

FINAL REPORT

STANFORD UNIVERSITY  
TRAFFIC MONITORING REPORT  
2009

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Prepared for:

**Santa Clara County  
Department of Planning Development**



**November 2009**

**Prepared by:**



**2025 Gateway Place, Suite 190  
San Jose, CA 95110  
(408) 490-2001-Phone  
(408) 490-2002-Fax**

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## **FOREWORD FROM THE COUNTY OF SANTA CLARA PLANNING OFFICE**

### **Background**

The purpose of this report is to compare traffic volumes entering and exiting the Stanford campus during the inbound AM peak hour and the outbound PM commute peak hour to a traffic baseline. This comparison is performed on an annual basis. The requirements for establishment of the traffic baseline and performing annual comparisons to the baseline are contained within the December 2000 Stanford Community Plan/General Use Permit (GUP)/Environmental Impact Report (EIR) and within the 2000 Stanford General Use Permit. These documents can be reviewed at the County website or at the County Planning Office. Essentially, Stanford is required to attain a “no net new commute trip” standard as defined in the GUP and EIR.

### **The Process**

Following the adoption of the GUP by the County Board of Supervisors in December 2000, the County Planning Office selected AECOM to conduct the monitoring process outlined in the conditions of approval. Because of the type of data to be collected (particularly license plate numbers), the data could not be collected until after the start of daylight savings time in Spring 2001. The data collection involved three, 2-week periods in the Spring and one, 2-week period in the Fall 2001.

Condition of Approval G.7 outlines the process for establishing the baseline counts and for continuing monitoring in subsequent years. The process can be summarized as follows:

- Peak hour traffic is counted at least three times per year for a two-week period each time. The three counts shall be averaged to determine the annual traffic level.
- All counts are recorded at the 16 campus entry and exit points forming a cordon around the campus.
- License plate numbers are recorded for each entering and exiting vehicle to determine the amount of non-campus traffic.
- Cordon volumes are adjusted for parking lots within the cordon used by the hospital (these volumes are subtracted from the cordon line counts) and parking lots outside the cordon used by the University (these volumes are added to the cordon line counts).
- A peak hour is then established for the campus based on the counts, adjusted for cut through and parking lot location.

Condition of Approval G.6 defines the peak commute directions as entering the campus in the morning peak commute period and leaving the campus in the evening commute period. The peak commute period is defined as the one-hour period of time between 7 AM and 9 AM and



again between 4 PM and 6 PM with the highest volume of traffic, as defined by the counts. Therefore, the two peak hours are considered to be independent events. For example, an increase in AM peak traffic for two out of three years would trigger the additional elements of the monitoring program without a change, or even a decrease, in PM peak traffic, or the reverse. Also, a significant increase during one year in the AM and a sufficient increase in the PM for the following year would not trigger additional mitigation.

## Activities Related to Traffic Baseline and Annual Monitoring Counts to Date

### ***Stanford University Traffic Monitoring Report -- 2001 GUP Baseline***

The 2001 Baseline Report was originally issued on July 3, 2002. An update to that report was issued on October 15, 2003. Per the provisions of the GUP, this original Traffic Baseline Report established the standard for measuring future traffic impacts to the “no net new commute” standard.

The following were the count dates of the 2001 Baseline Report:

- Week of April 2, 2001
- Week of April 9, 2001
- Week of April 23, 2001
- Week of April 30, 2001
- Week of May 7, 2001
- Week of May 14, 2001
- Week of October 22, 2001
- Week of October 29, 2001

The following were the results of the 2001 Baseline Monitoring:

#### Inbound AM:

Average count	3,319
90% confidence interval	+/- 120
significant traffic increase	3,439
1% increase trigger	3,474

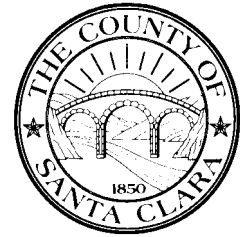
#### Outbound PM:

Average	3,446
90% confidence interval	+/- 109
significant traffic increase	3,555
1% trigger	3,591

### ***Stanford University Traffic Monitoring Report – 2002 Monitoring Report***

The 2002 Monitoring Report was originally issued in July 2003. The count dates for the 2002 Monitoring Report were as follows:

- Week of April 15, 2002
- Week of April 22, 2002
- Week of April 29, 2002
- Week of May 6, 2002
- Week of May 13, 2002
- Week of May 20, 2002
- Week of October 14, 2002
- Week of October 21, 2002



The 2002 Monitoring Report concluded that the adjusted AM inbound count totaled 3,390 vehicles. This represented an increase of 71 vehicles, which fell within the 90% confidence interval and did not represent a significant AM inbound traffic increase. The PM outbound count totaled 3,678 vehicles which was an increase of 232 vehicles from the baseline, which was higher than the 90% confidence interval. This count exceeded the 1% trigger of 3,591 vehicles by 87. The following is a summary of the results of the 2002 Monitoring Report as contained in the July 2003 document.

Inbound AM:

Adjusted average 2002 count	3,390
Baseline-established 90% confidence interval (2001)	+/- 120
Baseline-established significant traffic increase (2001)	3,439
Baseline-established 1% increase trigger (2001)	3,474
Result (falls below the 1% trigger by 84)	-84

Outbound PM:

Adjusted average 2002 count	3,678
Baseline-established 90% confidence interval (2001)	+/- 109
Baseline-established significant traffic increase (2001)	3,555
Baseline-established 1% increase trigger (2001)	3,591
Result (232 increase in vehicles exceeds the trigger by 87 vehicles)	+87

Adjustment 1 to 2002 Monitoring Report

An update to the original 2002 Monitoring Report was issued on October 15, 2003. Following the publication of the July 2003 report, Stanford and the County separately analyzed traffic data for the Stanford Homecoming Week. Based on consultation with Stanford and independent analysis of County consultant traffic data, the County determined that data collected for the week of Homecoming should not be included in the comparison data set. The rationale for this decision was that this event (Homecoming) had been ongoing for years, was not included in the baseline count, and would continue to be an annual event. The County communicated to Stanford that other future "large events" would not be excluded from future counts. The revised report substituted the week of October 28, 2002 for the previously counted week of October 14, 2002. The following are the results of the Revised 2002 Monitoring Report.

Inbound AM:

Adjusted average 2002 count	3,287
Baseline-established 90% confidence interval (2001)	+/- 120
Baseline-established significant traffic increase (2001)	3,439
Baseline-established 1% increase trigger (2001)	3,474
Result (falls below the 1% trigger by 187)	-187



Outbound PM:

Adjusted average 2002 count	3,598
Baseline-established 90% confidence interval (2001)	+/- 109
Baseline-established significant traffic increase (2001)	3,555
Baseline-established 1% increase trigger (2001)	3,591
Result (152 increase in vehicles exceeds the trigger by 7 vehicles)	+7

Adjustment 2 to the 2002 Monitoring Report

Subsequent to the first adjustment to the 2002 Monitoring Report, Stanford informed the County that additional Marguerite shuttle runs had been introduced to campus since the completion of the baseline count, and thus counted in the Year 1 (2002) comparison counts. This resulted in an increase of 12 vehicles in each peak hour. County staff determined that these new bus lines should be subtracted from the comparison count. This provided an end result as follows:

Inbound AM:

Adjusted average 2002 count	3,275
Baseline-established 90% confidence interval (2001)	+/- 120
Baseline-established significant traffic increase (2001)	3,439
Baseline-established 1% increase trigger (2001)	3,474
Result (falls below the 1% trigger by 199)	-199

Outbound PM:

Adjusted average 2002 count	3,586
Baseline-established 90% confidence interval (2001)	+/- 109
Baseline-established significant traffic increase (2001)	3,555
Baseline-established 1% increase trigger (2001)	3,591
Result (falls below the 1% trigger by 5 vehicles)	-5

**Stanford University Traffic Monitoring Report – 2003 Monitoring Report**

This report represents the 2003 Monitoring Report. The count dates for the 2003 Monitoring Report were as follows:

- Week of April 7, 2003
- Week of April 21, 2003
- Week of April 28, 2003
- Week of May 5, 2003
- Week of May 12, 2003
- Week of May 19, 2003
- Week of September 29, 2003
- Week of October 20, 2003

The 2003 Monitoring Report concluded that the adjusted AM inbound count totaled 3,413 vehicles. This represented an increase of 94 vehicles, which fell within the 90% confidence interval and did not represent a significant AM inbound traffic increase. The PM outbound count totaled 3,476 vehicles which was an increase of 30 vehicles from the baseline, which also fell





within the 90% confidence interval. The following is a summary of the results of the 2003 Monitoring Report.

