshore Hwy DIAG. Off-Ramp to Old Bayshore Hwy L. On-Ramp	0.32	F	1.25
105-04352	I 880	SB	Old Bayshore Hwy L. On-Ramp to US-101 L. On-Ramp	0.18	F	2.25
105N04879	I 680	SB	Alum Rock Ave L. Off-Ramp to Alum Rock Ave L. On-Ramp	0.61	F	1.50
105-04878	I 680	SB	Capitol Expy L. On-Ramp to Capitol Expy L. On-Ramp	0.02	F	2.00
105N04878	I 680	SB	Capitol Expy L. On-Ramp to Jackson Ave DIAG. On-Ramp	0.32	F	2.25
105-04877	I 680	SB	Jackson Ave DIAG. On-Ramp to US-101 DIAG. Off-Ramp	0.11	F	2.50
105N04877	I 680	SB	US-101 DIAG. Off-Ramp to US-101 DIAG. Off-Ramp/Bayshore Fwy	0.68	F	2.75
105N04876	I 680	SB	US-101 DIAG. Off-Ramp to US-101 DIAG. On-Ramp	0.87	F	3.50
105+04131	US 101	NB	I-680 DIAG. On-Ramp to Alum Rock Ave	0.53	F	4.50
105P04132	US 101	NB	Alum Rock Ave DIAG. Off-Ramp to McKee Rd DIAG. On-Ramp	0.75	F	4.75
105+04133	US 101	NB	McKee Rd DIAG. On-Ramp to Oakland Rd DIAG. Off-Ramp	1.14	F	3.00
105P04133	US 101	NB	Oakland Rd DIAG. Off-Ramp to Oakland Rd DIAG. On-Ramp	0.41	F	3.00

AM Period Exempt Freeway Segments						
TMC	Fwy	Dir	Segment	Length	LOS	Duration of Congestion (hours)
105+04134	US 101	NB	Oakland Rd DIAG. On-Ramp to I-880 DIAG. Off-Ramp	0.15	F	3.00
105P04134	US 101	NB	I-880 DIAG. Off-Ramp to I-880 L. On-Ramp	0.22	F	3.00
105+04135	US 101	NB	I-880 L. On-Ramp to Old Bayshore Hwy DIAG. On-Ramp	0.34	F	3.50
105P04135	US 101	NB	Old Bayshore Hwy DIAG. On-Ramp to Old Bayshore Hwy DIAG. Off-Ramp	0.23	F	3.75
105+04136	US 101	NB	Old Bayshore Hwy DIAG. Off-Ramp to Brokaw Rd DIAG. Off-Ramp	0.20	F	4.00
105P04136	US 101	NB	Brokaw Rd DIAG. Off-Ramp to Brokaw Rd DIAG. On-Ramp	0.63	F	4.25
105P04137	US 101	NB	Trimble Rd DIAG. Off-Ramp to SR-87 DIAG. On-Ramp	0.45	F	4.25
105P04147	US 101	NB	Moffett Blvd L. On-Ramp to Shoreline Blvd DIAG. Off-Ramp	0.25	F	2.00
105P04148	US 101	NB	Moffett Blvd L. Off-Ramp to Shoreline Blvd DIAG. On-Ramp	1.10	F	1.00
105+04321	SR 85	NB	I-280 DIAG. Off-Ramp to Homestead Rd	0.73	F	2.50
105+04322	SR 85	NB	Homestead Rd On-Ramp to Freemont Ave Off-Ramp	0.75	F	2.25
105P04322	SR 85	NB	Freemont Ave Off-Ramp to Freemont Ave On-Ramp	0.42	F	1.75
105P04328	SR 85	NB	US-101 Off-Ramp to N Shoreline Blvd Off-Ramp	0.50	F	2.00

TABLE 4.2: EXEMPT FREEWAY SEGMENTS OPERATING AT LOS F IN 2017 FOR THE PM PERIOD

PM Period Exempt Freeway Segments						
TMC	Fwy	Dir	Segment	Length	LOS	Duration of Congestion (hours)
105P04678	SR 237	EB	Middlefield Rd DIAG. On-Ramp to Maude Ave On-Ramp	0.33	F	1.25
105+04679	SR 237	EB	Maude Ave On-Ramp to US-101 DIAG. Off-Ramp	0.16	F	1.75
105P04679	SR 237	EB	US-101 DIAG. Off-Ramp to US-101 L. On-Ramp	0.22	F	2.50
105+04680	SR 237	EB	US-101 L. On-Ramp to Mathilda Ave DIAG. Off-Ramp	0.31	F	3.25
105P04682	SR 237	EB	Lawrence Expy DIAG. Off-Ramp to Lawrence Expy DIAG. On-Ramp	0.61	F	4.50
105+05140	SR 237	EB	Lawrence Expy DIAG. On-Ramp to Great America Pkwy DIAG. Off-Ramp	0.60	F	5.00
105P05140	SR 237	EB	Great America Pkwy DIAG. Off-Ramp to Great America Pkwy DIAG. On-Ramp	0.81	F	5.50
105P05142	SR 237	EB	1st L. Off-Ramp to 1st DIAG. On-Ramp	0.33	F	4.25
105P05144	SR 237	EB	McCarthy Blvd DIAG. Off-Ramp to McCarthy Blvd DIAG. On-Ramp	0.65	F	1.75
105P05145	SR 237	EB	I-880 DIAG. Off-Ramp to I-880 DIAG. On-Ramp	0.25	F	8.00
105P04825	I 280	NB	SR-17 DIAG. Off-Ramp to SR-17 DIAG. On-Ramp	0.76	F	0.25
105N04833	I 280	SB	Foothill Blvd DIAG. Off-Ramp to Foothill Blvd DIAG. On-Ramp	0.46	F	3.00
105-04832	I 280	SB	Foothill Blvd DIAG. On-Ramp to SR-85 DIAG. Off-Ramp	0.26	F	3.25
105N04832	I 280	SB	SR-85 DIAG. Off-Ramp to SR-85 DIAG. On-Ramp	0.75	F	3.75
105-04831	I 280	SB	SR-85 DIAG. On-Ramp to De Anza Blvd DIAG. Off-Ramp	0.57	F	4.25
105N04831	I 280	SB	De Anza Blvd DIAG. Off-Ramp to De Anza Blvd DIAG. On-Ramp	0.46	F	4.75
105-04830	I 280	SB	De Anza Blvd DIAG. On-Ramp to Wolfe Rd DIAG. Off-Ramp	0.63	F	5.00
105N04830	I 280	SB	Wolfe Rd DIAG. Off-Ramp to Wolfe Rd DIAG. On-Ramp	0.41	F	5.00
105-04829	I 280	SB	Wolfe Rd DIAG. On-Ramp to Stevens Creek Blvd DIAG. Off-Ramp	0.39	F	5.00
105N04829	I 280	SB	Stevens Creek Blvd DIAG. Off-Ramp to Stevens Creek Blvd	0.34	F	5.00
105-04828	I 280	SB	Stevens Creek Blvd to Stevens Creek Blvd DIAG. On-Ramp	0.28	F	5.00
105N04828	I 280	SB	Stevens Creek Blvd DIAG. On-Ramp to Lawrence Expy DIAG. On-Ramp	0.23	F	5.25
105-04827	I 280	SB	Lawrence Expy DIAG. On-Ramp to Saratoga Ave DIAG. Off-Ramp	0.71	F	5.25

PM Period Exempt Freeway Segments						
TMC	Fwy	Dir	Segment	Length	LOS	Duration of Congestion (hours)
105N04827	I 280	SB	Saratoga Ave DIAG. Off-Ramp to Saratoga Ave DIAG. On-Ramp	0.49	F	4.25
105-04826	I 280	SB	Saratoga Ave DIAG. On-Ramp to Winchester Blvd DIAG. Off-Ramp	0.85	F	1.00
105N04826	I 280	SB	Winchester Blvd DIAG. Off-Ramp to Winchester Blvd	0.31	F	1.50
105+04358	I 880	NB	SR-237 DIAG. On-Ramp to Dixon Landing DIAG. Off-Ramp	1.03	F	2.00
105P04358	I 880	NB	Dixon Landing DIAG. Off-Ramp to Dixon Landing DIAG. On-Ramp	0.83	F	3.25
105N04355	I 880	SB	Montague Expy DIAG. Off-Ramp to Montague Expy DIAG. On-Ramp	0.74	F	3.00
105-04354	I 880	SB	Montague Expy DIAG. On-Ramp to Brokaw Rd DIAG. Off-Ramp	0.62	F	3.00
105N04354	I 880	SB	Brokaw Rd DIAG. Off-Ramp to Brokaw Rd DIAG. On-Ramp	0.60	F	4.00
105-04353	I 880	SB	Brokaw Rd DIAG. On-Ramp to Old Bayshore Hwy DIAG. Off-Ramp	0.46	F	4.50
105N04353	I 880	SB	Old Bayshore Hwy DIAG. Off-Ramp to Old Bayshore Hwy L. On-Ramp	0.32	F	3.00
105-04352	I 880	SB	Old Bayshore Hwy L. On-Ramp to US-101 L. On-Ramp	0.18	F	3.25
105N04352	I 880	SB	US-101 L. On-Ramp to US-101 DIAG. On-Ramp	0.19	F	2.50
105-04351	I 880	SB	US-101 DIAG. On-Ramp to 1st St DIAG. Off-Ramp	0.12	F	2.50
105N04351	I 880	SB	1st St DIAG. Off-Ramp to 1st St DIAG. On-Ramp	0.40	F	3.25
105-04350	I 880	SB	1st St DIAG. On-Ramp to Coleman Ave DIAG. Off-Ramp	0.42	F	1.75
105N04350	I 880	SB	Coleman Ave DIAG. Off-Ramp to Coleman Ave DIAG. On-Ramp	0.53	F	1.75
105+04152	US 101	NB	San Antonio Rd DIAG. On-Ramp to Embarcadero Rd DIAG. Off-Ramp	1.18	F	3.75
105P04152	US 101	NB	Embarcadero Rd DIAG. Off-Ramp to Embarcadero Rd DIAG. On-Ramp	0.70	F	2.50
105N04152	US 101	SB	Embarcadero Rd DIAG. Off-Ramp to Embarcadero Rd DIAG. Off-Ramp	0.65	F	3.00
105-04151	US 101	SB	Oregon Expy DIAG. On-Ramp to San Antonio Rd DIAG. Off-Ramp	1.37	F	1.75
105-04150	US 101	SB	San Antonio Rd L. Off-Ramp to Rengstorff Ave DIAG. On-Ramp	0.70	F	0.25
105-04149	US 101	SB	Rengstorff Ave DIAG. Off-Ramp to Old Middlefield Way DIAG. Off-Ramp	0.46	F	0.50
105N04149	US 101	SB	Old Middlefield Way DIAG. Off-Ramp to Old Middlefield Way DIAG. On-Ramp	0.15	F	1.00
105-04148	US 101	SB	Old Middlefield Way DIAG. On-Ramp to Shoreline Blvd L. On-Ramp	0.37	F	1.00

PM Period Exempt Freeway Segments						
TMC	Fwy	Dir	Segment	Length	LOS	Duration of Congestion (hours)
105N04147	US 101	SB	Shoreline Blvd L. On-Ramp to SR-85 DIAG. Off-Ramp	0.36	F	2.00
105-04146	US 101	SB	SR-85 DIAG. Off-Ramp to Moffett Blvd L. Off-Ramp	0.22	F	3.25
105N04140	US 101	SB	Bowers Ave DIAG. Off-Ramp to Bowers Ave DIAG. On-Ramp	0.67	F	6.25
105-04139	US 101	SB	Bowers Ave DIAG. On-Ramp to San Thomas Expy DIAG. Off-Ramp	0.11	F	6.25
105N04139	US 101	SB	San Thomas Expy DIAG. Off-Ramp to San Thomas Expy DIAG. On-Ramp	0.65	F	6.50
105-04138	US 101	SB	San Thomas Expy DIAG. On-Ramp to Trimble Rd DIAG. Off-Ramp	0.78	F	6.50
105N04138	US 101	SB	Trimble Rd DIAG. Off-Ramp to Trimble Rd DIAG. On-Ramp	0.39	F	6.50
105-04137	US 101	SB	Trimble Rd DIAG. On-Ramp to SR-87 DIAG. Off-Ramp	0.41	F	2.00
105N04136	US 101	SB	1st St to 4th St DIAG. On-Ramp	0.37	F	2.25
105-04135	US 101	SB	1st St to 4th St DIAG. On-Ramp	0.38	F	4.00
105N04135	US 101	SB	4th St DIAG. On-Ramp to 4th St DIAG. On-Ramp	0.26	F	4.75
105-04134	US 101	SB	4th St DIAG. On-Ramp to I-880 DIAG. Off-Ramp	0.12	F	4.75
105N04134	US 101	SB	I-880 DIAG. Off-Ramp to I-880 DIAG. On-Ramp	0.49	F	5.25
105-04133	US 101	SB	I-880 DIAG. On-Ramp to Oakland Rd DIAG. Off-Ramp	0.10	F	5.50
105N04133	US 101	SB	Oakland Rd DIAG. Off-Ramp to Oakland Rd DIAG. On-Ramp	0.42	F	5.50
105N04132	US 101	SB	McKee Rd DIAG. Off-Ramp to Alum Rock Ave DIAG. Off-Ramp	0.59	F	0.75
105-04131	US 101	SB	McKee Rd DIAG. Off-Ramp to Santa Clara St DIAG. On-Ramp	0.10	F	1.25
105N04324	SR 85	SB	SR-237 DIAG. Off-Ramp to SR-237 L. On-Ramp	0.27	F	3.00
105-04323	SR 85	SB	SR-237 L. On-Ramp to El Camino Real L. On-Ramp	0.34	F	2.75
105N04323	SR 85	SB	El Camino Real L. On-Ramp to El Camino Real DIAG. On-Ramp	0.22	F	2.25
105N04322	SR 85	SB	Freemont Ave DIAG. Off-Ramp to Freemont Ave DIAG. On-Ramp	0.42	F	0.75

Freeway mixed flow segments operating at LOS F in 2017 but not operating at LOS F in 1991 are considered non-exempt from CMP requirements and are shown in Table 4.3 and Table for the AM and PM periods, respectively. These non-exempt segments account for about 81 miles (75%) of the total congested AM period miles and 65 miles (67%) of the PM period congested miles. The average duration of congestion for these segments is 2.1 hours for the AM period and 2.7 hours for the PM period.

TABLE 4.3: NON-EXEMPT FREEWAY SEGMENTS OPERATING AT LOS F IN 2017 FOR THE AM PERIOD

AM Period Non-Exempt Freeway Segments						
TMC	Fwy	Dir	Segment	Length	LOS	Duration of Congestion (hours)
105P04651	SR 87	NB	SR-85 DIAG. Off-Ramp to SR-87 DIAG. On-Ramp	0.27	F	1.75
105+04652	SR 87	NB	SR-87 DIAG. On-Ramp to Capitol Expy DIAG. Off-Ramp	0.68	F	2.50
105P04652	SR 87	NB	Capitol Expy DIAG. Off-Ramp to Capitol Expy DIAG. On-Ramp	0.39	F	3.00
105+04653	SR 87	NB	Capitol Expy DIAG. On-Ramp to Curtner Ave DIAG. Off-Ramp	0.98	F	3.75
105P04653	SR 87	NB	Curtner Ave DIAG. Off-Ramp to Curtner Ave DIAG. On-Ramp	0.56	F	4.50
105+04654	SR 87	NB	Curtner Ave DIAG. On-Ramp to Almaden Expy DIAG. Off-Ramp	0.21	F	5.00
105P04654	SR 87	NB	Almaden Expy DIAG. Off-Ramp to Almaden Expy DIAG. On-Ramp	0.24	F	4.75
105P04656	SR 87	NB	I-280 DIAG. Off-Ramp to I-280 DIAG. On-Ramp	0.80	F	0.50
105P04657	SR 87	NB	I-280 DIAG. On-Ramp to Santa Clara St DIAG. Off-Ramp	0.28	F	2.00
105+04658	SR 87	NB	Santa Clara St DIAG. Off-Ramp to Julian St DIAG. Off-Ramp	0.12	F	2.25
105P04658	SR 87	NB	Julian St DIAG. Off-Ramp to Julian St DIAG. On-Ramp	0.57	F	2.00
105+05602	SR 87	NB	Julian St DIAG. On-Ramp to Taylor DIAG. Off-Ramp	0.13	F	0.25
105P05602	SR 87	NB	Taylor DIAG. Off-Ramp to Taylor DIAG. On-Ramp	0.66	F	0.25
105P05914	SR 87	NB	Skyport Dr DIAG. Off-Ramp to Skyport Dr DIAG. On-Ramp	0.66	F	0.25
105+05605	SR 87	NB	Skyport Dr DIAG. On-Ramp to US-101 DIAG. Off-Ramp	0.36	F	3.75
105P05605	SR 87	NB	US-101 DIAG. Off-Ramp to US-101 DIAG. On-Ramp	0.38	F	5.25
105+04675	SR 237	EB	El Camino Real to SR-85 L. Off-Ramp	0.28	F	0.25
105+04676	SR 237	EB	SR-85 DIAG. On-Ramp to Dana St. L. Off-Ramp	0.05	F	1.25
105P04676	SR 237	EB	Dana St. L. Off-Ramp to Dana St. DIAG. On-Ramp	0.38	F	1.50

AM Period Non-Exempt Freeway Segments						
TMC	Fwy	Dir	Segment	Length	LOS	Duration of Congestion (hours)
105P05145	SR 237	EB	I-880 DIAG. Off-Ramp to I-880 DIAG. On-Ramp	0.25	F	2.25
105-05142	SR 237	WB	Zanker Rd DIAG. On-Ramp to 1st DIAG. Off-Ramp	0.84	F	2.25
105N05142	SR 237	WB	1st DIAG. Off-Ramp to 1st DIAG. On-Ramp	0.48	F	1.50
105-05141	SR 237	WB	1st DIAG. On-Ramp to America Center Dr DIAG. Off-Ramp	0.37	F	1.00
105N05141	SR 237	WB	America Center Dr DIAG. Off-Ramp to America Center Dr DIAG. Off-Ramp	0.13	F	2.25
105N05140	SR 237	WB	America Center Dr DIAG. Off-Ramp to America Center Dr DIAG. On-Ramp	0.74	F	1.50
105-04682	SR 237	WB	America Center Dr DIAG. On-Ramp to Lawrence Expy DIAG. Off-Ramp	0.54	F	2.00
105N04682	SR 237	WB	Lawrence Expy DIAG. Off-Ramp to Lawrence Expy DIAG. On-Ramp	0.66	F	3.25
105-04681	SR 237	WB	Lawrence Expy DIAG. On-Ramp to Java Dr DIAG. Off-Ramp	0.33	F	4.25
105N04681	SR 237	WB	Java Dr DIAG. Off-Ramp to Java Dr DIAG. On-Ramp	0.18	F	4.75
105-04680	SR 237	WB	Java Dr DIAG. On-Ramp to Mathilda Ave DIAG Off-Ramp	0.54	F	4.75
105N04680	SR 237	WB	Mathilda Ave DIAG Off-Ramp to Mathilda Ave DIAG On-Ramp	0.45	F	4.25
105-04679	SR 237	WB	Mathilda Ave DIAG On-Ramp to US-101 DIAG. Off-Ramp	0.09	F	1.25
105N04675	SR 237	WB	SR-85 L. Off-Ramp to SR-85 DIAG. On-Ramp	0.30	F	0.75
105-20468	SR 237	WB	SR-85 DIAG. On-Ramp to El Camino Real	0.21	F	7.00
105P05135	SR 17	NB	Summit DIAG. Off Ramp to Summit DIAG. On-Ramp	0.10	F	0.50
105+05136	SR 17	NB	Summit DIAG. On-Ramp to Idylwild Road	2.39	F	1.50
105+05137	SR 17	NB	Idylwild Road to Bear Creek Road DIAG. Off-Ramp	1.62	F	2.25
105+04649	SR 17	NB	San Thomas Expy DIAG. On-Ramp to Hamilton Ave DIAG. Off-Ramp	1.31	F	1.25
105P04649	SR 17	NB	Hamilton Ave DIAG. Off-Ramp to Hamilton Ave DIAG. On-Ramp	0.41	F	1.50
105+04650	SR 17	NB	Hamilton Ave DIAG. On-Ramp to I-280 DIAG. Off-Ramp	0.94	F	1.00
105P04650	SR 17	NB	I-280 DIAG. Off-Ramp to Stevens Creek Blvd L. On-Ramp	0.90	F	1.50
105-04645	SR 17	SB	Lark Ave DIAG. On-Ramp to Saratoga Ave DIAG. Off-Ramp	1.57	F	0.75
105P04814	I 280	NB	US-101 DIAG. Off-Ramp to US 101 DIAG. On-Ramp	0.87	F	3.50
105P04815	I 280	NB	US 101 DIAG. On-Ramp to McLaughlin Ave L. On-Ramp	0.27	F	4.00

AM Period Non-Exempt Freeway Segments						
TMC	Fwy	Dir	Segment	Length	LOS	Duration of Congestion (hours)
105+04816	I 280	NB	McLaughlin Ave L. On-Ramp to 11th St DIAG. Off-Ramp	0.45	F	3.00
105P04817	I 280	NB	11th St DIAG. Off-Ramp to 11th St DIAG. On-Ramp	0.58	F	2.50
105+04818	I 280	NB	11th St DIAG. On-Ramp to 4th St DIAG. On-Ramp	0.19	F	2.50
105+04819	I 280	NB	4th St DIAG. On-Ramp to 4th St DIAG. On-Ramp	0.14	F	2.25
105P04819	I 280	NB	4th St DIAG. On-Ramp to 4th St DIAG. On-Ramp	0.01	F	1.00
105+04820	I 280	NB	4th St DIAG. On-Ramp to SR-87 DIAG. Off-Ramp	0.17	F	0.75
105P04820	I 280	NB	SR-87 DIAG. Off-Ramp to SR-87 DIAG. On-Ramp	0.76	F	1.00
105+04822	I 280	NB	SR-280 DIAG. On-Ramp to Meridian Ave DIAG. Off-Ramp	0.27	F	2.00
105P04822	I 280	NB	Southwest Expy DIAG. Off-Ramp to Meridian Ave L. On-Ramp	0.47	F	2.50
105+04831	I 280	NB	Wolfe Rd DIAG. On-Ramp to De Anza Blvd DIAG. Off-Ramp	0.61	F	1.25
105P04831	I 280	NB	De Anza Blvd DIAG. Off-Ramp to De Anza Blvd DIAG. On-Ramp	0.46	F	1.25
105+04832	I 280	NB	De Anza Blvd DIAG. On-Ramp to SR-85 DIAG. Off-Ramp	0.70	F	1.50
105P04832	I 280	NB	SR-85 DIAG. Off-Ramp to SR-85 DIAG. On-Ramp	0.74	F	2.00
105P04833	I 280	NB	Foothill Blvd DIAG. Off-Ramp to Foothill Blvd L. On-Ramp	0.32	F	1.00
105-04821	I 280	SB	Southwest Expy DIAG. On-Ramp to Bird Ave DIAG. Off-Ramp	0.47	F	0.25
105N04814	I 280	SB	McLaughlin Ave DIAG. Off-Ramp to US-101 DIAG. On-Ramp	1.12	F	0.75
105N04358	I 880	SB	Dixon Landing DIAG. Off-Ramp to Dixon Landing DIAG. On-Ramp	0.64	F	2.75
105-04357	I 880	SB	Dixon Landing DIAG. On-Ramp to SR-237 DIAG. Off-Ramp	1.13	F	2.25
105N04352	I 880	SB	US-101 L. On-Ramp to US-101 DIAG. On-Ramp	0.19	F	3.00
105-04351	I 880	SB	US-101 DIAG. On-Ramp to 1st St DIAG. Off-Ramp	0.12	F	3.25
105N04351	I 880	SB	1st St DIAG. Off-Ramp to 1st St DIAG. On-Ramp	0.40	F	3.50
105-04347	I 880	SB	Bascom Ave DIAG. On-Ramp to Stevens Creek Blvd DIAG. Off-Ramp	0.49	F	0.50
105N04347	I 880	SB	Stevens Creek Blvd DIAG. Off-Ramp to I-280 DIAG. Off-Ramp	0.42	F	1.25
105-04346	I 880	SB	I-280 L. Off-Ramp to I-280 DIAG. Off-Ramp	0.06	F	1.25

AM Period Non-Exempt Freeway Segments						
TMC	Fwy	Dir	Segment	Length	LOS	Duration of Congestion (hours)
105P04877	I 680	NB	US-101 DIAG. Off-Ramp to US-101 DIAG. On-Ramp	0.59	F	1.00
105+04878	I 680	NB	US-101 DIAG. On-Ramp to Capitol Expy DIAG. Off-Ramp/ Jackson Ave	0.24	F	1.50
105P04878	I 680	NB	Capitol Expy DIAG. Off-Ramp/ Jackson Ave to Capitol Expy DIAG. Off-Ramp	0.33	F	1.75
105P04879	I 680	NB	Capitol Expy DIAG. Off-Ramp to Capitol Expy DIAG. On-Ramp	0.58	F	2.00
105P04880	I 680	NB	Alum Rock Ave DIAG. Off-Ramp to Alum Rock Ave DIAG. On-Ramp	0.61	F	2.00
105+04881	I 680	NB	Alum Rock Ave DIAG. On-Ramp to McKee Rd DIAG. Off-Ramp	0.14	F	1.75
105P04881	I 680	NB	McKee Rd DIAG. Off-Ramp to McKee Rd DIAG. On-Ramp	0.59	F	0.50
105+04886	I 680	NB	Montague Expy DIAG. On-Ramp to Calaveras Blvd DIAG. Off-Ramp	0.75	F	0.50
105P04886	I 680	NB	Calaveras Blvd DIAG. Off-Ramp to Calaveras Blvd DIAG. On-Ramp	0.84	F	0.75
105N04881	I 680	SB	McKee Rd DIAG. Off-Ramp to McKee Rd DIAG. On-Ramp	0.65	F	0.50
105-04880	I 680	SB	McKee Rd DIAG. On-Ramp to Alum Rock Ave DIAG. Off-Ramp	0.11	F	0.75
105N04880	I 680	SB	Alum Rock Ave DIAG. Off-Ramp to Capitol Expy L. On-Ramp	0.61	F	0.75
105P04117	US 101	NB	San Martin Ave DIAG. Off-Ramp to San Martin Ave DIAG. On-Ramp	0.44	F	1.00
105+04118	US 101	NB	San Martin Ave DIAG. On-Ramp to Tenant Ave DIAG. Off-Ramp	2.10	F	2.50
105P04118	US 101	NB	Tenant Ave DIAG. Off-Ramp to Tenant Ave DIAG. On-Ramp	0.59	F	3.00
105+04119	US 101	NB	Tenant Ave DIAG. On-Ramp to Dunne Ave DIAG. Off-Ramp	0.31	F	3.25
105P04119	US 101	NB	Dunne Ave DIAG. Off-Ramp to Dunne Ave DIAG. On-Ramp	0.58	F	2.75
105P04124	US 101	NB	Silver Creek Valley Rd DIAG. Off-Ramp to Silver Creek Valley Rd DIAG. On-Ramp	0.77	F	0.50
105+04125	US 101	NB	Silver Creek Valley Rd DIAG. On-Ramp to Hellyer Ave DIAG. Off-Ramp	1.34	F	2.25
105P04125	US 101	NB	Hellyer Ave DIAG. Off-Ramp to Hellyer Ave L. On-Ramp	0.27	F	2.50
105+04126	US 101	NB	Hellyer Ave L. On-Ramp to Yerba Buena Rd L. Off-Ramp	0.70	F	2.75
105P04126	US 101	NB	Yerba Buena Rd L. Off-Ramp to Capitol Expy DIAG. Off-Ramp	0.18	F	3.00
105P04127	US 101	NB	Capitol Expy DIAG. Off-Ramp to Capitol Expy DIAG. On-Ramp	0.97	F	3.00
105+04128	US 101	NB	Capitol Expy DIAG. On-Ramp to Tully Rd DIAG. Off-Ramp	0.64	F	3.25

AM Period Non-Exempt Freeway Segments						
TMC	Fwy	Dir	Segment	Length	LOS	Duration of Congestion (hours)
105P04128	US 101	NB	Tully Rd DIAG. Off-Ramp to Tully Rd DIAG. On-Ramp	0.63	F	2.00
105+04129	US 101	NB	Tully Rd DIAG. On-Ramp to I-680 DIAG. Off-Ramp	0.97	F	1.75
105P04129	US 101	NB	I-680 DIAG. Off-Ramp to I-680 DIAG. On-Ramp	0.79	F	3.00
105+04138	US 101	NB	SR-87 DIAG. On-Ramp to Trimble Rd DIAG. Off-Ramp	0.28	F	4.75
105P04138	US 101	NB	Trimble Rd DIAG. Off-Ramp to Trimble Rd DIAG. On-Ramp	0.43	F	4.75
105+04139	US 101	NB	Trimble Rd DIAG. On-Ramp to San Tomas Expy DIAG. Off-Ramp	0.70	F	3.00
105P04139	US 101	NB	San Tomas Expy DIAG. Off-Ramp to San Tomas Expy DIAG. On-Ramp	0.64	F	2.75
105P04140	US 101	NB	America Pkwy DIAG. Off-Ramp to America Pkwy DIAG. On-Ramp	0.65	F	2.75
105+04141	US 101	NB	America Pkwy DIAG. On-Ramp to Lawrence Expy DIAG. Off-Ramp	0.58	F	2.75
105P04141	US 101	NB	Lawrence Expy DIAG. Off-Ramp to Lawrence Expy DIAG. On-Ramp	0.39	F	3.25
105+04142	US 101	NB	Lawrence Expy DIAG. On-Ramp to Fair Oaks Avenue DIAG. Off-Ramp	0.65	F	3.25
105P04142	US 101	NB	Fair Oaks Avenue DIAG. Off-Ramp to Fair Oaks Avenue DIAG. On-Ramp	0.29	F	3.00
105+04143	US 101	NB	Fair Oaks Avenue DIAG. On-Ramp to Mathilda Ave DIAG. Off-Ramp	0.52	F	1.25
105P04143	US 101	NB	Mathilda Ave DIAG. Off-Ramp to Mathilda Ave L. Off-Ramp	0.21	F	0.25
105+04144	US 101	NB	Mathilda Ave L. Off-Ramp to Southbay Fwy L. Off-Ramp	0.43	F	1.00
105P04144	US 101	NB	Southbay Fwy L. Off-Ramp to Southbay Fwy DIAG. Off-Ramp	0.20	F	1.75
105+04145	US 101	NB	Southbay Fwy DIAG. Off-Ramp to Ellis St DIAG. Off-Ramp	0.46	F	0.75
105P04145	US 101	NB	Ellis St DIAG. Off-Ramp to Ellis St DIAG. On-Ramp	0.60	F	0.75
105+04146	US 101	NB	Ellis St DIAG. On-Ramp to Moffett Blvd DIAG. Off-Ramp	0.32	F	1.00
105P04146	US 101	NB	Moffett Blvd DIAG. Off-Ramp to Moffett Blvd L. On-Ramp	0.18	F	0.75
105+04147	US 101	NB	Moffett Blvd L. Off-Ramp to Shoreline Blvd DIAG. Off-Ramp	0.25	F	1.75
105+04151	US 101	NB	Rengstorff Ave DIAG. On-Ramp to San Antonio Rd DIAG. Off-Ramp	0.25	F	0.75
105P04151	US 101	NB	San Antonio Rd DIAG. Off-Ramp to San Antonio Rd DIAG. On-Ramp	0.44	F	1.50
105+04152	US 101	NB	San Antonio Rd DIAG. On-Ramp to Embarcadero Rd DIAG. Off-Ramp	1.18	F	2.50

AM Period Non-Exempt Freeway Segments						
TMC	Fwy	Dir	Segment	Length	LOS	Duration of Congestion (hours)
105P04152	US 101	NB	Embarcadero Rd DIAG. Off-Ramp to Embarcadero Rd DIAG. On-Ramp	0.70	F	0.25
105P04304	SR 85	NB	US-101 DIAG. Off-Ramp to Bernal Rd L. On-Ramp	0.70	F	2.50
105P04307	SR 85	NB	Cottle Rd DIAG. Off-Ramp to Cottle Rd DIAG. On-Ramp	0.58	F	1.50
105+04308	SR 85	NB	Cottle Rd DIAG. On-Ramp to Blossom Hill Rd DIAG. Off-Ramp	1.29	F	0.25
105+04309	SR 85	NB	Blossom Hill Rd DIAG. On-Ramp to SR-87 DIAG. Off-Ramp	0.53	F	0.50
105P04309	SR 85	NB	SR-87 DIAG. Off-Ramp to SR-87 DIAG. On-Ramp	0.78	F	2.50
105P04311	SR 85	NB	Almaden Expwy DIAG. Off-Ramp to Almaden Expwy DIAG. On-Ramp	0.53	F	3.50
105+04312	SR 85	NB	Almaden Expwy DIAG. On-Ramp to Camden Ave DIAG. Off-Ramp	1.46	F	3.00
105P04312	SR 85	NB	Camden Ave DIAG. Off-Ramp to Camden Ave DIAG. On-Ramp	0.43	F	3.25
105+04313	SR 85	NB	Camden Ave DIAG. On-Ramp to Union Ave DIAG. Off-Ramp	0.79	F	3.50
105P04313	SR 85	NB	Union Ave DIAG. Off-Ramp to Union Ave DIAG. On-Ramp	0.42	F	2.25
105+04314	SR 85	NB	Union Ave DIAG. On-Ramp to S. Bascom Ave DIAG. Off-Ramp	0.48	F	2.25
105P04315	SR 85	NB	S. Bascom Ave DIAG. Off Ramp to Winchester Blvd DIAG. On-Ramp	1.18	F	4.00
105P04316	SR 85	NB	S. Bascom Ave DIAG. On-Ramp to Winchester Blvd DIAG. On-Ramp	0.28	F	4.75
105+04317	SR 85	NB	Winchester Blvd DIAG. On-Ramp to Saratoga Ave DIAG. Off-Ramp	2.12	F	2.00
105P04317	SR 85	NB	Saratoga Ave DIAG. Off-Ramp to Saratoga Ave DIAG. On-Ramp	0.62	F	1.50
105+04318	SR 85	NB	Saratoga Ave DIAG. On-Ramp to S De Anza Blvd DIAG. Off-Ramp	1.39	F	0.50
105P04318	SR 85	NB	S De Anza Blvd DIAG. Off-Ramp to S De Anza Blvd DIAG. On-Ramp	0.75	F	2.25
105+04319	SR 85	NB	S De Anza Blvd DIAG. On-Ramp to Stevens Creek Blvd DIAG. Off-Ramp	1.28	F	0.50
105P04319	SR 85	NB	Stevens Creek Blvd DIAG. Off-Ramp to Stevens Creek Blvd DIAG. On-Ramp	0.48	F	0.75
105+04320	SR 85	NB	Stevens Creek Blvd DIAG. On-Ramp to I-280 DIAG. Off-Ramp	0.21	F	1.00
105+04323	SR 85	NB	Freemont Ave On-Ramp to El Camino Real Off-Ramp	1.45	F	1.00
105P04323	SR 85	NB	El Camino Real Off-Ramp to El Camino Real On-Ramp	0.37	F	0.50

TABLE 4.4: NON-EXEMPT FREEWAY SEGMENTS OPERATING AT LOS F IN 2017 FOR THE PM PERIOD

PM Period Non-Exempt Freeway Segments							
TMC	Fwy	Dir	Segment	Length	LOS	Duration of Congestion (hours)	
105P04654	SR 87	NB	Almaden Expy DIAG. Off-Ramp to Almaden Expy DIAG. On-Ramp	0.24	F	0.25	
105+04655	SR 87	NB	Almaden Expy DIAG. On-Ramp to Alma Ave DIAG. Off-Ramp	0.44	F	0.50	
105+04656	SR 87	NB	Alma Ave DIAG. Off-Ramp to I-280 DIAG. Off-Ramp	0.67	F	1.00	
105N05914	SR 87	SB	Skyport Dr DIAG. Off-Ramp to Skyport Dr DIAG. On-Ramp	0.68	F	0.25	
105-05603	SR 87	SB	Skyport Dr DIAG. On-Ramp to Hedding St DIAG. Off-Ramp/Taylor St DIAG. Off-Ramp	0.78	F	1.75	
105-05602	SR 87	SB	Hedding St DIAG. Off-Ramp/Taylor St DIAG. Off-Ramp to Taylor St DIAG. Off-Ramp	0.11	F	1.50	
105N05602	SR 87	SB	Taylor St DIAG. Off-Ramp to Taylor St DIAG. On-Ramp	0.56	F	3.00	
105-04658	SR 87	SB	Taylor St DIAG. On-Ramp to Coleman Ave/Julian St DIAG Off-Ramp	0.16	F	0.25	
105N04658	SR 87	SB	Coleman Ave/Julian St DIAG Off-Ramp to Julian St DIAG. On-Ramp	0.57	F	0.25	
105N04657	SR 87	SB	Park Ave DIAG. Off-Ramp to I-280 DIAG. Off-Ramp	0.25	F	0.50	
105N04656	SR 87	SB	I-280 DIAG. Off-Ramp to Alma Ave DIAG Off-Ramp	1.23	F	3.25	
105-04655	SR 87	SB	Alma Ave DIAG Off-Ramp to Alma Ave DIAG On-Ramp	0.22	F	2.75	
105+04678	SR 237	EB	Middlefield Rd DIAG. to Middlefield Rd DIAG. On-Ramp	0.23	F	1.00	
105P04680	SR 237	EB	Mathilda Ave DIAG. Off-Ramp to Mathilda Ave DIAG. On-Ramp	0.46	F	3.25	
105+04681	SR 237	EB	Mathilda Ave DIAG. On-Ramp to Fair Oaks Way DIAG. Off-Ramp	0.54	F	2.75	
105P04681	SR 237	EB	Fair Oaks Way DIAG. Off-Ramp to Fair Oaks Way L. On-Ramp	0.21	F	3.25	
105+04682	SR 237	EB	Fair Oaks Way L. On-Ramp to Lawrence Expy DIAG. Off-Ramp	0.30	F	3.50	
105+05142	SR 237	EB	Great America Pkwy DIAG. On-Ramp to 1st L. Off-Ramp	0.55	F	5.50	
105-05143	SR 237	WB	McCarthy Blvd DIAG. On-Ramp to Zanker Rd DIAG. Off-Ramp	0.29	F	0.75	
105N04682	SR 237	WB	Lawrence Expy DIAG. Off-Ramp to Lawrence Expy DIAG. On-Ramp	0.66	F	0.25	
105-04681	SR 237	WB	Lawrence Expy DIAG. On-Ramp to Java Dr DIAG. Off-Ramp	0.33	F	1.00	
105N04681	SR 237	WB	Java Dr DIAG. Off-Ramp to Java Dr DIAG. On-Ramp	0.18	F	1.50	
105-04680	SR 237	WB	Java Dr DIAG. On-Ramp to Mathilda Ave DIAG Off-Ramp	0.54	F	1.50	

PM Period Non-Exempt Freeway Segments						
TMC	Fwy	Dir	Segment	Length	LOS	Duration of Congestion (hours)
105N04680	SR 237	WB	Mathilda Ave DIAG Off-Ramp to Mathilda Ave DIAG On-Ramp	0.45	F	2.50
105-04679	SR 237	WB	Mathilda Ave DIAG On-Ramp to US-101 DIAG. Off-Ramp	0.09	F	2.25
105N04679	SR 237	WB	US-101 DIAG. Off-Ramp to US-101 L. On-Ramp	0.21	F	1.50
105-04678	SR 237	WB	US-101 L. On-Ramp to Maude Ave DIAG. Off-Ramp	0.48	F	1.50
105N04678	SR 237	WB	Maude Ave DIAG. Off-Ramp to Maude Ave DIAG. On-Ramp	0.28	F	2.00
105-04677	SR 237	WB	Maude Ave DIAG. On-Ramp to Middlefield DIAG. Off-Ramp	0.22	F	2.00
105N04677	SR 237	WB	Middlefield DIAG. Off-Ramp to Middlefield DIAG. On-Ramp	0.30	F	2.50
105-04676	SR 237	WB	Middlefield DIAG. On-Ramp to Dana St DIAG. Off-Ramp	0.44	F	2.25
105N04676	SR 237	WB	Dana St DIAG. Off-Ramp to Dana St L. On-Ramp	0.23	F	3.50
105-04675	SR 237	WB	Dana St L. On-Ramp to SR-85 L. Off-Ramp	0.10	F	2.75
105-20468	SR 237	WB	SR-85 DIAG. On-Ramp to El Camino Real	0.21	F	9.00
105P04645	SR 17	NB	Saratoga Los Gatos Rd DIAG. Off-Ramp to Saratoga Los Gatos Rd DIAG. On-Ramp	0.30	F	6.00
105N04646	SR 17	SB	Lark Ave DIAG. Off-Ramp to Lark Ave DIAG. On-Ramp	0.21	F	0.75
105P04817	I 280	NB	11th St DIAG. Off-Ramp to 11th St DIAG. On-Ramp	0.58	F	0.25
105+04818	I 280	NB	11th St DIAG. On-Ramp to 4th St DIAG. On-Ramp	0.19	F	0.50
105+04819	I 280	NB	4th St DIAG. On-Ramp to 4th St DIAG. On-Ramp	0.14	F	0.25
105P04819	I 280	NB	4th St DIAG. On-Ramp to 4th St DIAG. On-Ramp	0.01	F	0.50
105+04820	I 280	NB	4th St DIAG. On-Ramp to SR-87 DIAG. Off-Ramp	0.17	F	0.25
105P04820	I 280	NB	SR-87 DIAG. Off-Ramp to SR-87 DIAG. On-Ramp	0.76	F	0.50
105+04837	I 280	NB	Page Mill Rd DIAG. On-Ramp to Alpine Rd DIAG. Off-Ramp	1.70	F	1.50
105-04836	I 280	SB	Alpine Rd DIAG. On-Ramp to Page Mill Rd DIAG. Off-Ramp	1.58	F	1.50
105N04836	I 280	SB	Page Mill Rd DIAG. Off-Ramp to Page Mill Rd DIAG. On-Ramp	0.65	F	2.50
105-04835	I 280	SB	Page Mill Rd DIAG. On-Ramp to El Monte Rd DIAG. Off-Ramp	2.71	F	3.50
105N04835	I 280	SB	El Monte Rd DIAG. Off-Ramp to El Monte Rd DIAG. On-Ramp	0.60	F	4.00
105-04834	I 280	SB	El Monte Rd DIAG. On-Ramp to Magdalena Ave DIAG. Off-Ramp	0.36	F	4.50
105N04834	I 280	SB	Magdalena Ave DIAG. Off-Ramp to Magdalena Ave L. On-Ramp	0.38	F	0.75