Inbound AM:

Adjusted average 2003 count	3,413
Baseline-established 90% confidence interval (2001)	+/- 120
Baseline-established significant traffic increase (2001)	3,439
Baseline-established 1% increase trigger (2001)	3,474
Result (falls below the 90% confidence interval by 26)	-26
Result (falls below the 1% trigger by 61 vehicles)	-61

Outbound PM:

Adjusted average 2003 count	3,476
Baseline-established 90% confidence interval (2001)	+/- 109
Baseline-established significant traffic increase (2001)	3,555
Baseline-established 1% increase trigger (2001)	3,591
Result (falls below the 90% confidence interval by 79 vehicles)	-79
Result (falls below the 1% trigger by 115 vehicles)	-115

***Stanford University Traffic Monitoring Report – 2004 Monitoring Report***

This report represents the 2004 Monitoring Report. The count dates for the 2004 Monitoring Report were as follows:

- Week of April 12, 2004
- Week of April 19, 2004
- Week of April 26, 2004
- Week of May 3, 2004
- Week of May 10, 2004
- Week of May 17, 2004
- Week of September 27, 2004
- Week of October 4, 2004

The 2004 Monitoring Report concluded that the adjusted AM inbound count totaled 3,176 vehicles. This represented a decrease of 143 vehicles, which fell within the 90% confidence interval and did not represent a significant AM inbound traffic increase. The PM outbound count totaled 3,642 vehicles which was an increase of 196 vehicles from the baseline, which is 87 vehicles above 90% confidence interval and 51 vehicles more than the 1% established trigger. The following is a summary of the results of the initial 2004 Monitoring Report.

Inbound AM:

Adjusted average 2004 count	3,176
Baseline-established 90% confidence interval (2001)	+/- 120
Baseline-established significant traffic increase (2001)	3,439
Baseline-established 1% increase trigger (2001)	3,474
Result (falls below the 90% confidence interval by 263)	-263
Result (falls below the 1% trigger by 298 vehicles)	-298



Outbound PM:

Adjusted average 2004 count	3,642
Baseline-established 90% confidence interval (2001)	+/- 109
Baseline-established significant traffic increase (2001)	3,555
Baseline-established 1% increase trigger (2001)	3,591
Result (falls above the 90% confidence interval by 87 vehicles)	+87
Result (falls above the 1% trigger by 51 vehicles)	+51

Outbound PM:

Adjusted average 2004 count	3,642
Baseline-established 90% confidence interval (2001)	+/- 109
Baseline-established significant traffic increase (2001)	3,555
Baseline-established 1% increase trigger (2001)	3,591
Result (falls above the 90% confidence interval by 87 vehicles)	+87
Result (falls above the 1% trigger by 51 vehicles)	+51
2004 trip credit	-66
Result with trip credit (falls below the 1% trigger by 15 vehicles)	-15

***Stanford University Traffic Monitoring Report – 2005 Monitoring Report***

This report represents the 2005 Monitoring Report. The count dates for the 2005 Monitoring Report were as follows:

- Week of April 4, 2005
- Week of April 11, 2005
- Week of April 18, 2005
- Week of April 25, 2005
- Week of May 2, 2005
- Week of May 9, 2005
- Week of September 26, 2005
- Week of October 3, 2005

The 2005 Monitoring Report concluded that the adjusted AM inbound count totaled 3,383 vehicles. This represented an increase of 64 vehicles, which fell within the 90% confidence interval and did not represent a significant AM inbound traffic increase. The PM outbound count totaled 3,735 vehicles which was an increase of 289 vehicles from the baseline, which is above the 90% confidence interval by 180 vehicles and above the 1% increase trigger by 144 vehicles. The following is a summary of the results of the 2005 Monitoring Report.

Inbound AM:

Adjusted average 2005 count	3,383
Baseline-established 90% confidence interval (2001)	+/- 120
Baseline-established significant traffic increase (2001)	3,439
Baseline-established 1% increase trigger (2001)	3,474
Result (falls below the 90% confidence interval by 56)	-56
Result (falls below the 1% trigger by 91 vehicles)	-91

Outbound PM:

Adjusted average 2005 count	3,735
Baseline-established 90% confidence interval (2001)	+/- 109



Baseline-established significant traffic increase (2001)	3,555
Baseline-established 1% increase trigger (2001)	3,591
Result (falls above the 90% confidence interval by 180 vehicles)	+180
Result (falls above the 1% trigger by 144 vehicles)	+144

The 2000 Stanford GUP Condition G.8 specifies that the County will recognize and “credit” Stanford off-campus trip reduction efforts within defined geographic boundaries. These credits will be applied to Stanford’s attainment of the “no net new commute trip” standard. In 2003, Stanford and the County discussed potential methodologies for providing credits to Stanford. The County developed draft guidelines, which were reviewed by the Community Resource Group, and the Planning Office approved the final guidelines on October 9, 2003. These guidelines are presented in the “Stanford Traffic Cordon Count Credit Guidelines” dated October 28, 2003.

On April 24, 2006, Stanford submitted a 2005 trip credit report that was reviewed by AECOM. This report documented a credit of 174 trips for the increase in the number of bus trips across the cordon points and the number of transit passengers served outside the cordon area in the PM peak hour between the 2001 baseline and 2005. Using the new Marguerite shuttle Automated Transportation Management System, the number of passengers getting on and off the shuttle at each stop was counted. Most of the trip credits claimed are for passengers (primarily Stanford Hospital employees) getting on the shuttle outside the cordon area and traveling to the Palo Alto Caltrain station. As outlined in the adopted guidelines, full credits are claimed for trips in the peak commute direction and 1/3 credit claimed for trips in the reverse direction. Pass through credits are claimed for those passengers who board outside the cordon, pass through the campus, and then alight outside the campus based on onboard surveys. As summarized below, with the trip credit of 174 trips Stanford did not exceed the no net new commute trip standard based on the 2005 monitoring program.

Outbound PM:

Adjusted average 2005 count	3,735
Baseline-established 90% confidence interval (2001)	+/- 109
Baseline-established significant traffic increase (2001)	3,555
Baseline-established 1% increase trigger (2001)	3,591
Result (falls above the 90% confidence interval by 313 vehicles)	+180
Result (falls above the 1% trigger by 277 vehicles)	+144
2005 trip credit	-174
Result with trip credit (falls below the 1 percent trigger by 30 vehicles)	-30

**Stanford University Traffic Monitoring Report – 2006 Monitoring Report**

This report represents the 2006 Monitoring Report. The count dates for the 2006 Monitoring Report were as follows:

- Week of April 17, 2006
- Week of April 24, 2006
- Week of May 15, 2006
- Week of May 22, 2006



- Week of May 1, 2006
- Week of May 8, 2006
- Week of October 16, 2006
- Week of October 23, 2006

The 2006 Monitoring Report concluded that the adjusted AM inbound count totaled 3,048 vehicles. This represented a decrease of 271 vehicles from baseline, which falls within the 90 percent confidence interval and does not represent a significant AM inbound traffic increase. The PM outbound count totaled 3,427 vehicles which was a decrease of 19 vehicles from the baseline, which is 128 vehicles below the 90 percent confidence interval and 164 vehicles below the 1 percent established trigger. The following is a summary of the results of the 2006 Monitoring Report.

Inbound AM:

Adjusted average 2006 count	3,048
Baseline-established 90% confidence interval (2001)	+/- 120
Baseline-established significant traffic increase (2001)	3,439
Baseline-established 1% increase trigger (2001)	3,474
Result (falls below the 90% confidence interval by 391 vehicles)	-391
Result (falls below the 1% increase trigger by 426 vehicles)	-426

Outbound PM:

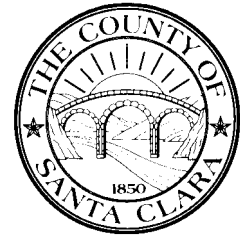
Adjusted average 2006 count	3,427
Baseline-established 90% confidence interval (2001)	+/- 109
Baseline-established significant traffic increase (2001)	3,555
Baseline-established 1% increase trigger (2001)	3,591
Result (falls below the 90% confidence interval by 128 vehicles)	-128
Result (falls below the 1% trigger by 164 vehicles)	-164

***Stanford University Traffic Monitoring Report – 2007 Monitoring Report***

This report represents the 2007 Monitoring Report. The count dates for the 2007 Monitoring Report were as follows:

- Week of April 9, 2007
- Week of April 16, 2007
- Week of April 23, 2007
- Week of April 30, 2007
- Week of May 7, 2007
- Week of May 14, 2007
- Week of October 15, 2007
- Week of October 22, 2007

The 2007 Monitoring Report concluded that the adjusted AM inbound count totaled 3,058 vehicles. This represented a decrease of 261 vehicles from baseline. The PM outbound count totaled 3,494 vehicles which is an increase of 48 vehicles from the baseline, which is 61 vehicles below the 90 percent confidence interval and 97 vehicles below the 1 percent established trigger. The following is a summary of the results of the 2007 Monitoring Report.



Inbound AM:

Adjusted average 2007 count	3,058
Baseline-established 90% confidence interval (2001)	+/- 120
Baseline-established significant traffic increase (2001)	3,439
Baseline-established 1% increase trigger (2001)	3,474
Result (falls below the 90% confidence interval by 381 vehicles)	-381
Result (falls below the 1% increase trigger by 416 vehicles)	-416

Outbound PM:

Adjusted average 2007 count	3,494
Baseline-established 90% confidence interval (2001)	+/- 109
Baseline-established significant traffic increase (2001)	3,555
Baseline-established 1% increase trigger (2001)	3,591
Result (falls below the 90% confidence interval by 61 vehicles)	-61
Result (falls below the 1% trigger by 97 vehicles)	-97

***Stanford University Traffic Monitoring Report – 2008 Monitoring Report***

This report represents the 2008 Monitoring Report. The count dates for the 2008 Monitoring Report were as follows:

- Week of April 7, 2008
- Week of April 14, 2008
- Week of April 21, 2008
- Week of April 28, 2008
- Week of May 5, 2008
- Week of May 12, 2008
- Week of October 13, 2008
- Week of October 20, 2008

The 2008 Monitoring Report concluded that the adjusted AM inbound count totaled 3,020 vehicles. This represented a decrease of 299 vehicles from baseline, which falls within the 90 percent confidence interval and does not represent a significant AM inbound traffic increase. The PM outbound count totaled 3,460 vehicles which is an increase of 14 vehicles from the baseline, which is 95 vehicles below the 90 percent confidence interval and 131 vehicles below the 1 percent established trigger. The following is a summary of the results of the 2008 Monitoring Report.

Inbound AM:

Adjusted average 2008 count	3,020
Baseline-established 90% confidence interval (2001)	+/- 120
Baseline-established significant traffic increase (2001)	3,439
Baseline-established 1% increase trigger (2001)	3,474
Result (falls below the 90% confidence interval by 419 vehicles)	-419
Result (falls below the 1% increase trigger by 454 vehicles)	-454



Outbound PM:

Adjusted average 2008 count	3,460
Baseline-established 90% confidence interval (2001)	+/- 109
Baseline-established significant traffic increase (2001)	3,555
Baseline-established 1% increase trigger (2001)	3,591
Result (falls below the 90% confidence interval by 95 vehicles)	-95
Result (falls below the 1% trigger by 131 vehicles)	-131

**Stanford University Traffic Monitoring Report – 2009 Monitoring Report**

This report represents the 2009 Monitoring Report. The count dates for the 2009 Monitoring Report were as follows:

- Week of April 13, 2009
- Week of April 20, 2009
- Week of April 27, 2009
- Week of May 4, 2009
- Week of May 11, 2009
- Week of May 18, 2009
- Week of October 5, 2009
- Week of October 12, 2009

The 2009 Monitoring Report concluded that the adjusted AM inbound count totaled 2,840 vehicles. This represented a decrease of 479 vehicles from baseline, which falls within the 90 percent confidence interval and does not represent a significant AM inbound traffic increase. The PM outbound count totaled 3,227 vehicles which is a decrease of 219 vehicles from the baseline, which is 328 vehicles below the 90 percent confidence interval and 364 vehicles below the 1 percent established trigger. The following is a summary of the results of the 2009 Monitoring Report.

Inbound AM:

Adjusted average 2009 count	2,840
Baseline-established 90% confidence interval (2001)	+/- 120
Baseline-established significant traffic increase (2001)	3,439
Baseline-established 1% increase trigger (2001)	3,474
Result (falls below the 90% confidence interval by 599 vehicles)	-599
Result (falls below the 1% increase trigger by 634 vehicles)	-634

Outbound PM:

Adjusted average 2009 count	3,227
Baseline-established 90% confidence interval (2001)	+/- 109
Baseline-established significant traffic increase (2001)	3,555
Baseline-established 1% increase trigger (2001)	3,591
Result (falls below the 90% confidence interval by 328 vehicles)	-328
Result (falls below the 1% increase trigger by 364 vehicles)	-364



# County of Santa Clara

## Environmental Resources Agency

### Planning Office

County Government Center, East Wing, 7<sup>th</sup> Floor

70 West Hedding Street, 7<sup>th</sup> Floor

San Jose, California 95110

(408) 299-5770 FAX (408) 288-9198

[www.sccplanning.org](http://www.sccplanning.org)

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### County Planning Office Project Management:

Michael Lopez: Planning Manager

Gary Rudholm: Senior Planner, Marina Rush: Planner, Project Manager: Stanford University Environmental Mitigation Monitoring and Reporting Program

### County Roads and Airports Review Team:

Masoud Akbarzadeh, PE, Traffic Engineer

Suhil Kandah, PE, Associate Civil Engineer

### AECOM

Dennis Struecker, PE, Department Manager

Dennis Belluomini, PE, Project Engineer

Syed Obaid, Project Engineer

### Stanford Coordination Contact:

Brodie Hamilton, Director, Parking and Transportation Services

### Contact Information

For further information, regarding this document or other Stanford University Community Plan and General Uses Permit policy issues, contact the County Planning Office by phone or visit our web site.

**PHONE:** (408) 299-5770

**WEB SITE:** [www.sccplanning.org](http://www.sccplanning.org)

## INTRODUCTION

This report presents the traffic and parking data that has been collected at Stanford University by AECOM during the monitoring periods of 2009. Traffic volumes were collected for six weeks during the Spring 2009 and two weeks during the Fall 2009. The spring counts were conducted for the weeks of April 13, April 20, April 27, May 4, May 11 and May 18. The Fall counts were conducted for the weeks of October 5 and October 12. The data include vehicle counts at all of the access points to the campus and parking lots. Parking lot counts and cut-through percentages were used to adjust the raw traffic counts in order to determine the total amount of peak hour traffic generated by Stanford University. The parking data were used to add in campus traffic that parks outside of the count area and subtract out hospital traffic from parking inside the count area. License plate surveys were used to calculate the amount of traffic that cuts through the campus and thus is not University-generated traffic. Data collection methodology is described in greater detail in Task 1. A description of the data analysis procedures is presented in Task 2. The data collected in calendar year 2009 is compared to the baseline counts collected in calendar year 2001. Differences between the two years are then analyzed to determine if traffic is increasing to a significant degree.

### Task 1.0 Traffic Monitoring Data Collection Methodology

Data collection is a critical component of the traffic monitoring program. The following work elements were conducted to collect all relevant traffic data for the monitoring program.

#### **Task 1.1 Machine Cordon Line Traffic Counts**

Directional traffic counts were collected at Stanford University for eight weeks in 2009 on each of the 16 roadways that provide access to and from the campus. The location of the 16 cordon counts are listed below and shown graphically in Figures 1 and 2.

1. Campus Drive West, north of Junipero Serra Boulevard
2. Stock Farm Road, east of Sand Hill Road
3. Welch Road, north of Oak Road
4. Quarry Road, north of Campus Drive West
5. Palm Drive, south of Arboretum Road
6. Lausen Street, south of Arboretum Road
7. Galvez Street, south of Arboretum Road
8. Serra Street, south of El Camino Real
9. Yale Street<sup>(1)</sup>, west of Stanford Avenue
10. Wellesley Street, west of Stanford Avenue
11. Oberlin Street<sup>(2)</sup>, west of Stanford Avenue
12. Olmsted Road, north of Escondido Road
13. Bowdoin Street, west of Stanford Avenue
14. Raimundo Way, west of Stanford Avenue
15. Santa Maria Avenue, north of Junipero Serra Boulevard
16. Campus Drive East, north of Junipero Serra Boulevard

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<sup>(1)</sup> Yale Street was closed during week 8 count period.

<sup>(2)</sup> Oberlin Street was closed during week 7 count period.