PM Period Non-Exempt Freeway Segments						
TMC	Fwy	Dir	Segment	Length	LOS	Duration of Congestion (hours)
105-04825	I 280	SB	Winchester Blvd to SR-17 DIAG. Off-Ramp	0.11	F	2.75
105N04825	I 280	SB	SR-17 DIAG. Off-Ramp to SR-17 DIAG. On-Ramp	0.62	F	3.75
105-04824	I 280	SB	SR-17 DIAG. On-Ramp to Bascom Ave DIAG. Off-Ramp	0.18	F	4.25
105N04824	I 280	SB	Bascom Ave DIAG. Off-Ramp to Leland Ave	0.39	F	5.00
105-04823	I 280	SB	Leland Ave to Meridian Ave DIAG. Off-Ramp	0.25	F	5.00
105N04823	I 280	SB	Meridian Ave DIAG. Off-Ramp to Meridian Ave DIAG. On-Ramp	0.75	F	5.00
105-04822	I 280	SB	Meridian Ave L. Off-Ramp to Meridian Ave L. Off-Ramp	0.01	F	5.50
105N04822	I 280	SB	Meridian Ave L. Off-Ramp to Southwest Expy DIAG. On-Ramp	0.22	F	5.25
105-04821	I 280	SB	Southwest Expy DIAG. On-Ramp to Bird Ave DIAG. Off-Ramp	0.47	F	3.75
105N04821	I 280	SB	Bird Ave DIAG. Off-Ramp to Bird Ave DIAG. On-Ramp	0.83	F	4.00
105-04819	I 280	SB	SR-87 DIAG. On-Ramp to 1st St L. On-Ramp	0.20	F	4.75
105N04819	I 280	SB	1st St L. On-Ramp to 6th St DIAG. Off-Ramp	0.10	F	4.25
105-04818	I 280	SB	1st St L. On-Ramp to 6th St DIAG. Off-Ramp	0.05	F	4.50
105-04817	I 280	SB	6th St DIAG. Off-Ramp to 10th St DIAG. Off-Ramp	0.21	F	4.75
105N04817	I 280	SB	10th St DIAG. Off-Ramp to 11th St DIAG. On-Ramp	0.54	F	2.00
105+04348	I 880	NB	Stevens Creek Blvd DIAG. On-Ramp to Bascom Ave DIAG. Off-Ramp	0.48	F	1.25
105P04348	I 880	NB	Bascom Ave DIAG. Off-Ramp to Bascom Ave DIAG. On-Ramp	0.27	F	2.75
105+04349	I 880	NB	Bascom Ave DIAG. On-Ramp to The Alameda DIAG. Off-Ramp	0.51	F	3.50
105P04349	I 880	NB	The Alameda DIAG. Off-Ramp to The Alameda DIAG. On-Ramp	0.38	F	4.00
105+04350	I 880	NB	The Alameda DIAG. On-Ramp to Coleman Ave L. Off-Ramp	0.30	F	5.00
105P04350	I 880	NB	Coleman Ave L. Off-Ramp to Coleman Ave DIAG. On-Ramp	0.38	F	5.25
105+04351	I 880	NB	Coleman Ave DIAG. On-Ramp to 1st St DIAG. Off-Ramp	0.41	F	3.75
105P04351	I 880	NB	1st St DIAG. Off-Ramp to 1nd St DIAG. On-Ramp	0.38	F	3.25
105-04355	I 880	SB	Great Mall Pkwy DIAG. On-Ramp to Montague Expy DIAG. Off-Ramp	0.42	F	2.25
105-04349	I 880	SB	Coleman Ave DIAG. On-Ramp to The Alameda DIAG. Off-Ramp	0.17	F	0.75
105N04349	I 880	SB	The Alameda DIAG. Off-Ramp to The Alameda DIAG. On-Ramp	0.37	F	1.75

PM Period Non-Exempt Freeway Segments						
TMC	Fwy	Dir	Segment	Length	LOS	Duration of Congestion (hours)
105-04348	I 880	SB	The Alameda DIAG. On-Ramp to Bascom Ave DIAG. Off-Ramp	0.45	F	1.75
105N04887	I 680	SB	Jacklin Rd DIAG. Off-Ramp to Jacklin Rd DIAG. On-Ramp	0.61	F	0.75
105N04886	I 680	SB	Calaveras Blvd DIAG. Off Ramp to Calaveras Blvd DIAG. On Ramp	0.96	F	2.75
105-04885	I 680	SB	Calaveras Blvd DIAG. On Ramp to Montague Expy DIAG. Off-Ramp	0.64	F	3.00
105N04885	I 680	SB	Montague Expy DIAG. Off-Ramp to Montague Expy DIAG. On-Ramp	0.70	F	3.25
105-04884	I 680	SB	Montague Expy DIAG. On-Ramp to Capitol Expy DIAG. Off-Ramp	0.43	F	3.25
105N04884	I 680	SB	Capitol Expy DIAG. Off-Ramp to Capitol Expy DIAG. On-Ramp	0.53	F	4.00
105-04883	I 680	SB	Capitol Expy DIAG. On-Ramp to Hostetter Rd L. Off-Ramp	0.10	F	4.25
105N04883	I 680	SB	Hostetter Rd L. Off-Ramp to Hostetter Rd L. On- Ramp	0.42	F	4.00
105-04882	I 680	SB	Hostetter Rd L. On-Ramp to Berryessa Rd DIAG. Off-Ramp	0.19	F	2.75
105N04882	I 680	SB	Berryessa Rd DIAG. Off-Ramp to Berryessa Rd DIAG. On-Ramp	0.63	F	2.25
105-04881	I 680	SB	Berryessa Rd DIAG. On-Ramp to McKee Rd DIAG. Off-Ramp	0.82	F	0.25
105N04881	I 680	SB	McKee Rd DIAG. Off-Ramp to McKee Rd DIAG. On-Ramp	0.65	F	0.75
105+04147	US 101	NB	Moffett Blvd L. Off-Ramp to Shoreline Blvd DIAG. Off-Ramp	0.25	F	1.00
105P04147	US 101	NB	Moffett Blvd L. On-Ramp to Shoreline Blvd DIAG. Off-Ramp	0.25	F	1.25
105P04148	US 101	NB	Moffett Blvd L. Off-Ramp to Shoreline Blvd DIAG. On-Ramp	1.10	F	0.50
105N04146	US 101	SB	Moffett Blvd L. Off-Ramp to Moffett Blvd DIAG. On-Ramp	0.15	F	4.00
105-04145	US 101	SB	Moffett Blvd DIAG. On-Ramp to Ellis St DIAG. Off- Ramp	0.41	F	4.50
105N04145	US 101	SB	Ellis St DIAG. Off-Ramp to Ellis St DIAG. On- Ramp	0.54	F	5.25
105-04144	US 101	SB	Ellis St DIAG. On-Ramp to SR-237 L. Off-Ramp	0.60	F	2.50
105N04144	US 101	SB	SR-237 L. Off-Ramp to SR-237 DIAG. On-Ramp	0.20	F	1.25
105N04143	US 101	SB	Mathilda Ave. DIAG. Off-Ramp to Mathilda Ave. DIAG. On-Ramp	0.33	F	1.75
105-04142	US 101	SB	Mathilda Ave. DIAG. On-Ramp to Fair Oaks Ave DIAG. Off-Ramp	0.52	F	1.25
105N04142	US 101	SB	Fair Oaks Ave DIAG. Off-Ramp to Fair Oaks Ave DIAG. On-Ramp	0.41	F	2.50

PM Period Non-Exempt Freeway Segments						
TMC	Fwy	Dir	Segment	Length	LOS	Duration of Congestion (hours)
105-04141	US 101	SB	Fair Oaks Ave DIAG. On-Ramp to Lawrence Expy DIAG. Off-Ramp	0.55	F	4.00
105N04141	US 101	SB	Lawrence Expy DIAG. Off-Ramp to Lawrence Expy DIAG. On-Ramp	0.39	F	5.75
105-04140	US 101	SB	Lawrence Expy DIAG. On-Ramp to Bowers Ave DIAG. Off-Ramp	0.58	F	6.00
105N04131	US 101	SB	McKee Rd DIAG. On-Ramp to Alum Rock Ave DIAG. Off-Ramp	0.24	F	0.50
105-04121	US 101	SB	Bailey Ave DIAG. On-Ramp to Coyote Creek Golf Dr DIAG. Off-Ramp	1.59	F	1.75
105N04121	US 101	SB	Coyote Creek Golf Dr DIAG. Off-Ramp to Coyote Creek Golf Dr DIAG. On-Ramp	0.62	F	2.25
105-04120	US 101	SB	Coyote Creek Golf Dr DIAG. On-Ramp to Cochrane Rd DIAG. Off-Ramp	2.69	F	3.00
105N04120	US 101	SB	Cochrane Rd DIAG. Off-Ramp to Cochrane Rd DIAG. On-Ramp	0.77	F	2.75
105N04113	US 101	SB	Monterey Rd DIAG. Off-Ramp to Monterey Rd DIAG. On-Ramp	0.50	F	1.50
105-09872	US 101	SB	Monterey Rd DIAG. On-Ramp to Castro Valley Rd	1.04	F	2.00
105-09871	US 101	SB	Castro Valley Rd to SR-25 DIAG. Off-Ramp	0.34	F	0.50
105N04328	SR 85	SB	N Shoreline Blvd DIAG. On-Ramp to Moffett Blvd L. Off-Ramp	0.75	F	0.50
105-04326	SR 85	SB	Moffett Blvd L. Off-Ramp to Central Expy DIAG. Off-Ramp	0.47	F	1.75
105N04326	SR 85	SB	Central Expy DIAG. Off-Ramp to Central Expy DIAG. On-Ramp	0.26	F	1.75
105N04325	SR 85	SB	Evelyn Ave DIAG. Off-Ramp to Evelyn Ave DIAG. On-Ramp	0.24	F	2.00
105-04320	SR 85	SB	Homestead Rd DIAG. On-Ramp to I-280 DIAG. Off-Ramp	0.73	F	3.25
105-04319	SR 85	SB	I-280 DIAG. Off-Ramp to I-280 DIAG. On-Ramp	0.20	F	4.25
105N04319	SR 85	SB	Stevens Creek Blvd DIAG. Off-Ramp to Stevens Creek Blvd DIAG. On-Ramp	0.52	F	5.00
105-04318	SR 85	SB	Stevens Creek Blvd DIAG. On-Ramp to S De Anza Blvd DIAG. Off-Ramp	1.29	F	5.00
105N04318	SR 85	SB	S De Anza Blvd DIAG. Off-Ramp to S De Anza Blvd DIAG. On-Ramp	0.54	F	4.50
105-04317	SR 85	SB	S De Anza Blvd DIAG. On-Ramp to Saratoga Ave DIAG. Off-Ramp	1.58	F	4.50
105N04317	SR 85	SB	Saratoga Ave DIAG. Off-Ramp to Saratoga Ave DIAG. On-Ramp	0.54	F	5.50
105-04316	SR 85	SB	Saratoga Ave DIAG. On-Ramp to Winchester Blvd DIAG. Off-Ramp	2.19	F	1.00
105N04316	SR 85	SB	Winchester Blvd DIAG. Off-Ramp to Winchester Blvd DIAG. On-Ramp	0.28	F	1.75
105N04315	SR 85	SB	SR-17 DIAG. Off-Ramp to SR-17 DIAG. On-Ramp	0.90	F	3.25

PM Period Non-Exempt Freeway Segments						
TMC	Fwy	Dir	Segment	Length	LOS	Duration of Congestion (hours)
105-04313	SR 85	SB	S Bascom Ave DIAG. On-Ramp to Union Ave DIAG. Off-Ramp	0.35	F	5.50
105N04313	SR 85	SB	Union Ave DIAG. Off-Ramp to Union Ave DIAG. On-Ramp	0.62	F	4.25

HOV Lane Operations

There are 188 directional miles of HOV lanes throughout the freeway network in Santa Clara County, Figure.2 shows the results of the HOV lane LOS analysis. About 50% of the HOV miles operate at or worse than LOS D in the AM peak, while 55% of the HOV miles operate at or worse than LOS D in the PM peak hour. In addition to the overall system HOV operations, Table 4.5 presents the total HOV miles operating at LOS F in each freeway with HOV facilities.

FIGURE 4.2: 2017 OVERALL HOV FREEWAY SYSTEM OPERATION

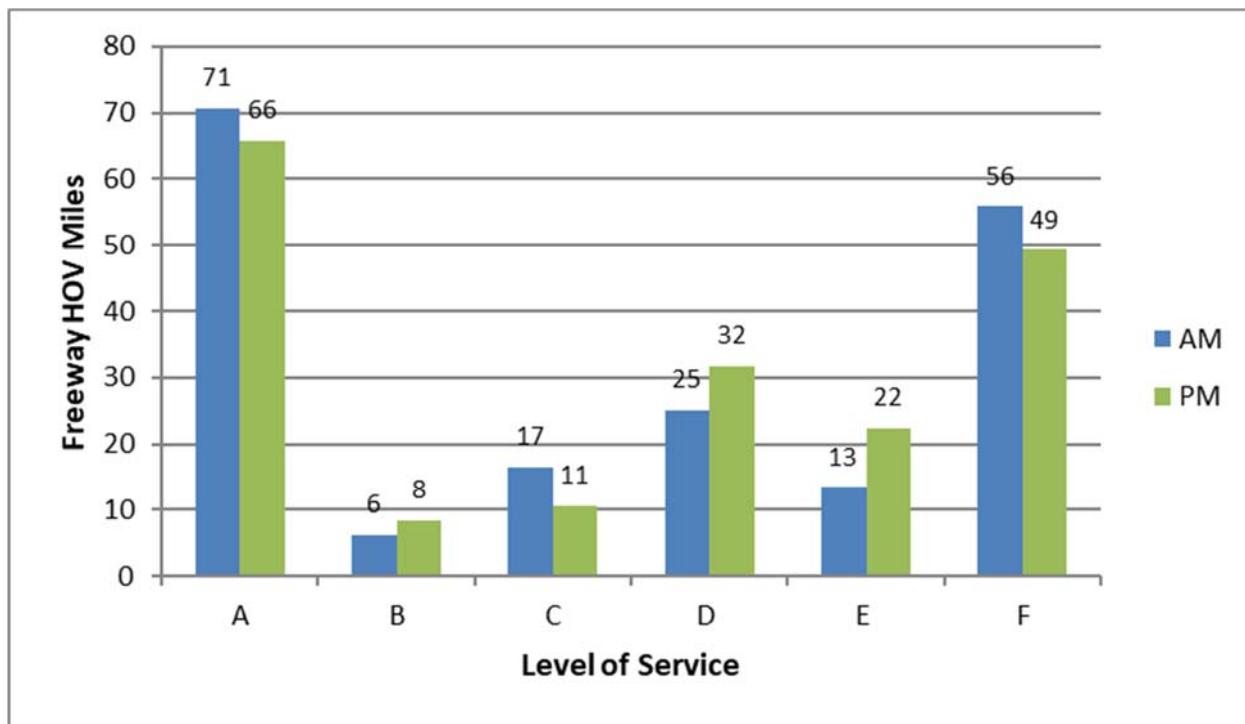


TABLE 4.5 TOTAL HOV MILES WITH LOS F CATEGORIZED BY FREEWAY FACILITY

Fwy	Dir	Total HOV Miles	LOS F AM Period Miles (% of Total)	LOS F PM Period Miles (% of Total)
SR 87	SB	7.9	4.6 (59%)	0.0 (0%)
	SB	8.9	0.0 (0%)	0.2 (2%)
SR 237	EB	6.4	0.0 (0%)	4.4 (69%)
	WB	5.5	3.8 (69%)	0.5 (9%)
I-280	NB	11.8	7.9 (67%)	0.0 (0%)
	SB	12.1	0.0 (0%)	8.5 (70%)
I-880	NB	6.9	0.3 (5%)	1.9 (27%)
	SB	7.0	3.0 (44%)	4.0 (58%)
I-680	SB	2.6	0.0 (0%)	0.0 (0%)
US 101	NB	35.6	21.7 (61%)	3.1 (9%)
	SB	34.0	0.0 (0%)	15.7 (46%)
SR 85	NB	24.3	13.1 (54%)	0.0 (0%)
	SB	23.8	0.0 (0%)	11.1 (47%)

The results from the table show that SR 87, US 101, and SR 85 have more HOV miles operating at LOS F in the AM peak period when compared to the PM peak period. However, SR 237, I-280 and I-880 have more HOV miles operating at LOS F in the PM peak period when compared to the AM peak period. These results show the pattern of HOV lanes usage during the AM peak and PM peak periods across the freeway facilities in the Santa Clara County.

Table 4.6 and Table 4.7 present the list of HOV segments operating at LOS F in the AM and PM periods, respectively. All segments in which the HOV lane operated at LOS F also had mixed flow segments operating at LOS F for 2017 except for the following segments:

- I-280 Northbound between the Magdalena Avenue Off-Ramp and Magdalena Avenue On-Ramp during the AM period
- US 101 Northbound between the Bayshore Freeway and Rengstorff Avenue Off-Ramp in the AM period
- SR 87 Southbound between the US 101 On-Ramp and Skyport Drive Off-Ramp during the PM period
- I-880 Southbound between SR 237 off-ramp and Great Mall Parkway on-ramp in the PM period
- US 101 Northbound between the on and off ramps at Cochrane Road and Coyote Creek Gold Drive in the PM period

- US 101 Southbound between the SR 87 Off-Ramp and Airport Parkway off-ramp

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.

TABLE 4.6: HOV SEGMENTS OPERATING AT LOS F IN THE AM PERIOD

HOV Segments Operating at LOS F in the AM Period						
TMC	Fwy	Dir	Segment	Length	HOV LOS	
105+04653	SR 87	NB	Capitol Expy DIAG. On-Ramp to Curtner Ave DIAG. Off-Ramp	0.98	F	
105P04653	SR 87	NB	Curtner Ave DIAG. Off-Ramp to Curtner Ave DIAG. On-Ramp	0.56	F	
105+04654	SR 87	NB	Curtner Ave DIAG. On-Ramp to Almaden Expy DIAG. Off-Ramp	0.21	F	
105P04654	SR 87	NB	Almaden Expy DIAG. Off-Ramp to Almaden Expy DIAG. On-Ramp	0.24	F	
105P04656	SR 87	NB	I-280 DIAG. Off-Ramp to I-280 DIAG. On-Ramp	0.80	F	
105P04657	SR 87	NB	I-280 DIAG. On-Ramp to Santa Clara St DIAG. Off-Ramp	0.28	F	
105+04658	SR 87	NB	Santa Clara St DIAG. Off-Ramp to Julian St DIAG. Off-Ramp	0.12	F	
105P04658	SR 87	NB	Julian St DIAG. Off-Ramp to Julian St DIAG. On-Ramp	0.57	F	
105+05602	SR 87	NB	Julian St DIAG. On-Ramp to Taylor DIAG. Off-Ramp	0.13	F	
105+05605	SR 87	NB	Skyport Dr DIAG. On-Ramp to US-101 DIAG. Off-Ramp	0.36	F	
105P05605	SR 87	NB	US-101 DIAG. Off-Ramp to US-101 DIAG. On-Ramp	0.38	F	
105N05144	SR 237	WB	McCarthy Blvd DIAG. Off-Ramp to McCarthy Blvd DIAG. On-Ramp	0.57	F	
105-05143	SR 237	WB	McCarthy Blvd DIAG. On-Ramp to Zanker Rd DIAG. Off-Ramp	0.29	F	
105N05143	SR 237	WB	Zanker Rd DIAG. Off-Ramp to Zanker Rd DIAG. On-Ramp	0.35	F	
105-05142	SR 237	WB	Zanker Rd DIAG. On-Ramp to 1st DIAG. Off-Ramp	0.84	F	
105-04682	SR 237	WB	America Center Dr DIAG. On-Ramp to Lawrence Expy DIAG. Off-Ramp	0.54	F	
105N04682	SR 237	WB	Lawrence Expy DIAG. Off-Ramp to Lawrence Expy DIAG. On-Ramp	0.66	F	
105-04681	SR 237	WB	Lawrence Expy DIAG. On-Ramp to Java Dr DIAG. Off-Ramp	0.33	F	
105N04681	SR 237	WB	Java Dr DIAG. Off-Ramp to Java Dr DIAG. On-Ramp	0.18	F	
105P04823	I 280	NB	SR-280 DIAG. Off-Ramp to SR-280 DIAG. On-Ramp	0.50	F	
105+04824	I 280	NB	SR-280 DIAG. On-Ramp to Menker Ave DIAG. On-Ramp	0.39	F	

HOV Segments Operating at LOS F in the AM Period						
TMC	Fwy	Dir	Segment	Length	HOV LOS	
105P04824	I 280	NB	Menker Ave DIAG. On-Ramp to Leland Ave DIAG. On-Ramp	0.26	F	
105P04825	I 280	NB	SR-17 DIAG. Off-Ramp to SR-17 DIAG. On-Ramp	0.76	F	
105+04826	I 280	NB	SR-17 DIAG. On-Ramp to Winchester Blvd DIAG. Off-Ramp	0.20	F	
105P04826	I 280	NB	Winchester Blvd DIAG. Off-Ramp to Winchester Blvd DIAG. On-Ramp	0.33	F	
105+04827	I 280	NB	Winchester Blvd DIAG. On-Ramp to Saratoga Ave DIAG. Off-Ramp	0.68	F	
105P04827	I 280	NB	Saratoga Ave DIAG. Off-Ramp to Saratoga Ave DIAG. On-Ramp	0.56	F	
105+04828	I 280	NB	Saratoga Ave DIAG. On-Ramp to Lawrence Expy DIAG. Off-Ramp	0.74	F	
105P04828	I 280	NB	Lawrence Expy DIAG. Off-Ramp to Lawrence Expy	0.28	F	
105+04829	I 280	NB	Lawrence Expy to Stevens Creek Blvd DIAG. Off-Ramp	0.24	F	
105P04829	I 280	NB	Stevens Creek Blvd DIAG. Off-Ramp to Stevens Creek Blvd DIAG. On-Ramp	0.30	F	
105+04830	I 280	NB	Stevens Creek Blvd DIAG. On-Ramp to Wolfe Rd DIAG. Off-Ramp	0.45	F	
105+04831	I 280	NB	Wolfe Rd DIAG. On-Ramp to De Anza Blvd DIAG. Off-Ramp	0.61	F	
105P04831	I 280	NB	De Anza Blvd DIAG. Off-Ramp to De Anza Blvd DIAG. On-Ramp	0.46	F	
105+04832	I 280	NB	De Anza Blvd DIAG. On-Ramp to SR-85 DIAG. Off-Ramp	0.70	F	
105P04834	I 280	NB	Magdalena Ave DIAG. Off-Ramp to Magdalena Ave DIAG. On-Ramp	0.47	F	
105P04352	I 880	NB	US-101 DIAG. Off-Ramp to US-101 DIAG. On-Ramp	0.34	F	
105N04358	I 880	SB	Dixon Landing DIAG. Off-Ramp to Dixon Landing DIAG. On-Ramp	0.64	F	
105-04357	I 880	SB	Dixon Landing DIAG. On-Ramp to SR-237 DIAG. Off-Ramp	1.13	F	
105-04353	I 880	SB	Brokaw Rd DIAG. On-Ramp to Old Bayshore Hwy DIAG. Off-Ramp	0.46	F	
105N04353	I 880	SB	Old Bayshore Hwy DIAG. Off-Ramp to Old Bayshore Hwy L. On-Ramp	0.32	F	
105-04352	I 880	SB	Old Bayshore Hwy L. On-Ramp to US-101 L. On-Ramp	0.18	F	
105N04352	I 880	SB	US-101 L. On-Ramp to US-101 DIAG. On-Ramp	0.19	F	
105-04351	I 880	SB	US-101 DIAG. On-Ramp to 1st St DIAG. Off-Ramp	0.12	F	
105P04124	US 101	NB	Silver Creek Valley Rd DIAG. Off-Ramp to Silver Creek Valley Rd DIAG. On-Ramp	0.77	F	
105+04125	US 101	NB	Silver Creek Valley Rd DIAG. On-Ramp to Hellyer Ave DIAG. Off-Ramp	1.34	F	
105P04125	US 101	NB	Hellyer Ave DIAG. Off-Ramp to Hellyer Ave L. On-Ramp	0.27	F	
105+04126	US 101	NB	Hellyer Ave L. On-Ramp to Yerba Buena Rd L. Off-Ramp	0.70	F	
105P04126	US 101	NB	Yerba Buena Rd L. Off-Ramp to Capitol Expy DIAG. Off-Ramp	0.18	F	
105P04127	US 101	NB	Capitol Expy DIAG. Off-Ramp to Capitol Expy DIAG. On-Ramp	0.97	F	

HOV Segments Operating at LOS F in the AM Period					
TMC	Fwy	Dir	Segment	Length	HOV LOS
105+04128	US 101	NB	Capitol Expy DIAG. On-Ramp to Tully Rd DIAG. Off-Ramp	0.64	F
105+04129	US 101	NB	Tully Rd DIAG. On-Ramp to I-680 DIAG. Off-Ramp	0.97	F
105P04129	US 101	NB	I-680 DIAG. Off-Ramp to I-680 DIAG. On-Ramp	0.79	F
105+04131	US 101	NB	I-680 DIAG. On-Ramp to Alum Rock Ave	0.53	F
105P04132	US 101	NB	Alum Rock Ave DIAG. Off-Ramp to McKee Rd DIAG. On-Ramp	0.75	F
105+04133	US 101	NB	McKee Rd DIAG. On-Ramp to Oakland Rd DIAG. Off-Ramp	1.14	F
105P04133	US 101	NB	Oakland Rd DIAG. Off-Ramp to Oakland Rd DIAG. On-Ramp	0.41	F
105+04134	US 101	NB	Oakland Rd DIAG. On-Ramp to I-880 DIAG. Off-Ramp	0.15	F
105P04134	US 101	NB	I-880 DIAG. Off-Ramp to I-880 L. On-Ramp	0.22	F
105+04135	US 101	NB	I-880 L. On-Ramp to Old Bayshore Hwy DIAG. On-Ramp	0.34	F
105P04135	US 101	NB	Old Bayshore Hwy DIAG. On-Ramp to Old Bayshore Hwy DIAG. Off-Ramp	0.23	F
105+04136	US 101	NB	Old Bayshore Hwy DIAG. Off-Ramp to Brokaw Rd DIAG. Off-Ramp	0.20	F
105P04136	US 101	NB	Brokaw Rd DIAG. Off-Ramp to Brokaw Rd DIAG. On-Ramp	0.63	F
105P04137	US 101	NB	Trimble Rd DIAG. Off-Ramp to SR-87 DIAG. On-Ramp	0.45	F
105+04138	US 101	NB	SR-87 DIAG. On-Ramp to Trimble Rd DIAG. Off-Ramp	0.28	F
105P04138	US 101	NB	Trimble Rd DIAG. Off-Ramp to Trimble Rd DIAG. On-Ramp	0.43	F
105+04139	US 101	NB	Trimble Rd DIAG. On-Ramp to San Tomas Expy DIAG. Off-Ramp	0.70	F
105P04139	US 101	NB	San Tomas Expy DIAG. Off-Ramp to San Tomas Expy DIAG. On-Ramp	0.64	F
105P04140	US 101	NB	America Pkwy DIAG. Off-Ramp to America Pkwy DIAG. On-Ramp	0.65	F
105+04141	US 101	NB	America Pkwy DIAG. On-Ramp to Lawrence Expy DIAG. Off-Ramp	0.58	F
105P04141	US 101	NB	Lawrence Expy DIAG. Off-Ramp to Lawrence Expy DIAG. On-Ramp	0.39	F
105+04142	US 101	NB	Lawrence Expy DIAG. On-Ramp to Fair Oaks Avenue DIAG. Off-Ramp	0.65	F
105P04142	US 101	NB	Fair Oaks Avenue DIAG. Off-Ramp to Fair Oaks Avenue DIAG. On-Ramp	0.29	F
105+04143	US 101	NB	Fair Oaks Avenue DIAG. On-Ramp to Mathilda Ave DIAG. Off-Ramp	0.52	F
105+04144	US 101	NB	Mathilda Ave L. Off-Ramp to Southbay Fwy L. Off-Ramp	0.43	F
105+04145	US 101	NB	Southbay Fwy DIAG. Off-Ramp to Ellis St DIAG. Off-Ramp	0.46	F
105P04145	US 101	NB	Ellis St DIAG. Off-Ramp to Ellis St DIAG. On-Ramp	0.60	F
105+04146	US 101	NB	Ellis St DIAG. On-Ramp to Moffett Blvd DIAG. Off-Ramp	0.32	F
105P04147	US 101	NB	Moffett Blvd L. On-Ramp to Shoreline Blvd DIAG. Off-Ramp	0.25	F

HOV Segments Operating at LOS F in the AM Period						
TMC	Fwy	Dir	Segment	Length	HOV LOS	
105P04148	US 101	NB	Moffett Blvd L. Off-Ramp to Shoreline Blvd DIAG. On-Ramp	1.10	F	
105+04150	US 101	NB	Bayshore Fwy/US-101 to Rengstorff Ave DIAG. Off-Ramp	0.51	F	
105+04152	US 101	NB	San Antonio Rd DIAG. On-Ramp to Embarcadero Rd DIAG. Off-Ramp	1.18	F	
105P04307	SR 85	NB	Cottle Rd DIAG. Off-Ramp to Cottle Rd DIAG. On-Ramp	0.58	F	
105+04309	SR 85	NB	Blossom Hill Rd DIAG. On-Ramp to SR-87 DIAG. Off-Ramp	0.53	F	
105P04309	SR 85	NB	SR-87 DIAG. Off-Ramp to SR-87 DIAG. On-Ramp	0.78	F	
105P04311	SR 85	NB	Almaden Expwy DIAG. Off-Ramp to Almaden Expwy DIAG. On-Ramp	0.53	F	
105+04312	SR 85	NB	Almaden Expwy DIAG. On-Ramp to Camden Ave DIAG. Off-Ramp	1.46	F	
105P04312	SR 85	NB	Camden Ave DIAG. Off-Ramp to Camden Ave DIAG. On-Ramp	0.43	F	
105+04313	SR 85	NB	Camden Ave DIAG. On-Ramp to Union Ave DIAG. Off-Ramp	0.79	F	
105+04314	SR 85	NB	Union Ave DIAG. On-Ramp to S. Bascom Ave DIAG. Off-Ramp	0.48	F	
105P04315	SR 85	NB	S. Bascom Ave DIAG. Off Ramp to Winchester Blvd DIAG. On-Ramp	1.18	F	
105P04316	SR 85	NB	S. Bascom Ave DIAG. On-Ramp to Winchester Blvd DIAG. On-Ramp	0.28	F	
105+04317	SR 85	NB	Winchester Blvd DIAG. On-Ramp to Saratoga Ave DIAG. Off-Ramp	2.12	F	
105P04317	SR 85	NB	Saratoga Ave DIAG. Off-Ramp to Saratoga Ave DIAG. On-Ramp	0.62	F	
105P04318	SR 85	NB	S De Anza Blvd DIAG. Off-Ramp to S De Anza Blvd DIAG. On-Ramp	0.75	F	
105+04320	SR 85	NB	Stevens Creek Blvd DIAG. On-Ramp to I-280 DIAG. Off-Ramp	0.21	F	
105+04321	SR 85	NB	I-280 DIAG. Off-Ramp to Homestead Rd	0.73	F	
105+04322	SR 85	NB	Homestead Rd On-Ramp to Fremont Ave Off-Ramp	0.75	F	
105P04322	SR 85	NB	Fremont Ave Off-Ramp to Fremont Ave On-Ramp	0.42	F	
105P04328	SR 85	NB	US-101 Off-Ramp to N Shoreline Blvd Off-Ramp	0.50	F	

TABLE 4.7: HOV SEGMENTS OPERATING AT LOS F IN THE PM PERIOD

HOV Segments Operating at LOS F in the PM Period					
TMC	Fwy	Dir	Segment	Length	HOV LOS
105-05604	SR 87	SB	US-101 DIAG. On-Ramp to Skyport Dr DIAG. Off-Ramp	0.17	F
105P04680	SR 237	EB	Mathilda Ave DIAG. Off-Ramp to Mathilda Ave DIAG. On-Ramp	0.46	F
105+04681	SR 237	EB	Mathilda Ave DIAG. On-Ramp to Fair Oaks Way DIAG. Off-Ramp	0.54	F
105P04681	SR 237	EB	Fair Oaks Way DIAG. Off-Ramp to Fair Oaks Way L. On-Ramp	0.21	F
105+04682	SR 237	EB	Fair Oaks Way L. On-Ramp to Lawrence Expy DIAG. Off-Ramp	0.30	F
105P04682	SR 237	EB	Lawrence Expy DIAG. Off-Ramp to Lawrence Expy DIAG. On-Ramp	0.61	F
105+05140	SR 237	EB	Lawrence Expy DIAG. On-Ramp to Great America Pkwy DIAG. Off-Ramp	0.60	F
105P05140	SR 237	EB	Great America Pkwy DIAG. Off-Ramp to Great America Pkwy DIAG. On-Ramp	0.81	F
105+05142	SR 237	EB	Great America Pkwy DIAG. On-Ramp to 1st L. Off-Ramp	0.55	F
105P05142	SR 237	EB	1st L. Off-Ramp to 1st DIAG. On-Ramp	0.33	F
105-04681	SR 237	WB	Lawrence Expy DIAG. On-Ramp to Java Dr DIAG. Off-Ramp	0.33	F
105N04681	SR 237	WB	Java Dr DIAG. Off-Ramp to Java Dr DIAG. On-Ramp	0.18	F
105N04834	I 280	SB	Magdalena Ave DIAG. Off-Ramp to Magdalena Ave L. On-Ramp	0.38	F
105N04833	I 280	SB	Foothill Blvd DIAG. Off-Ramp to Foothill Blvd DIAG. On-Ramp	0.46	F
105-04832	I 280	SB	Foothill Blvd DIAG. On-Ramp to SR-85 DIAG. Off-Ramp	0.26	F
105N04832	I 280	SB	SR-85 DIAG. Off-Ramp to SR-85 DIAG. On-Ramp	0.75	F
105-04831	I 280	SB	SR-85 DIAG. On-Ramp to De Anza Blvd DIAG. Off-Ramp	0.57	F
105N04831	I 280	SB	De Anza Blvd DIAG. Off-Ramp to De Anza Blvd DIAG. On-Ramp	0.46	F
105-04830	I 280	SB	De Anza Blvd DIAG. On-Ramp to Wolfe Rd DIAG. Off-Ramp	0.63	F
105N04830	I 280	SB	Wolfe Rd DIAG. Off-Ramp to Wolfe Rd DIAG. On-Ramp	0.41	F
105-04829	I 280	SB	Wolfe Rd DIAG. On-Ramp to Stevens Creek Blvd DIAG. Off-Ramp	0.39	F
105N04829	I 280	SB	Stevens Creek Blvd DIAG. Off-Ramp to Stevens Creek Blvd	0.34	F
105-04828	I 280	SB	Stevens Creek Blvd to Stevens Creek Blvd DIAG. On-Ramp	0.28	F
105N04828	I 280	SB	Stevens Creek Blvd DIAG. On-Ramp to Lawrence Expy DIAG. On-Ramp	0.23	F
105-04827	I 280	SB	Lawrence Expy DIAG. On-Ramp to Saratoga Ave DIAG. Off-Ramp	0.71	F
105N04826	I 280	SB	Winchester Blvd DIAG. Off-Ramp to Winchester Blvd	0.31	F
105-04825	I 280	SB	Winchester Blvd to SR-17 DIAG. Off-Ramp	0.11	F

105N04825	I 280	SB	SR-17 DIAG. Off-Ramp to SR-17 DIAG. On-Ramp	0.62	F
105-04824	I 280	SB	SR-17 DIAG. On-Ramp to Bascom Ave DIAG. Off-Ramp	0.18	F
105N04824	I 280	SB	Bascom Ave DIAG. Off-Ramp to Leland Ave	0.39	F
105-04823	I 280	SB	Leland Ave to Meridian Ave DIAG. Off-Ramp	0.25	F
105N04823	I 280	SB	Meridian Ave DIAG. Off-Ramp to Meridian Ave DIAG. On-Ramp	0.75	F
105+04358	I 880	NB	SR-237 DIAG. On-Ramp to Dixon Landing DIAG. Off-Ramp	1.03	F
105P04358	I 880	NB	Dixon Landing DIAG. Off-Ramp to Dixon Landing DIAG. On-Ramp	0.83	F
105N04357	I 880	SB	SR-237 DIAG. Off-Ramp to Great Mall Pkwy DIAG. On-Ramp	1.53	F
105N04355	I 880	SB	Montague Expy DIAG. Off-Ramp to Montague Expy DIAG. On-Ramp	0.74	F
105-04354	I 880	SB	Montague Expy DIAG. On-Ramp to Brokaw Rd DIAG. Off-Ramp	0.62	F
105-04353	I 880	SB	Brokaw Rd DIAG. On-Ramp to Old Bayshore Hwy DIAG. Off-Ramp	0.46	F
105N04353	I 880	SB	Old Bayshore Hwy DIAG. Off-Ramp to Old Bayshore Hwy L. On-Ramp	0.32	F
105-04352	I 880	SB	Old Bayshore Hwy L. On-Ramp to US-101 L. On-Ramp	0.18	F
105N04352	I 880	SB	US-101 L. On-Ramp to US-101 DIAG. On-Ramp	0.19	F
105P04120	US 101	NB	Cochrane Rd DIAG. Off-Ramp to Cochrane Rd DIAG. On-Ramp	0.60	F
105P04121	US 101	NB	Coyote Creek Golf Dr DIAG. Off-Ramp to Coyote Creek Golf Dr DIAG. On-Ramp	0.61	F
105+04152	US 101	NB	San Antonio Rd DIAG. On-Ramp to Embarcadero Rd DIAG. Off-Ramp	1.18	F
105P04152	US 101	NB	Embarcadero Rd DIAG. Off-Ramp to Embarcadero Rd DIAG. On-Ramp	0.70	F
105N04152	US 101	SB	Embarcadero Rd DIAG. Off-Ramp to Embarcadero Rd DIAG. Off-Ramp	0.65	F
105-04151	US 101	SB	Oregon Expy DIAG. On-Ramp to San Antonio Rd DIAG. Off-Ramp	1.37	F
105N04149	US 101	SB	Old Middlefield Way DIAG. Off-Ramp to Old Middlefield Way DIAG. On-Ramp	0.15	F
105-04148	US 101	SB	Old Middlefield Way DIAG. On-Ramp to Shoreline Blvd L. On-Ramp	0.37	F
105N04147	US 101	SB	Shoreline Blvd L. On-Ramp to SR-85 DIAG. Off-Ramp	0.36	F
105-04146	US 101	SB	SR-85 DIAG. Off-Ramp to Moffett Blvd L. Off-Ramp	0.22	F
105N04146	US 101	SB	Moffett Blvd L. Off-Ramp to Moffett Blvd DIAG. On-Ramp	0.15	F
105-04145	US 101	SB	Moffett Blvd DIAG. On-Ramp to Ellis St DIAG. Off-Ramp	0.41	F
105N04145	US 101	SB	Ellis St DIAG. Off-Ramp to Ellis St DIAG. On-Ramp	0.54	F

105N04144	US 101	SB	SR-237 L. Off-Ramp to SR-237 DIAG. On-Ramp	0.20	F
105N04142	US 101	SB	Fair Oaks Ave DIAG. Off-Ramp to Fair Oaks Ave DIAG. On-Ramp	0.41	F
105-04141	US 101	SB	Fair Oaks Ave DIAG. On-Ramp to Lawrence Expy DIAG. Off-Ramp	0.55	F
105N04141	US 101	SB	Lawrence Expy DIAG. Off-Ramp to Lawrence Expy DIAG. On-Ramp	0.39	F
105-04140	US 101	SB	Lawrence Expy DIAG. On-Ramp to Bowers Ave DIAG. Off-Ramp	0.58	F
105N04140	US 101	SB	Bowers Ave DIAG. Off-Ramp to Bowers Ave DIAG. On-Ramp	0.67	F
105-04139	US 101	SB	Bowers Ave DIAG. On-Ramp to San Thomas Expy DIAG. Off-Ramp	0.11	F
105N04139	US 101	SB	San Thomas Expy DIAG. Off-Ramp to San Thomas Expy DIAG. On-Ramp	0.65	F
105-04138	US 101	SB	San Thomas Expy DIAG. On-Ramp to Trimble Rd DIAG. Off-Ramp	0.78	F
105N04138	US 101	SB	Trimble Rd DIAG. Off-Ramp to Trimble Rd DIAG. On-Ramp	0.39	F
105N04137	US 101	SB	SR-87 DIAG. Off-Ramp to SR-87 DIAG. Off-Ramp	0.31	F
105-04136	US 101	SB	SR-87 DIAG. Off-Ramp to Airport Pkwy DIAG. Off-Ramp	0.14	F
105N04136	US 101	SB	1st St to 4th St DIAG. On-Ramp	0.37	F
105-04135	US 101	SB	1st St to 4th St DIAG. On-Ramp	0.38	F
105N04135	US 101	SB	4th St DIAG. On-Ramp to 4th St DIAG. On-Ramp	0.26	F
105-04134	US 101	SB	4th St DIAG. On-Ramp to I-880 DIAG. Off-Ramp	0.12	F
105N04134	US 101	SB	I-880 DIAG. Off-Ramp to I-880 DIAG. On-Ramp	0.49	F
105-04133	US 101	SB	I-880 DIAG. On-Ramp to Oakland Rd DIAG. Off-Ramp	0.10	F
105N04133	US 101	SB	Oakland Rd DIAG. Off-Ramp to Oakland Rd DIAG. On-Ramp	0.42	F
105N04132	US 101	SB	McKee Rd DIAG. Off-Ramp to Alum Rock Ave DIAG. Off-Ramp	0.59	F
105N04131	US 101	SB	McKee Rd DIAG. On-Ramp to Alum Rock Ave DIAG. Off-Ramp	0.24	F
105N04121	US 101	SB	Coyote Creek Golf Dr DIAG. Off-Ramp to Coyote Creek Golf Dr DIAG. On-Ramp	0.62	F
105-04120	US 101	SB	Coyote Creek Golf Dr DIAG. On-Ramp to Cochrane Rd DIAG. Off-Ramp	2.69	F
105-04326	SR 85	SB	Moffett Blvd L. Off-Ramp to Central Expy DIAG. Off-Ramp	0.47	F
105N04326	SR 85	SB	Central Expy DIAG. Off-Ramp to Central Expy DIAG. On-Ramp	0.26	F

105N04324	SR 85	SB	SR-237 DIAG. Off-Ramp to SR-237 L. On-Ramp	0.27	F
105-04323	SR 85	SB	SR-237 L. On-Ramp to El Camino Real L. On-Ramp	0.34	F
105-04320	SR 85	SB	Homestead Rd DIAG. On-Ramp to I-280 DIAG. Off-Ramp	0.73	F
105-04319	SR 85	SB	I-280 DIAG. Off-Ramp to I-280 DIAG. On-Ramp	0.20	F
105N04319	SR 85	SB	Stevens Creek Blvd DIAG. Off-Ramp to Stevens Creek Blvd DIAG. On-Ramp	0.52	F
105-04318	SR 85	SB	Stevens Creek Blvd DIAG. On-Ramp to S De Anza Blvd DIAG. Off-Ramp	1.29	F
105N04318	SR 85	SB	S De Anza Blvd DIAG. Off-Ramp to S De Anza Blvd DIAG. On-Ramp	0.54	F
105-04317	SR 85	SB	S De Anza Blvd DIAG. On-Ramp to Saratoga Ave DIAG. Off-Ramp	1.58	F
105N04317	SR 85	SB	Saratoga Ave DIAG. Off-Ramp to Saratoga Ave DIAG. On-Ramp	0.54	F
105-04316	SR 85	SB	Saratoga Ave DIAG. On-Ramp to Winchester Blvd DIAG. Off-Ramp	2.19	F
105N04316	SR 85	SB	Winchester Blvd DIAG. Off-Ramp to Winchester Blvd DIAG. On-Ramp	0.28	F
105N04315	SR 85	SB	SR-17 DIAG. Off-Ramp to SR-17 DIAG. On-Ramp	0.90	F
105-04313	SR 85	SB	S Bascom Ave DIAG. On-Ramp to Union Ave DIAG. Off-Ramp	0.35	F
105N04313	SR 85	SB	Union Ave DIAG. Off-Ramp to Union Ave DIAG. On-Ramp	0.62	F

DURATION OF CONGESTION

As the traffic demand increases on the roadway and exceeds the capacity, the peak period must extend in duration to serve the excess demand. The duration of congestion is a performance measure that supplements the LOS measure in assessing the congestion levels on the freeway facility. It gives additional information on how long each segment on a freeway was congested during the AM and PM periods.