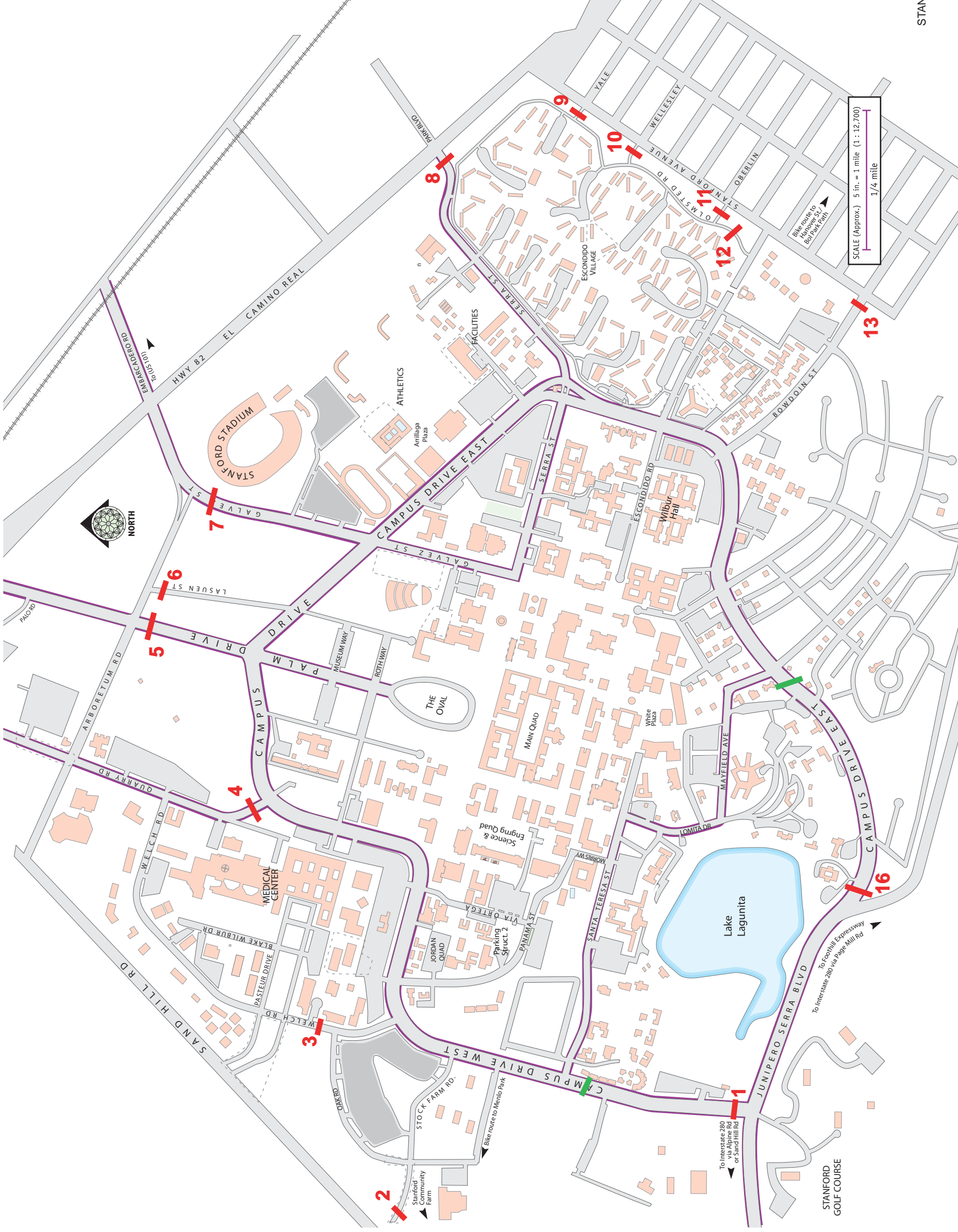
### Cordon Count Locations

1. Campus Drive West north of Junipero Serra Blvd.
2. Stock Farm Road east of Sand Hill Road
3. Welch Road north of Oak Road
4. Quarry Road north of Campus Drive
5. Palm Drive south of Arboretum Road
6. Lasuen Street south of Arboretum Road
7. Galvez Street south of Arboretum Road
8. Serra Street southwest of El Camino Real
9. Yale Street west of Stanford Avenue
10. Wellesley Street west of Stanford Avenue
11. Oberlin Street west of Stanford Avenue
12. Olmsted Road north of Escondido Road
13. Bowdoin west of Stanford Avenue
14. Raimundo west of Stanford Avenue
15. Santa Maria Avenue north of Junipero Serra Blvd.
16. Campus Drive East east of Junipero Serra Blvd.

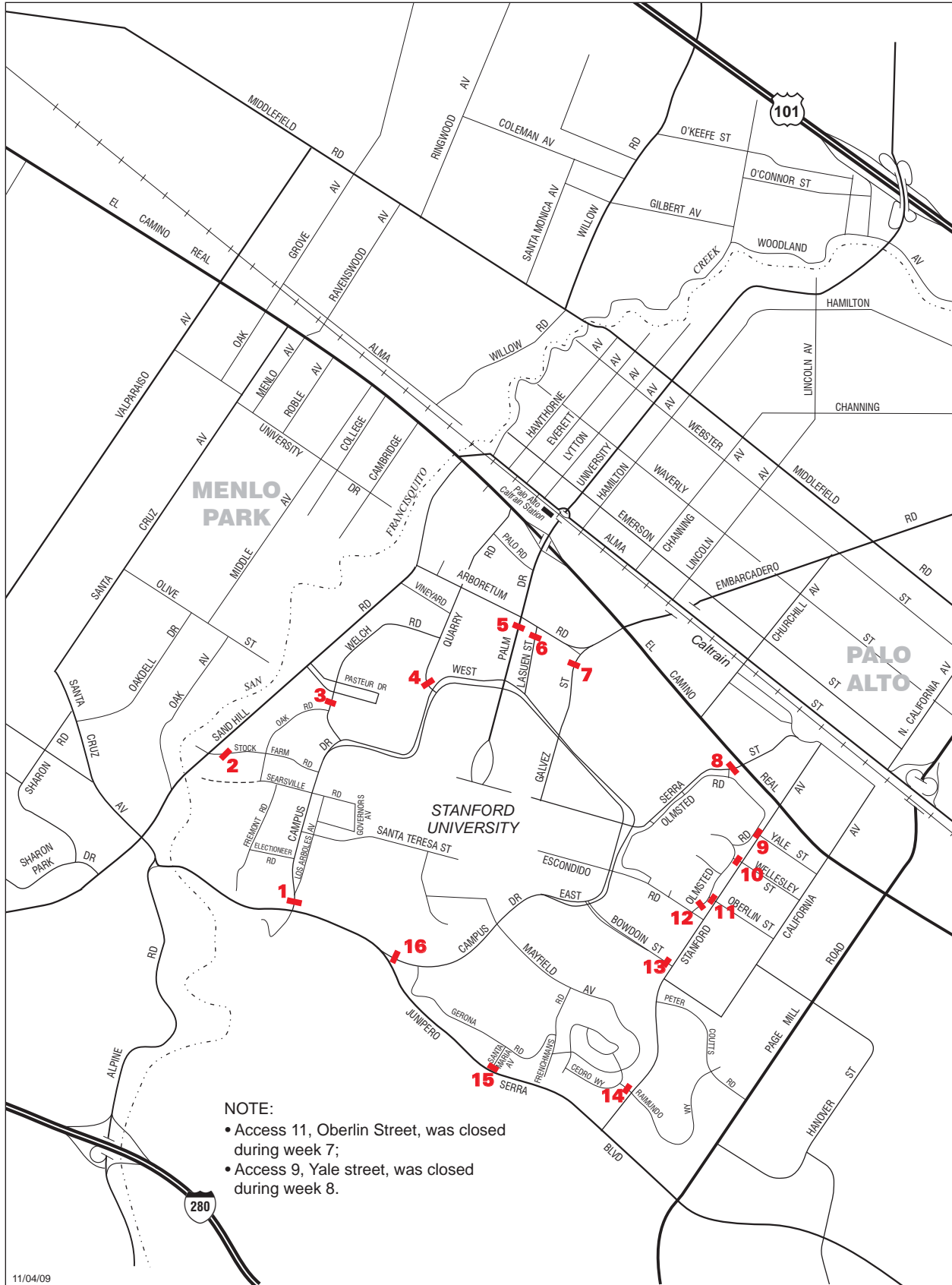
**NOTES**

License plate survey for Location 1 and Location 16 shifted for more accurate recording. Cordon tube counts continued at campus boundary.

Escondido Drive no longer continuous street from Campus Drive East to Stanford Avenue.



For count locations 14 and 15 see Figure 2



11/04/09

**Figure 2**  
**DAILY MACHINE CORDON COUNT LOCATIONS**

The detailed traffic counts at the 16 cordon locations are presented in Appendix A and are summarized in Table 1. Table 1 shows the AM inbound and PM outbound peak hour volumes for each day that the traffic is monitored. As indicated in Table 1, the AM peak hour usually occurred from 8:00 to 9:00 and the PM peak hour generally occurred between 5:00 to 6:00. The unadjusted AM inbound traffic volumes ranged from a low of 3,100 on Friday, May 22 to a high of 4,000 on Tuesday, May 5. The PM peak hour traffic volumes ranged from a low of 3,253 on Friday, May 22 to a high of 4,438 on Friday, May 8.

### **Task 1.2 Parking Lot Driveway Counts**

There are two parking lots (L1 – Rectangle Lot and L2 – Quarry Lot) outside the cordon line that serves some campus uses. There are also several parking lots (L3, L4 – Beckman Lot and L5 – Stock Farm Road Lot) along with parking structures 1 (PS1) and 3 (PS3) that are inside the established cordon line that serve some hospital uses. Parking lot 4 was not in use during the 2009 counts. Parking lot L6 is also located inside the cordon and serves buses only. Traffic was counted by direction into and out of these parking lots during the entire count period. The detailed count sheets for the driveway traffic at these lots are included in Appendix B.

The driveway count locations are presented below and in Figure 3.