The duration of congestion was calculated as the length of time per day in the AM and PM period that the travel speeds were less than 30 mph. The 30-mph threshold for this analysis is equivalent to the threshold for LOS F conditions on freeway facilities based on **Error! Reference source not found..** Figure 1.3 shows the freeway congestion in Santa Clara County stratified by the duration of congestion. As shown in this figure, 28 miles or 26% of Santa Clara freeway miles are congested for more than three hours in the AM period between 5 AM and noon. While the PM period has less overall congestion with 97 miles showing congestion, more than 50% of freeway miles (49.5 miles) are congested for more than three hours.

Figure 4.4 shows the percent of the freeway system experiencing congestion in the AM and PM periods. About 65% of the 310-mile freeway system experiences no congestion in the AM period and 69% experiences none in the PM period. However, 9% and 16% of the freeway miles are congested for three or more hours during the AM and PM periods, respectively.

FIGURE 1.3: SANTA CLARA FREEWAY CONGESTION STRATIFIED BY DURATION OF CONGESTION

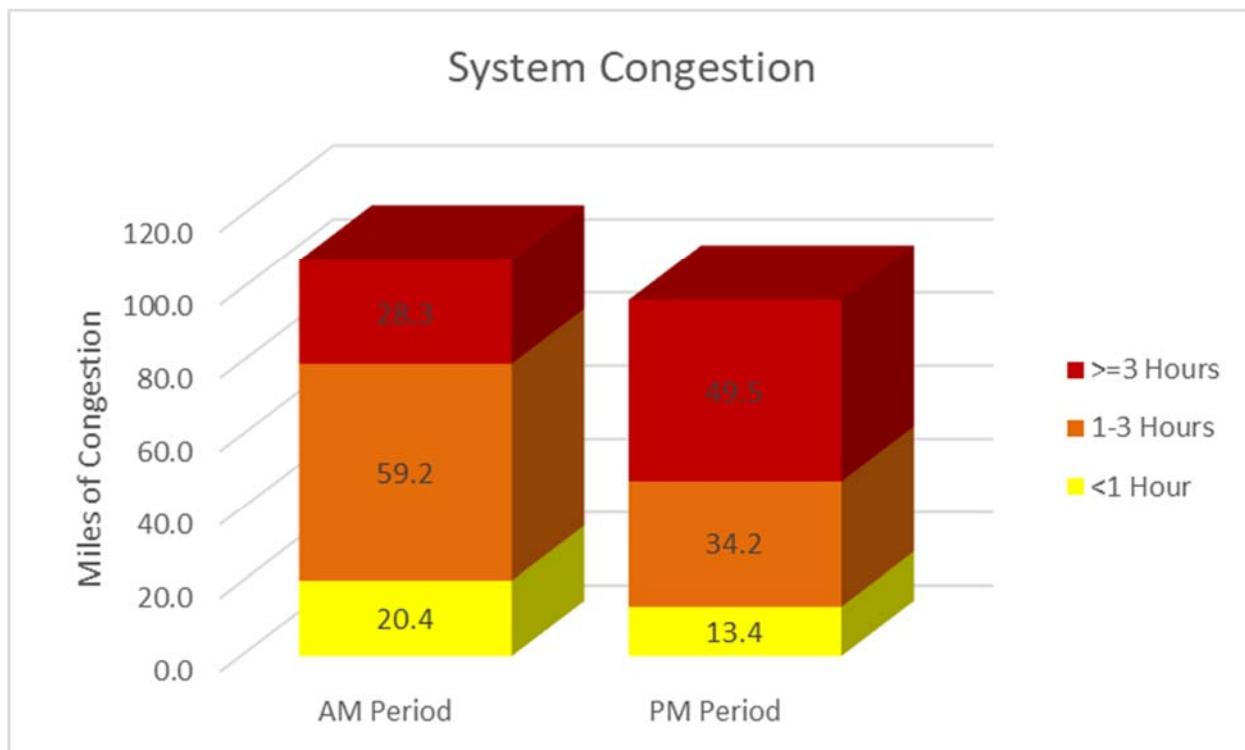
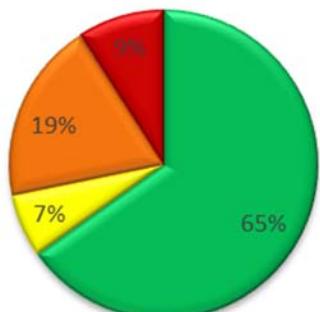
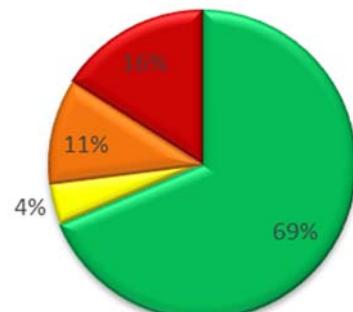


FIGURE 4.4 SANTA CLARA FREEWAY CONGESTION DURATION AS A PERCENT OF TOTAL DIRECTIONAL MILES

AM System Congestion



PM System Congestion



In addition to the overall freeway system congestion in Santa Clara County, the number of congested miles were calculated for each freeway facility, categorized by the duration of congestion. The findings for the various facilities are shown graphically in pie charts showing the percentage of each freeway facility miles congested for different time periods in the AM and PM periods in Figure 4.5 through Figure 4.8.

FIGURE 4.5: CONGESTION DURATION AS A PERCENT OF DIRECTIONAL MILES (SR 87 & SR 237)

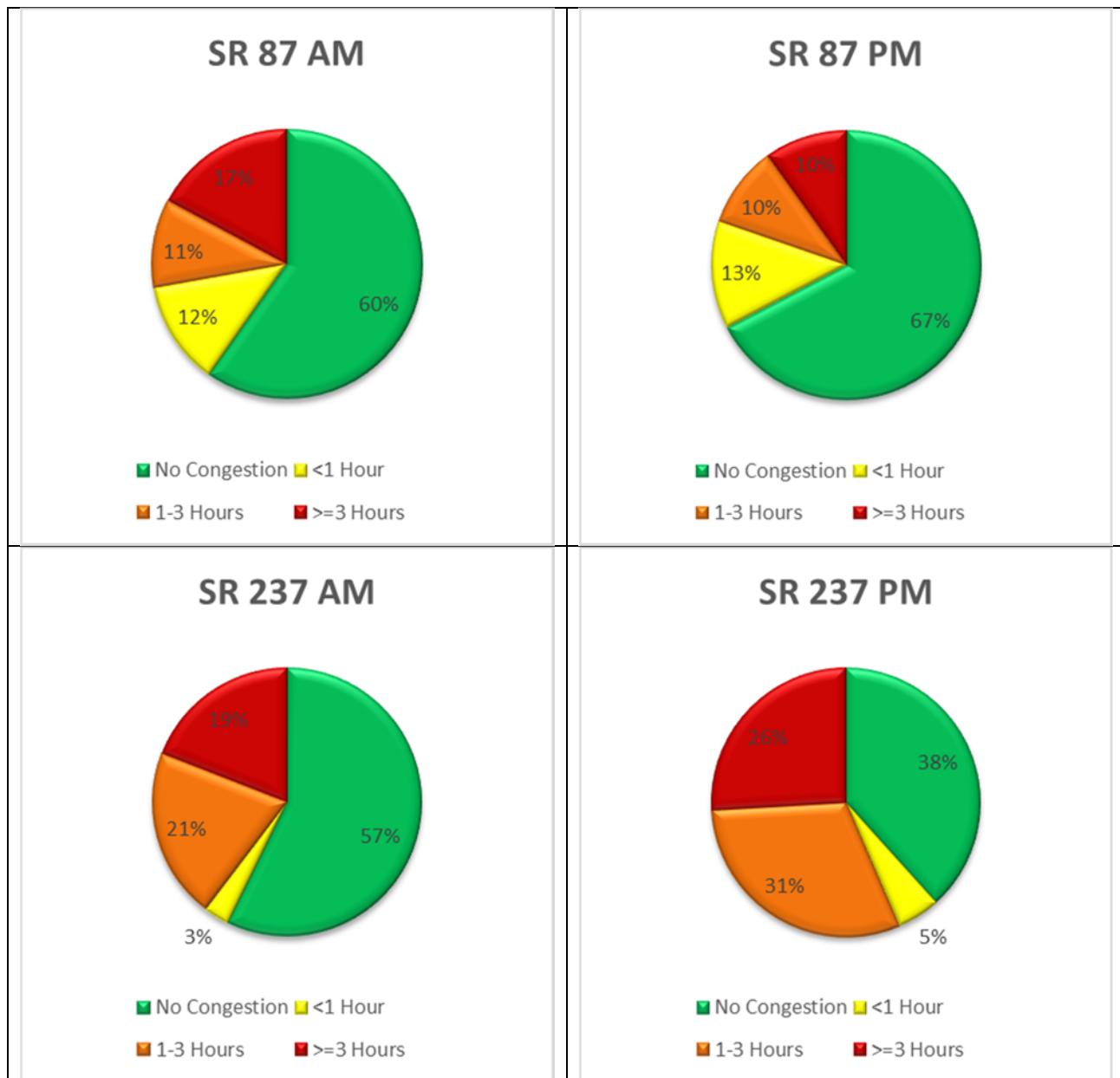


FIGURE 4.6: CONGESTION DURATION AS A PERCENT OF DIRECTIONAL MILES (SR 17 & I-280)

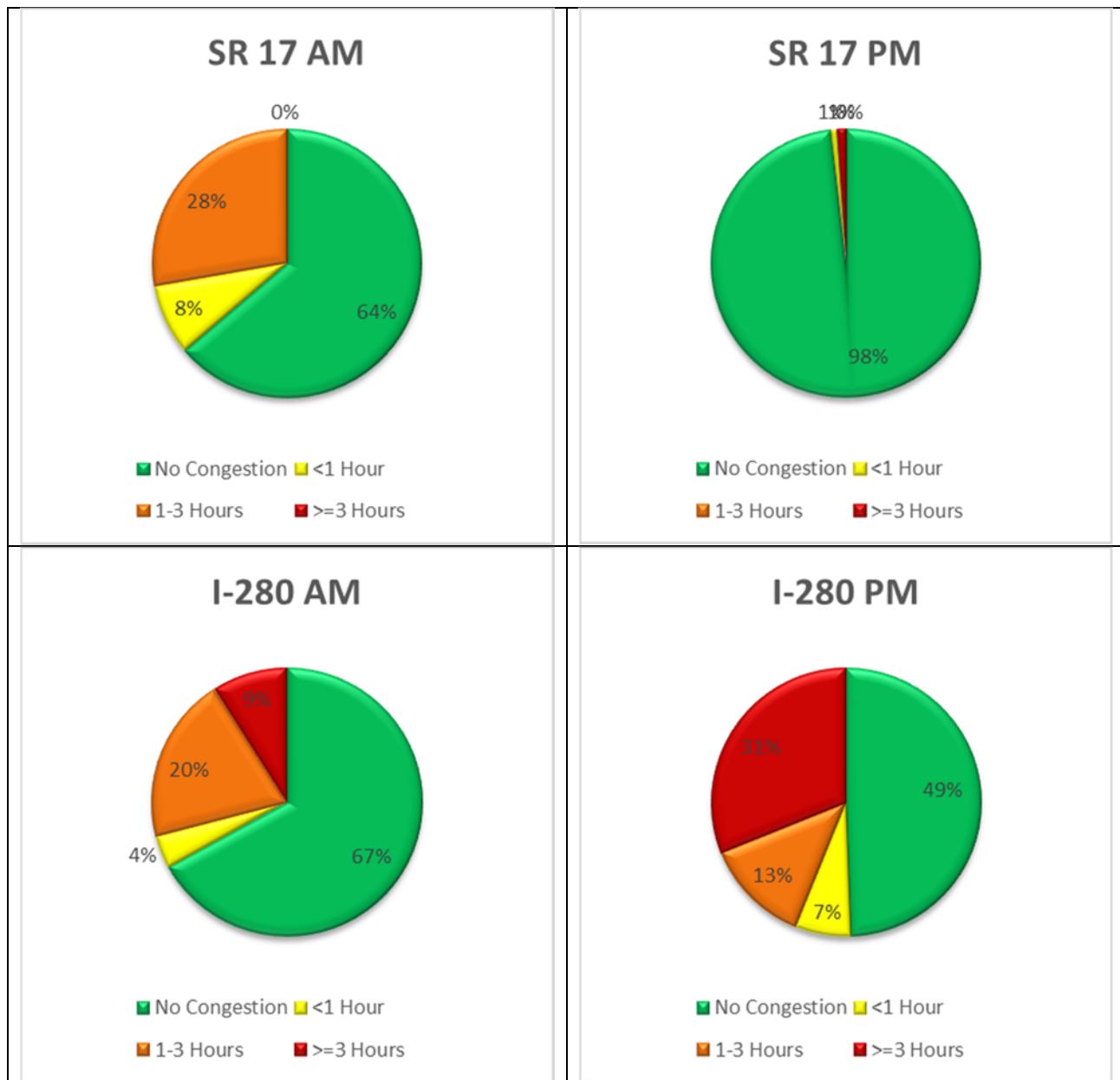


FIGURE 4.7: CONGESTION DURATION AS A PERCENT OF DIRECTIONAL MILES (I-880 & I-680)

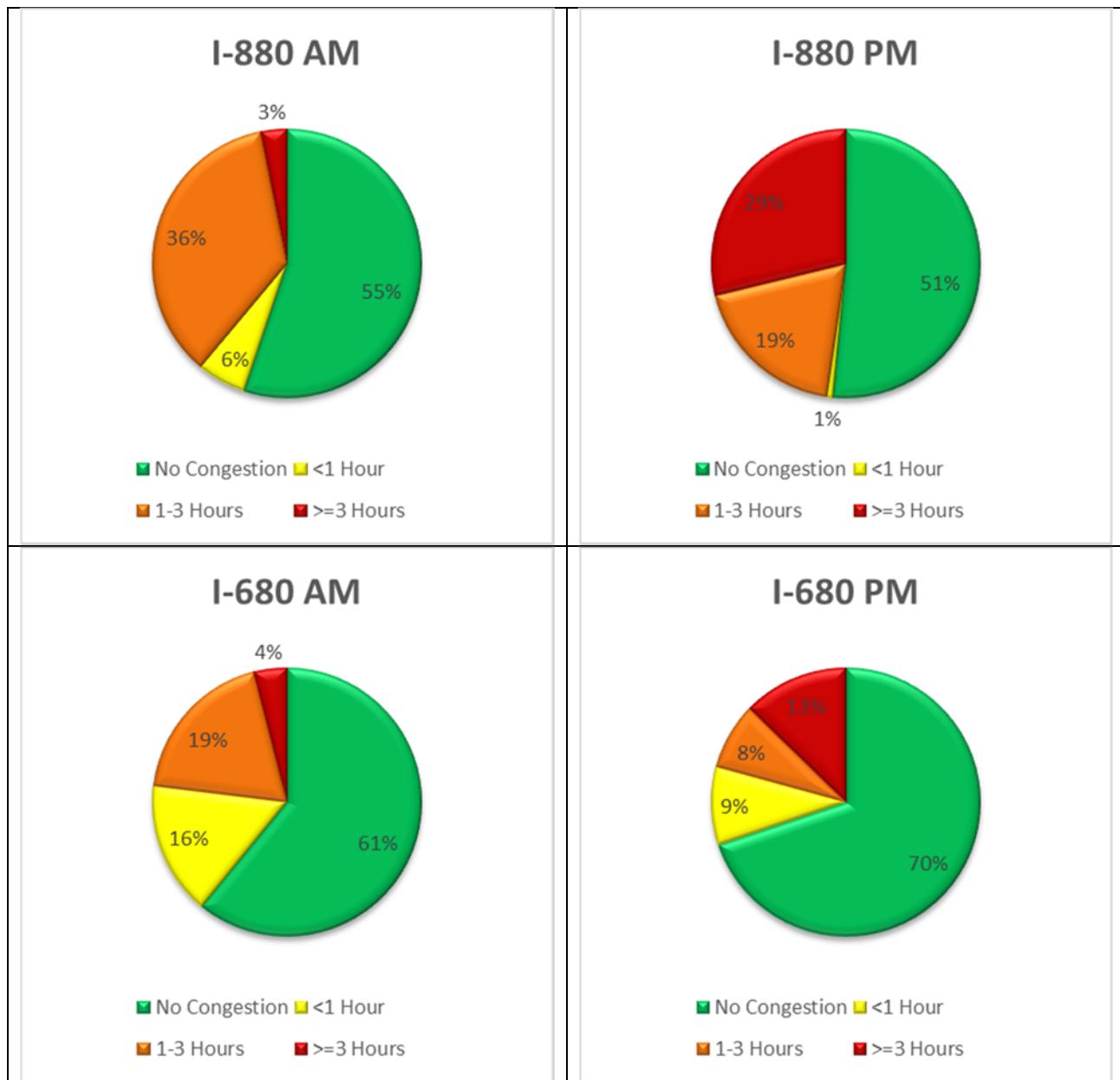
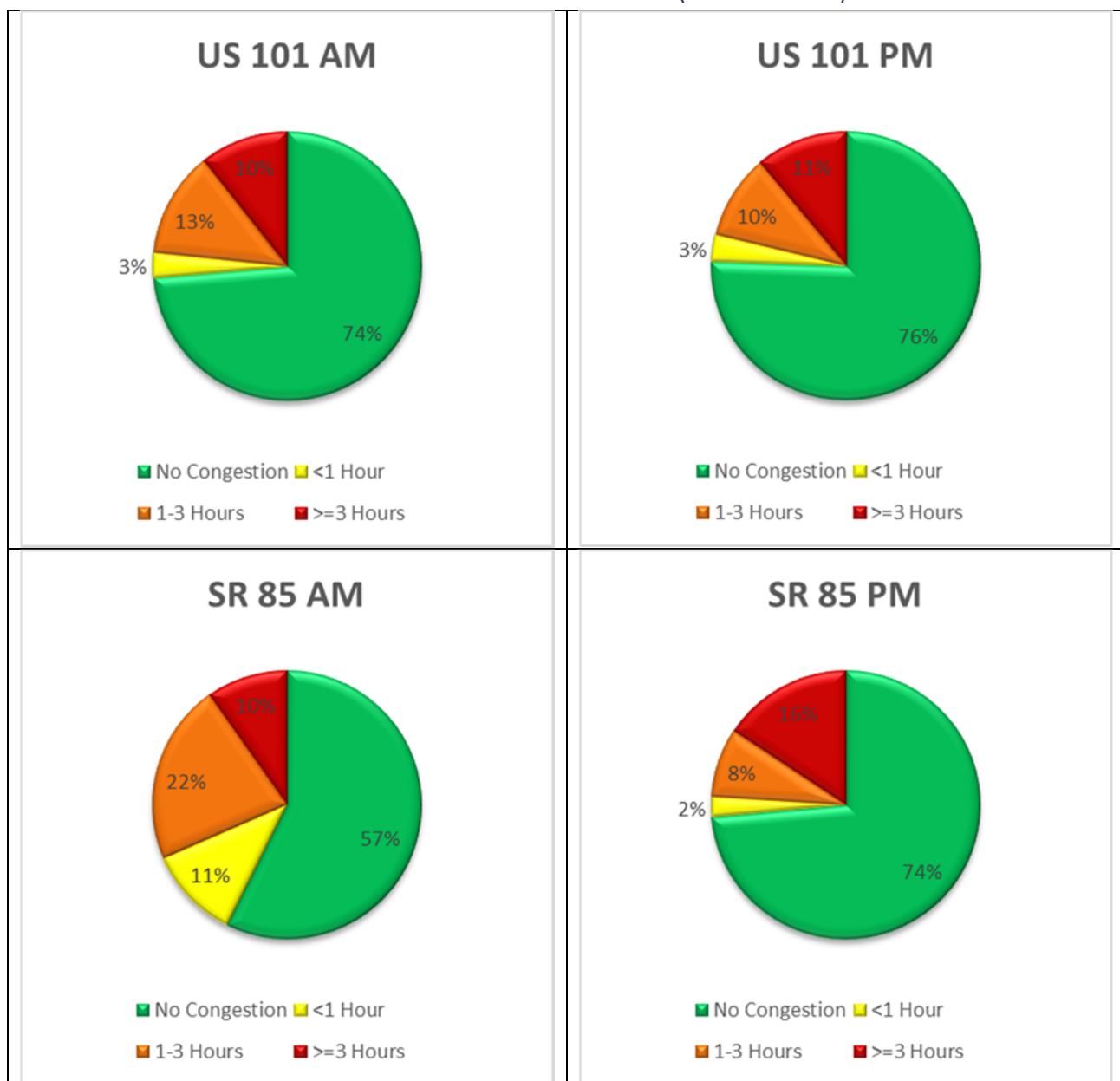


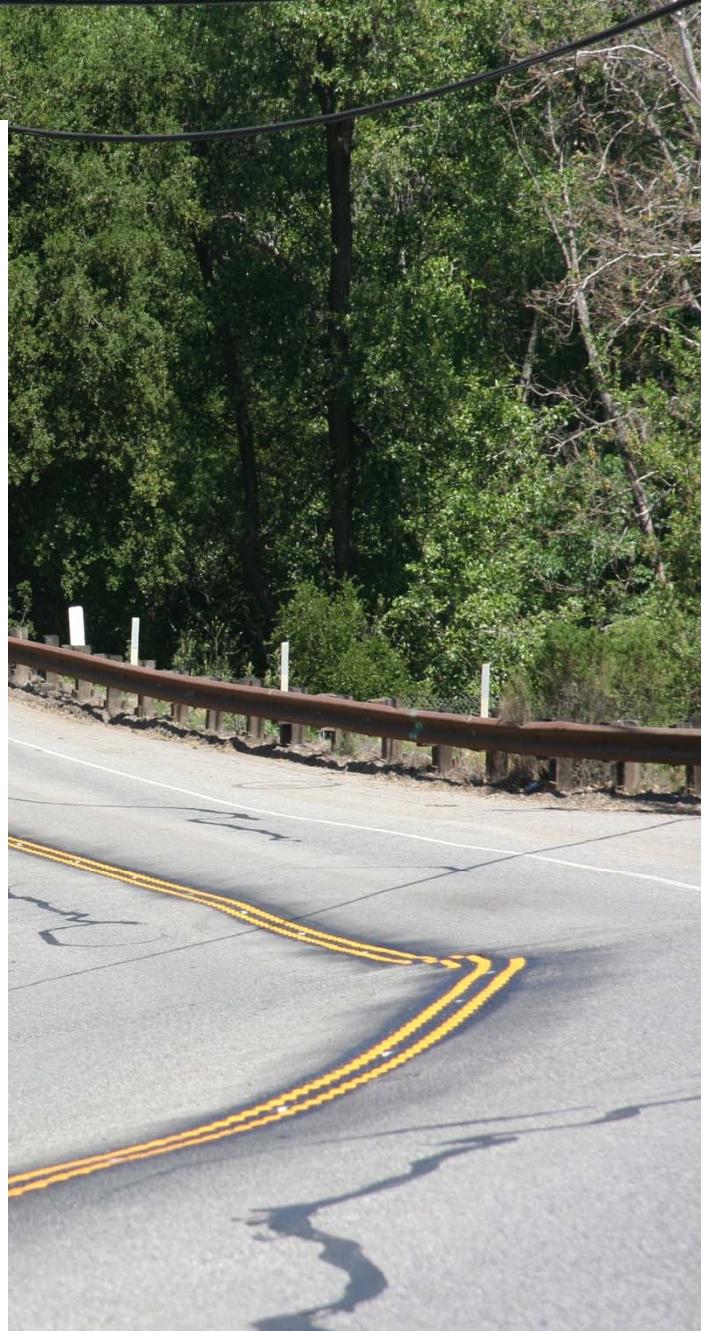
FIGURE 4.8: CONGESTION DURATION AS A PERCENT OF DIRECTIONAL MILES (US 101 & SR 85)



CHAPTER 5

GATEWAYS

2017 MONITORING AND
CONFORMANCE REPORT



Chapter Five – Gateway Counts

Gateways and Count Methodology

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 INRIX speed 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 for 2017 were conducted for four hours while previous studies collected three hours of data. The reason for this change was to better capture the peak spreading of traffic volumes as freeways get more congested. The new counts were conducted between 6:00 AM and 10:00 AM and 3:30 PM and 7:30 PM. Counts for previous years were between 6:30 AM and 9:30 AM and 3:30 PM and 6:30 PM. Since this is the first year the extra hour of counts has been collected, the comparisons presented below are still based on the original 3-hour data collection period. As the CMP progresses to the 2018 study and beyond, the year-to-year comparisons are anticipated to use the full 4-hour data collection started in 2017.

Freeway Gateway Volumes for the AM Peak Period

Freeway gateway volumes have been separated between inflows and outflows during the AM peak period since 2010. Table 5.1 presents a comparison between the counts performed in 2016 and those from 2017. The total inflow gateway volumes during the 2017 AM peak period decreased by 2.5% compared to 2016 volumes. Total outflow volumes increased by 1.8% overall. The ratio of inflow to outflow during the AM peak period changed from 1.39 in 2016 to 1.33 in 2017, indicating 2017 is more balanced between inflows and outflows. These numbers account only for the volumes on freeways at each gateway and are not intended to represent total gateway flows. A true “screenline”

of each gateway would include urban arterials and rural roads also carrying traffic to and from the county.

TABLE 5.1: AM PEAK HOUR INFLOW AND OUTFLOW COMPARISON BETWEEN 2016 AND 2017

INFLOWS			
Gateway	2016	2017	Change
Peninsula Gateway	40,441	39,660	-1.9%
East Bay Gateway	41,430	40,546	-2.1%
Santa Cruz Gateway	10,645	9,767	-8.2%
Southern Gateway	16,740	16,556	-1.1%
Total	109,256	106,529	-2.5%
OUTFLOWS			
Gateway	2016	2017	Change
Peninsula Gateway	32,994	33,200	0.6%
East Bay Gateway	31,980	33,068	3.4%
Santa Cruz Gateway	3,971	4,290	8.0%
Southern Gateway	9,537	9,321	-2.3%
Total	78,482	79,879	1.8%

Figure 5.1 shows a graphical representation of how the inflows into Santa Clara County have varied over the last eight years for each of the four gateways in the AM peak period. As this figure shows, most gateways have remained relatively consistent. The Peninsula gateway has grown the most, increasing from about 36,000 vehicles in a 3-hour period in 2010 to about 40,000 vehicles in 2017. The trend for the outflows over the last eight years is shown in Figure 2 for each of the four gateways. Vehicle outflow counts in the AM peak period have been consistent in the Southern and Santa Cruz gateways but the Peninsula and East Bay gateways have been growing.

FIGURE 5.1 – GATEWAY INFLOWS DURING THE AM PEAK PERIOD (6:30 AM – 9:30 AM)

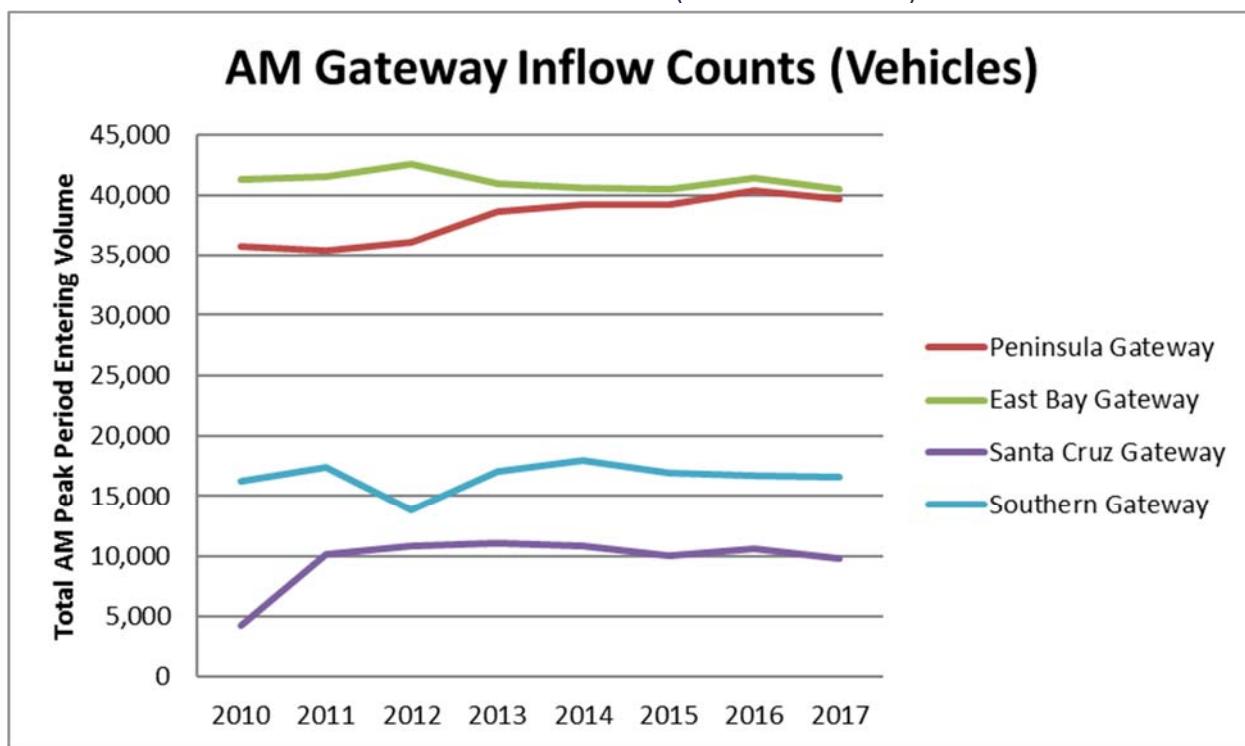
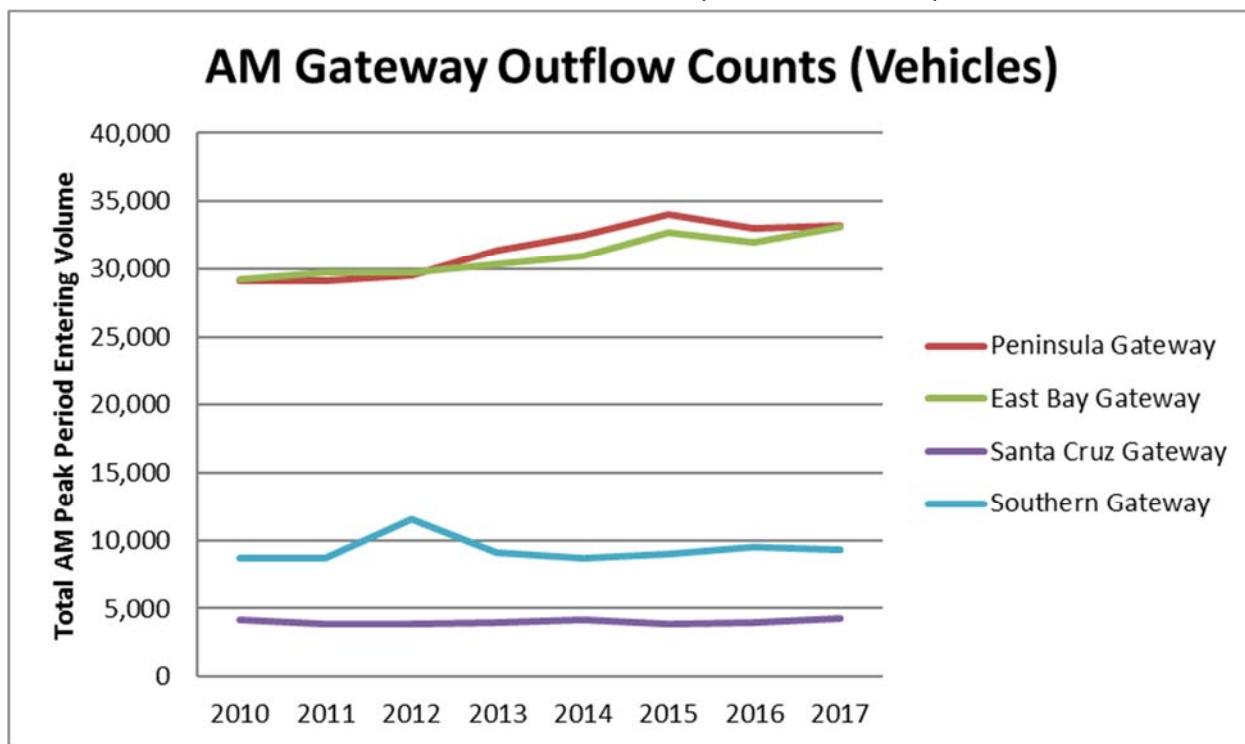
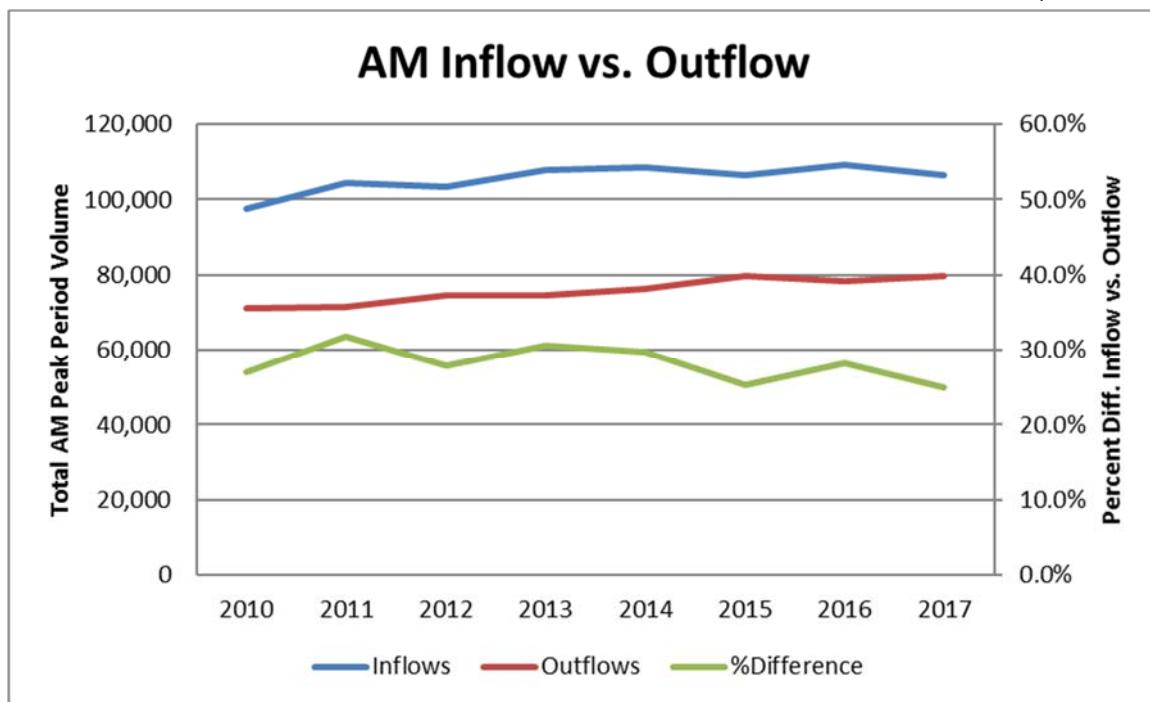


FIGURE 5.2 – GATEWAY OUTFLOWS DURING THE AM PEAK PERIOD (6:30 AM – 9:30 AM)



In addition to comparing gateway volumes, Figure 5.3 shows a comparison between the total inflow and outflow from Santa Clara County at the four gateways during the AM peak period. This figure also shows the percent difference between inflows and outflows. On average, vehicles entering Santa Clara County in the AM peak period account for approximately 28% more vehicles than vehicles leaving Santa Clara County.

FIGURE 5.3 – COMPARISON OF TOTAL GATEWAY INFLOWS AND OUTFLOWS IN THE AM PEAK PERIOD (6:30 AM – 9:30 AM)



Freeway Gateway Volumes for the PM Peak Period

PM peak period gateway volume information also been compiled since 2010. Table 5.2 presents a comparison between the 2017 counts performed for this study and those conducted for 2016. The total inflow gateway volumes during the PM peak period increased by 2.2% since 2016. Total outflow volumes also showed an increase of 0.5% in the volume of 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 2016 to 0.79 in 2017. These numbers account only for the volumes on freeways at each gateway and are not representative of total gateway flows. A screenline of each gateway would include urban arterials and rural roads carrying traffic to and from the county.

TABLE 5.2 – PM INFLOW AND OUTFLOW COMPARISON BETWEEN 2015 AND 2016

INFLOWS			
Gateway	2016	2017	Change
Peninsula Gateway	31,207	32,015	2.6%
East Bay Gateway	35,464	36,857	3.9%
Santa Cruz Gateway	5,593	5,668	1.3%
Southern Gateway	10,908	10,467	-4.0%
Total	83,172	85,007	2.2%
OUTFLOWS			
Gateway	2016	2017	Change
Peninsula Gateway	40,839	41,196	0.9%
East Bay Gateway	36,324	38,611	6.3%
Santa Cruz Gateway	10,791	10,503	-2.7%
Southern Gateway	18,849	16,984	-9.9%
Total	106,803	107,294	0.5%

Figure 5.4 shows how the inflows into Santa Clara County have varied over the last 8 years. While there is variation from year to year, inflow from the Peninsula and East Bay has been trending up in the last eight years. Inflow from the Southern and the Santa Cruz gateways has remained flat in the last eight years.

The trend for the outflows over the last eight years is shown in Figure for each of the four gateways. These four gateways have remained relatively consistent over the last eight years. The Peninsula and East Bay gateways have been trending up slightly while the Santa Cruz and Southern gateways are about the same as they were in 2010.