1. PS1a – Parking Structure 1 North Access to Campus Drive
2. PS1b – Parking Structure 1 South Access to Roth Way
3. PS3a – Parking Structure 3 Northwest Access
4. PS3b – Parking Structure 3 Northeast Access
5. L1a – Rectangle Lot (Lot 1) Quarry Road Access
6. L1b – Rectangle Lot (Lot 1) North Access
7. L2a – Quarry Lot (Lot 2) North Access to Quarry Road
8. L2b – Quarry Lot (Lot 2) Middle Access to Quarry Road
9. L2c – Quarry Lot (Lot 2) South Access to Quarry Road
10. L3a – Near Medical Drive, west of Campus Drive
11. L4a<sup>(1)</sup> – Driveway to Lot 4 from Campus Drive West, Panama Street
12. L5a – West Driveway to Lot 5 from Oak Road
13. L5b – Center Driveway to Lot 5 from Oak Road
14. L5c – East Driveway to Lot 5 from Oak Road
15. L5d – East Driveway to Lot 5 from Stock Farm Road
16. L5e – West Driveway to Lot 5 from Stock Farm Road
17. L6a – West Driveway to Lot 6 from Oak Road
18. L6b – South Driveway to Lot 6 from Stockfarm Road

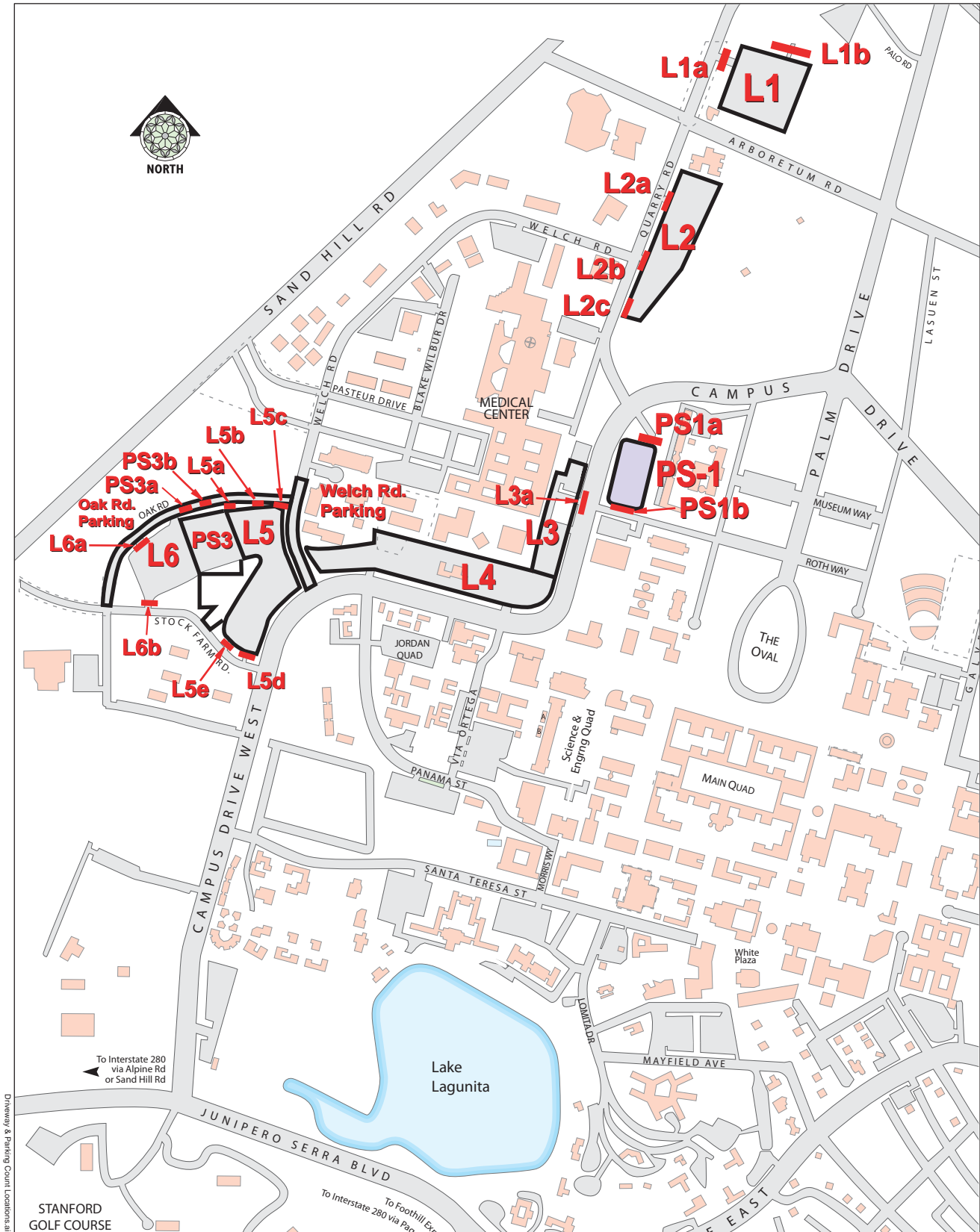
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<sup>(1)</sup> Access L4a remained closed during entire counting periods.

**Table 1 2009 Raw Traffic Count Summary**

Date	AM Inbound			PM Outbound		
	Weather	Volume	Period	Weather	Volume	Period
Week 1						
April 13, 2009	Mostly Cloudy	3535	7:45 to 8:45	Mostly Cloudy	4136	5:00 to 6:00
April 14, 2009	Partly Cloudy	3755	8:00 to 9:00	Scattered Clouds	4142	4:45 to 5:45
April 15, 2009	Partly Cloudy	3668	7:45 to 8:45	Partly Cloudy	4146	5:00 to 6:00
April 16, 2009	Scattered Clouds	3685	8:00 to 9:00	Partly Cloudy	4253	5:00 to 6:00
April 17, 2009	Clear	3448	8:00 to 9:00	Mostly Cloudy	4201	4:45 to 5:45
Week 2						
April 20, 2009	Partly Cloudy	3654	8:00 to 9:00	Scattered Clouds	4067	4:45 to 5:45
April 21, 2009	Mostly Cloudy	3812	8:00 to 9:00	Mostly Cloudy	4042	5:00 to 6:00
April 22, 2009	Clear	3705	7:45 to 8:45	Partly Cloudy	4121	4:45 to 5:45
April 23, 2009	Overcast	3879	8:00 to 9:00	Mostly Cloudy	4299	5:00 to 6:00
April 24, 2009	Overcast	3813	8:00 to 9:00	Partly Cloudy	4167	4:45 to 5:45
Week 3						
April 27, 2009	Overcast	3756	8:00 to 9:00	Mostly Cloudy	4118	4:45 to 5:45
April 28, 2009	Scattered Clouds	3861	8:00 to 9:00	Partly Cloudy	4074	5:00 to 6:00
April 29, 2009	Partly Cloudy	3825	7:45 to 8:45	Mostly Cloudy	4240	5:00 to 6:00
April 30, 2009	Mostly Cloudy	3785	8:00 to 9:00	Overcast	4238	5:00 to 6:00
May 1, 2009	Overcast	3828	7:45 to 8:45	Light Rain	4192	4:45 to 5:45
Week 4						
May 4, 2009	Overcast	3708	8:00 to 9:00	Overcast	4103	5:00 to 6:00
May 5, 2009	Overcast	4000	8:00 to 9:00	Mostly Cloudy	4145	5:00 to 6:00
May 6, 2009	Overcast	3733	8:00 to 9:00	Mostly Cloudy	4334	5:00 to 6:00
May 7, 2009	Scattered Clouds	3759	7:45 to 8:45	Partly Cloudy	4368	5:00 to 6:00
May 8, 2009	Clear	3634	8:00 to 9:00	Clear	4438	5:00 to 6:00
Week 5						
May 11, 2009	Scattered Clouds	3690	8:00 to 9:00	Clear	4107	5:00 to 6:00
May 12, 2009	Scattered Clouds	3918	8:00 to 9:00	Partly Cloudy	4254	5:00 to 6:00
May 13, 2009	Mostly Cloudy	3635	7:45 to 8:45	Mostly Cloudy	4171	5:00 to 6:00
May 14, 2009	Mostly Cloudy	3770	7:45 to 8:45	Partly Cloudy	4393	4:45 to 5:45
May 15, 2009	Overcast	3567	7:45 to 8:45	Clear	4231	5:00 to 6:00
Week 6						
May 18, 2009	Mostly Cloudy	3743	8:00 to 9:00	Mostly Cloudy	4168	5:00 to 6:00
May 19, 2009	Overcast	3719	8:00 to 9:00	Clear	4184	5:00 to 6:00
May 20, 2009	Scattered Clouds	3704	8:00 to 9:00	Clear	4169	5:00 to 6:00
May 21, 2009	Partly Cloudy	3761	8:00 to 9:00	Partly Cloudy	4139	5:00 to 6:00
May 22, 2009	Haze	3100	7:45 to 8:45	Scattered Clouds	3253	5:00 to 6:00
Week 7						
October 5, 2009	Clear	3756	8:00 to 9:00	Clear	3876	5:00 to 6:00
October 5, 2009	Clear	3843	7:45 to 8:45	Clear	3980	5:00 to 6:00
October 5, 2009	Partly Cloudy	3868	7:45 to 8:45	Clear	3918	5:00 to 6:00
October 5, 2009	Overcast	3851	7:45 to 8:45	Clear	3885	4:45 to 5:45
October 5, 2009	Overcast	3522	7:45 to 8:45	Clear	3869	5:00 to 6:00
Week 8						
October 5, 2009	Overcast	3632	8:00 to 9:00	Overcast	3832	5:00 to 6:00
October 5, 2009	Heavy Rain	3916	8:00 to 9:00	Rain	3660	4:30 to 5:30
October 5, 2009	Mostly Cloudy	3907	7:45 to 8:45	Mostly Cloudy	4049	5:00 to 6:00
October 5, 2009	Mostly Cloudy	3872	8:00 to 9:00	Partly Cloudy	3936	5:00 to 6:00
October 5, 2009	Clear	3568	7:45 to 8:45	Clear	4026	5:00 to 6:00





5/20/09

NOTE: ♦ Lot L4 remained closed during counting periods.