FIGURE 5.4 – GATEWAY INFLOWS DURING THE PM PEAK

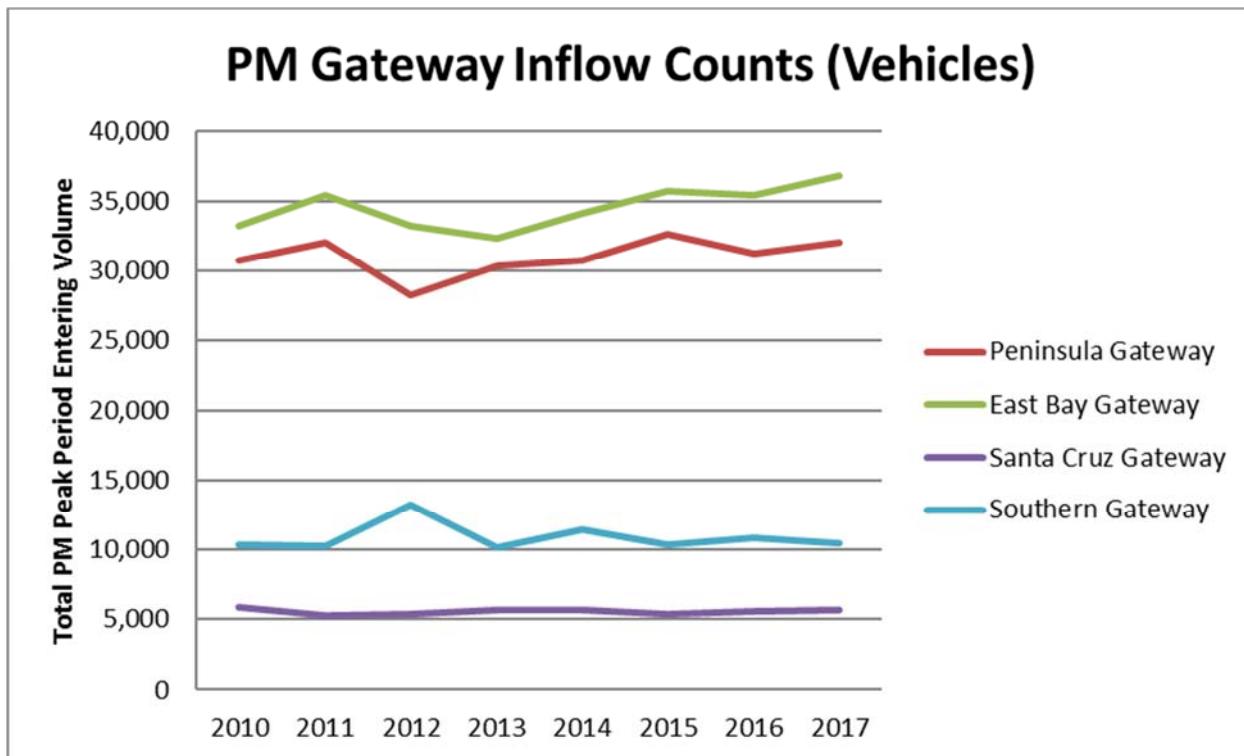


FIGURE 5.5 – GATEWAY OUTFLOWS DURING THE PM PEAK

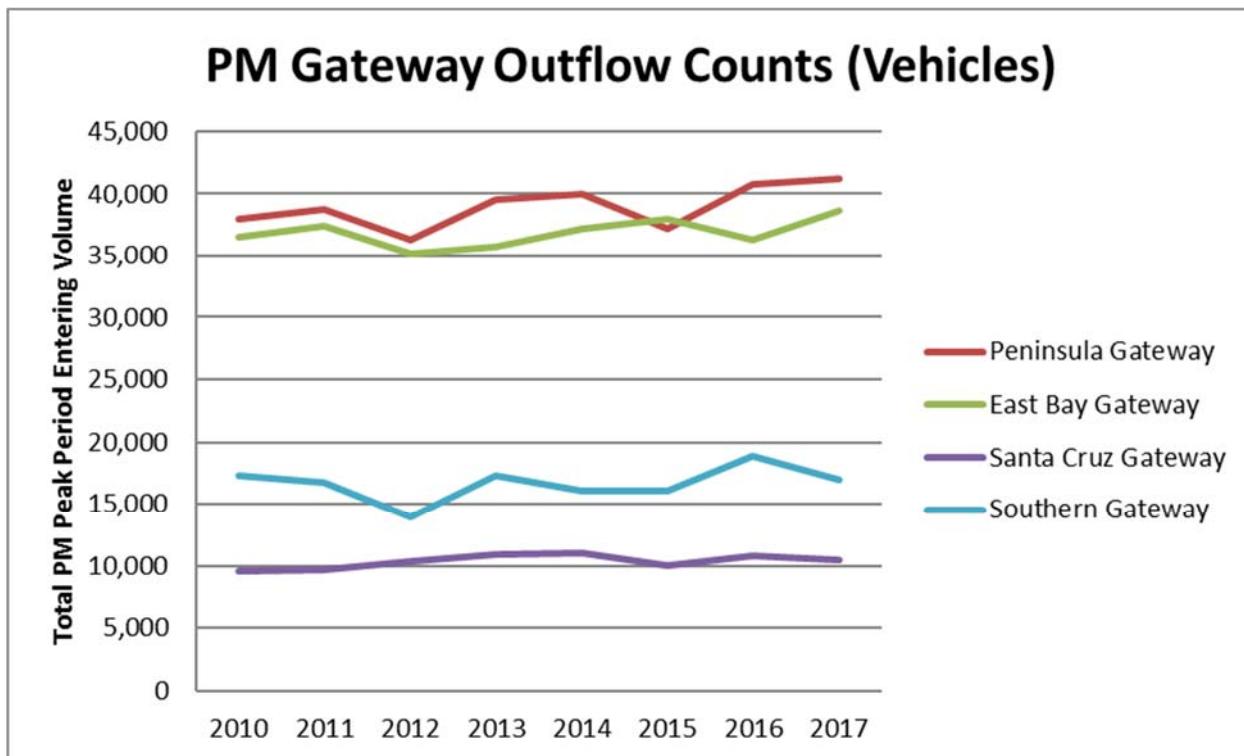
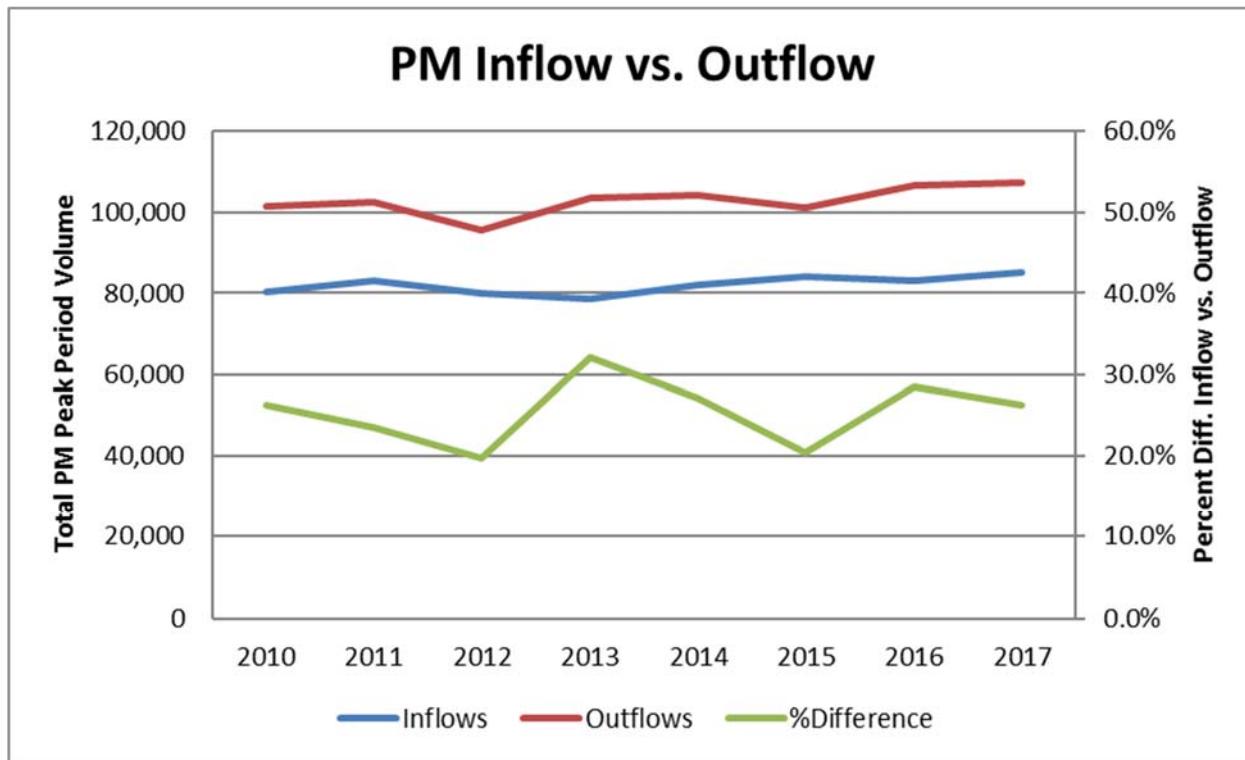


Figure 1 shows a comparison between the total inflow and outflow from Santa Clara County at the four gateways over the last eight years for the 3-hour PM peak period. This figure also shows the percent difference between inflows and outflows. On average, there has been about a 25% difference between inflows and outflows over the last eight years with outflows being higher during the PM peak period.

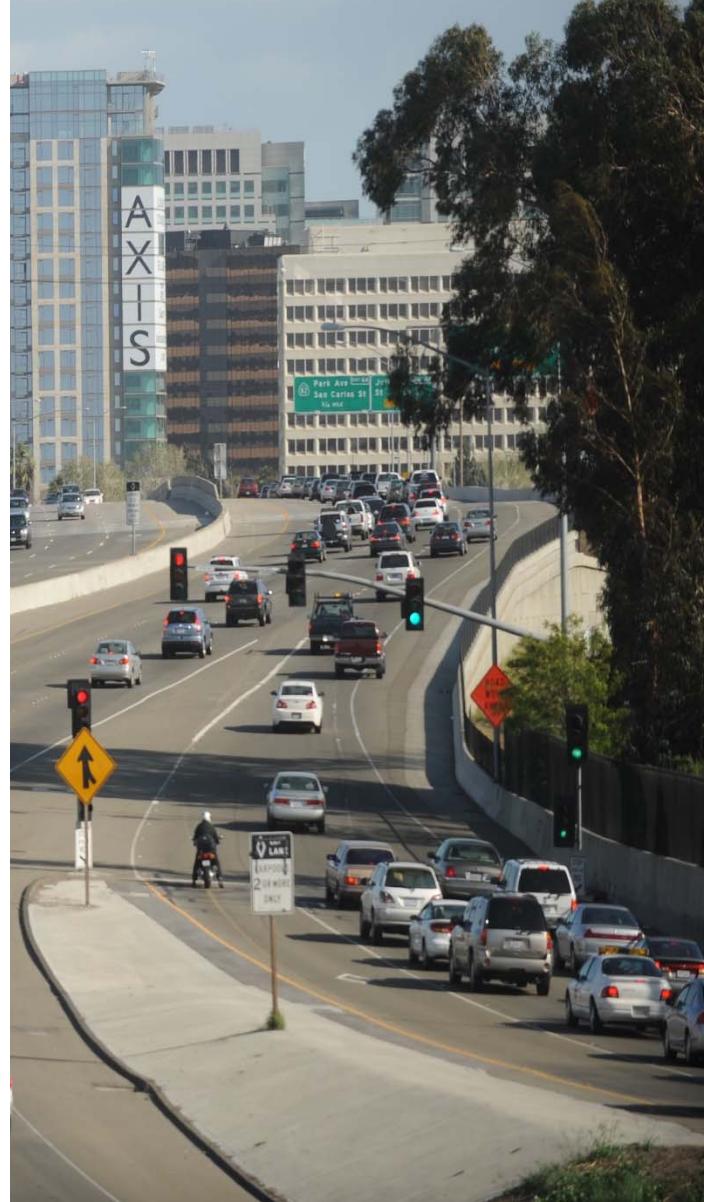
FIGURE 1.6 – COMPARISON OF TOTAL GATEWAY INFLOWS AND OUTFLOWS IN THE PM PEAK HOUR





APPENDIX FREEWAY TABLES

2017 MONITORING AND
CONFORMANCE REPORT



AM Freeway Speed, LOS, Estimated Density, Estimated Flow, and Duration of Congestion by Segment												2017 AM Results (INRIX Data)					
TMC	Facility	Dir	From	To	Miles	Speed (mi/hr)		LOS		Density (pc/mi/in)		Flow (pc/hr/in)		Congestion (hr)			
						Mixed	HOV	Mixed	HOV	Mixed	HOV	Mixed	HOV				
105P046 51	SR 87	NB	SR-85 DIAG. Off-Ramp	SR-87 DIAG. On-Ramp	0.27	7	8	F	F	89.9	87.4	618	704	1.75			
105+046 52	SR 87	NB	SR-87 DIAG. On-Ramp	Capitol Expy DIAG. Off-Ramp	0.68	9	8	F	F	86.2	88.4	743	669	2.50			
105P046 52	SR 87	NB	Capitol Expy DIAG. Off-Ramp	Capitol Expy DIAG. On-Ramp	0.39	11	9	F	F	81.6	86.1	901	747	3.00			
105+046 53	SR 87	NB	Capitol Expy DIAG. On-Ramp	Curtner Ave DIAG. Off-Ramp	0.98	14	14	F	F	76.7	76.7	1067	1068	3.75			
105P046 53	SR 87	NB	Curtner Ave DIAG. Off-Ramp	Curtner Ave DIAG. On-Ramp	0.56	16	20	F	F	72.8	68.2	1198	1349	4.50			
105+046 54	SR 87	NB	Curtner Ave DIAG. On-Ramp	Almaden Expy DIAG. Off-Ramp	0.21	18	21	F	F	70.5	66.6	1275	1401	5.00			
105P046 54	SR 87	NB	Almaden Expy DIAG. Off-Ramp	Almaden Expy DIAG. On-Ramp	0.24	25	26	F	F	62.3	60.8	1533	1580	4.75			
105+046 55	SR 87	NB	Almaden Expy DIAG. On-Ramp	Alma Ave DIAG. Off-Ramp	0.44	35	37	E	E	51.6	50.0	1831	1869				
105+046 56	SR 87	NB	Alma Ave DIAG. Off-Ramp	I-280 DIAG. Off-Ramp	0.67	51	58	D	D	39.2	32.7	1990	1886				
105P046 56	SR 87	NB	I-280 DIAG. Off-Ramp	I-280 DIAG. On-Ramp	0.80	28	24	F	F	58.4	63.3	1651	1505	0.50			
105P046 57	SR 87	NB	I-280 DIAG. On-Ramp	Santa Clara St DIAG. Off-Ramp	0.28	15	21	F	F	75.3	66.1	1115	1417	2.00			
105+046 58	SR 87	NB	Santa Clara St DIAG. Off-Ramp	Julian St DIAG. Off-Ramp	0.12	15	14	F	F	75.1	77.3	1123	1048	2.25			
105P046 58	SR 87	NB	Julian St DIAG. Off-Ramp	Julian St DIAG. On-Ramp	0.57	21	22	F	F	66.7	65.4	1397	1438	2.00			
105+056 02	SR 87	NB	Julian St DIAG. On-Ramp	Taylor DIAG. Off-Ramp	0.13	29	28	F	F	58.0	58.9	1679	1636	0.25			
105P056 02	SR 87	NB	Taylor DIAG. Off-Ramp	Taylor DIAG. On-Ramp	0.66	30	31	F	E	58.0	55.5	1724	1731	0.25			
105+059 14	SR 87	NB	Taylor DIAG. On-Ramp	Skyport Dr DIAG. Off-Ramp	0.80	45	49	D	D	44.1	40.3	1969	1992				
105P059 14	SR 87	NB	Skyport Dr DIAG. Off-Ramp	Skyport Dr DIAG. On-Ramp	0.66	30	42	F	E	58.0	46.4	1719	1937	0.25			
105+056 05	SR 87	NB	Skyport Dr DIAG. On-Ramp	US-101 DIAG. Off-Ramp	0.36	12	5	F	F	79.3	93.6	980	489	3.75			
105P056 05	SR 87	NB	US-101 DIAG. Off-Ramp	US-101 DIAG. On-Ramp	0.38	6	7	F	F	92.6	90.3	523	601	5.25			
105N05 605	SR 87	SB	US-101 DIAG. Off-Ramp	US-101 DIAG. On-Ramp	0.45	44	44	D	D	44.2	44.7	1967	1962				
105- 05604	SR 87	SB	US-101 DIAG. On-Ramp	Skyport Dr DIAG. Off-Ramp	0.17	52	59	D	D	37.8	30.4	1982	1810				
105N05 914	SR 87	SB	Skyport Dr DIAG. Off-Ramp	Skyport Dr DIAG. On-Ramp	0.68	59	65	D	C	31.6	20.3	1852	1310				
105- 05603	SR 87	SB	Skyport Dr DIAG. On-Ramp	Hedding St DIAG. Off-Ramp/Taylor St DIAG. Off-Ramp	0.78	60	67	D	A	30.3	10.1	1805	674				
105- 05602	SR 87	SB	Hedding St DIAG. Off-Ramp/Taylor St DIAG. Off-Ramp	Taylor St DIAG. Off-Ramp	0.11	57	65	D	B	33.6	18.0	1909	1176				

AM Freeway Speed, LOS, Estimated Density, Estimated Flow, and Duration of Congestion by Segment												2017 AM Results (INRIX Data)					
TMC	Facility	Dir	From	To	Miles	Speed (mi/hr)		LOS		Density (pc/mi/in)		Flow (pc/hr/in)		Congestion (hr)			
						Mixed	HOV	Mixed	HOV	Mixed	HOV	Mixed	HOV				
105N05 602	SR 87	SB	Taylor St DIAG. Off-Ramp	Taylor St DIAG. On-Ramp	0.56	58	64	D	C	32.6	22.9	1883	1459				
105- 04658	SR 87	SB	Taylor St DIAG. On-Ramp	Coleman Ave/Julian St DIAG Off-Ramp	0.16	54	63	D	C	36.8	24.5	1970	1541				
105N04 658	SR 87	SB	Coleman Ave/Julian St DIAG Off-Ramp	Julian St DIAG. On-Ramp	0.57	57	63	D	C	33.0	23.8	1893	1506				
105N04 657	SR 87	SB	Park Ave DIAG. Off-Ramp	I-280 DIAG. Off-Ramp	0.25	57	64	D	C	33.1	20.8	1896	1340				
105N04 656	SR 87	SB	I-280 DIAG. Off-Ramp	Alma Ave DIAG Off-Ramp	1.23	59	64	D	C	31.1	21.3	1834	1369				
105- 04655	SR 87	SB	Alma Ave DIAG Off-Ramp	Alma Ave DIAG On-Ramp	0.22	58	68	D	A	32.2	<8.9	1870	601				
105- 04654	SR 87	SB	Alma Ave DIAG On-Ramp	Almaden Expy DIAG. Off-Ramp	0.51	59	69	D	A	31.1	<8.9	1834	612				
105N04 654	SR 87	SB	Almaden Expy DIAG. Off-Ramp	Almaden Expy DIAG. On-Ramp	0.19	61	71	D	A	28.6	<8.9	1739	628				
105- 04653	SR 87	SB	Almaden Expy DIAG. On-Ramp	Curtner Ave DIAG. Off-Ramp	0.26	61	70	D	A	28.5	<8.9	1733	627				
105N04 653	SR 87	SB	Curtner Ave DIAG. Off-Ramp	Curtner Ave DIAG. On-Ramp	0.53	59	69	D	A	30.9	<8.9	1827	614				
105- 04652	SR 87	SB	Curtner Ave DIAG. On-Ramp	Capital Expwy DIAG. Off-Ramp	0.96	57	70	D	A	33.3	<8.9	1902	623				
105N04 652	SR 87	SB	Capital Expwy DIAG. Off-Ramp	Capital Expwy DIAG. On-Ramp	0.50	61	69	D	A	28.2	<8.9	1719	617				
105- 04651	SR 87	SB	Capital Expwy DIAG. On-Ramp	SR-87 DIAG. Off-Ramp	0.62	59	67	D	A	30.6	<8.9	1815	598				
105N04 651	SR 87	SB	SR-87 DIAG. Off-Ramp	SR-87 DIAG. On-Ramp	0.16	59	66	D	B	30.6	15.2	1817	1004				
105P046 75	SR 237	EB	Valley Fwy DIAG. Off-Ramp	SR-85 DIAG. On-Ramp	0.23	31		E		55.4		1736					
105+046 75	SR 237	EB	El Camino Real	SR-85 L. Off-Ramp	0.28	28		F		59.1		1631		0.25			
105+046 76	SR 237	EB	SR-85 DIAG. On-Ramp	Dana St. L. Off-Ramp	0.05	14		F		76.2		1087		1.25			
105P046 76	SR 237	EB	Dana St. L. Off-Ramp	Dana St. L. Off-Ramp	0.38	18		F		71.0		1259		1.50			
105+046 77	SR 237	EB	Dana St. L. On-Ramp	Middlefield Rd DIAG. Off-Ramp	0.35	33		E		54.3		1764					
105P046 77	SR 237	EB	Middlefield Rd DIAG. Off-Ramp	Middlefield Rd DIAG.	0.29	55		D		35.5		1950					
105+046 78	SR 237	EB	Middlefield Rd DIAG.	Middlefield Rd DIAG. On-Ramp	0.23	58		D		32.0		1864					
105P046 78	SR 237	EB	Middlefield Rd DIAG. On-Ramp	Maude Ave On-Ramp	0.33	59		D		31.1		1833					
105+046 79	SR 237	EB	Maude Ave On-Ramp	US-101 DIAG. Off-Ramp	0.16	57		D		33.9		1917					
105P046 79	SR 237	EB	US-101 DIAG. Off-Ramp	US-101 L. On-Ramp	0.22	48		D		41.3		1990					

AM Freeway Speed, LOS, Estimated Density, Estimated Flow, and Duration of Congestion by Segment												2017 AM Results (INRIX Data)					
TMC	Facility	Dir	From	To	Miles	Speed (mi/hr)		LOS		Density (pc/mi/in)		Flow (pc/hr/in)		Congestion (hr)			
						Mixed	HOV	Mixed	HOV	Mixed	HOV	Mixed	HOV				
105+046 80	SR 237	EB	US-101 L. On-Ramp	Mathilda Ave DIAG. Off-Ramp	0.31	36	E			51.1		1842					
105P046 80	SR 237	EB	Mathilda Ave DIAG. Off-Ramp	Mathilda Ave DIAG. On-Ramp	0.46	50	55	D	D	40.1	35.0	1992	1942				
105+046 81	SR 237	EB	Mathilda Ave DIAG. On-Ramp	Fair Oaks Way DIAG. Off-Ramp	0.54	58	62	D	C	32.5	25.9	1878	1611				
105P046 81	SR 237	EB	Fair Oaks Way DIAG. Off-Ramp	Fair Oaks Way L. On-Ramp	0.21	60	63	D	C	29.7	25.0	1781	1569				
105+046 82	SR 237	EB	Fair Oaks Way L. On-Ramp	Lawrence Expy DIAG. Off-Ramp	0.30	61	66	D	B	27.8	16.3	1702	1070				
105P046 82	SR 237	EB	Lawrence Expy DIAG. Off-Ramp	Lawrence Expy DIAG. On-Ramp	0.61	62	65	D	C	27.1	20.1	1671	1301				
105+051 40	SR 237	EB	Lawrence Expy DIAG. On-Ramp	Great America Pkwy DIAG. Off-Ramp	0.60	58	66	D	B	31.8	15.3	1858	1011				
105P051 40	SR 237	EB	Great America Pkwy DIAG. Off-Ramp	Great America Pkwy DIAG. On-Ramp	0.81	61	67	D	B	28.8	11.6	1744	771				
105+051 42	SR 237	EB	Great America Pkwy DIAG. On-Ramp	1st L. Off-Ramp	0.55	60	66	D	B	29.8	16.3	1785	1069				
105P051 42	SR 237	EB	1st L. Off-Ramp	1st DIAG. On-Ramp	0.33	59	63	D	C	31.1	24.0	1833	1514				
105+051 43	SR 237	EB	1st DIAG. On-Ramp	Zanker Rd DIAG. Off-Ramp	0.56	57	55	D	D	33.8	35.7	1914	1954				
105P051 43	SR 237	EB	Zanker Rd DIAG. Off-Ramp	Zanker Rd DIAG. On-Ramp	0.50	60	62	D	D	30.3	26.9	1805	1662				
105+051 44	SR 237	EB	Zanker Rd DIAG. On-Ramp	McCarthy Blvd DIAG. Off-Ramp	0.28	58	67	D	B	32.8	11.8	1889	785				
105P051 44	SR 237	EB	McCarthy Blvd DIAG. Off-Ramp	McCarthy Blvd DIAG. On-Ramp	0.65	42	64	D	C	46.0	22.5	1943	1436				
105P051 45	SR 237	EB	I-880 DIAG. Off-Ramp	I-880 DIAG. On-Ramp	0.25	24	F			62.8		1518		2.25			
105N05 144	SR 237	WB	McCarthy Blvd DIAG. Off-Ramp	McCarthy Blvd DIAG. On-Ramp	0.57	5	9	F	F	94.1	86.0	470	751	5.00			
105- 05143	SR 237	WB	McCarthy Blvd DIAG. On-Ramp	Zanker Rd DIAG. Off-Ramp	0.29	9	12	F	F	86.0	79.2	752	985	4.75			
105N05 143	SR 237	WB	Zanker Rd DIAG. Off-Ramp	Zanker Rd DIAG. On-Ramp	0.35	13	24	F	F	78.2	62.5	1017	1530	4.00			
105- 05142	SR 237	WB	Zanker Rd DIAG. On-Ramp	1st DIAG. Off-Ramp	0.84	19	23	F	F	69.3	64.2	1313	1477	2.25			
105N05 142	SR 237	WB	1st DIAG. Off-Ramp	1st DIAG. On-Ramp	0.48	21	35	F	E	67.1	52.2	1385	1817	1.50			
105- 05141	SR 237	WB	1st DIAG. On-Ramp	America Center Dr DIAG. Off-Ramp	0.37	20	30	F	E	67.9	56.6	1357	1702	1.00			
105N05 141	SR 237	WB	America Center Dr DIAG. Off-Ramp	America Center Dr DIAG. Off-Ramp	0.13	20	33	F	E	68.1	54.2	1353	1767	2.25			
105N05 140	SR 237	WB	America Center Dr DIAG. Off-Ramp	America Center Dr DIAG. On-Ramp	0.74	21	32	F	E	66.7	55.2	1396	1740	1.50			
105- 04682	SR 237	WB	America Center Dr DIAG. On-Ramp	Lawrence Expy DIAG. Off-Ramp	0.54	22	28	F	F	64.8	59.0	1456	1633	2.00			

2017 AM Results (INRIX Data)																
AM Freeway Speed, LOS, Estimated Density, Estimated Flow, and Duration of Congestion by Segment								Speed (mi/hr)		LOS		Density (pc/mi/in)		Flow (pc/hr/in)		Congestion (hr)
TMC	Facility	Dir	From	To	Miles	Mixed	HOV	Mixed	HOV	Mixed	HOV	Mixed	HOV			
105N04 682	SR 237	WB	Lawrence Expy DIAG. Off-Ramp	Lawrence Expy DIAG. On-Ramp	0.66	13	15	F	F	78.5	74.9	1009	1127	3.25		
105- 04681	SR 237	WB	Lawrence Expy DIAG. On-Ramp	Java Dr DIAG. Off-Ramp	0.33	12	9	F	F	80.3	86.0	948	750	4.25		
105N04 681	SR 237	WB	Java Dr DIAG. Off-Ramp	Java Dr DIAG. On-Ramp	0.18	13	9	F	F	77.7	86.2	1034	746	4.75		
105- 04680	SR 237	WB	Java Dr DIAG. On-Ramp	Mathilda Ave DIAG Off-Ramp	0.54	15		F		74.4		1146		4.75		
105N04 680	SR 237	WB	Mathilda Ave DIAG Off-Ramp	Mathilda Ave DIAG On-Ramp	0.45	18		F		70.4		1278		4.25		
105- 04679	SR 237	WB	Mathilda Ave DIAG On-Ramp	US-101 DIAG. Off-Ramp	0.09	25		F		62.4		1531		1.25		
105N04 679	SR 237	WB	US-101 DIAG. Off-Ramp	US-101 L. On-Ramp	0.21	43		D		45.4		1952				
105- 04678	SR 237	WB	US-101 L. On-Ramp	Maude Ave DIAG. Off-Ramp	0.48	50		D		39.5		1991				
105N04 678	SR 237	WB	Maude Ave DIAG. Off-Ramp	Maude Ave DIAG. On-Ramp	0.28	56		D		34.3		1925				
105- 04677	SR 237	WB	Maude Ave DIAG. On-Ramp	Middlefield DIAG. Off-Ramp	0.22	54		D		36.1		1961				
105N04 677	SR 237	WB	Middlefield DIAG. Off-Ramp	Middlefield DIAG. On-Ramp	0.30	49		D		40.6		1992				
105- 04676	SR 237	WB	Middlefield DIAG. On-Ramp	Dana St DIAG. Off-Ramp	0.44	44		D		44.6		1963				
105N04 676	SR 237	WB	Dana St DIAG. Off-Ramp	Dana St L. On-Ramp	0.23	36		E		50.9		1848				
105- 04675	SR 237	WB	Dana St L. On-Ramp	SR-85 L. Off-Ramp	0.10	33		E		54.3		1765				
105N04 675	SR 237	WB	SR-85 L. Off-Ramp	SR-85 DIAG. On-Ramp	0.30	18		F		70.0		1290		0.75		
105- 20468	SR 237	WB	SR-85 DIAG. On-Ramp	El Camino Real	0.21	9		F		84.6		800		7.00		
105P051 35	SR 17	NB	Summit DIAG. Off Ramp	Summit DIAG. On-Ramp	0.10	28		F		59.1		1630		0.50		
105+051 36	SR 17	NB	Summit DIAG. On-Ramp	Idylwild Road	2.39	20		F		67.8		1362		1.50		
105+051 37	SR 17	NB	Idylwild Road	Bear Creek Road DIAG. Off-Ramp	1.62	17		F		71.9		1227		2.25		
105P051 37	SR 17	NB	Bear Creek Road DIAG. Off-Ramp	Bear Creek Road DIAG. On-Ramp	0.19	17		F		71.5		1240		2.50		
105+051 38	SR 17	NB	Bear Creek Road DIAG. On-Ramp	Santa Cruz DIAG. Off-Ramp	1.82	39		E		49.0		1890				
105+046 45	SR 17	NB	Santa Cruz DIAG. Off-Ramp	Saratoga Los Gatos Rd DIAG. Off-Ramp	0.78	29		F		58.0		1671		0.25		
105P046 45	SR 17	NB	Saratoga Los Gatos Rd DIAG. Off-Ramp	Saratoga Los Gatos Rd DIAG. On-Ramp	0.30	18		F		70.6		1270		2.75		
105+046 46	SR 17	NB	Saratoga Los Gatos Rd DIAG. On-Ramp	Lark Ave DIAG. Off-Ramp	1.39	49		D		40.9		1991				

AM Freeway Speed, LOS, Estimated Density, Estimated Flow, and Duration of Congestion by Segment											2017 AM Results (INRIX Data)				
TMC	Facility	Dir	From	To	Miles	Speed (mi/hr)		LOS		Density (pc/mi/in)		Flow (pc/hr/in)		Congestion (hr)	
						Mixed	HOV	Mixed	HOV	Mixed	HOV	Mixed	HOV		
105P046 46	SR 17	NB	Lark Ave DIAG. Off-Ramp	Lark Ave DIAG. On-Ramp	0.53	64	C			20.8		1341			
105P046 47	SR 17	NB	SR-85 DIAG. Off-Ramp	SR-85 DIAG. On-Ramp	0.88	59	D			31.4		1843			
105+046 48	SR 17	NB	SR-85 DIAG. On-Ramp	Camden Ave DIAG. Off-Ramp	0.55	50	D			39.9		1992			
105P046 48	SR 17	NB	Camden Ave DIAG. Off-Ramp	San Thomas Expy DIAG. On-Ramp	0.61	32	E			55.0		1746			
105+046 49	SR 17	NB	San Thomas Expy DIAG. On-Ramp	Hamilton Ave DIAG. Off-Ramp	1.31	22	F			65.4		1439		1.25	
105P046 49	SR 17	NB	Hamilton Ave DIAG. Off-Ramp	Hamilton Ave DIAG. On-Ramp	0.41	22	F			65.9		1422		1.50	
105+046 50	SR 17	NB	Hamilton Ave DIAG. On-Ramp	I-280 DIAG. Off-Ramp	0.94	25	F			62.4		1531		1.00	
105P046 50	SR 17	NB	I-280 DIAG. Off-Ramp	Stevens Creek Blvd L. On-Ramp	0.90	16	F			73.4		1179		1.50	
105N04 650	SR 17	SB	Stevens Creek Blvd DIAG. Off-Ramp	I-280 DIAG. On-Ramp	0.69	62	D			26.7		1652			
105-04649	SR 17	SB	I-280 DIAG. On-Ramp	Hamilton Ave DIAG. Off-Ramp	1.04	60	D			29.0		1753			
105N04 649	SR 17	SB	Hamilton Ave DIAG. Off-Ramp	Hamilton Ave DIAG. On-Ramp	0.39	62	D			26.8		1659			
105-04648	SR 17	SB	Hamilton Ave DIAG. On-Ramp	San Thomas Expy DIAG. Off-Ramp	1.32	61	D			28.4		1728			
105N04 648	SR 17	SB	San Thomas Expy DIAG. Off-Ramp	San Thomas Expy DIAG. On-Ramp	0.72	61	D			28.4		1729			
105-04647	SR 17	SB	San Thomas Expy DIAG. On-Ramp	SR-85 DIAG. Off-Ramp	0.26	60	D			29.4		1769			
105N04 647	SR 17	SB	SR-85 DIAG. Off-Ramp	SR-85 DIAG. On-Ramp	0.69	59	D			31.1		1833			
105-04646	SR 17	SB	SR-85 DIAG. On-Ramp	Lark Ave DIAG. Off-Ramp	0.15	54	D			36.8		1970			
105N04 646	SR 17	SB	Lark Ave DIAG. Off-Ramp	Lark Ave DIAG. On-Ramp	0.21	60	D			30.2		1802			
105-04645	SR 17	SB	Lark Ave DIAG. On-Ramp	Saratoga Ave DIAG. Off-Ramp	1.57	21	F			66.5		1404		0.75	
105N04 645	SR 17	SB	Saratoga Ave DIAG. Off-Ramp	Saratoga Ave DIAG. On-Ramp	0.36	50	D			39.6		1991			
105-05138	SR 17	SB	Saratoga Ave DIAG. On-Ramp	Santa Cruz Hwy DIAG. On-Ramp	0.78	46	D			43.1		1979			
105-05137	SR 17	SB	Santa Cruz Hwy DIAG. On-Ramp	Bear Creek Rd DIAG. Off-Ramp	1.95	48	D			41.4		1989			
105N05 137	SR 17	SB	Bear Creek Rd DIAG. Off-Ramp	Bear Creek Rd DIAG. On-Ramp	0.11	50	D			39.6		1991			
105-05136	SR 17	SB	Bear Creek Rd DIAG. On-Ramp	Idylwild Rd. DIAG. Off-Ramp	1.55	45	D			44.0		1970			
105-05135	SR 17	SB	Idylwild Rd. DIAG. Off-Ramp	Summit Rd. L. Off-Ramp	2.34	31	E			55.2		1739			

AM Freeway Speed, LOS, Estimated Density, Estimated Flow, and Duration of Congestion by Segment											2017 AM Results (INRIX Data)					
TMC	Facility	Dir	From	To	Miles	Speed (mi/hr)		LOS		Density (pc/mi/in)		Flow (pc/hr/in)		Congestion (hr)		
						Mixed	HOV	Mixed	HOV	Mixed	HOV	Mixed	HOV			
105N05 135	SR 17	SB	Summit Rd. L. Off-Ramp	Summit Rd. L. On-Ramp	0.15	41	E			47.3		1922				
105P048 14	I 280	NB	US-101 DIAG. Off-Ramp	US 101 DIAG. On-Ramp	0.87	11	F			82.0		888			3.50	
105P048 15	I 280	NB	US 101 DIAG. On-Ramp	McLaughlin Ave L. On-Ramp	0.27	14	F			77.4		1045			4.00	
105+048 16	I 280	NB	McLaughlin Ave L. On-Ramp	11th St DIAG. Off-Ramp	0.45	18	F			70.2		1285			3.00	
105P048 17	I 280	NB	11th St DIAG. Off-Ramp	11th St DIAG. On-Ramp	0.58	21	F			66.8		1393			2.50	
105+048 18	I 280	NB	11th St DIAG. On-Ramp	4th St DIAG. On-Ramp	0.19	20	F			68.0		1356			2.50	
105+048 19	I 280	NB	4th St DIAG. On-Ramp	4th St DIAG. On-Ramp	0.14	21	F			67.0		1388			2.25	
105P048 19	I 280	NB	4th St DIAG. On-Ramp	4th St DIAG. On-Ramp	0.01	22	F			66.0		1420			1.00	
105+048 20	I 280	NB	4th St DIAG. On-Ramp	SR-87 DIAG. Off-Ramp	0.17	22	F			64.9		1452			0.75	
105P048 20	I 280	NB	SR-87 DIAG. Off-Ramp	SR-87 DIAG. On-Ramp	0.76	18	F			70.7		1268			1.00	
105+048 22	I 280	NB	SR-280 DIAG. On-Ramp	Meridian Ave DIAG. Off-Ramp	0.27	17	F			72.3		1217			2.00	
105P048 22	I 280	NB	Southwest Expy DIAG. Off-Ramp	Meridian Ave L. On-Ramp	0.47	16	F			73.3		1183			2.50	
105P048 23	I 280	NB	SR-280 DIAG. Off-Ramp	SR-280 DIAG. On-Ramp	0.50	9	6	F	F	85.7	90.7	762	588		3.50	
105+048 24	I 280	NB	SR-280 DIAG. On-Ramp	Menker Ave DIAG. On-Ramp	0.39	8	7	F	F	86.5	89.9	732	616		3.75	
105P048 24	I 280	NB	Menker Ave DIAG. On-Ramp	Leland Ave DIAG. On-Ramp	0.26	10	5	F	F	83.7	93.0	830	510		3.75	
105P048 25	I 280	NB	SR-17 DIAG. Off-Ramp	SR-17 DIAG. On-Ramp	0.76	9	9	F	F	85.9	86.4	753	738		4.25	
105+048 26	I 280	NB	SR-17 DIAG. On-Ramp	Winchester Blvd DIAG. Off-Ramp	0.20	12	7	F	F	80.4	88.7	942	659		3.75	
105P048 26	I 280	NB	Winchester Blvd DIAG. Off-Ramp	Winchester Blvd DIAG. On-Ramp	0.33	13	11	F	F	78.8	80.8	998	929		3.00	
105+048 27	I 280	NB	Winchester Blvd DIAG. On-Ramp	Saratoga Ave DIAG. Off-Ramp	0.68	15	15	F	F	75.5	74.9	1108	1129		2.75	
105P048 27	I 280	NB	Saratoga Ave DIAG. Off-Ramp	Saratoga Ave DIAG. On-Ramp	0.56	15	17	F	F	74.3	72.5	1149	1207		2.50	
105+048 28	I 280	NB	Saratoga Ave DIAG. On-Ramp	Lawrence Expy DIAG. Off-Ramp	0.74	18	13	F	F	71.0	77.5	1258	1042		2.50	
105P048 28	I 280	NB	Lawrence Expy DIAG. Off-Ramp	Lawrence Expy	0.28	18	19	F	F	70.7	68.8	1266	1331		2.50	
105+048 29	I 280	NB	Lawrence Expy	Stevens Creek Blvd DIAG. Off-Ramp	0.24	18	25	F	F	70.5	61.9	1273	1546		2.50	
105P048 29	I 280	NB	Stevens Creek Blvd DIAG. Off-Ramp	Stevens Creek Blvd DIAG. On-Ramp	0.30	19	26	F	F	69.0	60.8	1325	1580		2.00	

AM Freeway Speed, LOS, Estimated Density, Estimated Flow, and Duration of Congestion by Segment												2017 AM Results (INRIX Data)					
TMC	Facility	Dir	From	To	Miles	Speed (mi/hr)		LOS		Density (pc/mi/in)		Flow (pc/hr/in)		Congestion (hr)			
						Mixed	HOV	Mixed	HOV	Mixed	HOV	Mixed	HOV				
105+048 30	I 280	NB	Stevens Creek Blvd DIAG. On-Ramp	Wolfe Rd DIAG. Off-Ramp	0.45	20	26	F	F	67.8	60.9	1361	1576	2.00			
105P048 30	I 280	NB	Wolfe Rd DIAG. Off-Ramp	Wolfe Rd DIAG. On-Ramp	0.45	22	33	F	E	65.0	53.8	1449	1777	1.75			
105+048 31	I 280	NB	Wolfe Rd DIAG. On-Ramp	De Anza Blvd DIAG. Off-Ramp	0.61	23	24	F	F	63.9	63.4	1486	1499	1.25			
105P048 31	I 280	NB	De Anza Blvd DIAG. Off-Ramp	De Anza Blvd DIAG. On-Ramp	0.46	23	28	F	F	64.3	58.9	1473	1637	1.25			
105+048 32	I 280	NB	De Anza Blvd DIAG. On-Ramp	SR-85 DIAG. Off-Ramp	0.70	24	27	F	F	63.1	59.5	1509	1617	1.50			
105P048 32	I 280	NB	SR-85 DIAG. Off-Ramp	SR-85 DIAG. On-Ramp	0.74	25	33	F	E	62.3	53.5	1536	1784	2.00			
105P048 33	I 280	NB	Foothill Blvd DIAG. Off-Ramp	Foothill Blvd L. On-Ramp	0.32	28	34	F	E	58.6	52.8	1646	1802	1.00			
105+048 34	I 280	NB	Foothill Blvd L. On-Ramp	Magdalena Ave DIAG. Off-Ramp	2.37	37	44	E	D	50.5	44.7	1856	1961				
105P048 34	I 280	NB	Magdalena Ave DIAG. Off-Ramp	Magdalena Ave DIAG. On-Ramp	0.47	31	30	E	F	55.6	58.0	1728	1713				
105+048 35	I 280	NB	Magdalena Ave DIAG. On-Ramp	El monte Rd DIAG. Off-Ramp	0.38	34		E		53.3		1790					
105P048 35	I 280	NB	El monte Rd DIAG. Off-Ramp	El monte Rd DIAG. On-Ramp	0.60	33		E		53.8		1777					
105+048 36	I 280	NB	El monte Rd DIAG. On-Ramp	Page Mill Rd DIAG. Off-Ramp	2.72	47		D		42.0		1987					
105P048 36	I 280	NB	Page Mill Rd DIAG. Off-Ramp	Page Mill Rd DIAG. On-Ramp	0.64	64		C		21.4		1372					
105+048 37	I 280	NB	Page Mill Rd DIAG. On-Ramp	Alpine Rd DIAG. Off-Ramp	1.70	64		C		23.1		1467					
105-04836	I 280	SB	Alpine Rd DIAG. On-Ramp	Page Mill Rd DIAG. Off-Ramp	1.58	65		C		18.8		1221					
105N04 836	I 280	SB	Page Mill Rd DIAG. Off-Ramp	Page Mill Rd DIAG. On-Ramp	0.65	66		B		14.7		968					
105-04835	I 280	SB	Page Mill Rd DIAG. On-Ramp	El Monte Rd DIAG. Off-Ramp	2.71	63		C		24.0		1514					
105N04 835	I 280	SB	El Monte Rd DIAG. Off-Ramp	El Monte Rd DIAG. On-Ramp	0.60	65		C		18.8		1221					
105-04834	I 280	SB	El Monte Rd DIAG. On-Ramp	Magdalena Ave DIAG. Off-Ramp	0.36	64		C		21.6		1387					
105N04 834	I 280	SB	Magdalena Ave DIAG. Off-Ramp	Magdalena Ave L. On-Ramp	0.38	66	63	B	C	15.3	23.5	1011	1491				
105-04833	I 280	SB	Magdalena Ave L. On-Ramp	Foothill Blvd DIAG. Off-Ramp	2.34	65	64	C	C	18.6	22.5	1210	1434				
105N04 833	I 280	SB	Foothill Blvd DIAG. Off-Ramp	Foothill Blvd DIAG. On-Ramp	0.46	65	69	C	A	19.6	<8.9	1269	618				
105-04832	I 280	SB	Foothill Blvd DIAG. On-Ramp	SR-85 DIAG. Off-Ramp	0.26	64	70	C	A	21.2	<8.9	1360	619				
105N04 832	I 280	SB	SR-85 DIAG. Off-Ramp	SR-85 DIAG. On-Ramp	0.75	62	69	C	A	25.7	<8.9	1605	611				

AM Freeway Speed, LOS, Estimated Density, Estimated Flow, and Duration of Congestion by Segment												2017 AM Results (INRIX Data)					
TMC	Facility	Dir	From	To	Miles	Speed (mi/hr)		LOS		Density (pc/mi/in)		Flow (pc/hr/in)		Congestion (hr)			
						Mixed	HOV	Mixed	HOV	Mixed	HOV	Mixed	HOV				
105-04831	I 280	SB	SR-85 DIAG. On-Ramp	De Anza Blvd DIAG. Off-Ramp	0.57	49	69	D	A	40.8	<8.9	1991	613				
105N04831	I 280	SB	De Anza Blvd DIAG. Off-Ramp	De Anza Blvd DIAG. On-Ramp	0.46	61	69	D	A	27.6	<8.9	1691	617				
105-04830	I 280	SB	De Anza Blvd DIAG. On-Ramp	Wolfe Rd DIAG. Off-Ramp	0.63	62	72	C	A	25.6	<8.9	1597	637				
105N04830	I 280	SB	Wolfe Rd DIAG. Off-Ramp	Wolfe Rd DIAG. On-Ramp	0.41	63	70	C	A	25.3	<8.9	1583	622				
105-04829	I 280	SB	Wolfe Rd DIAG. On-Ramp	Stevens Creek Blvd DIAG. Off-Ramp	0.39	61	69	D	A	27.4	<8.9	1685	614				
105N04829	I 280	SB	Stevens Creek Blvd DIAG. Off-Ramp	Stevens Creek Blvd	0.34	62	69	D	A	27.0	<8.9	1668	614				
105-04828	I 280	SB	Stevens Creek Blvd	Stevens Creek Blvd DIAG. On-Ramp	0.28	64	70	C	A	21.0	<8.9	1353	623				
105N04828	I 280	SB	Stevens Creek Blvd DIAG. On-Ramp	Lawrence Expy DIAG. On-Ramp	0.23	59	72	D	A	31.4	<8.9	1845	638				
105-04827	I 280	SB	Lawrence Expy DIAG. On-Ramp	Saratoga Ave DIAG. Off-Ramp	0.71	61	69	D	A	28.5	<8.9	1732	618				
105N04827	I 280	SB	Saratoga Ave DIAG. Off-Ramp	Saratoga Ave DIAG. On-Ramp	0.49	60	70	D	A	30.2	<8.9	1801	620				
105-04826	I 280	SB	Saratoga Ave DIAG. On-Ramp	Winchester Blvd DIAG. Off-Ramp	0.85	59	68	D	A	30.5	<8.9	1811	605				
105N04826	I 280	SB	Winchester Blvd DIAG. Off-Ramp	Winchester Blvd	0.31	62	70	D	A	26.8	<8.9	1658	619				
105-04825	I 280	SB	Winchester Blvd	SR-17 DIAG. Off-Ramp	0.11	61	71	D	A	27.7	<8.9	1699	632				
105N04825	I 280	SB	SR-17 DIAG. Off-Ramp	SR-17 DIAG. On-Ramp	0.62	61	68	D	A	28.7	<8.9	1743	606				
105-04824	I 280	SB	SR-17 DIAG. On-Ramp	Bascom Ave DIAG. Off-Ramp	0.18	59	69	D	A	31.5	<8.9	1847	613				
105N04824	I 280	SB	Bascom Ave DIAG. Off-Ramp	Leland Ave	0.39	63	69	C	A	24.8	<8.9	1558	615				
105-04823	I 280	SB	Leland Ave	Meridian Ave DIAG. Off-Ramp	0.25	63	65	C	C	25.4	19.8	1588	1279				
105N04823	I 280	SB	Meridian Ave DIAG. Off-Ramp	Meridian Ave DIAG. On-Ramp	0.75	52	50	D	D	38.5	39.9	1987	1992				
105-04822	I 280	SB	Meridian Ave L. Off-Ramp	Meridian Ave L. Off-Ramp	0.01	39		E		48.7		1895					
105N04822	I 280	SB	Meridian Ave L. Off-Ramp	Southwest Expy DIAG. On-Ramp	0.22	32		E		55.1		1743		0.25			
105-04821	I 280	SB	Southwest Expy DIAG. On-Ramp	Bird Ave DIAG. Off-Ramp	0.47	29		F		58.0		1694					
105N04821	I 280	SB	Bird Ave DIAG. Off-Ramp	Bird Ave DIAG. On-Ramp	0.83	35		E		51.8		1826					
105-04819	I 280	SB	SR-87 DIAG. On-Ramp	1st St L. On-Ramp	0.20	56		D		34.3		1927					
105N04819	I 280	SB	1st St L. On-Ramp	6th St DIAG. Off-Ramp	0.10	57		D		33.2		1900					

AM Freeway Speed, LOS, Estimated Density, Estimated Flow, and Duration of Congestion by Segment											2017 AM Results (INRIX Data)					
TMC	Facility	Dir	From	To	Miles	Speed (mi/hr)		LOS		Density (pc/mi/in)		Flow (pc/hr/in)		Congestion (hr)		
						Mixed	HOV	Mixed	HOV	Mixed	HOV	Mixed	HOV			
105-04818	I 280	SB	1st St L. On-Ramp	6th St DIAG. Off-Ramp	0.05	58	D			32.3		1872				
105-04817	I 280	SB	6th St DIAG. Off-Ramp	10th St DIAG. Off-Ramp	0.21	60	D			29.7		1782				
105N04817	I 280	SB	10th St DIAG. Off-Ramp	11th St DIAG. On-Ramp	0.54	61	D			27.9		1707				
105-04815	I 280	SB	11th St DIAG. On-Ramp	McLaughlin Ave DIAG. Off-Ramp	0.45	59	D			31.5		1846				
105N04815	I 280	SB	McLaughlin Ave DIAG. Off-Ramp	US-101 DIAG. Off-Ramp	0.31	60	D			29.8		1785				
105-04814	I 280	SB	McLaughlin Ave DIAG. Off-Ramp	McLaughlin Ave DIAG. Off-Ramp	0.17	59	D			31.3		1842				
105N04814	I 280	SB	McLaughlin Ave DIAG. Off-Ramp	US-101 DIAG. On-Ramp	1.12	20	F			67.8		1360		0.75		
105P04346	I 880	NB	I-280 DIAG. Off-Ramp	I-280 DIAG. On-Ramp	0.90	23	F			64.5		1465		1.25		
105P04347	I 880	NB	Stevens Creek Blvd DIAG. Off-Ramp	Stevens Creek Blvd DIAG. On-Ramp	0.39	12	F			80.2		949		2.00		
105+04348	I 880	NB	Stevens Creek Blvd DIAG. On-Ramp	Bascom Ave DIAG. Off-Ramp	0.48	15	F			75.3		1115		2.25		
105P04348	I 880	NB	Bascom Ave DIAG. Off-Ramp	Bascom Ave DIAG. On-Ramp	0.27	18	F			70.5		1275		2.00		
105+04349	I 880	NB	Bascom Ave DIAG. On-Ramp	The Alameda DIAG. Off-Ramp	0.51	18	F			70.8		1264		2.00		
105P04349	I 880	NB	The Alameda DIAG. Off-Ramp	The Alameda DIAG. On-Ramp	0.38	18	F			71.2		1251		2.00		
105+04350	I 880	NB	The Alameda DIAG. On-Ramp	Coleman Ave L. Off-Ramp	0.30	14	F			75.9		1097		2.50		
105P04350	I 880	NB	Coleman Ave L. Off-Ramp	Coleman Ave DIAG. On-Ramp	0.38	14	F			77.1		1053		2.50		
105+04351	I 880	NB	Coleman Ave DIAG. On-Ramp	1st St DIAG. Off-Ramp	0.41	17	F			72.7		1201		2.50		
105P04351	I 880	NB	1st St DIAG. Off-Ramp	1nd St DIAG. On-Ramp	0.38	17	F			71.3		1246		2.25		
105+04352	I 880	NB	1nd St DIAG. On-Ramp	US-101 DIAG. Off-Ramp	0.14	18	F			70.0		1290		2.25		
105P04352	I 880	NB	US-101 DIAG. Off-Ramp	US-101 DIAG. On-Ramp	0.34	20	21	F	F	67.9	67.0	1358	1388	2.75		
105P04353	I 880	NB	Old Bayshore Hwy L. Off-Ramp	Old Bayshore Hwy DIAG. On-Ramp	0.26	28	32	F	E	58.2	54.8	1655	1751	0.50		
105+04354	I 880	NB	Old Bayshore Hwy DIAG. On-Ramp	Brokaw Rd DIAG. Off-Ramp	0.50	47	55	D	D	42.2	35.0	1986	1942			
105P04354	I 880	NB	Brokaw Rd DIAG. Off-Ramp	Brokaw Rd L. On-Ramp	0.38	59	66	D	B	31.3	13.3	1840	881			
105+04355	I 880	NB	Brokaw Rd L. On-Ramp	Montague Expy DIAG. Off-Ramp	0.88	63	70	C	A	23.3	<8.9	1476	620			
105P04355	I 880	NB	Montague Expy DIAG. Off-Ramp	Montague Expy DIAG. On-Ramp	0.81	65	69	C	A	18.1	<8.9	1181	617			

2017 AM Results (INRIX Data)																
AM Freeway Speed, LOS, Estimated Density, Estimated Flow, and Duration of Congestion by Segment								Speed (mi/hr)		LOS		Density (pc/mi/in)		Flow (pc/hr/in)		Congestion (hr)
TMC	Facility	Dir	From	To	Miles	Mixed	HOV	Mixed	HOV	Mixed	HOV	Mixed	HOV			
105+043 56	I 880	NB	Montague Expy DIAG. On-Ramp	Great Mall Pkwy DIAG. Off-Ramp	0.24	62	69	D	A	26.9	<8.9	1660	614			
105P043 56	I 880	NB	Great Mall Pkwy DIAG. Off-Ramp	Great Mall Pkwy L. On-Ramp	0.36	62	68	D	A	26.3	<8.9	1632	603			
105+043 57	I 880	NB	Great Mall Pkwy L. On-Ramp	SR-237 DIAG. Off-Ramp	0.28	61	68	D	A	27.5	<8.9	1690	605			
105P043 57	I 880	NB	SR-237 DIAG. Off-Ramp	SR-237 DIAG. On-Ramp	0.93	63	67	C	A	23.7	<8.9	1502	598			
105+043 58	I 880	NB	SR-237 DIAG. On-Ramp	Dixon Landing DIAG. Off-Ramp	1.03	64	68	C	A	21.8	<8.9	1397	609			
105P043 58	I 880	NB	Dixon Landing DIAG. Off-Ramp	Dixon Landing DIAG. On-Ramp	0.83	64	69	C	A	22.5	<8.9	1435	614			
105N04 358	I 880	SB	Dixon Landing DIAG. Off-Ramp	Dixon Landing DIAG. On-Ramp	0.64	13	10	F	F	78.0	82.8	1024	862	2.75		
105-04357	I 880	SB	Dixon Landing DIAG. On-Ramp	SR-237 DIAG. Off-Ramp	1.13	21	13	F	F	66.9	77.8	1392	1032	2.25		
105N04 357	I 880	SB	SR-237 DIAG. Off-Ramp	Great Mall Pkwy DIAG. On-Ramp	1.53	42	62	E	D	46.1	26.5	1942	1644			
105-04355	I 880	SB	Great Mall Pkwy DIAG. On-Ramp	Montague Expy DIAG. Off-Ramp	0.42	36	62	E	D	51.4	26.6	1836	1647			
105N04 355	I 880	SB	Montague Expy DIAG. Off-Ramp	Montague Expy DIAG. On-Ramp	0.74	52	68	D	A	37.9	<8.9	1983	601			
105-04354	I 880	SB	Montague Expy DIAG. On-Ramp	Brokaw Rd DIAG. Off-Ramp	0.62	30	68	E	A	56.3	<8.9	1711	602			
105N04 354	I 880	SB	Brokaw Rd DIAG. Off-Ramp	Brokaw Rd DIAG. On-Ramp	0.60	21	46	F	D	66.5	42.8	1402	1982	0.50		
105-04353	I 880	SB	Brokaw Rd DIAG. On-Ramp	Old Bayshore Hwy DIAG. Off-Ramp	0.46	15	18	F	F	74.4	70.9	1146	1261	1.00		
105N04 353	I 880	SB	Old Bayshore Hwy DIAG. Off-Ramp	Old Bayshore Hwy L. On-Ramp	0.32	13	10	F	F	78.6	83.1	1005	852	1.25		
105-04352	I 880	SB	Old Bayshore Hwy L. On-Ramp	US-101 L. On-Ramp	0.18	12	9	F	F	80.7	85.6	931	767	2.25		
105N04 352	I 880	SB	US-101 L. On-Ramp	US-101 DIAG. On-Ramp	0.19	11	9	F	F	80.9	84.6	926	800	3.00		
105-04351	I 880	SB	US-101 DIAG. On-Ramp	1st St DIAG. Off-Ramp	0.12	12	16	F	F	80.2	73.6	950	1172	3.25		
105N04 351	I 880	SB	1st St DIAG. Off-Ramp	1st St DIAG. On-Ramp	0.40	15		F		75.0		1124		3.50		
105-04350	I 880	SB	1st St DIAG. On-Ramp	Coleman Ave DIAG. Off-Ramp	0.42	39		E		48.3		1902				
105N04 350	I 880	SB	Coleman Ave DIAG. Off-Ramp	Coleman Ave DIAG. On-Ramp	0.53	56		D		34.6		1932				
105-04349	I 880	SB	Coleman Ave DIAG. On-Ramp	The Alameda DIAG. Off-Ramp	0.17	56		D		34.2		1924				
105N04 349	I 880	SB	The Alameda DIAG. Off-Ramp	The Alameda DIAG. On-Ramp	0.37	58		D		32.4		1875				
105-04348	I 880	SB	The Alameda DIAG. On-Ramp	Bascom Ave DIAG. Off-Ramp	0.45	52		D		38.2		1985				

2017 AM Results (INRIX Data)														
AM Freeway Speed, LOS, Estimated Density, Estimated Flow, and Duration of Congestion by Segment														
TMC	Facility	Dir	From	To	Miles	Speed (mi/hr)		LOS		Density (pc/mi/in)		Flow (pc/hr/in)		Congestion (hr)
						Mixed	HOV	Mixed	HOV	Mixed	HOV	Mixed	HOV	
105N04 348	I 880	SB	Bascom Ave DIAG. Off-Ramp	Bascom Ave DIAG. On-Ramp	0.27	39	E			48.8		1892		
105- 04347	I 880	SB	Bascom Ave DIAG. On-Ramp	Stevens Creek Blvd DIAG. Off-Ramp	0.49	25	F			61.5		1560		0.50
105N04 347	I 880	SB	Stevens Creek Blvd DIAG. Off-Ramp	I-280 DIAG. Off-Ramp	0.42	22	F			65.4		1440		1.25
105- 04346	I 880	SB	I-280 L. Off-Ramp	I-280 DIAG. Off-Ramp	0.06	25	F			62.1		1539		1.25
105N04 346	I 880	SB	Stevens Creek Blvd DIAG. On-Ramp	I-280 DIAG. On-Ramp	0.69	62	D			26.7		1652		
105P048 76	I 680	NB	US-101 DIAG. Off-Ramp	US-101 DIAG. On-Ramp	0.93	58	D			32.1		1868		
105P048 77	I 680	NB	US-101 DIAG. Off-Ramp	US-101 DIAG. On-Ramp	0.59	16	F			72.9		1196		1.00
105+048 78	I 680	NB	US-101 DIAG. On-Ramp	Capitol Expy DIAG. Off-Ramp/ Jackson Ave	0.24	14	F			76.4		1080		1.50
105P048 78	I 680	NB	Capitol Expy DIAG. Off-Ramp/ Jackson Ave	Capitol Expy DIAG. Off-Ramp	0.33	16	F			72.9		1194		1.75
105P048 79	I 680	NB	Capitol Expy DIAG. Off-Ramp	Capitol Expy DIAG. On-Ramp	0.58	16	F			73.7		1168		2.00
105P048 80	I 680	NB	Alum Rock Ave DIAG. Off-Ramp	Alum Rock Ave DIAG. On-Ramp	0.61	19	F			68.6		1335		2.00
105+048 81	I 680	NB	Alum Rock Ave DIAG. On-Ramp	McKee Rd DIAG. Off-Ramp	0.14	22	F			64.9		1454		1.75
105P048 81	I 680	NB	McKee Rd DIAG. Off-Ramp	McKee Rd DIAG. On-Ramp	0.59	28	F			58.8		1640		0.50
105+048 82	I 680	NB	McKee Rd DIAG. On-Ramp	Berryessa Rd DIAG. Off-Ramp	0.80	45	D			44.1		1969		
105P048 82	I 680	NB	Berryessa Rd DIAG. Off-Ramp	Berryessa Rd DIAG. On-Ramp	0.68	56	D			34.3		1926		
105+048 83	I 680	NB	Berryessa Rd DIAG. On-Ramp	Hostetter Rd DIAG. Off-Ramp	0.36	60	D			29.7		1783		
105P048 83	I 680	NB	Hostetter Rd DIAG. Off-Ramp	Hostetter Rd DIAG. On-Ramp	0.33	58	D			32.8		1888		
105+048 84	I 680	NB	Hostetter Rd DIAG. On-Ramp	Capital Ave L. Off-Ramp	0.08	55	D			35.3		1948		
105P048 84	I 680	NB	Capital Ave L. Off-Ramp	Capital Ave DIAG. On-Ramp	0.51	47	D			42.0		1987		
105+048 85	I 680	NB	Capital Ave DIAG. On-Ramp	Montague Expy DIAG. Off-Ramp	0.38	48	D			41.7		1988		
105P048 85	I 680	NB	Montague Expy DIAG. Off-Ramp	Montague Expy DIAG. On-Ramp	0.70	48	D			41.8		1988		
105+048 86	I 680	NB	Montague Expy DIAG. On-Ramp	Calaveras Blvd DIAG. Off-Ramp	0.75	30	F			58.0		1722		0.50
105P048 86	I 680	NB	Calaveras Blvd DIAG. Off-Ramp	Calaveras Blvd DIAG. On-Ramp	0.84	28	F			58.6		1645		0.75
105+048 87	I 680	NB	Calaveras Blvd DIAG. On-Ramp	Jacklin Rd DIAG. Off-Ramp	0.13	33	E			53.5		1786		

AM Freeway Speed, LOS, Estimated Density, Estimated Flow, and Duration of Congestion by Segment												2017 AM Results (INRIX Data)				
TMC	Facility	Dir	From	To	Miles	Speed (mi/hr)		LOS		Density (pc/mi/in)		Flow (pc/hr/in)		Congestion (hr)		
						Mixed	HOV	Mixed	HOV	Mixed	HOV	Mixed	HOV			
105P048 87	I 680	NB	Jacklin Rd DIAG. Off-Ramp	Jacklin Rd DIAG. On-Ramp	0.63	33	E			54.1		1769				
105+048 88	I 680	NB	Jacklin Rd DIAG. On-Ramp	Scott Creek Rd DIAG. Off-Ramp	0.95	41	E			46.7		1932				
105-04887	I 680	SB	Scott Creek Rd DIAG. On-Ramp	Jacklin Rd DIAG. Off-Ramp	1.02	66	70	B	A	13.6	<8.9	899	625			
105N04 887	I 680	SB	Jacklin Rd DIAG. Off-Ramp	Jacklin Rd DIAG. On-Ramp	0.61	63	70	C	A	24.0	<8.9	1514	627			
105N04 886	I 680	SB	Calaveras Blvd DIAG. Off Ramp	Calaveras Blvd DIAG. On Ramp	0.96	65	67	C	A	19.6	10.4	1267	692			
105-04885	I 680	SB	Calaveras Blvd DIAG. On Ramp	Montague Expy DIAG. Off-Ramp	0.64	58	D			31.8		1857				
105N04 885	I 680	SB	Montague Expy DIAG. Off-Ramp	Montague Expy DIAG. On-Ramp	0.70	65	C			19.9		1287				
105-04884	I 680	SB	Montague Expy DIAG. On-Ramp	Capitol Expy DIAG. Off-Ramp	0.43	64	C			20.8		1338				
105N04 884	I 680	SB	Capitol Expy DIAG. Off-Ramp	Capitol Expy DIAG. On-Ramp	0.53	64	C			21.4		1375				
105-04883	I 680	SB	Capitol Expy DIAG. On-Ramp	Hostetter Rd L. Off-Ramp	0.10	62	C			26.0		1617				
105N04 883	I 680	SB	Hostetter Rd L. Off-Ramp	Hostetter Rd L. On-Ramp	0.42	63	C			24.0		1515				
105-04882	I 680	SB	Hostetter Rd L. On-Ramp	Berryessa Rd DIAG. Off-Ramp	0.19	63	C			23.5		1488				
105N04 882	I 680	SB	Berryessa Rd DIAG. Off-Ramp	Berryessa Rd DIAG. On-Ramp	0.63	63	C			23.8		1504				
105-04881	I 680	SB	Berryessa Rd DIAG. On-Ramp	McKee Rd DIAG. Off-Ramp	0.82	62	D			26.5		1644				
105N04 881	I 680	SB	McKee Rd DIAG. Off-Ramp	McKee Rd DIAG. On-Ramp	0.65	24	F			63.0		1513		0.50		
105-04880	I 680	SB	McKee Rd DIAG. On-Ramp	Alum Rock Ave DIAG. Off-Ramp	0.11	18	F			70.8		1264		0.75		
105N04 880	I 680	SB	Alum Rock Ave DIAG. Off-Ramp	Capitol Expy L. On-Ramp	0.61	18	F			70.5		1275		0.75		
105N04 879	I 680	SB	Alum Rock Ave L. Off-Ramp	Alum Rock Ave L. On-Ramp	0.61	16	F			72.8		1197		1.50		
105-04878	I 680	SB	Capitol Expy L. On-Ramp	Capitol Expy L. On-Ramp	0.02	15	F			75.3		1115		2.00		
105N04 878	I 680	SB	Capitol Expy L. On-Ramp	Jackson Ave DIAG. On-Ramp	0.32	15	F			75.4		1113		2.25		
105-04877	I 680	SB	Jackson Ave DIAG. On-Ramp	US-101 DIAG. Off-Ramp	0.11	16	F			73.8		1166		2.50		
105N04 877	I 680	SB	US-101 DIAG. Off-Ramp	US-101 DIAG. Off-Ramp/Bayshore Fwy	0.68	17	F			72.5		1208		2.75		
105N04 876	I 680	SB	US-101 DIAG. Off-Ramp	US-101 DIAG. On-Ramp	0.87	11	F			82.0		888		3.50		
105+098 71	US 101	NB	US-101 DIAG. On-Ramp	SR-25 DIAG. Off-Ramp	3.61	62	D			27.1		1671				

AM Freeway Speed, LOS, Estimated Density, Estimated Flow, and Duration of Congestion by Segment											2017 AM Results (INRIX Data)					
TMC	Facility	Dir	From	To	Miles	Speed (mi/hr)		LOS		Density (pc/mi/in)		Flow (pc/hr/in)		Congestion (hr)		
						Mixed	HOV	Mixed	HOV	Mixed	HOV	Mixed	HOV	Mixed	HOV	
105P098 71	US 101	NB	SR-25 DIAG. Off-Ramp	SR-25 DIAG. On-Ramp	0.12	61		D		28.8		1745				
105+098 72	US 101	NB	SR-25 DIAG. On-Ramp	Castro Valley Rd	0.43	56		D		34.6		1932				
105+041 13	US 101	NB	Castro Valley Rd	Bolsa Rd DIAG. Off-Ramp	0.98	61		D		28.7		1743				
105P041 13	US 101	NB	Bolsa Rd DIAG. Off-Ramp	Bolsa Rd DIAG. On-Ramp	0.30	64		C		22.0		1409				
105+041 14	US 101	NB	Bolsa Rd DIAG. On-Ramp	SR-152 DIAG. Off-Road	0.89	64		C		22.9		1455				
105P041 14	US 101	NB	SR-152 DIAG. Off-Road	SR-152 DIAG. On-Road	0.47	64		C		21.3		1367				
105+041 15	US 101	NB	SR-152 DIAG. On-Road	Leavesley Rd DIAG. Off-Ramp	0.87	62		D		27.2		1674				
105P041 15	US 101	NB	Leavesley Rd DIAG. Off-Ramp	Leavesley Rd DIAG. On-Ramp	0.68	49		D		40.7		1992				
105+041 16	US 101	NB	Leavesley Rd DIAG. On-Ramp	Masten Ave DIAG. Off-Ramp	2.07	45		D		44.1		1969				
105P041 16	US 101	NB	Masten Ave DIAG. Off-Ramp	Masten Ave DIAG. On-Ramp	0.58	44		D		44.5		1964				
105+041 17	US 101	NB	Masten Ave DIAG. On-Ramp	San Martin Ave DIAG. Off-Ramp	1.71	36		E		51.2		1842				
105P041 17	US 101	NB	San Martin Ave DIAG. Off-Ramp	San Martin Ave DIAG. On-Ramp	0.44	26		F		60.3		1594		1.00		
105+041 18	US 101	NB	San Martin Ave DIAG. On-Ramp	Tennant Ave DIAG. Off-Ramp	2.10	13		F		79.1		988		2.50		
105P041 18	US 101	NB	Tennant Ave DIAG. Off-Ramp	Tennant Ave DIAG. On-Ramp	0.59	9		F		85.7		762		3.00		
105+041 19	US 101	NB	Tennant Ave DIAG. On-Ramp	Dunne Ave DIAG. Off-Ramp	0.31	9		F		85.0		787		3.25		
105P041 19	US 101	NB	Dunne Ave DIAG. Off-Ramp	Dunne Ave DIAG. On-Ramp	0.58	13		F		78.8		998		2.75		
105+041 20	US 101	NB	Dunne Ave DIAG. On-Ramp	Cochrane Rd DIAG. Off-Ramp	1.24	37		E		50.2		1864				
105P041 20	US 101	NB	Cochrane Rd DIAG. Off-Ramp	Cochrane Rd DIAG. On-Ramp	0.60	60	64	D	C	30.2	22.9	1800	1459			
105+041 21	US 101	NB	Cochrane Rd DIAG. On-Ramp	Coyote Creek Golf Dr DIAG. Off-Ramp	2.89	61	57	D	D	27.4	33.6	1686	1908			
105P041 21	US 101	NB	Coyote Creek Golf Dr DIAG. Off-Ramp	Coyote Creek Golf Dr DIAG. On-Ramp	0.61	60	55	D	D	29.3	35.8	1767	1955			
105+092 88	US 101	NB	Coyote Creek Golf Dr DIAG. Off-Ramp	Bailey Ave DIAG. Off-Ramp	1.42	62	62	C	D	25.7	26.9	1605	1662			
105P092 88	US 101	NB	Bailey Ave DIAG. Off-Ramp	Bailey Ave DIAG. On-Ramp	0.54	59	69	D	A	31.3	<8.9	1839	617			
105+041 22	US 101	NB	Bailey Ave DIAG. On-Ramp	SR-85 DIAG. Off-Ramp	2.77	63	63	C	C	25.3	23.4	1582	1487			
105P041 22	US 101	NB	SR-85 DIAG. Off-Ramp	Silicon Valley Blvd DIAG. Off-Ramp	0.51	67	69	A	A	9.9	<8.9	664	611			

2017 AM Results (INRIX Data)																
AM Freeway Speed, LOS, Estimated Density, Estimated Flow, and Duration of Congestion by Segment								Speed (mi/hr)		LOS		Density (pc/mi/in)		Flow (pc/hr/in)		Congestion (hr)
TMC	Facility	Dir	From	To	Miles	Mixed	HOV	Mixed	HOV	Mixed	HOV	Mixed	HOV			
105P041 23	US 101	NB	Silicon Valley Blvd DIAG. Off-Ramp	Silicon Valley Blvd DIAG. On-Ramp	0.57	66	69	B	A	13.8	<8.9	915	617			
105+041 24	US 101	NB	Silicon Valley Blvd DIAG. On-Ramp	Silver Creek Valley Rd DIAG. Off-Ramp	0.79	66	65	B	C	16.6	18.2	1088	1183			
105P041 24	US 101	NB	Silver Creek Valley Rd DIAG. Off-Ramp	Silver Creek Valley Rd DIAG. On-Ramp	0.77	26	22	F	F	61.2	65.5	1568	1434	0.50		
105+041 25	US 101	NB	Silver Creek Valley Rd DIAG. On-Ramp	Hellyer Ave DIAG. Off-Ramp	1.34	12	18	F	F	79.7	70.2	965	1283	2.25		
105P041 25	US 101	NB	Hellyer Ave DIAG. Off-Ramp	Hellyer Ave L. On-Ramp	0.27	10	11	F	F	82.8	80.9	862	926	2.50		
105+041 26	US 101	NB	Hellyer Ave L. On-Ramp	Yerba Buena Rd L. Off-Ramp	0.70	13	15	F	F	78.3	74.8	1016	1130	2.75		
105P041 26	US 101	NB	Yerba Buena Rd L. Off-Ramp	Capitol Expy DIAG. Off-Ramp	0.18	14	24	F	F	76.4	63.3	1080	1503	3.00		
105P041 27	US 101	NB	Capitol Expy DIAG. Off-Ramp	Capitol Expy DIAG. On-Ramp	0.97	12	19	F	F	79.2	69.6	984	1304	3.00		
105+041 28	US 101	NB	Capitol Expy DIAG. On-Ramp	Tully Rd DIAG. Off-Ramp	0.64	19	26	F	F	69.5	61.0	1308	1573	3.25		
105P041 28	US 101	NB	Tully Rd DIAG. Off-Ramp	Tully Rd DIAG. On-Ramp	0.63	27	35	F	E	59.7	51.6	1613	1830	2.00		
105+041 29	US 101	NB	Tully Rd DIAG. On-Ramp	I-680 DIAG. Off-Ramp	0.97	22	25	F	F	65.5	61.9	1435	1547	1.75		
105P041 29	US 101	NB	I-680 DIAG. Off-Ramp	I-680 DIAG. On-Ramp	0.79	11	10	F	F	82.2	83.5	882	839	3.00		
105+041 31	US 101	NB	I-680 DIAG. On-Ramp	Alum Rock Ave	0.53	13	12	F	F	78.9	79.8	995	964	4.50		
105P041 32	US 101	NB	Alum Rock Ave DIAG. Off-Ramp	McKee Rd DIAG. On-Ramp	0.75	12	13	F	F	79.3	78.7	980	999	4.75		
105+041 33	US 101	NB	McKee Rd DIAG. On-Ramp	Oakland Rd DIAG. Off-Ramp	1.14	17	17	F	F	71.4	71.8	1246	1232	3.00		
105P041 33	US 101	NB	Oakland Rd DIAG. Off-Ramp	Oakland Rd DIAG. On-Ramp	0.41	16	13	F	F	73.6	77.7	1172	1035	3.00		
105+041 34	US 101	NB	Oakland Rd DIAG. On-Ramp	I-880 DIAG. Off-Ramp	0.15	16	7	F	F	74.1	88.7	1156	656	3.00		
105P041 34	US 101	NB	I-880 DIAG. Off-Ramp	I-880 L. On-Ramp	0.22	16	6	F	F	74.0	92.5	1160	527	3.00		
105+041 35	US 101	NB	I-880 L. On-Ramp	Old Bayshore Hwy DIAG. On-Ramp	0.34	10	8	F	F	84.2	88.5	814	666	3.50		
105P041 35	US 101	NB	Old Bayshore Hwy DIAG. On-Ramp	Old Bayshore Hwy DIAG. Off-Ramp	0.23	7	7	F	F	88.9	88.8	651	655	3.75		
105+041 36	US 101	NB	Old Bayshore Hwy DIAG. Off-Ramp	Brokaw Rd DIAG. Off-Ramp	0.20	8	7	F	F	88.3	90.2	673	605	4.00		
105P041 36	US 101	NB	Brokaw Rd DIAG. Off-Ramp	Brokaw Rd DIAG. On-Ramp	0.63	7	7	F	F	88.6	90.7	662	590	4.25		
105P041 37	US 101	NB	Trimble Rd DIAG. Off-Ramp	SR-87 DIAG. On-Ramp	0.45	7	7	F	F	89.8	89.2	620	641	4.25		
105+041 38	US 101	NB	SR-87 DIAG. On-Ramp	Trimble Rd DIAG. Off-Ramp	0.28	8	5	F	F	87.4	93.0	704	509	4.75		

AM Freeway Speed, LOS, Estimated Density, Estimated Flow, and Duration of Congestion by Segment												2017 AM Results (INRIX Data)					
TMC	Facility	Dir	From	To	Miles	Speed (mi/hr)		LOS		Density (pc/mi/in)		Flow (pc/hr/in)		Congestion (hr)			
						Mixed	HOV	Mixed	HOV	Mixed	HOV	Mixed	HOV				
105P041 38	US 101	NB	Trimble Rd DIAG. Off-Ramp	Trimble Rd DIAG. On-Ramp	0.43	12	8	F	F	79.9	86.7	959	727	4.75			
105+041 39	US 101	NB	Trimble Rd DIAG. On-Ramp	San Tomas Expy DIAG. Off-Ramp	0.70	15	12	F	F	74.5	79.7	1141	968	3.00			
105P041 39	US 101	NB	San Tomas Expy DIAG. Off-Ramp	San Tomas Expy DIAG. On-Ramp	0.64	14	11	F	F	76.6	81.9	1073	891	2.75			
105P041 40	US 101	NB	America Pkwy DIAG. Off-Ramp	America Pkwy DIAG. On-Ramp	0.65	13	8	F	F	77.5	86.7	1042	725	2.75			
105+041 41	US 101	NB	America Pkwy DIAG. On-Ramp	Lawrence Expy DIAG. Off-Ramp	0.58	16	13	F	F	74.0	77.8	1159	1031	2.75			
105P041 41	US 101	NB	Lawrence Expy DIAG. Off-Ramp	Lawrence Expy DIAG. On-Ramp	0.39	14	19	F	F	77.0	69.7	1059	1299	3.25			
105+041 42	US 101	NB	Lawrence Expy DIAG. On-Ramp	Fair Oaks Avenue DIAG. Off-Ramp	0.65	17	20	F	F	71.8	68.1	1232	1353	3.25			
105P041 42	US 101	NB	Fair Oaks Avenue DIAG. Off-Ramp	Fair Oaks Avenue DIAG. On-Ramp	0.29	19	17	F	F	69.3	72.3	1312	1215	3.00			
105+041 43	US 101	NB	Fair Oaks Avenue DIAG. On-Ramp	Mathilda Ave DIAG. Off-Ramp	0.52	26	19	F	F	61.1	68.7	1570	1331	1.25			
105P041 43	US 101	NB	Mathilda Ave DIAG. Off-Ramp	Mathilda Ave L. Off-Ramp	0.21	28	33	F	E	58.9	53.5	1636	1784	0.25			
105+041 44	US 101	NB	Mathilda Ave L. Off-Ramp	Southbay Fwy L. Off-Ramp	0.43	28	29	F	F	58.9	58.0	1635	1703	1.00			
105P041 44	US 101	NB	Southbay Fwy L. Off-Ramp	Southbay Fwy DIAG. Off-Ramp	0.20	27	31	F	E	59.6	55.3	1616	1736	1.75			
105+041 45	US 101	NB	Southbay Fwy DIAG. Off-Ramp	Ellis St DIAG. Off-Ramp	0.46	28	24	F	F	58.4	63.5	1650	1499	0.75			
105P041 45	US 101	NB	Ellis St DIAG. Off-Ramp	Ellis St DIAG. On-Ramp	0.60	28	18	F	F	58.3	70.3	1653	1281	0.75			
105+041 46	US 101	NB	Ellis St DIAG. On-Ramp	Moffett Blvd DIAG. Off-Ramp	0.32	26	25	F	F	60.8	61.5	1580	1557	1.00			
105P041 46	US 101	NB	Moffett Blvd DIAG. Off-Ramp	Moffett Blvd L. On-Ramp	0.18	26	35	F	E	60.4	52.2	1591	1817	0.75			
105+041 47	US 101	NB	Moffett Blvd L. Off-Ramp	Shoreline Blvd DIAG. Off-Ramp	0.25	23	32	F	E	64.6	54.5	1462	1759	1.75			
105P041 47	US 101	NB	Moffett Blvd L. On-Ramp	Shoreline Blvd DIAG. Off-Ramp	0.25	24	25	F	F	63.6	61.9	1496	1545	2.00			
105P041 48	US 101	NB	Moffett Blvd L. Off-Ramp	Shoreline Blvd DIAG. On-Ramp	1.10	29	27	F	F	58.2	59.4	1658	1622	1.00			
105+041 50	US 101	NB	Bayshore Fwy/US-101	Rengstorff Ave DIAG. Off-Ramp	0.51	33	24	E	F	53.9	63.4	1774	1500				
105P041 50	US 101	NB	Rengstorff Ave DIAG. Off-Ramp	Rengstorff Ave DIAG. On-Ramp	0.35	37	45	E	D	50.7	44.2	1853	1968				
105+041 51	US 101	NB	Rengstorff Ave DIAG. On-Ramp	San Antonio Rd DIAG. Off-Ramp	0.25	28	53	F	D	58.9	37.3	1635	1976	0.75			
105P041 51	US 101	NB	San Antonio Rd DIAG. Off-Ramp	San Antonio Rd DIAG. On-Ramp	0.44	25	48	F	D	61.5	41.8	1558	1988	1.50			
105+041 52	US 101	NB	San Antonio Rd DIAG. On-Ramp	Embarcadero Rd DIAG. Off-Ramp	1.18	21	21	F	F	66.1	66.3	1415	1409	2.50			