STANFORD UNIVERSITY TRAFFIC MONITORING REPORT

**Figure 3**  
**DRIVEWAY AND PARKING**  
**COUNT LOCATIONS**

Hospital trips from parking lots inside the cordon line were subtracted from the cordon counts, while campus trips from lots outside the cordon line were added to the raw counts. This was done to properly identify all trips generated by Stanford University and not by other adjacent land uses, particularly the medical complex.

### **Task 1.3 Parking Permit Scanning/Count**

At the beginning and end of both the morning and evening peak period, the number of vehicles in each of the lots identified in Figure 3 was counted. The exceptions are Lot 4 which was closed and Lot 6 which is a bus only parking lot. Each vehicle permit was also scanned to determine if it was related to campus or hospital uses. Both Campus and Medical related parking stickers were purple or orange in color with white lettering for campus and orange or purple lettering for hospital related vehicles. In addition, this year P&TS (Parking and Transportation Services) permits were issued to the construction crew related to Stanford Hospital expansion activities. These P&TS vehicles mostly utilizing Lot 6 and PS3 and are subtracted from the cordon traffic. During the counts, both Medical Center and Campus vehicles were identified by a windshield sticker stating Hospital or Campus on the bottom right or left hand corner.

On-street parking on Oak Road between Stock Farm Road and Welch Road, and on Welch Road between Campus Drive West and the cordon station just north of Oak Road was counted and classified in the same manner as described above. Since these on-street parking facilities are located within the cordon line, hospital vehicles were subtracted out of the cordon count and no adjustment was made to add in campus trips. The parking lot and on-street parking occupancy data is included in Appendix B along with the parking counts.

AECOM used the traffic counts in Task 1.1 and the parking counts in Tasks 1.2 and 1.3 to adjust the raw traffic counts. If campus parking permits were observed in lots outside the cordon area, they were added back into the cordon count. If hospital trips were observed inside the cordon area, they were subtracted from the cordon count. All vehicles without a parking permit were assumed to be campus trips.

### **Task 1.4 License Plate Survey**

The purpose of the license plate survey was to identify vehicles that are only passing through the Stanford campus, not beginning or ending their trip there. License plate numbers were recorded for vehicles entering and leaving each cordon location. Vehicles that entered the cordon and left within a period of 15 minutes were considered to be "cut-through" vehicles. Surveys were done during one day each week for both of the peak hours. The license plate matching process showed that during the Spring counts the average AM and PM cut-through percentages were 14.85% and 17.21%, respectively. During the Fall count, the AM cut-through percentage was 14.74%, while the PM was 17.35%. The average Spring and Fall percentages were used to adjust their respective vehicle counts.

## **Task 2.0 Traffic Monitoring Data Analysis**

### ***Task 2.1 Daily Cordon Count Spreadsheets***

First, the raw cordon count numbers were entered into spreadsheets. Two spreadsheets – one for the AM peak period and one for the PM peak period – were created for each weekday that a cordon count was conducted. Each spreadsheet shows the AM inbound and PM outbound vehicles passing all 16 cordon locations during five hourly increments. For the AM peak, the hours were 7:00-8:00, 7:15-8:15, 7:30-8:30, 7:45-8:45, and 8:00-9:00. For the PM peak, the hours were 4:00-5:00, 4:15-5:15, 4:30-5:30, 4:45-5:45, and 5:00-6:00. Since cordon counts were collected for eight weeks, there are a total of 80 daily cordon count spreadsheets (40 AM and 40 PM). These sheets are included in Appendix C of this report.

### ***Task 2.2 Daily Parking Spreadsheets***

The number of vehicles entering and exiting the parking lots in the vicinity of the Stanford Medical Center was also monitored during the eight-week period. The AM inbound and PM outbound volumes at all lot entrances were entered into spreadsheets for the AM and PM peak periods of each day just as described for the cordon counts in Task 2.1. All 80 daily parking spreadsheets are included in Appendix D.

### ***Task 2.3 Adjustments For Parking and Cut-Through Vehicles***

The parking sticker counts performed at the lots were used to compute the percentage of campus and hospital vehicles present in each lot during the AM and PM peak hours. Since a sticker survey was done at the beginning and end of each two-hour peak period count, the two values for every lot were averaged. Sticker surveys were completed for both peak hours of one day during each week.

The parking lot AM inbound and PM outbound volumes were used along with the averaged campus and hospital vehicle percentages in order to adjust the cordon count spreadsheets. Since Lots 1 and 2 are outside of the cordon boundary, some campus-related vehicles will park in those lots and not get counted in the cordon count. To add them in, the average percentage of campus vehicles in those lots was multiplied by the AM inbound and PM outbound volumes at each corresponding lot entrance (from Task 2.2), and then added to the cordon counts.

Lots 3, 4, and 5, as well as the two parking structures (PS-1 and PS-3), are located inside the cordon boundary. Thus, hospital-related vehicles parking in these lots need to be subtracted out of the cordon counts. To do this, the average percentage of hospital-related vehicles was multiplied by the AM inbound and PM outbound volumes at each respective lot entrance (from Task 2.2), and then subtracted from the cordon counts.

A parking sticker survey was also conducted at two on-street locations during the same days as the surveys for the parking lots. The streets surveyed were Oak Road and the portion of Welch Road between Campus Drive West and the cordon location

just north of Oak Road. Since both streets are inside the cordon, only the hospital vehicles were of importance. If more hospital vehicles were present at the end of the period than at the beginning, the change in vehicles was subtracted from the inbound totals for that period. If fewer hospital vehicles were present at the end of the period, the difference was subtracted from the outbound totals.

The average observed cut-through traffic percentages during the Spring monitoring period was about 14.85% percent during the AM peak hour and 17.21% percent during the PM peak hour. During the Fall count, the AM cut-through percentage was 14.74%, while the PM was 17.35%. The traffic counts were reduced by these percentages in order to subtract out vehicles lacking a destination within the Stanford University campus. Spreadsheets showing the detailed license plate matching data are shown in Appendix E. The 80 cordon counts adjusted for parking lot factors and cut-through traffic is shown in Table 2 with the average AM inbound and PM outbound traffic volumes and the peak hour time periods. Table 3 shows the traffic data collected in the 2001 baseline Stanford Traffic Monitoring Program, including the baseline average and the 90% confidence interval.

## **INBOUND AM TRAFFIC**

The 2001 baseline counts determined that an average of 3,439 inbound vehicles during the AM peak hour would constitute a significant increase in traffic at the 90% confidence level. The 2009 AM average of 2,840 vehicles does not represent a statistically significant increase over the AM baseline average with an upper threshold of 3,439 at the 90% confidence level. The average AM inbound volume of 2,840 is in fact 599 vehicles lower than the +90% confidence level. A scatter plot of the 2009 AM inbound data is shown in Figure 4. Lines representing the baseline average, baseline 90% confidence interval, and 2009 average are also shown in this figure. As shown in the figure the average 2009 volume is lower than the 90 percent confidence boundary established from 2001.

## **OUTBOUND PM TRAFFIC**

The 2001 baseline counts determined that an average of 3,555 outbound vehicles during the PM peak hour would constitute a significant increase in traffic at the 90% confidence level. The PM outbound adjusted average shows a decrease of 219 vehicles from the baseline count, this decrease falls below the +90% confidence interval by 328 vehicles. The 1% significant increase trigger was developed from 2001 baseline counts as 3,591 vehicles. The average 2009 PM outbound volume is calculated as 3,227 vehicles which fall below the 1% increase trigger by 364 vehicles. Since the established 1% increased trigger requirement is not met, no additional mitigation is required.

A scatter plot of the 2009 PM outbound data is shown in Figure 5. Lines representing the baseline average, baseline 90% confidence interval, and 2001 average are shown in this figure. As shown in Figure 5, the average Spring 2009 data line falls below the +90% confidence level.