AM Freeway Speed, LOS, Estimated Density, Estimated Flow, and Duration of Congestion by Segment												2017 AM Results (INRIX Data)					
TMC	Facility	Dir	From	To	Miles	Speed (mi/hr)		LOS		Density (pc/mi/in)		Flow (pc/hr/in)		Congestion (hr)			
						Mixed	HOV	Mixed	HOV	Mixed	HOV	Mixed	HOV				
105P04152	US 101	NB	Embarcadero Rd DIAG. Off-Ramp	Embarcadero Rd DIAG. On-Ramp	0.70	30	31	F	E	58.0	55.8	1739	1723	0.25			
105N04152	US 101	SB	Embarcadero Rd DIAG. Off-Ramp	Embarcadero Rd DIAG. Off-Ramp	0.65	40	53	E	D	48.1	37.6	1907	1980				
105-04151	US 101	SB	Oregon Expy DIAG. On-Ramp	San Antonio Rd DIAG. Off-Ramp	1.37	44	54	D	D	45.0	36.1	1958	1961				
105N04151	US 101	SB	San Antonio Rd DIAG. Off-Ramp	San Antonio Rd L. Off-Ramp	0.15	49	62	D	D	40.4	26.9	1992	1661				
105-04150	US 101	SB	San Antonio Rd L. Off-Ramp	Rengstorff Ave DIAG. On-Ramp	0.70	45	61	D	D	43.9	27.7	1971	1697				
105N04150	US 101	SB	San Antonio Rd L. Off-Ramp	Rengstorff Ave DIAG. Off-Ramp	0.18	46	61	D	D	42.8	28.5	1981	1735				
105-04149	US 101	SB	Rengstorff Ave DIAG. Off-Ramp	Old Middlefield Way DIAG. Off-Ramp	0.46	48	63	D	C	41.2	24.5	1990	1542				
105N04149	US 101	SB	Old Middlefield Way DIAG. Off-Ramp	Old Middlefield Way DIAG. On-Ramp	0.15	43	60	D	D	45.1	29.1	1957	1758				
105-04148	US 101	SB	Old Middlefield Way DIAG. On-Ramp	Shoreline Blvd L. On-Ramp	0.37	46	55	D	D	43.3	35.7	1977	1955				
105N04147	US 101	SB	Shoreline Blvd L. On-Ramp	SR-85 DIAG. Off-Ramp	0.36	40	48	E	D	48.0	41.2	1909	1990				
105-04146	US 101	SB	SR-85 DIAG. Off-Ramp	Moffett Blvd L. Off-Ramp	0.22	36	50	E	D	51.1	39.5	1843	1991				
105N04146	US 101	SB	Moffett Blvd L. Off-Ramp	Moffett Blvd DIAG. On-Ramp	0.15	36	51	E	D	51.2	39.0	1840	1989				
105-04145	US 101	SB	Moffett Blvd DIAG. On-Ramp	Ellis St DIAG. Off-Ramp	0.41	35	58	E	D	52.0	31.8	1822	1858				
105N04145	US 101	SB	Ellis St DIAG. Off-Ramp	Ellis St DIAG. On-Ramp	0.54	36	58	E	D	50.9	32.2	1847	1871				
105-04144	US 101	SB	Ellis St DIAG. On-Ramp	SR-237 L. Off-Ramp	0.60	33	63	E	C	53.5	24.5	1784	1541				
105N04144	US 101	SB	SR-237 L. Off-Ramp	SR-237 DIAG. On-Ramp	0.20	58	66	D	B	32.0	13.3	1865	883				
105N04143	US 101	SB	Mathilda Ave. DIAG. Off-Ramp	Mathilda Ave. DIAG. On-Ramp	0.33	62	67	C	A	25.6	<8.9	1598	598				
105-04142	US 101	SB	Mathilda Ave. DIAG. On-Ramp	Fair Oaks Ave DIAG. Off-Ramp	0.52	62	67	D	A	26.3	<8.9	1631	598				
105N04142	US 101	SB	Fair Oaks Ave DIAG. Off-Ramp	Fair Oaks Ave DIAG. On-Ramp	0.41	64	69	C	A	22.7	<8.9	1448	612				
105-04141	US 101	SB	Fair Oaks Ave DIAG. On-Ramp	Lawrence Expy DIAG. Off-Ramp	0.55	63	68	C	A	25.3	<8.9	1582	609				
105N04141	US 101	SB	Lawrence Expy DIAG. Off-Ramp	Lawrence Expy DIAG. On-Ramp	0.39	64	68	C	A	22.7	<8.9	1448	608				
105-04140	US 101	SB	Lawrence Expy DIAG. On-Ramp	Bowers Ave DIAG. Off-Ramp	0.58	58	66	D	B	31.8	16.4	1859	1075				
105N04140	US 101	SB	Bowers Ave DIAG. Off-Ramp	Bowers Ave DIAG. On-Ramp	0.67	61	68	D	A	28.0	<8.9	1712	607				
105-04139	US 101	SB	Bowers Ave DIAG. On-Ramp	San Thomas Expy DIAG. Off-Ramp	0.11	60	69	D	A	29.4	<8.9	1772	617				

2017 AM Results (INRIX Data)																
AM Freeway Speed, LOS, Estimated Density, Estimated Flow, and Duration of Congestion by Segment								Speed (mi/hr)		LOS		Density (pc/mi/in)		Flow (pc/hr/in)		Congestion (hr)
TMC	Facility	Dir	From	To	Miles	Mixed	HOV	Mixed	HOV	Mixed	HOV	Mixed	HOV			
105N04 139	US 101	SB	San Thomas Expy DIAG. Off-Ramp	San Thomas Expy DIAG. On-Ramp	0.65	63	71	C	A	24.2	<8.9	1526	628			
105- 04138	US 101	SB	San Thomas Expy DIAG. On-Ramp	Trimble Rd DIAG. Off-Ramp	0.78	61	72	D	A	28.5	<8.9	1734	640			
105N04 138	US 101	SB	Trimble Rd DIAG. Off-Ramp	Trimble Rd DIAG. On-Ramp	0.39	56	70	D	A	34.2	<8.9	1923	627			
105- 04137	US 101	SB	Trimble Rd DIAG. On-Ramp	SR-87 DIAG. Off-Ramp	0.41	51	70	D	A	38.8	<8.9	1988	623			
105N04 137	US 101	SB	SR-87 DIAG. Off-Ramp	SR-87 DIAG. On-Ramp	0.31	60	68	D	A	29.3	<8.9	1764	606			
105- 04136	US 101	SB	SR-87 DIAG. Off-Ramp	Airport Pkwy DIAG. Off-Ramp	0.14	61	68	D	A	28.3	<8.9	1725	603			
105N04 136	US 101	SB	1st St	4th St DIAG. On-Ramp	0.37	60	69	D	A	29.3	<8.9	1768	612			
105- 04135	US 101	SB	1st St	4th St DIAG. On-Ramp	0.38	59	68	D	A	30.7	<8.9	1818	609			
105N04 135	US 101	SB	4th St DIAG. On-Ramp	4th St DIAG. On-Ramp	0.26	57	65	D	C	33.2	18.1	1899	1180			
105- 04134	US 101	SB	4th St DIAG. On-Ramp	I-880 DIAG. Off-Ramp	0.12	57	65	D	C	33.4	18.8	1905	1221			
105N04 134	US 101	SB	I-880 DIAG. Off-Ramp	I-880 DIAG. On-Ramp	0.49	49	66	D	B	40.8	14.1	1991	934			
105- 04133	US 101	SB	I-880 DIAG. On-Ramp	Oakland Rd DIAG. Off-Ramp	0.10	49	65	D	B	40.2	17.5	1992	1146			
105N04 133	US 101	SB	Oakland Rd DIAG. Off-Ramp	Oakland Rd DIAG. On-Ramp	0.42	54	70	D	A	36.4	<8.9	1966	621			
105- 04132	US 101	SB	Oakland Rd DIAG. On-Ramp	McKee Rd DIAG. Off-Ramp	1.21	59	69	D	A	30.6	<8.9	1817	611			
105N04 132	US 101	SB	McKee Rd DIAG. Off-Ramp	Alum Rock Ave DIAG. Off-Ramp	0.59	61	70	D	A	27.6	<8.9	1693	625			
105- 04131	US 101	SB	McKee Rd DIAG. Off-Ramp	Santa Clara St DIAG. On-Ramp	0.10	61	73	D	A	28.1	<8.9	1715	654			
105N04 131	US 101	SB	McKee Rd DIAG. On-Ramp	Alum Rock Ave DIAG. Off-Ramp	0.24	60	73	D	A	29.3	<8.9	1767	647			
105- 04130	US 101	SB	Alum Rock Ave DIAG. Off-Ramp	I-680 DIAG. Off-Ramp	0.22	60	71	D	A	29.4	<8.9	1772	635			
105N04 130	US 101	SB	I-680 DIAG. Off-Ramp	I-680 DIAG. On-Ramp	1.36	61	71	D	A	28.2	<8.9	1718	636			
105N04 128	US 101	SB	Tully Rd DIAG. Off-Ramp	Tully Rd DIAG. On-Ramp	0.47	63	73	C	A	24.8	<8.9	1556	647			
105- 04127	US 101	SB	Tully Rd DIAG. On-Ramp	Capitol Expy DIAG. Off-Ramp	0.81	62	72	D	A	27.1	<8.9	1669	639			
105N04 127	US 101	SB	Capitol Expy DIAG. Off-Ramp	Yerba Buena Rd DIAG. Off-Ramp	0.74	62	73	C	A	25.9	<8.9	1615	653			
105- 04126	US 101	SB	Yerba Buena Rd DIAG. Off-Ramp	Yerba Buena Rd	0.26	62	72	D	A	26.6	<8.9	1646	641			
105N04 126	US 101	SB	Yerba Buena Rd	Yerba Buena Rd DIAG. On-Ramp	0.26	62	71	D	A	26.3	<8.9	1631	632			

2017 AM Results (INRIX Data)													
AM Freeway Speed, LOS, Estimated Density, Estimated Flow, and Duration of Congestion by Segment													
TMC	Facility	Dir	From	To	Miles	Speed (mi/hr)		LOS		Density (pc/mi/in)		Flow (pc/hr/in)	
						Mixed	HOV	Mixed	HOV	Mixed	HOV	Mixed	HOV
105-04125	US 101	SB	Yerba Buena Rd DIAG. On-Ramp	Hellyer Ave L. On-Ramp	0.60	61	68	D	A	28.2	<8.9	1720	603
105N04125	US 101	SB	Hellyer Ave L. On-Ramp	Hellyer Ave DIAG. Off-Ramp(NB)	0.28	62	66	D	B	26.9	13.4	1659	889
105-04124	US 101	SB	Hellyer Ave DIAG. Off-Ramp(NB)	Blossom Hill Rd DIAG. Off-Ramp	1.24	62	69	D	A	27.1	<8.9	1669	619
105N04124	US 101	SB	Blossom Hill Rd DIAG. Off-Ramp	Blossom Hill Rd DIAG. On-Ramp	0.65	62	71	C	A	25.6	<8.9	1597	635
105-04123	US 101	SB	Blossom Hill Rd DIAG. On-Ramp	Silicon Valley Blvd DIAG. Off-Ramp	1.03	62	71	D	A	26.2	<8.9	1629	631
105N04123	US 101	SB	Silicon Valley Blvd DIAG. Off-Ramp	Silicon Valley Blvd DIAG. On-Ramp	0.31	61	69	D	A	27.6	<8.9	1692	611
105-04122	US 101	SB	Silicon Valley Blvd DIAG. On-Ramp	Silicon Valley Blvd DIAG. Off-Ramp	0.18	62	69	D	A	26.9	<8.9	1663	618
105N04122	US 101	SB	Silicon Valley Blvd DIAG. Off-Ramp	SR-85 DIAG. On-Ramp	0.20	62	69	D	A	27.3	<8.9	1682	614
105-09288	US 101	SB	SR-85 DIAG. On-Ramp	Bailey Ave DIAG. Off-Ramp	2.93	62	71	D	A	26.9	<8.9	1661	636
105N09288	US 101	SB	Bailey Ave DIAG. Off-Ramp	Bailey Ave DIAG. On-Ramp	0.52	61	70	D	A	28.0	<8.9	1712	626
105-04121	US 101	SB	Bailey Ave DIAG. On-Ramp	Coyote Creek Golf Dr DIAG. Off-Ramp	1.59	61	70	D	A	27.9	<8.9	1705	621
105N04121	US 101	SB	Coyote Creek Golf Dr DIAG. Off-Ramp	Coyote Creek Golf Dr DIAG. On-Ramp	0.62	62	70	C	A	25.6	<8.9	1598	620
105-04120	US 101	SB	Coyote Creek Golf Dr DIAG. On-Ramp	Cochrane Rd DIAG. Off-Ramp	2.69	61	71	D	A	28.0	<8.9	1711	633
105N04120	US 101	SB	Cochrane Rd DIAG. Off-Ramp	Cochrane Rd DIAG. On-Ramp	0.77	61		D		28.0		1711	
105-04119	US 101	SB	Cochrane Rd DIAG. On-Ramp	Dunne Ave DIAG. Off-Ramp	1.20	61		D		27.7		1700	
105N04119	US 101	SB	Dunne Ave DIAG. Off-Ramp	Dunne Ave DIAG. On-Ramp	0.49	62		D		27.0		1666	
105-04118	US 101	SB	Dunne Ave DIAG. On-Ramp	Tenant Ave DIAG. Off-Ramp	0.39	61		D		27.6		1693	
105N04118	US 101	SB	Tenant Ave DIAG. Off-Ramp	Tenant Ave DIAG. On-Ramp	0.55	62		D		27.3		1679	
105-04117	US 101	SB	Tenant Ave DIAG. On-Ramp	San Martin Ave DIAG. Off-Ramp	2.15	61		D		27.8		1704	
105N04117	US 101	SB	San Martin Ave DIAG. Off-Ramp	San Martin Ave DIAG. On-Ramp	0.48	61		D		28.6		1736	
105-04116	US 101	SB	San Martin Ave DIAG. On-Ramp	Masten Ave DIAG. Off-Ramp	1.63	61		D		28.3		1726	
105N04116	US 101	SB	Masten Ave DIAG. Off-Ramp	Masten Ave DIAG. On-Ramp	0.56	60		D		29.5		1774	
105-04115	US 101	SB	Masten Ave DIAG. On-Ramp	Leavesley Rd DIAG. Off-Ramp	2.18	50		D		39.6		1991	
105N04115	US 101	SB	Leavesley Rd DIAG. Off-Ramp	Leavesley Rd DIAG. On-Ramp	0.65	61		D		28.5		1731	

2017 AM Results (INRIX Data)														
AM Freeway Speed, LOS, Estimated Density, Estimated Flow, and Duration of Congestion by Segment														
TMC	Facility	Dir	From	To	Miles	Speed (mi/hr)		LOS		Density (pc/mi/in)		Flow (pc/hr/in)		Congestion (hr)
						Mixed	HOV	Mixed	HOV	Mixed	HOV	Mixed	HOV	
105-04114	US 101	SB	Leavesley Rd DIAG. On-Ramp	10th St DIAG. Off-Ramp	0.86	60		D		29.2		1763		
105N04114	US 101	SB	10th St DIAG. Off-Ramp	10th St DIAG. On-Ramp	0.56	62		D		26.5		1644		
105-04113	US 101	SB	10th St DIAG. On-Ramp	Monterey Rd DIAG. Off-Ramp	0.58	60		D		30.2		1802		
105N04113	US 101	SB	Monterey Rd DIAG. Off-Ramp	Monterey Rd DIAG. On-Ramp	0.50	61		D		28.6		1739		
105-09872	US 101	SB	Monterey Rd DIAG. On-Ramp	Castro Valley Rd	1.04	60		D		29.0		1753		
105-09871	US 101	SB	Castro Valley Rd	SR-25 DIAG. Off-Ramp	0.34	60		D		29.1		1760		
105N09871	US 101	SB	SR-25 DIAG. Off-Ramp	SR-25 DIAG. On-Ramp	0.40	61		D		28.3		1723		
105-05102	US 101	SB	SR-25 DIAG. On-Ramp	Beatable Rd DIAG. Off-Ramp	3.60	61		D		28.4		1730		
105P04304	SR 85	NB	US-101 DIAG. Off-Ramp	Bernal Rd L. On-Ramp	0.70	6	60	F	D	92.3	29.0	534	1755	2.50
105P04305	SR 85	NB	Bernal Rd. L. On-Ramp	Bernal Rd. DIAG. On-Ramp	0.32	53	67	D	A	37.5	<8.9	1979	601	
105P04306	SR 85	NB	US-101 DIAG. On-Ramp	Great Oaks Blvd DIAG. On-Ramp	0.35	63	69	C	A	25.1	<8.9	1571	618	
105+04307	SR 85	NB	Great Oaks Blvd DIAG. On-Ramp	Cottle Rd DIAG. Off-Ramp	0.80	31	56	E	D	55.4	34.3	1734	1927	
105P04307	SR 85	NB	Cottle Rd DIAG. Off-Ramp	Cottle Rd DIAG. On-Ramp	0.58	23	29	F	F	64.8	58.0	1459	1689	1.50
105+04308	SR 85	NB	Cottle Rd DIAG. On-Ramp	Blossom Hill Rd DIAG. Off-Ramp	1.29	29	33	F	E	58.1	53.7	1658	1780	0.25
105P04308	SR 85	NB	Blossom Hill Rd DIAG. Off-Ramp	Blossom Hill Rd DIAG. On-Ramp	0.62	33	37	E	E	53.4	50.6	1787	1854	
105+04309	SR 85	NB	Blossom Hill Rd DIAG. On-Ramp	SR-87 DIAG. Off-Ramp	0.53	25	16	F	F	62.0	73.7	1544	1168	0.50
105P04309	SR 85	NB	SR-87 DIAG. Off-Ramp	SR-87 DIAG. On-Ramp	0.78	12	10	F	F	79.8	83.3	964	844	2.50
105P04311	SR 85	NB	Almaden Expwy DIAG. Off-Ramp	Almaden Expwy DIAG. On-Ramp	0.53	11	9	F	F	80.9	85.8	925	758	3.50
105+04312	SR 85	NB	Almaden Expwy DIAG. On-Ramp	Camden Ave DIAG. Off-Ramp	1.46	16	16	F	F	73.2	73.7	1184	1169	3.00
105P04312	SR 85	NB	Camden Ave DIAG. Off-Ramp	Camden Ave DIAG. On-Ramp	0.43	15	18	F	F	74.7	70.6	1136	1270	3.25
105+04313	SR 85	NB	Camden Ave DIAG. On-Ramp	Union Ave DIAG. Off-Ramp	0.79	17	18	F	F	72.3	70.3	1214	1282	3.50
105P04313	SR 85	NB	Union Ave DIAG. Off-Ramp	Union Ave DIAG. On-Ramp	0.42	20	31	F	E	68.3	56.0	1347	1719	2.25
105+04314	SR 85	NB	Union Ave DIAG. On-Ramp	S. Bascom Ave DIAG. Off-Ramp	0.48	15	8	F	F	74.7	87.9	1135	687	2.25
105P04315	SR 85	NB	S. Bascom Ave DIAG. Off Ramp	Winchester Blvd DIAG. On-Ramp	1.18	10	9	F	F	83.2	84.9	847	788	4.00

AM Freeway Speed, LOS, Estimated Density, Estimated Flow, and Duration of Congestion by Segment												2017 AM Results (INRIX Data)					
TMC	Facility	Dir	From	To	Miles	Speed (mi/hr)		LOS		Density (pc/mi/in)		Flow (pc/hr/in)		Congestion (hr)			
						Mixed	HOV	Mixed	HOV	Mixed	HOV	Mixed	HOV				
105P043 16	SR 85	NB	S. Bascom Ave DIAG. On-Ramp	Winchester Blvd DIAG. On-Ramp	0.28	11	8	F	F	80.9	86.6	927	732	4.75			
105+043 17	SR 85	NB	Winchester Blvd DIAG. On-Ramp	Saratoga Ave DIAG. Off-Ramp	2.12	22	23	F	F	65.2	64.7	1443	1459	2.00			
105P043 17	SR 85	NB	Saratoga Ave DIAG. Off-Ramp	Saratoga Ave DIAG. On-Ramp	0.62	23	22	F	F	63.7	65.9	1490	1421	1.50			
105+043 18	SR 85	NB	Saratoga Ave DIAG. On-Ramp	S De Anza Blvd DIAG. Off-Ramp	1.39	26	32	F	E	60.5	55.0	1590	1745	0.50			
105P043 18	SR 85	NB	S De Anza Blvd DIAG. Off-Ramp	S De Anza Blvd DIAG. On-Ramp	0.75	23	27	F	F	64.7	59.2	1462	1627	2.25			
105+043 19	SR 85	NB	S De Anza Blvd DIAG. On-Ramp	Stevens Creek Blvd DIAG. Off-Ramp	1.28	29	46	F	D	58.0	43.2	1679	1978	0.50			
105P043 19	SR 85	NB	Stevens Creek Blvd DIAG. Off-Ramp	Stevens Creek Blvd DIAG. On-Ramp	0.48	19	39	F	E	69.6	48.9	1304	1891	0.75			
105+043 20	SR 85	NB	Stevens Creek Blvd DIAG. On-Ramp	I-280 DIAG. Off-Ramp	0.21	9	10	F	F	85.6	82.8	766	860	1.00			
105+043 21	SR 85	NB	I-280 DIAG. Off-Ramp	Homestead Rd	0.73	7	8	F	F	89.3	87.4	637	702	2.50			
105+043 22	SR 85	NB	Homestead Rd On-Ramp	Freemont Ave Off-Ramp	0.75	13	16	F	F	78.5	73.6	1007	1171	2.25			
105P043 22	SR 85	NB	Freemont Ave Off-Ramp	Freemont Ave On-Ramp	0.42	14	25	F	F	76.6	62.2	1072	1536	1.75			
105+043 23	SR 85	NB	Freemont Ave On-Ramp	El Camino Real Off-Ramp	1.45	21	32	F	E	66.7	54.4	1397	1761	1.00			
105P043 23	SR 85	NB	El Camino Real Off-Ramp	El Camino Real On-Ramp	0.37	28	38	F	E	58.4	49.2	1651	1884	0.50			
105P043 24	SR 85	NB	SR-237 Off-Ramp	SR-237	0.26	42	53	E	D	46.3	37.6	1939	1980				
105+043 25	SR 85	NB	SR-237	Central Expy Off-Ramp	0.14	60	64	D	C	29.7	22.7	1781	1447				
105P043 25	SR 85	NB	Central Expy Off-Ramp	E Evelyn Ave	0.31	63	64	C	C	24.1	21.7	1522	1389				
105P043 26	SR 85	NB	Central Expy	Central Expy On-Ramp	0.41	65	64	C	C	20.3	21.9	1311	1401				
105+043 27	SR 85	NB	Central Expy On-Ramp	Middlefield Rd Off-Ramp	0.15	63	65	C	C	25.2	19.2	1577	1247				
105P043 27	SR 85	NB	Middlefield Rd Off-Ramp	Moffett Blvd	0.25	62	62	D	D	26.1	26.3	1623	1634				
105+043 28	SR 85	NB	Moffett Blvd	US-101 Off-Ramp	0.18	57	59	D	D	33.5	31.0	1908	1831				
105P043 28	SR 85	NB	US-101 Off-Ramp	N Shoreline Blvd Off-Ramp	0.50	16	21	F	F	73.3	67.1	1182	1385	2.00			
105N04 328	SR 85	SB	N Shoreline Blvd DIAG. On-Ramp	Moffett Blvd L. Off-Ramp	0.75	54	54	D	D	36.8	36.4	1970	1966				
105-04326	SR 85	SB	Moffett Blvd L. Off-Ramp	Central Expy DIAG. Off-Ramp	0.47	61	64	D	C	28.7	21.3	1739	1367				
105N04 326	SR 85	SB	Central Expy DIAG. Off-Ramp	Central Expy DIAG. On-Ramp	0.26	60	67	D	A	29.8	<8.9	1784	600				

2017 AM Results (INRIX Data)																
AM Freeway Speed, LOS, Estimated Density, Estimated Flow, and Duration of Congestion by Segment								Speed (mi/hr)		LOS		Density (pc/mi/in)		Flow (pc/hr/in)		Congestion (hr)
TMC	Facility	Dir	From	To	Miles	Mixed	HOV	Mixed	HOV	Mixed	HOV	Mixed	HOV			
105N04325	SR 85	SB	Evelyn Ave DIAG. Off-Ramp	Evelyn Ave DIAG. On-Ramp	0.24	59	68	D	A	30.7	<8.9	1819	609			
105N04324	SR 85	SB	SR-237 DIAG. Off-Ramp	SR-237 L. On-Ramp	0.27	60	68	D	A	29.7	<8.9	1782	607			
105-04323	SR 85	SB	SR-237 L. On-Ramp	El Camino Real L. On-Ramp	0.34	57	67	D	B	33.7	11.9	1911	789			
105N04323	SR 85	SB	El Camino Real L. On-Ramp	El Camino Real DIAG. On-Ramp	0.22	60	67	D	B	30.0	11.4	1793	760			
105-04322	SR 85	SB	El Camino Real DIAG. On-Ramp	Freemont Ave DIAG. Off-Ramp	1.46	60	68	D	A	30.3	<8.9	1804	605			
105N04322	SR 85	SB	Freemont Ave DIAG. Off-Ramp	Freemont Ave DIAG. On-Ramp	0.42	61	67	D	A	28.2	<8.9	1720	596			
105-04321	SR 85	SB	Freemont Ave DIAG. On-Ramp	Homestead Rd DIAG. Off-Ramp	0.52	58	65	D	C	31.8	19.4	1857	1257			
105N04321	SR 85	SB	Homestead Rd DIAG. Off-Ramp	Homestead Rd DIAG. On-Ramp	0.30	40	66	E	B	48.1	14.7	1907	973			
105-04320	SR 85	SB	Homestead Rd DIAG. On-Ramp	I-280 DIAG. Off-Ramp	0.73	63	67	C	A	25.4	<8.9	1591	599			
105-04319	SR 85	SB	I-280 DIAG. Off-Ramp	I-280 DIAG. On-Ramp	0.20	56	63	D	C	34.0	24.5	1918	1544			
105N04319	SR 85	SB	Stevens Creek Blvd DIAG. Off-Ramp	Stevens Creek Blvd DIAG. On-Ramp	0.52	59	67	D	A	30.7	<8.9	1820	598			
105-04318	SR 85	SB	Stevens Creek Blvd DIAG. On-Ramp	S De Anza Blvd DIAG. Off-Ramp	1.29	64	69	C	A	21.5	<8.9	1380	613			
105N04318	SR 85	SB	S De Anza Blvd DIAG. Off-Ramp	S De Anza Blvd DIAG. On-Ramp	0.54	69	69	A	A	<8.9	<8.9	610	614			
105-04317	SR 85	SB	S De Anza Blvd DIAG. On-Ramp	Saratoga Ave DIAG. Off-Ramp	1.58	67	68	A	A	<8.9	<8.9	599	609			
105N04317	SR 85	SB	Saratoga Ave DIAG. Off-Ramp	Saratoga Ave DIAG. On-Ramp	0.54	60	67	D	A	30.1	9.8	1798	657			
105-04316	SR 85	SB	Saratoga Ave DIAG. On-Ramp	Winchester Blvd DIAG. Off-Ramp	2.19	67	69	A	A	9.5	<8.9	634	614			
105N04316	SR 85	SB	Winchester Blvd DIAG. Off-Ramp	Winchester Blvd DIAG. On-Ramp	0.28	68	69	A	A	<8.9	<8.9	606	615			
105N04315	SR 85	SB	SR-17 DIAG. Off-Ramp	SR-17 DIAG. On-Ramp	0.90	67	69	A	A	<8.9	<8.9	600	615			
105-04313	SR 85	SB	S Bascom Ave DIAG. On-Ramp	Union Ave DIAG. Off-Ramp	0.35	64	69	C	A	21.0	<8.9	1352	616			
105N04313	SR 85	SB	Union Ave DIAG. Off-Ramp	Union Ave DIAG. On-Ramp	0.62	67	69	A	A	10.3	<8.9	689	616			
105-04312	SR 85	SB	Union Ave DIAG. On-Ramp	Camden DIAG. Off-Ramp	0.80	66	69	B	A	13.0	<8.9	865	614			
105N04312	SR 85	SB	Camden DIAG. Off-Ramp	Camden DIAG. On-Ramp	0.31	67	69	A	A	<8.9	<8.9	598	615			
105-04311	SR 85	SB	Camden DIAG. On-Ramp	Almaden Expy DIAG. Off-Ramp	1.43	67	69	B	A	11.2	<8.9	748	610			
105N04311	SR 85	SB	Almaden Expy DIAG. Off-Ramp	Almaden Expy DIAG. On-Ramp	0.44	66	68	B	A	15.7	<8.9	1036	605			

2017 AM Results (INRIX Data)													
AM Freeway Speed, LOS, Estimated Density, Estimated Flow, and Duration of Congestion by Segment													
TMC	Facility	Dir	From	To	Miles	Speed (mi/hr)		LOS		Density (pc/mi/in)		Flow (pc/hr/in)	
						Mixed	HOV	Mixed	HOV	Mixed	HOV	Mixed	HOV
105-04310	SR 85	SB	Almaden Expy DIAG. On-Ramp	SR-87 DIAG. Off-Ramp	0.50	63	69	C	A	23.8	<8.9	1507	610
105N04310	SR 85	SB	SR-87 DIAG. Off-Ramp	SR-87 DIAG. On-Ramp	0.52	63	69	C	A	25.2	<8.9	1576	618
105-04308	SR 85	SB	SR-87 DIAG. On-Ramp	Blossom Hill Rd DIAG. Off-Ramp	0.44	64	69	C	A	23.0	<8.9	1460	617
105N04308	SR 85	SB	Blossom Hill Rd DIAG. Off-Ramp	Blossom Hill Rd DIAG. On-Ramp	0.64	66	69	B	A	16.9	<8.9	1105	618
105-04307	SR 85	SB	Blossom Hill Rd DIAG. On-Ramp	Cottle Rd DIAG. Off-Ramp	1.35	65	69	B	A	17.2	<8.9	1124	618
105N04307	SR 85	SB	Cottle Rd DIAG. Off-Ramp	Cottle Rd DIAG. On-Ramp	0.69	67	69	A	A	<8.9	<8.9	596	618
105-04306	SR 85	SB	Cottle Rd DIAG. On-Ramp	Great Oaks Blvd DIAG. Off-Ramp	0.72	65	69	C	A	19.9	<8.9	1289	613
105N04306	SR 85	SB	Great Oaks Blvd DIAG. Off-Ramp	Great Oaks Blvd DIAG. On-Ramp	0.34	65	69	C	A	19.2	<8.9	1247	615
105N04305	SR 85	SB	US-101 DIAG. Off-Ramp	US-101 DIAG. On-Ramp	0.59	64	66	C	B	23.0	16.7	1460	1094

PM Freeway Speed, LOS, Estimated Density, Estimated Flow, and Duration of Congestion by Segment											2017 AM Results (INRIX Data)							
TMC	Facility	Dir	From		To	Miles	Speed (mi/hr)		LOS		Density (pc/mi/ln)		Flow (pc/hr/ln)		Congestion (hr)			
							Mixed	HOV	Mixed	HOV	Mixed	HOV	Mixed	HOV				
105N0560	2	SR 87	SB	Taylor St DIAG. Off-Ramp	Taylor St DIAG. On-Ramp	0.56	27	37	F	E	60.1	49.9	1602	0	187	3.00		
105-	04658	SR 87	SB	Taylor St DIAG. On-Ramp	Coleman Ave/Julian St DIAG Off-Ramp	0.16	29	40	F	E	58.0	48.1	1676	6	190			
105N0465	8	SR 87	SB	Coleman Ave/Julian St DIAG Off-Ramp	Julian St DIAG. On-Ramp	0.57	30	36	F	E	58.0	51.0	1716	4	184	0.25		
105N0465	7	SR 87	SB	Park Ave DIAG. Off-Ramp	I-280 DIAG. Off-Ramp	0.25	27	43	F	D	59.3	45.3	1626	3	195	0.50		
105N0465	6	SR 87	SB	I-280 DIAG. Off-Ramp	Alma Ave DIAG Off-Ramp	1.23	21	30	F	E	66.1	56.5	1415	4	170	3.25		
105-	04655	SR 87	SB	Alma Ave DIAG Off-Ramp	Alma Ave DIAG On-Ramp	0.22	26	33	F	E	60.3	53.8	1594	7	177	2.75		
105-	04654	SR 87	SB	Alma Ave DIAG On-Ramp	Almaden Expy DIAG. Off-Ramp	0.51	36	37	E	E	50.7	49.9	1852	9	186			
105N0465	4	SR 87	SB	Almaden Expy DIAG. Off-Ramp	Almaden Expy DIAG. On-Ramp	0.19	41	37	E	E	47.2	50.3	1923	1	186			
105-	04653	SR 87	SB	Almaden Expy DIAG. On-Ramp	Curtner Ave DIAG. Off-Ramp	0.26	41	32	E	E	47.0	54.6	1926	6	175			
105N0465	3	SR 87	SB	Curtner Ave DIAG. Off-Ramp	Curtner Ave DIAG. On-Ramp	0.53	34	37	E	E	52.7	50.5	1804	6	185			
105-	04652	SR 87	SB	Curtner Ave DIAG. On-Ramp	Capital Expwy DIAG. Off-Ramp	0.96	47	47	D	D	42.6	42.3	1983	5	198			
105N0465	2	SR 87	SB	Capital Expwy DIAG. Off-Ramp	Capital Expwy DIAG. On-Ramp	0.50	61	60	D	D	28.2	29.7	1722	1	178			
105-	04651	SR 87	SB	Capital Expwy DIAG. On-Ramp	SR-87 DIAG. Off-Ramp	0.62	57	60	D	D	33.2	29.1	1899	8	175			
105N0465	1	SR 87	SB	SR-87 DIAG. Off-Ramp	SR-87 DIAG. On-Ramp	0.16	45	54	D	D	43.8	36.8	1972	1	197			
105P0467	5	SR 237	EB	Valley Fwy DIAG. Off-Ramp	SR-85 DIAG. On-Ramp	0.23	51		D		39.0		1989					
105+0467	5	SR 237	EB	El Camino Real	SR-85 L. Off-Ramp	0.28	34		E		52.5		1809					
105+0467	6	SR 237	EB	SR-85 DIAG. On-Ramp	Dana St. L. Off-Ramp	0.05	47		D		41.9		1987					
105P0467	6	SR 237	EB	Dana St. L. Off-Ramp	Dana St. DIAG. On-Ramp	0.38	53		D		37.5		1979					
105+0467	7	SR 237	EB	Dana St. L. On-Ramp	Middlefield Rd DIAG. Off-Ramp	0.35	55		D		35.5		1951					
105P0467	7	SR 237	EB	Middlefield Rd DIAG. Off-Ramp	Middlefield Rd DIAG.	0.29	31		E		55.9		1722					
105+0467	8	SR 237	EB	Middlefield Rd DIAG.	Middlefield Rd DIAG. On-Ramp	0.23	10		F		83.0		853		1.00			
105P0467	8	SR 237	EB	Middlefield Rd DIAG. On-Ramp	Maude Ave On-Ramp	0.33	8		F		86.5		732		1.25			
105+0467	9	SR 237	EB	Maude Ave On-Ramp	US-101 DIAG. Off-Ramp	0.16	7		F		88.6		663		1.75			
105P0467	9	SR 237	EB	US-101 DIAG. Off-Ramp	US-101 L. On-Ramp	0.22	7		F		89.0		646		2.50			

PM Freeway Speed, LOS, Estimated Density, Estimated Flow, and Duration of Congestion by Segment											2017 AM Results (INRIX Data)					
TMC	Facility	Dir	From	To	Miles	Speed (mi/hr)		LOS		Density (pc/mi/in)		Flow (pc/hr/in)		Congestion (hr)		
						Mixed	HOV	Mixed	HOV	Mixed	HOV	Mixed	HOV			
105+0468 0	SR 237	EB	US-101 L. On-Ramp	Mathilda Ave DIAG. Off-Ramp	0.31	9		F		86.1		749		3.25		
105P0468 0	SR 237	EB	Mathilda Ave DIAG. Off-Ramp	Mathilda Ave DIAG. On-Ramp	0.46	11	10	F	F	81.3	83.2	911	848	3.25		
105+0468 1	SR 237	EB	Mathilda Ave DIAG. On-Ramp	Fair Oaks Way DIAG. Off-Ramp	0.54	11	22	F	F	80.9	65.9	927	3	2.75		
105P0468 1	SR 237	EB	Fair Oaks Way DIAG. Off-Ramp	Fair Oaks Way L. On-Ramp	0.21	10	13	F	F	83.9	78.2	822	6	3.25		
105+0468 2	SR 237	EB	Fair Oaks Way L. On-Ramp	Lawrence Expy DIAG. Off-Ramp	0.30	10	11	F	F	84.0	80.9	820	928	3.50		
105P0468 2	SR 237	EB	Lawrence Expy DIAG. Off-Ramp	Lawrence Expy DIAG. On-Ramp	0.61	10	16	F	F	82.9	74.1	857	4	4.50		
105+0514 0	SR 237	EB	Lawrence Expy DIAG. On-Ramp	Great America Pkwy DIAG. Off-Ramp	0.60	13	15	F	F	78.5	75.5	1006	0	5.00		
105P0514 0	SR 237	EB	Great America Pkwy DIAG. Off-Ramp	Great America Pkwy DIAG. On-Ramp	0.81	14	22	F	F	76.7	65.6	1067	2	5.50		
105+0514 2	SR 237	EB	Great America Pkwy DIAG. On-Ramp	1st L. Off-Ramp	0.55	17	21	F	F	72.3	67.0	1214	8	5.50		
105P0514 2	SR 237	EB	1st L. Off-Ramp	1st DIAG. On-Ramp	0.33	21	27	F	F	66.2	60.2	1411	7	4.25		
105+0514 3	SR 237	EB	1st DIAG. On-Ramp	Zanker Rd DIAG. Off-Ramp	0.56	32	39	E	E	54.9	48.2	1747	5	194		
105P0514 3	SR 237	EB	Zanker Rd DIAG. Off-Ramp	Zanker Rd DIAG. On-Ramp	0.50	39	43	E	D	48.6	45.7	1896	8	192		
105+0514 4	SR 237	EB	Zanker Rd DIAG. On-Ramp	McCarthy Blvd DIAG. Off-Ramp	0.28	49	56	D	D	40.5	34.1	1992	1	181		
105P0514 4	SR 237	EB	McCarthy Blvd DIAG. Off-Ramp	McCarthy Blvd DIAG. On-Ramp	0.65	21	59	F	D	66.9	30.5	1391	2	1.75		
105P0514 5	SR 237	EB	I-880 DIAG. Off-Ramp	I-880 DIAG. On-Ramp	0.25	12		F		80.5		940		8.00		
105N0514 4	SR 237	WB	McCarthy Blvd DIAG. Off-Ramp	McCarthy Blvd DIAG. On-Ramp	0.57	34	62	E	C	53.3	25.9	1789	4	161		
105- 05143	SR 237	WB	McCarthy Blvd DIAG. On-Ramp	Zanker Rd DIAG. Off-Ramp	0.29	24	59	F	D	63.2	30.5	1508	3	181		
105N0514 3	SR 237	WB	Zanker Rd DIAG. Off-Ramp	Zanker Rd DIAG. On-Ramp	0.35	32	59	E	D	54.9	31.4	1748	4	184		
105- 05142	SR 237	WB	Zanker Rd DIAG. On-Ramp	1st DIAG. Off-Ramp	0.84	42	62	D	D	45.9	26.3	1945	0	163		
105N0514 2	SR 237	WB	1st DIAG. Off-Ramp	1st DIAG. On-Ramp	0.48	58	67	D	A	32.9	<8.9	1889	600	122		
105- 05141	SR 237	WB	1st DIAG. On-Ramp	America Center Dr DIAG. Off-Ramp	0.37	59	65	D	C	30.9	18.8	1828	0	100		
105N0514 1	SR 237	WB	America Center Dr DIAG. Off-Ramp	America Center Dr DIAG. Off-Ramp	0.13	59	66	D	B	31.0	15.3	1830	7	7		
105N0514 0	SR 237	WB	America Center Dr DIAG. Off-Ramp	America Center Dr DIAG. On-Ramp	0.74	62	67	D	B	26.3	11.3	1635	752			
105- 04682	SR 237	WB	America Center Dr DIAG. On-Ramp	Lawrence Expy DIAG. Off-Ramp	0.54	58	67	D	A	31.8	<8.9	1857	598			

PM Freeway Speed, LOS, Estimated Density, Estimated Flow, and Duration of Congestion by Segment											2017 AM Results (INRIX Data)							
TMC	Facility	Dir	From		To	Miles	Speed (mi/hr)		LOS		Density (pc/mi/in)		Flow (pc/hr/in)		Congestion (hr)			
							Mixed	HOV	Mixed	HOV	Mixed	HOV	Mixed	HOV				
105N0468 2 105- 04681	SR 237	WB	Lawrence Expy	DIAG. Off-Ramp	Lawrence Expy	DIAG. On-Ramp	0.66	29	65	F	B	58.0	17.3	1663	4	0.25		
105N0468 1 105- 04680	SR 237	WB	Lawrence Expy	DIAG. On-Ramp	Java Dr	DIAG. Off-Ramp	0.33	13	22	F	F	78.2	65.2	1019	5	1.00		
105N0468 0 105- 04679	SR 237	WB	Java Dr	DIAG. Off-Ramp	Java Dr	DIAG. On-Ramp	0.18	12	9	F	F	80.4	86.0	944	751	1.50		
105N0468 0 105- 04679	SR 237	WB	Java Dr	DIAG. On-Ramp	Mathilda Ave	DIAG Off-Ramp	0.54	12		F		80.1		955		1.50		
105N0467 9 105- 04678	SR 237	WB	Mathilda Ave	DIAG Off-Ramp	Mathilda Ave	DIAG On-Ramp	0.45	15		F		75.4		1112		2.50		
105N0467 8 105- 04677	SR 237	WB	US-101	DIAG. Off-Ramp	US-101 L.	On-Ramp	0.09	18		F		71.1		1255		2.25		
105N0467 7 105- 04676	SR 237	WB	US-101 L.	On-Ramp	Maude Ave	DIAG. Off-Ramp	0.21	14		F		76.4		1078		1.50		
105N0467 6 105- 04675	SR 237	WB	Maude Ave	DIAG. Off-Ramp	Maude Ave	DIAG. On-Ramp	0.48	16		F		72.8		1200		1.50		
105N0467 5 105- 20468	SR 237	WB	Maude Ave	DIAG. On-Ramp	Middlefield	DIAG. Off-Ramp	0.28	14		F		76.7		1068		2.00		
105P0513 5 105+0513 6	SR 17	NB	Summit	DIAG. Off Ramp	Summit	DIAG. On-Ramp	0.10	45		D		44.2		1968				
105P0513 7 105P0513 7	SR 17	NB	Summit	DIAG. On-Ramp	Idylwild	Road	2.39	46		D		43.1		1978				
105P0513 7 105+0513 8	SR 17	NB	Idylwild	Road	Bear Creek	Road DIAG. Off-Ramp	1.62	45		D		43.8		1972				
105P0513 5 105+0464 5	SR 17	NB	Bear Creek	Road DIAG. Off-Ramp	Bear Creek	Road DIAG. On-Ramp	0.19	51		D		39.2		1990				
105P0464 5 105+0464 6	SR 17	NB	Bear Creek	Road DIAG. On-Ramp	Santa Cruz	DIAG. Off-Ramp	1.82	49		D		40.8		1991				
105P0464 5 105+0464 6	SR 17	NB	Santa Cruz	DIAG. Off-Ramp	Saratoga	Los Gatos Rd DIAG. Off-Ramp	0.78	53		D		37.3		1976				
105P0464 5 105+0464 6	SR 17	NB	Saratoga	Los Gatos Rd DIAG. Off-Ramp	Saratoga	Los Gatos Rd DIAG. On-Ramp	0.30	28		F		58.8		1638		6.00		
105P0464 5 105+0464 6	SR 17	NB	Saratoga	Los Gatos Rd DIAG. On-Ramp	Lark Ave	DIAG. Off-Ramp	1.39	58		D		32.8		1889				

PM Freeway Speed, LOS, Estimated Density, Estimated Flow, and Duration of Congestion by Segment										2017 AM Results (INRIX Data)							
TMC	Facility	Dir	From		To	Miles	Speed (mi/hr)		LOS		Density (pc/mi/ln)		Flow (pc/hr/ln)		Congestion (hr)		
			Mixed	HOV			Mixed	HOV	Mixed	HOV	Mixed	HOV	Mixed	HOV			
105P0464 6	SR 17	NB	Lark Ave	DIAG. Off-Ramp	Lark Ave	DIAG. On-Ramp	0.53	63	C		24.9		1563				
105P0464 7	SR 17	NB	SR-85	DIAG. Off-Ramp	SR-85	DIAG. On-Ramp	0.88	62	D		26.9		1659				
105+0464 8	SR 17	NB	SR-85	DIAG. On-Ramp	Camden Ave	DIAG. Off-Ramp	0.55	64	C		21.2		1363				
105P0464 8	SR 17	NB	Camden Ave	DIAG. Off-Ramp	San Thomas Expy	DIAG. On-Ramp	0.61	66	B		16.9		1104				
105+0464 9	SR 17	NB	San Thomas Expy	DIAG. On-Ramp	Hamilton Ave	DIAG. Off-Ramp	1.31	65	C		18.2		1185				
105P0464 9	SR 17	NB	Hamilton Ave	DIAG. Off-Ramp	Hamilton Ave	DIAG. On-Ramp	0.41	61	D		28.2		1721				
105+0465 0	SR 17	NB	Hamilton Ave	DIAG. On-Ramp	I-280	DIAG. Off-Ramp	0.94	62	D		27.1		1672				
105P0465 0	SR 17	NB	I-280	DIAG. Off-Ramp	Stevens Creek Blvd L.	On-Ramp	0.90	64	C		21.9		1401				
105N0465 0	SR 17	SB	Stevens Creek Blvd	DIAG. Off-Ramp	I-280	DIAG. On-Ramp	0.69	60	D		30.3		1806				
105-04649	SR 17	SB	I-280	DIAG. On-Ramp	Hamilton Ave	DIAG. Off-Ramp	1.04	41	E		46.7		1931				
105N0464 9	SR 17	SB	Hamilton Ave	DIAG. Off-Ramp	Hamilton Ave	DIAG. On-Ramp	0.39	60	D		29.4		1769				
105-04648	SR 17	SB	Hamilton Ave	DIAG. On-Ramp	San Thomas Expy	DIAG. Off-Ramp	1.32	62	C		25.9		1613				
105N0464 8	SR 17	SB	San Thomas Expy	DIAG. Off-Ramp	San Thomas Expy	DIAG. On-Ramp	0.72	63	C		25.2		1580				
105-04647	SR 17	SB	San Thomas Expy	DIAG. On-Ramp	SR-85	DIAG. Off-Ramp	0.26	58	D		32.5		1878				
105N0464 7	SR 17	SB	SR-85	DIAG. Off-Ramp	SR-85	DIAG. On-Ramp	0.69	49	D		40.9		1991				
105-04646	SR 17	SB	SR-85	DIAG. On-Ramp	Lark Ave	DIAG. Off-Ramp	0.15	44	D		44.6		1963				
105N0464 6	SR 17	SB	Lark Ave	DIAG. Off-Ramp	Lark Ave	DIAG. On-Ramp	0.21	26	F		60.6		1585		0.75		
105-04645	SR 17	SB	Lark Ave	DIAG. On-Ramp	Saratoga Ave	DIAG. Off-Ramp	1.57	33	E		53.4		1787				
105N0464 5	SR 17	SB	Saratoga Ave	DIAG. Off-Ramp	Saratoga Ave	DIAG. On-Ramp	0.36	55	D		35.9		1957				
105-05138	SR 17	SB	Saratoga Ave	DIAG. On-Ramp	Santa Cruz Hwy	DIAG. On-Ramp	0.78	48	D		41.1		1991				
105-05137	SR 17	SB	Santa Cruz Hwy	DIAG. On-Ramp	Bear Creek Rd	DIAG. Off-Ramp	1.95	38	E		49.5		1879				
105N0513 7	SR 17	SB	Bear Creek Rd	DIAG. Off-Ramp	Bear Creek Rd	DIAG. On-Ramp	0.11	49	D		40.9		1991				
105-05136	SR 17	SB	Bear Creek Rd	DIAG. On-Ramp	Idylwild Rd.	DIAG. Off-Ramp	1.55	46	D		43.4		1976				
105-05135	SR 17	SB	Idylwild Rd.	DIAG. Off-Ramp	Summit Rd. L.	Off-Ramp	2.34	43	D		45.5		1950				

PM Freeway Speed, LOS, Estimated Density, Estimated Flow, and Duration of Congestion by Segment										2017 AM Results (INRIX Data)							
TMC	Facility	Dir	From	To	Miles	Speed (mi/hr)		LOS		Density (pc/mi/in)		Flow (pc/hr/in)		Congestion (hr)			
						Mixed	HOV	Mixed	HOV	Mixed	HOV	Mixed	HOV				
105N0513 5	SR 17	SB	Summit Rd. L. Off-Ramp	Summit Rd. L. On-Ramp	0.15	45		D		43.9		1971					
105P0481 4	I 280	NB	US-101 DIAG. Off-Ramp	US 101 DIAG. On-Ramp	0.87	63		C		24.4		1535					
105P0481 5	I 280	NB	US 101 DIAG. On-Ramp	McLaughlin Ave L. On-Ramp	0.27	57		D		33.1		1895					
105+0481 6	I 280	NB	McLaughlin Ave L. On-Ramp	11th St DIAG. Off-Ramp	0.45	50		D		39.4		1991					
105P0481 7	I 280	NB	11th St DIAG. Off-Ramp	11th St DIAG. On-Ramp	0.58	28		F		58.4		1652		0.25			
105+0481 8	I 280	NB	11th St DIAG. On-Ramp	4th St DIAG. On-Ramp	0.19	27		F		59.5		1619		0.50			
105+0481 9	I 280	NB	4th St DIAG. On-Ramp	4th St DIAG. On-Ramp	0.14	27		F		59.6		1614		0.25			
105P0481 9	I 280	NB	4th St DIAG. On-Ramp	4th St DIAG. On-Ramp	0.01	27		F		59.3		1625		0.50			
105+0482 0	I 280	NB	4th St DIAG. On-Ramp	SR-87 DIAG. Off-Ramp	0.17	29		F		58.0		1663		0.25			
105P0482 0	I 280	NB	SR-87 DIAG. Off-Ramp	SR-87 DIAG. On-Ramp	0.76	27		F		59.3		1625		0.50			
105+0482 2	I 280	NB	SR-280 DIAG. On-Ramp	Meridian Ave DIAG. Off-Ramp	0.27	34		E		53.2		1792					
105P0482 2	I 280	NB	Southwest Expy DIAG. Off-Ramp	Meridian Ave L. On-Ramp	0.47	52		D		37.7		1981					147
105P0482 3	I 280	NB	SR-280 DIAG. Off-Ramp	SR-280 DIAG. On-Ramp	0.50	62	63	D	C	26.5	23.3	1641	8				105
105+0482 4	I 280	NB	SR-280 DIAG. On-Ramp	Menker Ave DIAG. On-Ramp	0.39	63	66	C	B	24.9	16.1	1562	6				
105P0482 4	I 280	NB	Menker Ave DIAG. On-Ramp	Leland Ave DIAG. On-Ramp	0.26	59	69	D	A	30.4	<8.9	1810	613				182
105P0482 5	I 280	NB	SR-17 DIAG. Off-Ramp	SR-17 DIAG. On-Ramp	0.76	26	59	F	D	60.5	30.8	1587	4				182
105+0482 6	I 280	NB	SR-17 DIAG. On-Ramp	Winchester Blvd DIAG. Off-Ramp	0.20	33	59	E	D	54.2	30.8	1766	4				165
105P0482 6	I 280	NB	Winchester Blvd DIAG. Off-Ramp	Winchester Blvd DIAG. On-Ramp	0.33	37	62	E	D	50.2	26.8	1863	7				175
105+0482 7	I 280	NB	Winchester Blvd DIAG. On-Ramp	Saratoga Ave DIAG. Off-Ramp	0.68	38	60	E	D	49.1	29.1	1887	9				
105P0482 7	I 280	NB	Saratoga Ave DIAG. Off-Ramp	Saratoga Ave DIAG. On-Ramp	0.56	60	67	D	A	29.0	<8.9	1753	599				
105+0482 8	I 280	NB	Saratoga Ave DIAG. On-Ramp	Lawrence Expy DIAG. Off-Ramp	0.74	61	69	D	A	27.8	<8.9	1700	614				
105P0482 8	I 280	NB	Lawrence Expy DIAG. Off-Ramp	Lawrence Expy	0.28	57	69	D	A	32.9	<8.9	1891	612				
105+0482 9	I 280	NB	Lawrence Expy	Stevens Creek Blvd DIAG. Off-Ramp	0.24	66	67	B	A	14.5	<8.9	960	598				
105P0482 9	I 280	NB	Stevens Creek Blvd DIAG. Off-Ramp	Stevens Creek Blvd DIAG. On-Ramp	0.30	67	71	B	A	11.2	<8.9	748	630				

PM Freeway Speed, LOS, Estimated Density, Estimated Flow, and Duration of Congestion by Segment											2017 AM Results (INRIX Data)							
TMC	Facility	Dir	From			To	Miles	Speed (mi/hr)		LOS		Density (pc/mi/ln)		Flow (pc/hr/ln)		Congestion (hr)		
			Mixed	HOV	Mixed			Mixed	HOV	Mixed	HOV	Mixed	HOV	Mixed	HOV			
105+0483	0	I 280	NB	Stevens Creek Blvd DIAG. On-Ramp		Wolfe Rd DIAG. Off-Ramp	0.45	65	68	C	A	19.6	<8.9	1270	608			
105P0483	0	I 280	NB	Wolfe Rd DIAG. Off-Ramp		Wolfe Rd DIAG. On-Ramp	0.45	67	70	A	A	<8.9	<8.9	597	626			
105+0483	1	I 280	NB	Wolfe Rd DIAG. On-Ramp		De Anza Blvd DIAG. Off-Ramp	0.61	61	69	D	A	28.1	<8.9	1716	615			
105P0483	1	I 280	NB	De Anza Blvd DIAG. Off-Ramp		De Anza Blvd DIAG. On-Ramp	0.46	61	70	D	A	28.5	<8.9	1734	624			
105+0483	2	I 280	NB	De Anza Blvd DIAG. On-Ramp		SR-85 DIAG. Off-Ramp	0.70	66	70	B	A	16.3	<8.9	1072	623			
105P0483	2	I 280	NB	SR-85 DIAG. Off-Ramp		SR-85 DIAG. On-Ramp	0.74	67	69	A	A	<8.9	<8.9	600	616			
105P0483	3	I 280	NB	Foothill Blvd DIAG. Off-Ramp		Foothill Blvd L. On-Ramp	0.32	65	68	C	A	18.1	<8.9	1182	605			
105+0483	4	I 280	NB	Foothill Blvd L. On-Ramp		Magdalena Ave DIAG. Off-Ramp	2.37	69	68	A	A	<8.9	<8.9	612	608			
105P0483	4	I 280	NB	Magdalena Ave DIAG. Off-Ramp		Magdalena Ave DIAG. On-Ramp	0.47	67	59	A	D	<8.9	30.7	599	182	1		
105+0483	5	I 280	NB	Magdalena Ave DIAG. On-Ramp		El monte Rd DIAG. Off-Ramp	0.38	66		B		15.8		1037				
105P0483	5	I 280	NB	El monte Rd DIAG. Off-Ramp		El monte Rd DIAG. On-Ramp	0.60	68		A		<8.9		603				
105+0483	6	I 280	NB	El monte Rd DIAG. On-Ramp		Page Mill Rd DIAG. Off-Ramp	2.72	68		A		<8.9		609				
105P0483	6	I 280	NB	Page Mill Rd DIAG. Off-Ramp		Page Mill Rd DIAG. On-Ramp	0.64	40		E		48.0		1909				
105+0483	7	I 280	NB	Page Mill Rd DIAG. On-Ramp		Alpine Rd DIAG. Off-Ramp	1.70	23		F		64.3		1473		1.50		
105-04836	I 280	SB	Alpine Rd DIAG. On-Ramp		Page Mill Rd DIAG. Off-Ramp	1.58	18		F		70.1		1287		1.50			
105N0483	6	I 280	SB	Page Mill Rd DIAG. Off-Ramp		Page Mill Rd DIAG. On-Ramp	0.65	18		F		70.8		1263		2.50		
105-04835	I 280	SB	Page Mill Rd DIAG. On-Ramp		El Monte Rd DIAG. Off-Ramp	2.71	16		F		73.5		1174		3.50			
105N0483	5	I 280	SB	El Monte Rd DIAG. Off-Ramp		El Monte Rd DIAG. On-Ramp	0.60	15		F		75.0		1127		4.00		
105-04834	I 280	SB	El Monte Rd DIAG. On-Ramp		Magdalena Ave DIAG. Off-Ramp	0.36	19		F		69.9		1294		4.50			
105N0483	4	I 280	SB	Magdalena Ave DIAG. Off-Ramp		Magdalena Ave L. On-Ramp	0.38	29	26	F	F	58.0	61.3	1690	156	5		
105-04833	I 280	SB	Magdalena Ave L. On-Ramp		Foothill Blvd DIAG. Off-Ramp	2.34	31	43	E	D	56.1	45.6	1716	195	0			
105N0483	3	I 280	SB	Foothill Blvd DIAG. Off-Ramp		Foothill Blvd DIAG. On-Ramp	0.46	22	26	F	F	66.0	60.9	1419	157	7		
105-04832	I 280	SB	Foothill Blvd DIAG. On-Ramp		SR-85 DIAG. Off-Ramp	0.26	18	11	F	F	70.2	81.1	1283	920		3.25		
105N0483	2	I 280	SB	SR-85 DIAG. Off-Ramp		SR-85 DIAG. On-Ramp	0.75	10	10	F	F	83.8	82.9	827	858		3.75	

PM Freeway Speed, LOS, Estimated Density, Estimated Flow, and Duration of Congestion by Segment											2017 AM Results (INRIX Data)							
TMC	Facility	Dir	From			To	Miles	Speed (mi/hr)		LOS		Density (pc/mi/in)		Flow (pc/hr/in)		Congestion (hr)		
			Mixed	HOV	Mixed			Mixed	HOV	Mixed	HOV	Mixed	HOV	Mixed	HOV			
105-04831	I 280	SB	SR-85 DIAG. On-Ramp			De Anza Blvd DIAG. Off-Ramp	0.57	12	10	F	F	80.2	82.7	949	866	4.25		
105N0483	1	I 280	SB	De Anza Blvd	DIAG. Off-Ramp	De Anza Blvd DIAG. On-Ramp	0.46	13	15	F	F	78.3	75.3	1014	111			
105-04830	I 280	SB	De Anza Blvd	DIAG.	On-Ramp	Wolfe Rd DIAG. Off-Ramp	0.63	16	16	F	F	73.1	73.1	1190	7	4.75		
105N0483	0	I 280	SB	Wolfe Rd	DIAG. Off-Ramp	Wolfe Rd DIAG. On-Ramp	0.41	16	14	F	F	73.3	76.1	1182	119	5.00		
105-04829	I 280	SB	Wolfe Rd	DIAG.	On-Ramp	Stevens Creek Blvd DIAG. Off-Ramp	0.39	18	16	F	F	70.4	72.9	1277	4	5.00		
105N0482	9	I 280	SB	Stevens Creek Blvd	DIAG. Off-Ramp	Stevens Creek Blvd	0.34	20	22	F	F	68.2	66.0	1348	9	5.00		
105-04828	I 280	SB	Stevens Creek Blvd			Stevens Creek Blvd DIAG. On-Ramp	0.28	19	22	F	F	69.6	65.8	1304	141			
105N0482	8	I 280	SB	Stevens Creek Blvd	DIAG. On-Ramp	Lawrence Expy DIAG. On-Ramp	0.23	19	29	F	F	68.8	58.0	1330	7	5.00		
105-04827	I 280	SB	Lawrence Expy	DIAG.	On-Ramp	Saratoga Ave DIAG. Off-Ramp	0.71	20	24	F	F	67.5	62.6	1370	169			
105N0482	7	I 280	SB	Saratoga Ave	DIAG. Off-Ramp	Saratoga Ave DIAG. On-Ramp	0.49	24	32	F	E	62.6	55.1	1525	5	5.25		
105-04826	I 280	SB	Saratoga Ave	DIAG.	On-Ramp	Winchester Blvd DIAG. Off-Ramp	0.85	23	32	F	E	64.3	55.0	1472	174			
105N0482	6	I 280	SB	Winchester Blvd	DIAG. Off-Ramp	Winchester Blvd	0.31	20	17	F	F	67.4	72.1	1374	2	4.25		
105-04825	I 280	SB	Winchester Blvd			SR-17 DIAG. Off-Ramp	0.11	17	10	F	F	72.6	84.0	1203	122			
105N0482	5	I 280	SB	SR-17	DIAG. Off-Ramp	SR-17 DIAG. On-Ramp	0.62	10	10	F	F	84.5	82.9	803	857	2.75		
105-04824	I 280	SB	SR-17	DIAG.	On-Ramp	Bascom Ave DIAG. Off-Ramp	0.18	11	9	F	F	82.5	86.0	872	751			
105N0482	4	I 280	SB	Bascom Ave	DIAG. Off-Ramp	Leland Ave	0.39	10	8	F	F	84.2	86.6	813	4.25			
105-04823	I 280	SB	Leland Ave			Meridian Ave DIAG. Off-Ramp	0.25	11	10	F	F	82.3	84.4	880	729			
105N0482	3	I 280	SB	Meridian Ave	DIAG. Off-Ramp	Meridian Ave DIAG. On-Ramp	0.75	11	11	F	F	82.0	81.7	890	5.00			
105-04822	I 280	SB	Meridian Ave	L.	Off-Ramp	Meridian Ave L. Off-Ramp	0.01	11		F		81.5		906		5.50		
105N0482	2	I 280	SB	Meridian Ave L.	Off-Ramp	Southwest Expy DIAG. On-Ramp	0.22	12		F		80.7		933		5.25		
105-04821	I 280	SB	Southwest Expy	DIAG.	On-Ramp	Bird Ave DIAG. Off-Ramp	0.47	16		F		72.8		1199		3.75		
105N0482	1	I 280	SB	Bird Ave	DIAG. Off-Ramp	Bird Ave DIAG. On-Ramp	0.83	16		F		74.1		1154		4.00		
105-04819	I 280	SB	SR-87	DIAG.	On-Ramp	1st St L. On-Ramp	0.20	18		F		71.2		1251		4.75		
105N0481	9	I 280	SB	1st St L.	On-Ramp	6th St DIAG. Off-Ramp	0.10	21		F		66.4		1407		4.25		

PM Freeway Speed, LOS, Estimated Density, Estimated Flow, and Duration of Congestion by Segment										2017 AM Results (INRIX Data)					
TMC	Facility	Dir	From	To	Miles	Speed (mi/hr)		LOS		Density (pc/mi/in)		Flow (pc/hr/in)		Congestion (hr)	
						Mixed	HOV	Mixed	HOV	Mixed	HOV	Mixed	HOV		
105-04818 105-04817 105N0481 7 105-04815 105N0481 5 105-04814 105N0481 4	I 280	SB	1st St L. On-Ramp	6th St DIAG. Off-Ramp	0.05	22	F			65.4		1439		4.50	
	I 280	SB	6th St DIAG. Off-Ramp	10th St DIAG. Off-Ramp	0.21	24	F			63.6		1496		4.75	
	I 280	SB	10th St DIAG. Off-Ramp	11th St DIAG. On-Ramp	0.54	28	F			58.5		1648		2.00	
	I 280	SB	11th St DIAG. On-Ramp	McLaughlin Ave DIAG. Off-Ramp	0.45	49	D			40.4		1992			
	I 280	SB	McLaughlin Ave DIAG. Off-Ramp	US-101 DIAG. Off-Ramp	0.31	57	D			33.2		1898			
	I 280	SB	McLaughlin Ave DIAG. Off-Ramp	McLaughlin Ave DIAG. Off-Ramp	0.17	58	D			32.5		1878			
	I 280	SB	McLaughlin Ave DIAG. Off-Ramp	US-101 DIAG. On-Ramp	1.12	55	D			35.8		1956			
105P0434 6 105P0434 7 105+0434 8 105P0434 8 105+0434 9 105P0434 9 105+0435 0 105P0435 0 105+0435 1 105P0435 1 105+0435 2 105P0435 2 105P0435 3 105+0435 4 105P0435 4 105+0435 5 105P0435 5	I 880	NB	I-280 DIAG. Off-Ramp	I-280 DIAG. On-Ramp	0.90	63	C			24.4		1535			
	I 880	NB	Stevens Creek Blvd DIAG. Off-Ramp	Stevens Creek Blvd DIAG. On-Ramp	0.39	52	D			38.0		1983			
	I 880	NB	Stevens Creek Blvd DIAG. On-Ramp	Bascom Ave DIAG. Off-Ramp	0.48	20	F			68.0		1355		1.25	
	I 880	NB	Bascom Ave DIAG. Off-Ramp	Bascom Ave DIAG. On-Ramp	0.27	11	F			81.2		915		2.75	
	I 880	NB	Bascom Ave DIAG. On-Ramp	The Alameda DIAG. Off-Ramp	0.51	8	F			86.8		723		3.50	
	I 880	NB	The Alameda DIAG. Off-Ramp	The Alameda DIAG. On-Ramp	0.38	9	F			86.3		740		4.00	
	I 880	NB	The Alameda DIAG. On-Ramp	Coleman Ave L. Off-Ramp	0.30	8	F			86.8		725		5.00	
	I 880	NB	Coleman Ave L. Off-Ramp	Coleman Ave DIAG. On-Ramp	0.38	10	F			83.4		841		5.25	
	I 880	NB	Coleman Ave DIAG. On-Ramp	1st St DIAG. Off-Ramp	0.41	15	F			75.2		1120		3.75	
	I 880	NB	1st St DIAG. Off-Ramp	1nd St DIAG. On-Ramp	0.38	21	F			66.5		1403		3.25	
	I 880	NB	1nd St DIAG. On-Ramp	US-101 DIAG. Off-Ramp	0.14	32	E			55.2		1741			
	I 880	NB	US-101 DIAG. Off-Ramp	US-101 DIAG. On-Ramp	0.34	39	48	E	D	48.7	41.7	1895	8		
	I 880	NB	Old Bayshore Hwy L. Off-Ramp	Old Bayshore Hwy DIAG. On-Ramp	0.26	46	54	D	D	43.4	36.3	1976	3		
	I 880	NB	Old Bayshore Hwy DIAG. On-Ramp	Brokaw Rd DIAG. Off-Ramp	0.50	56	61	D	D	34.1	28.5	1922	4		
	I 880	NB	Brokaw Rd DIAG. Off-Ramp	Brokaw Rd L. On-Ramp	0.38	62	67	C	A	26.0	10.4	1620	695		
	I 880	NB	Brokaw Rd L. On-Ramp	Montague Expy DIAG. Off-Ramp	0.88	64	70	C	A	21.0	<8.9	1350	626		
	I 880	NB	Montague Expy DIAG. Off-Ramp	Montague Expy DIAG. On-Ramp	0.81	66	68	B	A	15.4	<8.9	1012	609		

PM Freeway Speed, LOS, Estimated Density, Estimated Flow, and Duration of Congestion by Segment												2017 AM Results (INRIX Data)					
TMC	Facility	Dir	From	To	Miles	Speed (mi/hr)		LOS		Density (pc/mi/ln)		Flow (pc/hr/ln)		Congestion (hr)			
						Mixed	HOV	Mixed	HOV	Mixed	HOV	Mixed	HOV				
105+0435 6	I 880	NB	Montague Expy DIAG. On-Ramp	Great Mall Pkwy DIAG. Off-Ramp	0.24	60	71	D	A	30.2	<8.9	1801	635				
105P0435 6	I 880	NB	Great Mall Pkwy DIAG. Off-Ramp	Great Mall Pkwy L. On-Ramp	0.36	59	69	D	A	31.0	<8.9	1831	612				
105+0435 7	I 880	NB	Great Mall Pkwy L. On-Ramp	SR-237 DIAG. Off-Ramp	0.28	56	66	D	B	34.7	16.1	1934	106	0			
105P0435 7	I 880	NB	SR-237 DIAG. Off-Ramp	SR-237 DIAG. On-Ramp	0.93	36	52	E	D	50.9	38.4	1847	198	6			
105+0435 8	I 880	NB	SR-237 DIAG. On-Ramp	Dixon Landing DIAG. Off-Ramp	1.03	21	19	F	F	66.1	69.3	1416	131	2			
105P0435 8	I 880	NB	Dixon Landing DIAG. Off-Ramp	Dixon Landing DIAG. On-Ramp	0.83	17	13	F	F	71.4	78.6	1245	100	4			
															2.00	3.25	
105N0435 8	I 880	SB	Dixon Landing DIAG. Off-Ramp	Dixon Landing DIAG. On-Ramp	0.64	63	32	C	E	23.9	54.5	1508	175	9			
105-04357	I 880	SB	Dixon Landing DIAG. On-Ramp	SR-237 DIAG. Off-Ramp	1.13	64	58	C	D	21.7	32.0	1389	186	4			
105N0435 7	I 880	SB	SR-237 DIAG. Off-Ramp	Great Mall Pkwy DIAG. On-Ramp	1.53	35	25	E	F	51.8	61.7	1826	155	3			
105-04355	I 880	SB	Great Mall Pkwy DIAG. On-Ramp	Montague Expy DIAG. Off-Ramp	0.42	18	32	F	E	70.3	54.6	1282	175	5	2.25		
105N0435 5	I 880	SB	Montague Expy DIAG. Off-Ramp	Montague Expy DIAG. On-Ramp	0.74	16	23	F	F	72.9	64.6	1196	146	2			
105-04354	I 880	SB	Montague Expy DIAG. On-Ramp	Brokaw Rd DIAG. Off-Ramp	0.62	18	27	F	F	70.7	60.2	1269	159	9	3.00		
105N0435 4	I 880	SB	Brokaw Rd DIAG. Off-Ramp	Brokaw Rd DIAG. On-Ramp	0.60	17	32	F	E	72.2	55.2	1220	174	0			
105-04353	I 880	SB	Brokaw Rd DIAG. On-Ramp	Old Bayshore Hwy DIAG. Off-Ramp	0.46	19	23	F	F	68.8	64.3	1329	147	3	3.00		
105N0435 3	I 880	SB	Old Bayshore Hwy DIAG. Off-Ramp	Old Bayshore Hwy L. On-Ramp	0.32	17	18	F	F	71.4	71.3	1245	124	8			
105-04352	I 880	SB	Old Bayshore Hwy L. On-Ramp	US-101 L. On-Ramp	0.18	15	16	F	F	74.7	73.1	1135	118	9	3.25		
105N0435 2	I 880	SB	US-101 L. On-Ramp	US-101 DIAG. On-Ramp	0.19	16	19	F	F	74.0	68.6	1158	133	5			
105-04351	I 880	SB	US-101 DIAG. On-Ramp	1st St DIAG. Off-Ramp	0.12	14	38	F	E	76.1	49.1	1090	188	7	2.50		
105N0435 1	I 880	SB	1st St DIAG. Off-Ramp	1st St DIAG. On-Ramp	0.40	11		F		81.0		922	1090		2.50		
105-04350	I 880	SB	1st St DIAG. On-Ramp	Coleman Ave DIAG. Off-Ramp	0.42	21		F		66.9		1391	1090		1.75		
105N0435 0	I 880	SB	Coleman Ave DIAG. Off-Ramp	Coleman Ave DIAG. On-Ramp	0.53	22		F		65.5		1436	1090		1.75		
105-04349	I 880	SB	Coleman Ave DIAG. On-Ramp	The Alameda DIAG. Off-Ramp	0.17	26		F		61.0		1573	1090		0.75		
105N0434 9	I 880	SB	The Alameda DIAG. Off-Ramp	The Alameda DIAG. On-Ramp	0.37	24		F		62.8		1518	1090		1.75		
105-04348	I 880	SB	The Alameda DIAG. On-Ramp	Bascom Ave DIAG. Off-Ramp	0.45	26		F		60.6		1586	1090		1.75		

PM Freeway Speed, LOS, Estimated Density, Estimated Flow, and Duration of Congestion by Segment											2017 AM Results (INRIX Data)							
TMC	Facility	Dir	From			To	Miles	Speed (mi/hr)		LOS		Density (pc/mi/in)		Flow (pc/hr/in)		Congestion (hr)		
			Mixed	HOV	Mixed			Mixed	HOV	Mixed	HOV	Mixed	HOV	Mixed	HOV			
105N0434 8 105- 04347	I 880	SB	Bascom Ave DIAG. Off-Ramp		Bascom Ave DIAG. On-Ramp		0.27	32	E			55.1		1743				
105N0434 7 105- 04346	I 880	SB	Bascom Ave DIAG. On-Ramp		Stevens Creek Blvd DIAG. Off-Ramp		0.49	32	E			54.8		1752				
105N0434 6	I 880	SB	Stevens Creek Blvd DIAG. Off-Ramp		I-280 DIAG. Off-Ramp		0.42	41	E			47.1		1925				
105N0434 6	I 880	SB	I-280 L. Off-Ramp		I-280 DIAG. Off-Ramp		0.06	51	D			39.3		1991				
105N0434 6	I 880	SB	I-280 DIAG. On-Ramp		I-280 DIAG. On-Ramp		0.69	60	D			30.3		1806				
105P0487 6	I 680	NB	US-101 DIAG. Off-Ramp		US-101 DIAG. On-Ramp		0.93	58	D			31.8		1857				
105P0487 7	I 680	NB	US-101 DIAG. Off-Ramp		US-101 DIAG. On-Ramp		0.59	53	D			37.6		1979				
105+0487 8	I 680	NB	US-101 DIAG. On-Ramp		Capitol Expy DIAG. Off-Ramp/ Jackson Ave		0.24	47	D			42.6		1983				
105P0487 8	I 680	NB	Capitol Expy DIAG. Off-Ramp/ Jackson Ave		Capitol Expy DIAG. Off-Ramp		0.33	56	D			34.8		1936				
105P0487 9	I 680	NB	Capitol Expy DIAG. Off-Ramp		Capitol Expy DIAG. On-Ramp		0.58	62	D			26.3		1631				
105P0488 0	I 680	NB	Alum Rock Ave DIAG. Off-Ramp		Alum Rock Ave DIAG. On-Ramp		0.61	62	D			26.5		1640				
105+0488 1	I 680	NB	Alum Rock Ave DIAG. On-Ramp		McKee Rd DIAG. Off-Ramp		0.14	62	C			25.9		1614				
105P0488 1	I 680	NB	McKee Rd DIAG. Off-Ramp		McKee Rd DIAG. On-Ramp		0.59	64	C			21.2		1364				
105+0488 2	I 680	NB	McKee Rd DIAG. On-Ramp		Berryessa Rd DIAG. Off-Ramp		0.80	63	C			23.6		1493				
105P0488 2	I 680	NB	Berryessa Rd DIAG. Off-Ramp		Berryessa Rd DIAG. On-Ramp		0.68	65	B			17.5		1142				
105+0488 3	I 680	NB	Berryessa Rd DIAG. On-Ramp		Hostetter Rd DIAG. Off-Ramp		0.36	66	B			15.9		1046				
105P0488 3	I 680	NB	Hostetter Rd DIAG. Off-Ramp		Hostetter Rd DIAG. On-Ramp		0.33	65	B			17.7		1158				
105+0488 4	I 680	NB	Hostetter Rd DIAG. On-Ramp		Capital Ave L. Off-Ramp		0.08	64	C			22.2		1420				
105P0488 4	I 680	NB	Capital Ave L. Off-Ramp		Capital Ave DIAG. On-Ramp		0.51	65	B			17.3		1132				
105+0488 5	I 680	NB	Capital Ave DIAG. On-Ramp		Montague Expy DIAG. Off-Ramp		0.38	64	C			21.6		1387				
105P0488 5	I 680	NB	Montague Expy DIAG. Off-Ramp		Montague Expy DIAG. On-Ramp		0.70	66	B			14.9		983				
105+0488 6	I 680	NB	Montague Expy DIAG. On-Ramp		Calaveras Blvd DIAG. Off-Ramp		0.75	66	B			15.1		995				
105P0488 6	I 680	NB	Calaveras Blvd DIAG. Off-Ramp		Calaveras Blvd DIAG. On-Ramp		0.84	65	B			17.2		1128				
105+0488 7	I 680	NB	Calaveras Blvd DIAG. On-Ramp		Jacklin Rd DIAG. Off-Ramp		0.13	64	C			21.7		1389				

PM Freeway Speed, LOS, Estimated Density, Estimated Flow, and Duration of Congestion by Segment										2017 AM Results (INRIX Data)							
TMC	Facility	Dir	From		To	Miles	Speed (mi/hr)		LOS		Density (pc/mi/ln)		Flow (pc/hr/ln)		Congestion (hr)		
			Mixed	HOV			Mixed	HOV	Mixed	HOV	Mixed	HOV	Mixed	HOV			
105P0488 7 105+0488 8	I 680	NB	Jacklin Rd DIAG. Off-Ramp		Jacklin Rd DIAG. On-Ramp	0.63	64		C		21.4		1374				
105-04887 105N0488 7 105N0488 6 105-04885 105N0488 5 105-04884 105N0488 4 105-04883 105N0488 3 105-04882 105N0488 2 105-04881 105N0488 1 105-04880 105N0488 0 105N0487 9 105-04878 105N0487 8 105-04877 105N0487 7 105N0487 6 105+0987 1	I 680	SB	Scott Creek Rd DIAG. On-Ramp		Jacklin Rd DIAG. Off-Ramp	1.02	50	73	D	A	39.6	<8.9	1991	651 107			
	I 680	SB	Jacklin Rd DIAG. Off-Ramp		Jacklin Rd DIAG. On-Ramp	0.61	24	66	F	B	63.1	16.4	1509	5 180	0.75		
	I 680	SB	Calaveras Blvd DIAG. Off Ramp		Calaveras Blvd DIAG. On Ramp	0.96	12	34	F	E	79.3	52.5	981	9	2.75		
	I 680	SB	Calaveras Blvd DIAG. On Ramp		Montague Expy DIAG. Off-Ramp	0.64	11		F		80.9		925		3.00		
	I 680	SB	Montague Expy DIAG. Off-Ramp		Montague Expy DIAG. On-Ramp	0.70	11		F		81.4		909		3.25		
	I 680	SB	Montague Expy DIAG. On-Ramp		Capitol Expy DIAG. Off-Ramp	0.43	13		F		77.9		1028		3.25		
	I 680	SB	Capitol Expy DIAG. Off-Ramp		Capitol Expy DIAG. On-Ramp	0.53	13		F		77.5		1042		4.00		
	I 680	SB	Capitol Expy DIAG. On-Ramp		Hostetter Rd L. Off-Ramp	0.10	15		F		75.0		1125		4.25		
	I 680	SB	Hostetter Rd L. Off-Ramp		Hostetter Rd L. On-Ramp	0.42	17		F		71.7		1234		4.00		
	I 680	SB	Hostetter Rd L. On-Ramp		Berryessa Rd DIAG. Off-Ramp	0.19	21		F		67.0		1387		2.75		
	I 680	SB	Berryessa Rd DIAG. Off-Ramp		Berryessa Rd DIAG. On-Ramp	0.63	24		F		63.0		1512		2.25		
	I 680	SB	Berryessa Rd DIAG. On-Ramp		McKee Rd DIAG. Off-Ramp	0.82	29		F		58.0		1699		0.25		
	I 680	SB	McKee Rd DIAG. Off-Ramp		McKee Rd DIAG. On-Ramp	0.65	28		F		58.4		1652		0.75		
	I 680	SB	McKee Rd DIAG. On-Ramp		Alum Rock Ave DIAG. Off-Ramp	0.11	31		E		55.4		1735				
	I 680	SB	Alum Rock Ave DIAG. Off-Ramp		Capitol Expy L. On-Ramp	0.61	42		D		45.8		1946				
	I 680	SB	Alum Rock Ave L. Off-Ramp		Alum Rock Ave L. On-Ramp	0.61	56		D		34.3		1927				
	I 680	SB	Capitol Expy L. On-Ramp		Capitol Expy L. On-Ramp	0.02	56		D		34.0		1920				
	I 680	SB	Capitol Expy L. On-Ramp		Jackson Ave DIAG. On-Ramp	0.32	58		D		31.8		1857				
	I 680	SB	Jackson Ave DIAG. On-Ramp		US-101 DIAG. Off-Ramp	0.11	58		D		32.2		1870				
	I 680	SB	US-101 DIAG. Off-Ramp		US-101 DIAG. Off-Ramp/Bayshore Fwy	0.68	57		D		33.8		1914				
	I 680	SB	US-101 DIAG. Off-Ramp		US-101 DIAG. On-Ramp	0.87	63		C		24.4		1535				
105+0987 1	US 101	NB	US-101 DIAG. On-Ramp		SR-25 DIAG. Off-Ramp	3.61	62		D		27.1		1671				

PM Freeway Speed, LOS, Estimated Density, Estimated Flow, and Duration of Congestion by Segment										2017 AM Results (INRIX Data)							
TMC	Facility	Dir	From	To	Miles	Speed (mi/hr)		LOS		Density (pc/mi/in)		Flow (pc/hr/in)		Congestion (hr)			
						Mixed	HOV	Mixed	HOV	Mixed	HOV	Mixed	HOV				
105P0987																	
1	US 101	NB	SR-25 DIAG. Off-Ramp	SR-25 DIAG. On-Ramp	0.12	61		D		27.9		1708					
105+0987																	
2	US 101	NB	SR-25 DIAG. On-Ramp	Castro Valley Rd	0.43	57		D		33.0		1895					
105+0411																	
3	US 101	NB	Castro Valley Rd	Bolsa Rd DIAG. Off-Ramp	0.98	60		D		29.9		1788					
105P0411																	
3	US 101	NB	Bolsa Rd DIAG. Off-Ramp	Bolsa Rd DIAG. On-Ramp	0.30	61		D		28.1		1716					
105+0411																	
4	US 101	NB	Bolsa Rd DIAG. On-Ramp	SR-152 DIAG. Off-Road	0.89	62		D		26.8		1658					
105P0411																	
4	US 101	NB	SR-152 DIAG. Off-Road	SR-152 DIAG. On-Road	0.47	64		C		22.4		1428					
105+0411																	
5	US 101	NB	SR-152 DIAG. On-Road	Leavesley Rd DIAG. Off-Ramp	0.87	61		D		27.9		1707					
105P0411																	
5	US 101	NB	Leavesley Rd DIAG. Off-Ramp	Leavesley Rd DIAG. On-Ramp	0.68	63		C		24.8		1558					
105+0411																	
6	US 101	NB	Leavesley Rd DIAG. On-Ramp	Masten Ave DIAG. Off-Ramp	2.07	63		C		24.6		1546					
105P0411																	
6	US 101	NB	Masten Ave DIAG. Off-Ramp	Masten Ave DIAG. On-Ramp	0.58	61		D		28.6		1739					
105+0411																	
7	US 101	NB	Masten Ave DIAG. On-Ramp	San Martin Ave DIAG. Off-Ramp	1.71	62		D		26.3		1630					
105P0411																	
7	US 101	NB	San Martin Ave DIAG. Off-Ramp	San Martin Ave DIAG. On-Ramp	0.44	63		C		24.8		1556					
105+0411																	
8	US 101	NB	San Martin Ave DIAG. On-Ramp	Tenant Ave DIAG. Off-Ramp	2.10	64		C		20.6		1329					
105P0411																	
8	US 101	NB	Tenant Ave DIAG. Off-Ramp	Tenant Ave DIAG. On-Ramp	0.59	64		C		21.8		1395					
105+0411																	
9	US 101	NB	Tenant Ave DIAG. On-Ramp	Dunne Ave DIAG. Off-Ramp	0.31	64		C		22.2		1416					
105P0411																	
9	US 101	NB	Dunne Ave DIAG. Off-Ramp	Dunne Ave DIAG. On-Ramp	0.58	64		C		20.8		1338					
105+0412																	
0	US 101	NB	Dunne Ave DIAG. On-Ramp	Cochrane Rd DIAG. Off-Ramp	1.24	64		C		22.8		1449		153			
105P0412																	
0	US 101	NB	Cochrane Rd DIAG. Off-Ramp	Cochrane Rd DIAG. On-Ramp	0.60	66	25	B	F	15.6	62.4	1029	2				
105+0412																	
1	US 101	NB	Cochrane Rd DIAG. On-Ramp	Coyote Creek Golf Dr DIAG. Off-Ramp	2.89	67	74	B	A	11.8	<8.9	784	657				
105P0412																	116
1	US 101	NB	Coyote Creek Golf Dr DIAG. Off-Ramp	Coyote Creek Golf Dr DIAG. On-Ramp	0.61	66	16	B	F	16.9	73.7	1105	9				
105+0928																	
8	US 101	NB	Coyote Creek Golf Dr DIAG. Off-Ramp	Bailey Ave DIAG. Off-Ramp	1.42	66	71	B	A	13.4	<8.9	888	634				
105P0928																	
8	US 101	NB	Bailey Ave DIAG. Off-Ramp	Bailey Ave DIAG. On-Ramp	0.54	67	72	A	A	9.2	<8.9	618	637				
105+0412																	
2	US 101	NB	Bailey Ave DIAG. On-Ramp	SR-85 DIAG. Off-Ramp	2.77	67	74	A	A	<8.9	<8.9	597	656				
105P0412																	
2	US 101	NB	SR-85 DIAG. Off-Ramp	Silicon Valley Blvd DIAG. Off-Ramp	0.51	64	78	C	A	22.4	<8.9	1428	697				