**Table 2 2009 Adjusted Traffic Totals**

Date	AM Inbound		PM Outbound	
	Volume	Period	Volume	Period
Week 1				
April 13, 2009	2705	7:45 to 8:45	3238	5:00 to 6:00
April 14, 2009	2872	8:00 to 9:00	3231	4:45 to 5:45
April 15, 2009	2803	7:45 to 8:45	3236	5:00 to 6:00
April 16, 2009	2825	8:00 to 9:00	3301	5:00 to 6:00
April 17, 2009	2633	8:00 to 9:00	3246	4:45 to 5:45
Week 2				
April 20, 2009	2752	8:00 to 9:00	3150	4:45 to 5:45
April 21, 2009	2884	8:00 to 9:00	3165	5:00 to 6:00
April 22, 2009	2762	7:45 to 8:45	3190	4:45 to 5:45
April 23, 2009	2937	8:00 to 9:00	3393	5:00 to 6:00
April 24, 2009	2874	8:00 to 9:00	3291	4:45 to 5:45
Week 3				
April 27, 2009	2833	8:00 to 9:00	3233	4:45 to 5:45
April 28, 2009	2920	8:00 to 9:00	3188	5:00 to 6:00
April 29, 2009	2843	7:45 to 8:45	3317	5:00 to 6:00
April 30, 2009	2849	8:00 to 9:00	3296	5:00 to 6:00
May 1, 2009	2906	7:45 to 8:45	3280	4:45 to 5:45
Week 4				
May 4, 2009	2803	8:00 to 9:00	3229	5:00 to 6:00
May 5, 2009	3033	8:00 to 9:00	3254	5:00 to 6:00
May 6, 2009	2799	8:00 to 9:00	3403	5:00 to 6:00
May 7, 2009	2829	7:45 to 8:45	3427	5:00 to 6:00
May 8, 2009	2767	8:00 to 9:00	3540	5:00 to 6:00
Week 5				
May 11, 2009	2803	8:00 to 9:00	3241	5:00 to 6:00
May 12, 2009	2993	8:00 to 9:00	3354	5:00 to 6:00
May 13, 2009	2762	7:45 to 8:45	3302	5:00 to 6:00
May 14, 2009	2890	7:45 to 8:45	3486	4:45 to 5:45
May 15, 2009	2718	7:45 to 8:45	3372	5:00 to 6:00
Week 6				
May 18, 2009	2848	8:00 to 9:00	3317	5:00 to 6:00
May 19, 2009	2817	8:00 to 9:00	3315	5:00 to 6:00
May 20, 2009	2790	8:00 to 9:00	3322	5:00 to 6:00
May 21, 2009	2856	8:00 to 9:00	3293	5:00 to 6:00
May 22, 2009	2404	7:45 to 8:45	2603	5:00 to 6:00
Week 7				
October 5, 2009	2893	8:00 to 9:00	3042	5:00 to 6:00
October 6, 2009	2964	7:45 to 8:45	3123	5:00 to 6:00
October 7, 2009	2958	7:45 to 8:45	3089	5:00 to 6:00
October 8, 2009	2967	7:45 to 8:45	3067	4:45 to 5:45
October 9, 2009	2684	7:45 to 8:45	3050	5:00 to 6:00
Week 8				
October 12, 2009	2823	8:00 to 9:00	3064	5:00 to 6:00
October 13, 2009	3034	8:00 to 9:00	2900	4:30 to 5:30
October 14, 2009	3018	7:45 to 8:45	3209	5:00 to 6:00
October 15, 2009	2999	8:00 to 9:00	3131	5:00 to 6:00
October 16, 2009	2738	7:45 to 8:45	3199	5:00 to 6:00
<b>Average</b>	<b>2,840</b>		<b>3,227</b>	

**Table 3 2001 Baseline Adjusted Traffic Totals**

Date	AM INBOUND		PM OUTBOUND	
	Volume	Period	Volume	Period
Week 1				
April 2, 2001	3036	7:45 to 8:45	3323	5:00 to 6:00
April 3, 2001	3059	7:45 to 8:45	3285	4:45 to 5:45
April 4, 2001	2884	8:00 to 9:00	3334	4:45 to 5:45
April 5, 2001	3000	7:45 to 8:45	3216	5:00 to 6:00
April 6, 2001	2610	8:00 to 9:00	3092	4:45 to 5:45
Week 2				
April 9, 2001	3265	8:00 to 9:00	3329	5:00 to 6:00
April 10, 2001	3141	8:00 to 9:00	3362	5:00 to 6:00
April 11, 2001	3107	8:00 to 9:00	3473	4:45 to 5:45
April 12, 2001	3081	8:00 to 9:00	3397	5:00 to 6:00
April 13, 2001	2973	8:00 to 9:00	3413	4:45 to 5:45
Week 3				
April 23, 2001	3285	7:45 to 8:45	3311	4:30 to 5:30
April 24, 2001	3322	7:45 to 8:45	3281	5:00 to 6:00
April 25, 2001	3186	7:30 to 8:30	3326	4:45 to 5:45
April 26, 2001	3129	7:45 to 8:45	3286	5:00 to 6:00
April 27, 2001	2723	8:00 to 9:00	3154	4:45 to 5:45
Week 4				
April 30, 2001	2502	7:30 to 8:30	2681	4:15 to 5:15
May 1, 2001	2826	7:45 to 8:45	2967	5:00 to 6:00
May 2, 2001	2742	7:45 to 8:45	2912	5:00 to 6:00
May 3, 2001	2632	8:00 to 9:00	2861	5:00 to 6:00
May 4, 2001	2595	8:00 to 9:00	2744	4:45 to 5:45
Week 5				
May 7 2001	3604	8:00 to 9:00	3410	4:45 to 5:45
May 8, 2001	3559	8:00 to 9:00	3422	5:00 to 6:00
May 9, 2001	3455	8:00 to 9:00	3326	5:00 to 6:00
May 10, 2001	3478	8:00 to 9:00	3396	4:45 to 5:45
May 11, 2001	3393	8:00 to 9:00	3090	5:00 to 6:00
Week 6				
May 14 2001	3479	8:00 to 9:00	3235	4:45 to 5:45
May 15, 2001	3756	8:00 to 9:00	3450	5:00 to 6:00
May 16, 2001	3830	8:00 to 9:00	3374	5:00 to 6:00
May 17, 2001	3533	8:00 to 9:00	3456	5:00 to 6:00
May 18, 2001	3246	8:00 to 9:00	3386	4:45 to 5:45
Week 7				
October 22, 2001	3221	8:00 to 9:00	3505	5:00 to 6:00
October 23, 2001	3835	8:00 to 9:00	3805	5:00 to 6:00
October 24, 2001	3550	8:00 to 9:00	3959	5:00 to 6:00
October 25, 2001	3908	7:45 to 8:45	3991	5:00 to 6:00
October 26, 2001	3371	8:00 to 9:00	4072	4:45 to 5:45
Week 8				
October 29, 2001	4241	8:00 to 9:00	4115	5:00 to 6:00
October 30, 2001	4251	8:00 to 9:00	4217	5:00 to 6:00
October 31, 2001	4139	8:00 to 9:00	4394	5:00 to 6:00
November 1, 2001	4037	8:00 to 9:00	4193	5:00 to 6:00
November 2, 2001	3789	7:45 to 8:45	4277	5:00 to 6:00
Average	3,319		3,446	
90% confidence interval	+/- 120		+/- 109	

Figure 4 2009 AM Peak Inbound vs. 2001 Baseline

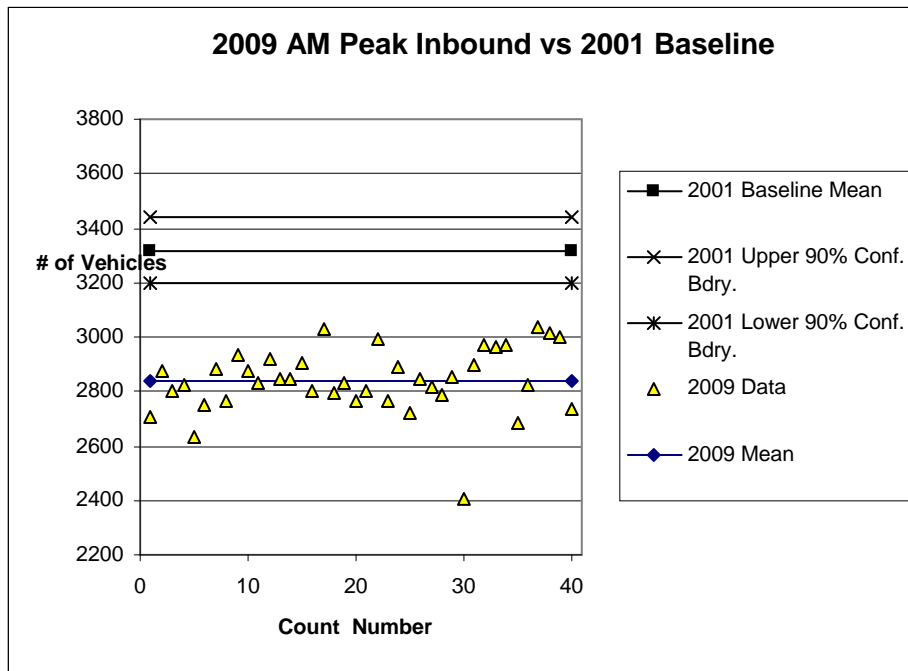
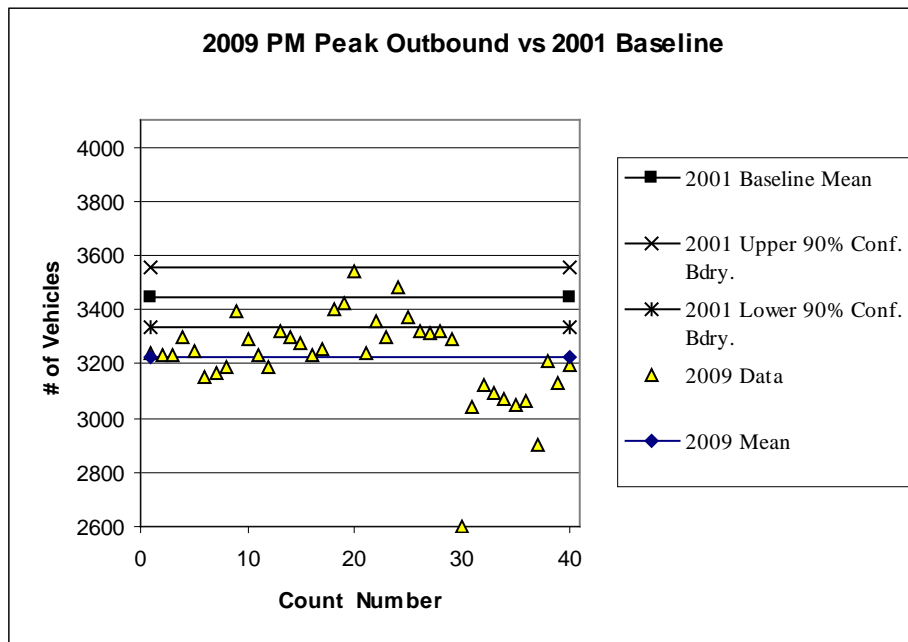