PM Freeway Speed, LOS, Estimated Density, Estimated Flow, and Duration of Congestion by Segment											2017 AM Results (INRIX Data)							
TMC	Facility	Dir	From		To	Miles	Speed (mi/hr)		LOS		Density (pc/mi/in)		Flow (pc/hr/in)		Congestion (hr)			
							Mixed	HOV	Mixed	HOV	Mixed	HOV	Mixed	HOV				
105P0412																		
3	US 101	NB	Silicon Valley Blvd	DIAG. Off-Ramp	Silicon Valley Blvd	DIAG. On-Ramp	0.57	64	77	C	A	22.2	<8.9	1420	682			
105+0412																		
4	US 101	NB	Silicon Valley Blvd	DIAG. On-Ramp	Silver Creek Valley Rd	DIAG. Off-Ramp	0.79	64	75	C	A	22.8	<8.9	1452	664			
105P0412																		
4	US 101	NB	Silver Creek Valley Rd	DIAG. Off-Ramp	Silver Creek Valley Rd	DIAG. On-Ramp	0.77	64	71	C	A	23.0	<8.9	1465	636			
105+0412																		
5	US 101	NB	Silver Creek Valley Rd	DIAG. On-Ramp	Hellyer Ave	DIAG. Off-Ramp	1.34	63	72	C	A	24.2	<8.9	1525	637			
105P0412																		
5	US 101	NB	Hellyer Ave	DIAG. Off-Ramp	Hellyer Ave L.	On-Ramp	0.27	63	71	C	A	23.3	<8.9	1479	628			
105+0412																		
6	US 101	NB	Hellyer Ave L.	On-Ramp	Yerba Buena Rd L.	Off-Ramp	0.70	63	70	C	A	24.9	<8.9	1562	622			
105P0412																		
6	US 101	NB	Yerba Buena Rd L.	Off-Ramp	Capitol Expy	DIAG. Off-Ramp	0.18	63	71	C	A	25.0	<8.9	1568	634			
105P0412																		
7	US 101	NB	Capitol Expy	DIAG. Off-Ramp	Capitol Expy	DIAG. On-Ramp	0.97	64	71	C	A	22.3	<8.9	1425	633			
105+0412																		
8	US 101	NB	Capitol Expy	DIAG. On-Ramp	Tully Rd	DIAG. Off-Ramp	0.64	62	72	D	A	27.0	<8.9	1666	639			
105P0412																		
8	US 101	NB	Tully Rd	DIAG. Off-Ramp	Tully Rd	DIAG. On-Ramp	0.63	58	67	D	A	32.7	<8.9	1884	597			
105+0412																		
9	US 101	NB	Tully Rd	DIAG. On-Ramp	I-680	DIAG. Off-Ramp	0.97	56	75	D	A	34.3	<8.9	1927	671			
105P0412																		
9	US 101	NB	I-680	DIAG. Off-Ramp	I-680	DIAG. On-Ramp	0.79	65	71	C	A	19.4	<8.9	1258	633			
105+0413																		
1	US 101	NB	I-680	DIAG. On-Ramp	Alum Rock Ave		0.53	61	71	D	A	28.5	<8.9	1734	633			
105P0413																		
2	US 101	NB	Alum Rock Ave	DIAG. Off-Ramp	McKee Rd	DIAG. On-Ramp	0.75	62	71	D	A	26.3	<8.9	1633	633			
105+0413																		
3	US 101	NB	McKee Rd	DIAG. On-Ramp	Oakland Rd	DIAG. Off-Ramp	1.14	61	68	D	A	27.5	<8.9	1687	606			
105P0413																		
3	US 101	NB	Oakland Rd	DIAG. Off-Ramp	Oakland Rd	DIAG. On-Ramp	0.41	45	66	D	B	43.5	15.1	1975	993			
105+0413																		
4	US 101	NB	Oakland Rd	DIAG. On-Ramp	I-880	DIAG. Off-Ramp	0.15	34	68	E	A	53.0	<8.9	1796	602			
105P0413																		
4	US 101	NB	I-880	DIAG. Off-Ramp	I-880 L.	On-Ramp	0.22	57	65	D	C	33.5	19.5	1907	126	4		
105+0413																		
5	US 101	NB	I-880 L.	On-Ramp	Old Bayshore Hwy	DIAG. On-Ramp	0.34	61	67	D	A	28.9	<8.9	1750	599			
105P0413																		
5	US 101	NB	Old Bayshore Hwy	DIAG. On-Ramp	Old Bayshore Hwy	DIAG. Off-Ramp	0.23	63	68	C	A	24.9	<8.9	1562	602			
105+0413																		
6	US 101	NB	Old Bayshore Hwy	DIAG. Off-Ramp	Brokaw Rd	DIAG. Off-Ramp	0.20	62	68	C	A	25.8	<8.9	1609	606			
105P0413																		
6	US 101	NB	Brokaw Rd	DIAG. Off-Ramp	Brokaw Rd	DIAG. On-Ramp	0.63	63	67	C	A	24.5	<8.9	1540	599			
105P0413																		
7	US 101	NB	Trimble Rd	DIAG. Off-Ramp	SR-87	DIAG. On-Ramp	0.45	64	71	C	A	21.7	<8.9	1391	633			
105+0413																		
8	US 101	NB	SR-87	DIAG. On-Ramp	Trimble Rd	DIAG. Off-Ramp	0.28	63	71	C	A	24.0	<8.9	1517	631			

PM Freeway Speed, LOS, Estimated Density, Estimated Flow, and Duration of Congestion by Segment											2017 AM Results (INRIX Data)							
TMC	Facility	Dir	From	To	Miles	Speed (mi/hr)		LOS		Density (pc/mi/ln)		Flow (pc/hr/ln)		Congestion (hr)				
						Mixed	HOV	Mixed	HOV	Mixed	HOV	Mixed	HOV					
105P0413 8	US 101	NB	Trimble Rd DIAG. Off-Ramp	Trimble Rd DIAG. On-Ramp	0.43	62	70	D	A	27.1	<8.9	1669	623					
105+0413 9	US 101	NB	Trimble Rd DIAG. On-Ramp	San Tomas Expy DIAG. Off-Ramp	0.70	61	68	D	A	28.9	<8.9	1748	603					
105P0413 9	US 101	NB	San Tomas Expy DIAG. Off-Ramp	San Tomas Expy DIAG. On-Ramp	0.64	65	70	C	A	19.1	<8.9	1241	625					
105P0414 0	US 101	NB	America Pkwy DIAG. Off-Ramp	America Pkwy DIAG. On-Ramp	0.65	62	72	D	A	26.1	<8.9	1621	643					
105+0414 1	US 101	NB	America Pkwy DIAG. On-Ramp	Lawrence Expy DIAG. Off-Ramp	0.58	62	69	C	A	25.6	<8.9	1601	618					
105P0414 1	US 101	NB	Lawrence Expy DIAG. Off-Ramp	Lawrence Expy DIAG. On-Ramp	0.39	65	69	C	A	19.9	<8.9	1287	612					
105+0414 2	US 101	NB	Lawrence Expy DIAG. On-Ramp	Fair Oaks Avenue DIAG. Off-Ramp	0.65	63	69	C	A	25.2	<8.9	1580	612					
105P0414 2	US 101	NB	Fair Oaks Avenue DIAG. Off-Ramp	Fair Oaks Avenue DIAG. On-Ramp	0.29	63	68	C	A	23.4	<8.9	1486	601					
105+0414 3	US 101	NB	Fair Oaks Avenue DIAG. On-Ramp	Mathilda Ave DIAG. Off-Ramp	0.52	61	67	D	A	27.4	9.3	1686	619					
105P0414 3	US 101	NB	Mathilda Ave DIAG. Off-Ramp	Mathilda Ave L. Off-Ramp	0.21	61	69	D	A	28.2	<8.9	1722	613					
105+0414 4	US 101	NB	Mathilda Ave L. Off-Ramp	Southbay Fwy L. Off-Ramp	0.43	58	63	D	C	32.2	23.5	1872	0					
105P0414 4	US 101	NB	Southbay Fwy L. Off-Ramp	Southbay Fwy DIAG. Off-Ramp	0.20	58	64	D	C	32.2	21.3	1871	6					
105+0414 5	US 101	NB	Southbay Fwy DIAG. Off-Ramp	Ellis St DIAG. Off-Ramp	0.46	45	67	D	A	43.8	9.8	1973	656					
105P0414 5	US 101	NB	Ellis St DIAG. Off-Ramp	Ellis St DIAG. On-Ramp	0.60	34	61	E	D	53.0	28.5	1798	3					
105+0414 6	US 101	NB	Ellis St DIAG. On-Ramp	Moffett Blvd DIAG. Off-Ramp	0.32	33	59	E	D	54.2	31.5	1765	184					
105P0414 6	US 101	NB	Moffett Blvd DIAG. Off-Ramp	Moffett Blvd L. On-Ramp	0.18	31	61	E	D	55.4	27.6	1736	7					
105+0414 7	US 101	NB	Moffett Blvd L. Off-Ramp	Shoreline Blvd DIAG. Off-Ramp	0.25	27	58	F	D	59.6	32.0	1617	169					
105P0414 7	US 101	NB	Moffett Blvd L. On-Ramp	Shoreline Blvd DIAG. Off-Ramp	0.25	24	44	F	D	63.0	44.3	1512	4					
105P0414 8	US 101	NB	Moffett Blvd L. Off-Ramp	Shoreline Blvd DIAG. On-Ramp	1.10	28	49	F	D	59.1	40.4	1631	196					
105+0415 0	US 101	NB	Bayshore Fwy/US-101	Rengstorff Ave DIAG. Off-Ramp	0.51	31	51	E	D	56.1	38.9	1715	9					
105P0415 0	US 101	NB	Rengstorff Ave DIAG. Off-Ramp	Rengstorff Ave DIAG. On-Ramp	0.35	34	42	E	E	52.7	46.1	1804	194					
105+0415 1	US 101	NB	Rengstorff Ave DIAG. On-Ramp	San Antonio Rd DIAG. Off-Ramp	0.25	33	49	E	D	53.6	40.7	1781	2					
105P0415 1	US 101	NB	San Antonio Rd DIAG. Off-Ramp	San Antonio Rd DIAG. On-Ramp	0.44	33	44	E	D	53.5	44.4	1785	199					
105+0415 2	US 101	NB	San Antonio Rd DIAG. On-Ramp	Embarcadero Rd DIAG. Off-Ramp	1.18	21	18	F	F	66.8	71.2	1393	5					
														125	0	3.75		

PM Freeway Speed, LOS, Estimated Density, Estimated Flow, and Duration of Congestion by Segment											2017 AM Results (INRIX Data)							
TMC	Facility	Dir	From		To	Miles	Speed (mi/hr)		LOS		Density (pc/mi/ln)		Flow (pc/hr/ln)		Congestion (hr)			
			Mixed	HOV			Mixed	HOV	Mixed	HOV	Mixed	HOV	Mixed	HOV				
105P0415 2	US 101	NB	Embarcadero Rd	DIAG. Off-Ramp	Embarcadero Rd	DIAG. On-Ramp	0.70	25	25	F	F	61.5	62.1	1560	154 2	2.50		
105N0415 2	US 101	SB	Embarcadero Rd	DIAG. Off-Ramp	Embarcadero Rd	DIAG. Off-Ramp	0.65	15	17	F	F	75.7	71.7	1102	123 5	3.00		
105- 04151	US 101	SB	Oregon Expy	DIAG. On-Ramp	San Antonio Rd	DIAG. Off-Ramp	1.37	26	30	F	F	60.9	58.0	1575	171 7	1.75		
105N0415 1	US 101	SB	San Antonio Rd	DIAG. Off-Ramp	San Antonio Rd	L. Off-Ramp	0.15	34	48	E	D	52.8	41.6	1801	198 9	1.99		
105- 04150	US 101	SB	San Antonio Rd	L. Off-Ramp	Rengstorff Ave	DIAG. On-Ramp	0.70	30	50	F	D	58.0	39.9	1738	198 2	0.25		
105N0415 0	US 101	SB	San Antonio Rd	L. Off-Ramp	Rengstorff Ave	DIAG. Off-Ramp	0.18	30	47	E	D	56.3	42.0	1710	198 7	1.97		
105- 04149	US 101	SB	Rengstorff Ave	DIAG. Off-Ramp	Old Middlefield Way	DIAG. Off-Ramp	0.46	29	46	F	D	58.1	43.3	1660	116 7	0.50		
105N0414 9	US 101	SB	Old Middlefield Way	DIAG. Off-Ramp	Old Middlefield Way	DIAG. On-Ramp	0.15	24	16	F	F	62.6	73.7	1525	116 8	1.00		
105- 04148	US 101	SB	Old Middlefield Way	DIAG. On-Ramp	Shoreline Blvd	L. On-Ramp	0.37	23	12	F	F	64.1	79.1	1479	988 101	1.00		
105N0414 7	US 101	SB	Shoreline Blvd	L. On-Ramp	SR-85	DIAG. Off-Ramp	0.36	16	13	F	F	72.9	78.3	1196	101 5	2.00		
105- 04146	US 101	SB	SR-85	DIAG. Off-Ramp	Moffett Blvd	L. Off-Ramp	0.22	13	12	F	F	78.6	80.2	1005	948 125	3.25		
105N0414 6	US 101	SB	Moffett Blvd	L. Off-Ramp	Moffett Blvd	DIAG. On-Ramp	0.15	14	18	F	F	76.6	71.1	1070	125 3	4.00		
105- 04145	US 101	SB	Moffett Blvd	DIAG. On-Ramp	Ellis St	DIAG. Off-Ramp	0.41	16	22	F	F	72.8	65.0	1199	145 2	4.50		
105N0414 5	US 101	SB	Ellis St	DIAG. Off-Ramp	Ellis St	DIAG. On-Ramp	0.54	18	23	F	F	71.0	64.2	1258	147 5	5.25		
105- 04144	US 101	SB	Ellis St	DIAG. On-Ramp	SR-237	L. Off-Ramp	0.60	21	33	F	E	66.3	54.0	1409	177 1	2.50		
105N0414 4	US 101	SB	SR-237	L. Off-Ramp	SR-237	DIAG. On-Ramp	0.20	23	28	F	F	64.6	59.0	1464	163 5	1.25		
105N0414 3	US 101	SB	Mathilda Ave.	DIAG. Off-Ramp	Mathilda Ave.	DIAG. On-Ramp	0.33	22	31	F	E	65.6	55.3	1433	173 7	1.75		
105- 04142	US 101	SB	Mathilda Ave.	DIAG. On-Ramp	Fair Oaks Ave	DIAG. Off-Ramp	0.52	25	31	F	E	61.5	56.0	1558	171 8	1.25		
105N0414 2	US 101	SB	Fair Oaks Ave	DIAG. Off-Ramp	Fair Oaks Ave	DIAG. On-Ramp	0.41	17	19	F	F	71.9	69.0	1229	132 3	2.50		
105- 04141	US 101	SB	Fair Oaks Ave	DIAG. On-Ramp	Lawrence Expy	DIAG. Off-Ramp	0.55	14	8	F	F	77.2	87.5	1050	699 10	4.00		
105N0414 1	US 101	SB	Lawrence Expy	DIAG. Off-Ramp	Lawrence Expy	DIAG. On-Ramp	0.39	8	7	F	F	88.4	88.7	668	660 6	5.75		
105- 04140	US 101	SB	Lawrence Expy	DIAG. On-Ramp	Bowers Ave	DIAG. Off-Ramp	0.58	7	8	F	F	89.9	88.5	615	664 6	6.00		
105N0414 0	US 101	SB	Bowers Ave	DIAG. Off-Ramp	Bowers Ave	DIAG. On-Ramp	0.67	7	6	F	F	89.9	91.5	616	562 5	6.25		
105- 04139	US 101	SB	Bowers Ave	DIAG. On-Ramp	San Thomas Expy	DIAG. Off-Ramp	0.11	8	7	F	F	86.7	90.4	729	598 6	6.25		

PM Freeway Speed, LOS, Estimated Density, Estimated Flow, and Duration of Congestion by Segment											2017 AM Results (INRIX Data)					
TMC	Facility	Dir	From	To	Miles	Speed (mi/hr)		LOS		Density (pc/mi/in)		Flow (pc/hr/in)		Congestion (hr)		
						Mixed	HOV	Mixed	HOV	Mixed	HOV	Mixed	HOV	Mixed	HOV	
105N0413 9 105- 04138	US 101	SB	San Thomas Expy DIAG. Off-Ramp	San Thomas Expy DIAG. On-Ramp	0.65	9	9	F	F	85.8	85.7	759	761	6.50	123	
105N0413 8 105- 04137	US 101	SB	Trimble Rd DIAG. Off-Ramp	Trimble Rd DIAG. On-Ramp	0.78	13	17	F	F	77.9	71.7	1029	4	6.50	157	
105N0413 7 105- 04136	US 101	SB	Trimble Rd DIAG. On-Ramp	SR-87 DIAG. Off-Ramp	0.41	28	43	F	D	58.6	45.2	1644	5	2.00	144	
105N0413 6 105- 04135	US 101	SB	SR-87 DIAG. Off-Ramp	SR-87 DIAG. Off-Ramp	0.31	41	22	E	F	46.8	65.2	1930	6	6.50	195	
105N0413 5 105- 04134	US 101	SB	SR-87 DIAG. Off-Ramp	Airport Pkwy DIAG. Off-Ramp	0.14	32	11	E	F	55.1	82.1	1742	886	6.50		
105N0413 4 105- 04133	US 101	SB	1st St	4th St DIAG. On-Ramp	0.37	12	7	F	F	79.9	89.2	961	642	2.25		
105N0413 3 105- 04132	US 101	SB	1st St	4th St DIAG. On-Ramp	0.38	8	8	F	F	86.6	88.5	730	665	4.00		
105N0413 2 105- 04131	US 101	SB	4th St DIAG. On-Ramp	4th St DIAG. On-Ramp	0.26	9	8	F	F	86.3	87.6	742	695	4.75		
105N0413 1 105- 04130	US 101	SB	4th St DIAG. On-Ramp	I-880 DIAG. Off-Ramp	0.12	9	9	F	F	86.4	86.4	736	736	4.75	101	
105N0413 0 105- 04129	US 101	SB	I-880 DIAG. Off-Ramp	I-880 DIAG. On-Ramp	0.49	9	13	F	F	85.5	78.4	767	1	5.25		
105N0413 - 04128	US 101	SB	I-880 DIAG. On-Ramp	Oakland Rd DIAG. Off-Ramp	0.10	13	10	F	F	77.5	82.9	1041	857	5.50	132	
105N0413 - 04127	US 101	SB	Oakland Rd DIAG. Off-Ramp	Oakland Rd DIAG. On-Ramp	0.42	17	19	F	F	72.1	68.9	1222	6	5.50	174	
105N0413 - 04126	US 101	SB	Oakland Rd DIAG. On-Ramp	McKee Rd DIAG. Off-Ramp	1.21	30	32	E	E	56.4	55.0	1708	4	164		
105N0413 - 04125	US 101	SB	McKee Rd DIAG. Off-Ramp	Alum Rock Ave DIAG. Off-Ramp	0.59	30	28	F	F	58.0	58.4	1725	9	0.75	177	
105N0413 - 04124	US 101	SB	McKee Rd DIAG. Off-Ramp	Santa Clara St DIAG. On-Ramp	0.10	28	33	F	E	58.6	54.0	1646	1	1.25		
105N0413 - 04123	US 101	SB	McKee Rd DIAG. On-Ramp	Alum Rock Ave DIAG. Off-Ramp	0.24	30	29	F	F	58.0	58.0	1727	5	0.50	167	
105N0413 - 04122	US 101	SB	Alum Rock Ave DIAG. Off-Ramp	I-680 DIAG. Off-Ramp	0.22	37	32	E	E	49.9	54.3	1869	4	176		
105N0413 - 04121	US 101	SB	I-680 DIAG. Off-Ramp	I-680 DIAG. On-Ramp	1.36	45	31	D	E	44.1	55.2	1969	9	197		
105N0412 8 105- 04120	US 101	SB	Tully Rd DIAG. Off-Ramp	Tully Rd DIAG. On-Ramp	0.47	57	45	D	D	33.2	43.7	1898	3	185		
105N0412 7 105- 04119	US 101	SB	Tully Rd DIAG. On-Ramp	Capitol Expy DIAG. Off-Ramp	0.81	61	59	D	D	27.7	31.6	1699	2	166		
105N0412 6 105- 04118	US 101	SB	Capitol Expy DIAG. Off-Ramp	Yerba Buena Rd DIAG. Off-Ramp	0.74	63	62	C	D	23.6	27.0	1497	6	165		
105N0412 5 105- 04117	US 101	SB	Yerba Buena Rd DIAG. Off-Ramp	Yerba Buena Rd	0.26	62	62	C	D	25.6	26.7	1597	1	165		
105N0412 4 105- 04116	US 101	SB	Yerba Buena Rd	Yerba Buena Rd DIAG. On-Ramp	0.26	61	62	D	D	27.7	26.8	1699	6	165		

PM Freeway Speed, LOS, Estimated Density, Estimated Flow, and Duration of Congestion by Segment											2017 AM Results (INRIX Data)							
TMC	Facility	Dir	From			To	Miles	Speed (mi/hr)		LOS		Density (pc/mi/in)		Flow (pc/hr/in)		Congestion (hr)		
			Mixed	HOV	Mixed			Mixed	HOV	Mixed	HOV	Mixed	HOV	Mixed	HOV			
105-04125	US 101	SB	Yerba Buena Rd DIAG. On-Ramp			Hellyer Ave L. On-Ramp	0.60	61	61	D	D	28.1	28.3	1715	3	172		
105N0412	5	US 101	SB	Hellyer Ave L. On-Ramp		Hellyer Ave DIAG. Off-Ramp(NB)	0.28	65	65	C	C	18.9	18.7	1230	5	121		
105-04124	US 101	SB	Hellyer Ave DIAG. Off-Ramp(NB)			Blossom Hill Rd DIAG. Off-Ramp	1.24	55	61	D	D	35.1	27.8	1944	3	170		
105N0412	4	US 101	SB	Blossom Hill Rd DIAG. Off-Ramp		Blossom Hill Rd DIAG. On-Ramp	0.65	66	66	B	B	14.9	15.5	984	3	102		
105-04123	US 101	SB	Blossom Hill Rd DIAG. On-Ramp			Silicon Valley Blvd DIAG. Off-Ramp	1.03	66	67	B	A	12.5	<8.9	830	598			
105N0412	3	US 101	SB	Silicon Valley Blvd DIAG. Off-Ramp		Silicon Valley Blvd DIAG. On-Ramp	0.31	66	68	B	A	14.5	<8.9	955	602			
105-04122	US 101	SB	Silicon Valley Blvd DIAG. On-Ramp			Silicon Valley Blvd DIAG. Off-Ramp	0.18	65	69	C	A	19.1	<8.9	1238	617			
105N0412	2	US 101	SB	Silicon Valley Blvd DIAG. Off-Ramp		SR-85 DIAG. On-Ramp	0.20	65	69	C	A	19.4	<8.9	1255	611			
105-09288	US 101	SB	SR-85 DIAG. On-Ramp			Bailey Ave DIAG. Off-Ramp	2.93	40	68	E	A	48.0	<8.9	1908	609	609		
105N0928	8	US 101	SB	Bailey Ave DIAG. Off-Ramp		Bailey Ave DIAG. On-Ramp	0.52	39	33	E	E	48.5	54.1	1900	9	176		
105-04121	US 101	SB	Bailey Ave DIAG. On-Ramp			Coyote Creek Golf Dr DIAG. Off-Ramp	1.59	22	32	F	E	65.2	55.0	1444	4	174		
105N0412	1	US 101	SB	Coyote Creek Golf Dr DIAG. Off-Ramp		Coyote Creek Golf Dr DIAG. On-Ramp	0.62	20	27	F	F	68.1	59.4	1353	1	2.25		
105-04120	US 101	SB	Coyote Creek Golf Dr DIAG. On-Ramp			Cochrane Rd DIAG. Off-Ramp	2.69	19	24	F	F	68.8	62.8	1329	8	3.00		
105N0412	0	US 101	SB	Cochrane Rd DIAG. Off-Ramp		Cochrane Rd DIAG. On-Ramp	0.77	23		F		64.5		1467		2.75		
105-04119	US 101	SB	Cochrane Rd DIAG. On-Ramp			Dunne Ave DIAG. Off-Ramp	1.20	38		E		49.3		1883				
105N0411	9	US 101	SB	Dunne Ave DIAG. Off-Ramp		Dunne Ave DIAG. On-Ramp	0.49	39		E		48.3		1904				
105-04118	US 101	SB	Dunne Ave DIAG. On-Ramp			Tenant Ave DIAG. Off-Ramp	0.39	36		E		51.3		1838				
105N0411	8	US 101	SB	Tenant Ave DIAG. Off-Ramp		Tenant Ave DIAG. On-Ramp	0.55	34		E		53.0		1797				
105-04117	US 101	SB	Tenant Ave DIAG. On-Ramp			San Martin Ave DIAG. Off-Ramp	2.15	44		D		44.9		1959				
105N0411	7	US 101	SB	San Martin Ave DIAG. Off-Ramp		San Martin Ave DIAG. On-Ramp	0.48	52		D		37.7		1981				
105-04116	US 101	SB	San Martin Ave DIAG. On-Ramp			Masten Ave DIAG. Off-Ramp	1.63	55		D		35.7		1954				
105N0411	6	US 101	SB	Masten Ave DIAG. Off-Ramp		Masten Ave DIAG. On-Ramp	0.56	64		C		20.9		1344				
105-04115	US 101	SB	Masten Ave DIAG. On-Ramp			Leavesley Rd DIAG. Off-Ramp	2.18	65		C		19.4		1259				
105N0411	5	US 101	SB	Leavesley Rd DIAG. Off-Ramp		Leavesley Rd DIAG. On-Ramp	0.65	63		C		24.0		1516				

PM Freeway Speed, LOS, Estimated Density, Estimated Flow, and Duration of Congestion by Segment											2017 AM Results (INRIX Data)					
TMC	Facility	Dir	From	To	Miles	Speed (mi/hr)		LOS		Density (pc/mi/ln)		Flow (pc/hr/ln)		Congestion (hr)		
						Mixed	HOV	Mixed	HOV	Mixed	HOV	Mixed	HOV	Mixed	HOV	
105-04114 105N0411	US 101	SB	Leavesley Rd DIAG. On-Ramp	10th St DIAG. Off-Ramp	0.86	63		C		23.7		1500				
4 105-04113 105N0411	US 101	SB	10th St DIAG. Off-Ramp	10th St DIAG. On-Ramp	0.56	65		C		19.9		1286				
3 105-09872 105-09871 105N0987	US 101	SB	10th St DIAG. On-Ramp	Monterey Rd DIAG. Off-Ramp	0.58	56		D		34.3		1927				
Monterey Rd DIAG. Off-Ramp	Monterey Rd DIAG. On-Ramp	0.50	18	F		70.0		1292					1.50			
Castro Valley Rd	Castro Valley Rd	1.04	24	F		63.4		1499					2.00			
SR-25 DIAG. Off-Ramp	SR-25 DIAG. On-Ramp	0.34	27	F		59.5		1620					0.50			
SR-25 DIAG. Off-Ramp	SR-25 DIAG. On-Ramp	0.40	49	D		40.3		1992								
SR-25 DIAG. On-Ramp	Beatable Rd DIAG. Off-Ramp	3.60	63	C		24.6		1548								
105P0430 4 105P0430 5 105P0430 6 105+0430 7 105P0430 7 105+0430 8 105P0430 8 105+0430 9 105P0430 9 105P0431 1 105+0431 2 105P0431 2 105+0431 3 105P0431 3 105+0431 4 105P0431 5	SR 85	NB	US-101 DIAG. Off-Ramp	Bernal Rd L. On-Ramp	0.70	63	67	C	A	24.7	<8.9	1550	598			
			Bernal Rd. L. On-Ramp	Bernal Rd. DIAG. On-Ramp	0.32	65	70	C	A	19.5	<8.9	1265	622			
			US-101 DIAG. On-Ramp	Great Oaks Blvd DIAG. On-Ramp	0.35	67	71	A	A	<8.9	<8.9	597	636			
			Great Oaks Blvd DIAG. On-Ramp	Cottle Rd DIAG. Off-Ramp	0.80	60	68	D	A	30.1	<8.9	1799	608			
			Cottle Rd DIAG. Off-Ramp	Cottle Rd DIAG. On-Ramp	0.58	42	51	D	D	46.0	38.8	1943	198			
			Cottle Rd DIAG. On-Ramp	Blossom Hill Rd DIAG. Off-Ramp	1.29	53	63	D	C	37.5	25.4	1978	159			
			Blossom Hill Rd DIAG. Off-Ramp	Blossom Hill Rd DIAG. On-Ramp	0.62	64	66	C	B	22.4	15.4	1428	101			
			Blossom Hill Rd DIAG. On-Ramp	SR-87 DIAG. Off-Ramp	0.53	63	69	C	A	24.0	<8.9	1514	1			
			SR-87 DIAG. Off-Ramp	SR-87 DIAG. On-Ramp	0.78	63	67	C	A	24.2	9.7	1527	611			
			SR-87 DIAG. On-Ramp	Almaden Expwy DIAG. Off-Ramp	0.53	63	67	C	A	24.5	<8.9	1545	646			
			Almaden Expwy DIAG. Off-Ramp	Almaden Expwy DIAG. On-Ramp	0.53	63	67	C	A	24.5	<8.9	1545	600			
			Almaden Expwy DIAG. On-Ramp	Camden Ave DIAG. Off-Ramp	1.46	62	69	D	A	26.7	<8.9	1652	612			
			Camden Ave DIAG. Off-Ramp	Camden Ave DIAG. On-Ramp	0.43	65	67	C	A	20.0	<8.9	1294	599			
			Camden Ave DIAG. On-Ramp	Union Ave DIAG. Off-Ramp	0.79	66	70	B	A	15.5	<8.9	1022	619			
			Union Ave DIAG. Off-Ramp	Union Ave DIAG. On-Ramp	0.42	65	70	C	A	19.9	<8.9	1289	619			
			Union Ave DIAG. On-Ramp	S. Bascom Ave DIAG. Off-Ramp	0.48	63	69	C	A	24.5	<8.9	1544	617			
			S. Bascom Ave DIAG. Off Ramp	Winchester Blvd DIAG. On-Ramp	1.18	67	69	A	A	10.2	<8.9	680	618			

PM Freeway Speed, LOS, Estimated Density, Estimated Flow, and Duration of Congestion by Segment											2017 AM Results (INRIX Data)					
TMC	Facility	Dir	From	To	Miles	Speed (mi/hr)		LOS		Density (pc/mi/in)		Flow (pc/hr/in)		Congestion (hr)		
						Mixed	HOV	Mixed	HOV	Mixed	HOV	Mixed	HOV	Mixed	HOV	
105P0431 6	SR 85	NB	S. Bascom Ave DIAG. On-Ramp	Winchester Blvd DIAG. On-Ramp	0.28	66	70	B	A	12.6	<8.9	837	619			
105+0431 7	SR 85	NB	Winchester Blvd DIAG. On-Ramp	Saratoga Ave DIAG. Off-Ramp	2.12	54	68	D	A	36.2	<8.9	1962	601			
105P0431 7	SR 85	NB	Saratoga Ave DIAG. Off-Ramp	Saratoga Ave DIAG. On-Ramp	0.62	65	68	C	A	19.3	<8.9	1252	606			
105+0431 8	SR 85	NB	Saratoga Ave DIAG. On-Ramp	S De Anza Blvd DIAG. Off-Ramp	1.39	67	70	A	A	<8.9	<8.9	600	621			
105P0431 8	SR 85	NB	S De Anza Blvd DIAG. Off-Ramp	S De Anza Blvd DIAG. On-Ramp	0.75	65	69	C	A	18.8	<8.9	1223	617			
105+0431 9	SR 85	NB	S De Anza Blvd DIAG. On-Ramp	Stevens Creek Blvd DIAG. Off-Ramp	1.28	65	69	C	A	18.8	<8.9	1224	612			
105P0431 9	SR 85	NB	Stevens Creek Blvd DIAG. Off-Ramp	Stevens Creek Blvd DIAG. On-Ramp	0.48	67	69	A	A	9.1	<8.9	612	615			
105+0432 0	SR 85	NB	Stevens Creek Blvd DIAG. On-Ramp	I-280 DIAG. Off-Ramp	0.21	67	69	A	A	<8.9	<8.9	599	613			
105+0432 1	SR 85	NB	I-280 DIAG. Off-Ramp	Homestead Rd	0.73	67	69	A	A	10.1	<8.9	673	613			
105+0432 2	SR 85	NB	Homestead Rd On-Ramp	Freemont Ave Off-Ramp	0.75	50	68	D	A	39.9	<8.9	1992	608			
105P0432 2	SR 85	NB	Freemont Ave Off-Ramp	Freemont Ave On-Ramp	0.42	54	69	D	A	36.1	<8.9	1960	610			
105+0432 3	SR 85	NB	Freemont Ave On-Ramp	El Camino Real Off-Ramp	1.45	65	68	C	A	18.7	<8.9	1213	607			
105P0432 3	SR 85	NB	El Camino Real Off-Ramp	El Camino Real On-Ramp	0.37	61	68	D	A	27.9	<8.9	1706	607			
105P0432 4	SR 85	NB	SR-237 Off-Ramp	SR-237	0.26	63	67	C	A	23.4	<8.9	1485	598			
105+0432 5	SR 85	NB	SR-237	Central Expy Off-Ramp	0.14	63	67	C	A	23.3	<8.9	1477	600			
105P0432 5	SR 85	NB	Central Expy Off-Ramp	E Evelyn Ave	0.31	63	67	C	A	23.4	9.1	1482	608			
105P0432 6	SR 85	NB	Central Expy	Central Expy On-Ramp	0.41	66	68	B	A	13.4	<8.9	886	603			
105+0432 7	SR 85	NB	Central Expy On-Ramp	Middlefield Rd Off-Ramp	0.15	64	69	C	A	22.3	<8.9	1425	615	101		
105P0432 7	SR 85	NB	Middlefield Rd Off-Ramp	Moffett Blvd	0.25	65	66	C	B	20.2	15.4	1305	7	123		
105+0432 8	SR 85	NB	Moffett Blvd	US-101 Off-Ramp	0.18	63	65	C	C	25.3	19.0	1585	1	194		
105P0432 8	SR 85	NB	US-101 Off-Ramp	N Shoreline Blvd Off-Ramp	0.50	43	55	D	D	45.6	35.2	1950	5			
105N0432 8	SR 85	SB	N Shoreline Blvd DIAG. On-Ramp	Moffett Blvd L. Off-Ramp	0.75	22	38	F	E	65.5	49.3	1434	4	188	0.50	
105-04326	SR 85	SB	Moffett Blvd L. Off-Ramp	Central Expy DIAG. Off-Ramp	0.47	14	20	F	F	76.5	67.8	1075	3	136		
105N0432 6	SR 85	SB	Central Expy DIAG. Off-Ramp	Central Expy DIAG. On-Ramp	0.26	17	22	F	F	72.4	65.8	1211	6	142	1.75	

PM Freeway Speed, LOS, Estimated Density, Estimated Flow, and Duration of Congestion by Segment												2017 AM Results (INRIX Data)							
TMC	Facility	Dir	From			To	Miles	Speed (mi/hr)		LOS		Density (pc/mi/in)		Flow (pc/hr/in)		Congestion (hr)			
			Mixed	HOV	Mixed	HOV	Mixed	HOV	Mixed	HOV	Mixed	HOV	Mixed	HOV	Mixed	HOV			
105N0432	5	SR 85	SB	Evelyn Ave DIAG. Off-Ramp		Evelyn Ave DIAG. On-Ramp	0.24	16	31	F	E	73.0	55.9	1193	1	172	2.00		
105N0432	4	SR 85	SB	SR-237 DIAG. Off-Ramp		SR-237 L. On-Ramp	0.27	17	27	F	F	71.8	59.5	1231	8	161			
105-	04323	SR 85	SB	SR-237 L. On-Ramp		El Camino Real L. On-Ramp	0.34	21	20	F	F	66.1	68.3	1415	6	134	3.00		
105N0432	3	SR 85	SB	El Camino Real L. On-Ramp		El Camino Real DIAG. On-Ramp	0.22	24	31	F	E	62.9	55.4	1515	5	173	2.25		
105-	04322	SR 85	SB	El Camino Real DIAG. On-Ramp		Freemont Ave DIAG. Off-Ramp	1.46	30	32	E	E	56.6	54.4	1702	0	176			
105N0432	2	SR 85	SB	Freemont Ave DIAG. Off-Ramp		Freemont Ave DIAG. On-Ramp	0.42	28	34	F	E	58.6	53.3	1646	1	195	0.75		
105-	04321	SR 85	SB	Freemont Ave DIAG. On-Ramp		Homestead Rd DIAG. Off-Ramp	0.52	40	43	E	D	47.7	45.1	1915	6	196			
105N0432	1	SR 85	SB	Homestead Rd DIAG. Off-Ramp		Homestead Rd DIAG. On-Ramp	0.30	38	54	E	D	49.4	36.1	1881	0	196			
105-	04320	SR 85	SB	Homestead Rd DIAG. On-Ramp		I-280 DIAG. Off-Ramp	0.73	10	11	F	F	83.6	81.2	834	917	3.25			
105-	04319	SR 85	SB	I-280 DIAG. Off-Ramp		I-280 DIAG. On-Ramp	0.20	9	5	F	F	85.0	94.7	785	450	4.25			
105N0431	9	SR 85	SB	Stevens Creek Blvd DIAG. Off-Ramp		Stevens Creek Blvd DIAG. On-Ramp	0.52	8	7	F	F	86.8	90.3	722	602	104	5.00		
105-	04318	SR 85	SB	Stevens Creek Blvd DIAG. On-Ramp		S De Anza Blvd DIAG. Off-Ramp	1.29	12	13	F	F	79.6	77.4	972	5	116	5.00		
105N0431	8	SR 85	SB	S De Anza Blvd DIAG. Off-Ramp		S De Anza Blvd DIAG. On-Ramp	0.54	15	16	F	F	75.7	73.8	1102	7	147	4.50		
105-	04317	SR 85	SB	S De Anza Blvd DIAG. On-Ramp		Saratoga Ave DIAG. Off-Ramp	1.58	18	23	F	F	70.1	64.2	1286	5	157	4.50		
105N0431	7	SR 85	SB	Saratoga Ave DIAG. Off-Ramp		Saratoga Ave DIAG. On-Ramp	0.54	20	26	F	F	67.9	61.0	1360	4	168	5.50		
105-	04316	SR 85	SB	Saratoga Ave DIAG. On-Ramp		Winchester Blvd DIAG. Off-Ramp	2.19	25	29	F	F	62.1	58.0	1541	4	127	1.00		
105N0431	6	SR 85	SB	Winchester Blvd DIAG. Off-Ramp		Winchester Blvd DIAG. On-Ramp	0.28	25	18	F	F	61.4	70.5	1562	3	110	1.75		
105N0431	5	SR 85	SB	SR-17 DIAG. Off-Ramp		SR-17 DIAG. On-Ramp	0.90	13	15	F	F	77.6	75.7	1037	3	135	3.25		
105-	04313	SR 85	SB	S Bascom Ave DIAG. On-Ramp		Union Ave DIAG. Off-Ramp	0.35	18	20	F	F	71.3	68.0	1249	7	163	5.50		
105N0431	3	SR 85	SB	Union Ave DIAG. Off-Ramp		Union Ave DIAG. On-Ramp	0.62	27	28	F	F	60.1	59.1	1602	2	189			
105-	04312	SR 85	SB	Union Ave DIAG. On-Ramp		Camden DIAG. Off-Ramp	0.80	34	39	E	E	52.9	48.5	1800	9	180			
105N0431	2	SR 85	SB	Camden DIAG. Off-Ramp		Camden DIAG. On-Ramp	0.31	31	34	E	E	56.1	52.5	1715	9	198			
105-	04311	SR 85	SB	Camden DIAG. On-Ramp		Almaden Expy DIAG. Off-Ramp	1.43	45	48	D	D	44.0	41.8	1970	8	183			
105N0431	1	SR 85	SB	Almaden Expy DIAG. Off-Ramp		Almaden Expy DIAG. On-Ramp	0.44	60	59	D	D	29.2	31.0	1764	2	183			

PM Freeway Speed, LOS, Estimated Density, Estimated Flow, and Duration of Congestion by Segment											2017 AM Results (INRIX Data)					
TMC	Facility	Dir	From	To	Miles	Speed (mi/hr)		LOS		Density (pc/mi/in)		Flow (pc/hr/in)		Congestion (hr)		
						Mixed	HOV	Mixed	HOV	Mixed	HOV	Mixed	HOV			
105-04310	SR 85	SB	Almaden Expy DIAG. On-Ramp	SR-87 DIAG. Off-Ramp	0.50	59	64	D	C	30.5	22.5	1814	7	143		
105N04310	0	SR 85	SB	SR-87 DIAG. Off-Ramp	SR-87 DIAG. On-Ramp	0.52	47	57	D	D	42.5	32.9	1984	1	189	
105-04308	SR 85	SB	SR-87 DIAG. On-Ramp	Blossom Hill Rd DIAG. Off-Ramp	0.44	35	40	E	E	51.9	48.2	1824	6	190		
105N04308	8	SR 85	SB	Blossom Hill Rd DIAG. Off-Ramp	Blossom Hill Rd DIAG. On-Ramp	0.64	58	54	D	D	32.8	36.0	1887	9	195	
105-04307	SR 85	SB	Blossom Hill Rd DIAG. On-Ramp	Cottle Rd DIAG. Off-Ramp	1.35	61	63	D	C	28.0	24.6	1712	6	154		
105N04307	7	SR 85	SB	Cottle Rd DIAG. Off-Ramp	Cottle Rd DIAG. On-Ramp	0.69	67	65	A	C	10.2	20.0	683	2	129	
105-04306	SR 85	SB	Cottle Rd DIAG. On-Ramp	Great Oaks Blvd DIAG. Off-Ramp	0.72	65	66	B	B	17.7	16.1	1156	5	105		
105N04306	6	SR 85	SB	Great Oaks Blvd DIAG. Off-Ramp	Great Oaks Blvd DIAG. On-Ramp	0.34	63	64	C	C	23.5	22.5	1491	4	143	
105N04305	5	SR 85	SB	US-101 DIAG. Off-Ramp	US-101 DIAG. On-Ramp	0.59	63	61	C	D	24.0	28.0	1514	3	171	