Figure 5 2009 PM Peak Outbound vs. 2001 Baseline



## CONCLUSION

The AM inbound adjusted average shows a decrease of 479 vehicles from the baseline count to the 2009 average count. The 2009 AM inbound volume also shows the decrease from the 90% confidence interval of  $\pm 120$  by -599 vehicles and -359 vehicles, respectively. Since the AM inbound volumes are lower in 2009 compared to the 2001 baseline +90% confidence boundary by 599 vehicles, no mitigation measures are required. Mitigation measures are required if the trigger is exceeded in two out of three consecutive years for the same peak hour.

The PM outbound count totaled 3,227 vehicles which was a decrease of 219 vehicles from the baseline, which is 328 vehicles lower than the +90% confidence interval and 364 vehicles lower than the 1% established trigger. Therefore, this increase is not significant. Mitigation measures are required if the trigger is exceeded in two out of three consecutive years for the same peak hour.

Table 4 summarizes the comparison between the baseline 2001 counts and the 2009 monitoring counts.

**Table 4: 2009 Monitoring Comparison to Baseline**

Inbound AM:

Adjusted average 2009 count	2,840
Baseline-established 90% confidence interval (2001)	+/- 120
Baseline-established significant traffic increase (2001)	3,439
Baseline-established 1% increase trigger (2001)	3,474
Result (falls below the 90% confidence interval by 599 vehicles)	-599
Result (falls below the 1% increase trigger by 634 vehicles)	-634

Outbound PM:

Adjusted average 2009 count	3,227
Baseline-established 90% confidence interval (2001)	+/- 109
Baseline-established significant traffic increase (2001)	3,555
Baseline-established 1% increase trigger (2001)	3,591
Result (falls below the 90% confidence interval by 328 vehicles)	-328
Result (falls below the 1% trigger by 364 vehicles)	-364

## SUMMARY AND COMPARISON OF PREVIOUS REPORTS

### INTRODUCTION

The purpose of the Stanford University Traffic Monitoring Program is to compare traffic volumes entering and exiting the Stanford Campus during the inbound AM peak and the outbound PM commute peak to a traffic baseline. This comparison is completed on an annual basis. The requirements for establishment of the traffic baseline and performing annual comparisons to the baseline are contained within the December 2000 Stanford Community Plan/General Use Permit (GUP)/Environmental Impact Report (EIR) and within the 2000 Stanford General Use Permit. Stanford is required to attain a “no net new commute trip” standard as defined in the GUP and EIR.

Condition of Approval G.7 outlines the process for establishing the baseline counts and for continuing monitoring in subsequent years. The process can be summarized as follows:

- Peak hour traffic is counted at least three times per year for a two-week period each time. The three counts shall be averaged to determine the annual traffic level.
- All counts are recorded at the 16 campus entry and exit points forming a cordon around the campus.
- License plate numbers are recorded for each entering and exiting vehicle to determine the amount of non-campus traffic.
- Cordon volumes are adjusted for parking lots within the cordon used by the hospital (these volumes are subtracted from the cordon line counts) and parking lots outside the cordon used by the university (these volumes are added to the cordon line counts).
- A peak hour is then established for the campus based on the counts, adjusted for cut through and parking lot location.

Condition of Approval G.6 defines the peak commute directions as entering the campus in the morning peak commute period and leaving the campus in the evening commute period. The peak commute period is defined as the one-hour period of time between 7 AM and 9 AM and again between 4 PM and 6 PM with the highest volume of traffic, as defined by the counts. Therefore, the two peak hours are considered to be independent events. An increase in traffic during the AM peak hour is independent from an increase in traffic during the PM peak hour. An increase in traffic for two out of three years in one peak hour would trigger the additional element of the monitoring program, even if there is no change or even a decrease in traffic in the other peak hour. Also, a significant increase during one year in the AM and a sufficient increase in the PM for the following year would not trigger additional mitigation.

The following is a summary of the Baseline report prepared in 2001 and the subsequent eight years of monitoring from 2002 through 2009.

## Traffic Baseline Report

The Traffic Baseline Report represents the first year of traffic monitoring. This report established the baseline conditions to which subsequent years are compared.

<b>Data Collection:</b>	Week of April 2, 2001 through week of May 14 2001 and week of October 22, 2001 through week of October 29, 2001.																
<b>Final Report Issued:</b>	July 2002 and updated on October 2003.																
<b>Findings:</b>	<p>The following were the results of the 2001 Baseline Monitoring:</p> <p><u>Inbound AM:</u></p> <table> <tr> <td>Average Count</td> <td>3,319</td> </tr> <tr> <td>90% Confidence Interval</td> <td>+/- 120</td> </tr> <tr> <td>Significant Traffic Increase</td> <td>3,439</td> </tr> <tr> <td>1% Increase Trigger</td> <td>3,474</td> </tr> </table> <p><u>Outbound PM:</u></p> <table> <tr> <td>Average</td> <td>3,446</td> </tr> <tr> <td>90% Confidence Interval</td> <td>+/- 109</td> </tr> <tr> <td>Significant Traffic Increase</td> <td>3,555</td> </tr> <tr> <td>1% Trigger</td> <td>3,591</td> </tr> </table>	Average Count	3,319	90% Confidence Interval	+/- 120	Significant Traffic Increase	3,439	1% Increase Trigger	3,474	Average	3,446	90% Confidence Interval	+/- 109	Significant Traffic Increase	3,555	1% Trigger	3,591
Average Count	3,319																
90% Confidence Interval	+/- 120																
Significant Traffic Increase	3,439																
1% Increase Trigger	3,474																
Average	3,446																
90% Confidence Interval	+/- 109																
Significant Traffic Increase	3,555																
1% Trigger	3,591																
<b>Conclusion</b>	The Traffic Baseline Report established the baseline thresholds, no conclusions are drawn from this report.																

## Traffic Report #1

Traffic Report #1 was the first year of monitoring compared back to the Traffic Baseline Report.

<b>Data Collection:</b>	Week of April 15, 2002 through week of May 20 2002 and week of October 14, 2002 through week of October 21, 2002.																				
<b>Final Report Issued:</b>	July 2003																				
<b>Final Report Revised:</b>	October 2003																				
<b>Findings:</b>	<p>The following were the results of the Report #1, 2002 Traffic Monitoring:</p> <p><u>Inbound AM:</u></p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="padding-left: 20px;">Adjusted Average 2002 Count</td> <td style="text-align: right;">3,275</td> </tr> <tr> <td style="padding-left: 20px;">Baseline-established 90% Confidence Interval (2001)</td> <td style="text-align: right;">+/- 120</td> </tr> <tr> <td style="padding-left: 20px;">Baseline-established Significant Traffic Increase (2001)</td> <td style="text-align: right;">3,439</td> </tr> <tr> <td style="padding-left: 20px;">Baseline-established 1% Increase Trigger (2001)</td> <td style="text-align: right;">3,474</td> </tr> <tr> <td style="padding-left: 20px;">Result (Falls below the 1% Trigger by 199)</td> <td style="text-align: right;">-199</td> </tr> </table> <p><u>Outbound PM:</u></p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="padding-left: 20px;">Adjusted Average 2002 Count</td> <td style="text-align: right;">3,586</td> </tr> <tr> <td style="padding-left: 20px;">Baseline-established 90% Confidence Interval (2001)</td> <td style="text-align: right;">+/- 109</td> </tr> <tr> <td style="padding-left: 20px;">Baseline-established Significant Traffic Increase (2001)</td> <td style="text-align: right;">3,555</td> </tr> <tr> <td style="padding-left: 20px;">Baseline-established 1% Increase Trigger (2001)</td> <td style="text-align: right;">3,591</td> </tr> <tr> <td style="padding-left: 20px;">Result (Falls below the 1% Trigger by 5 vehicles)</td> <td style="text-align: right;">-5</td> </tr> </table>	Adjusted Average 2002 Count	3,275	Baseline-established 90% Confidence Interval (2001)	+/- 120	Baseline-established Significant Traffic Increase (2001)	3,439	Baseline-established 1% Increase Trigger (2001)	3,474	Result (Falls below the 1% Trigger by 199)	-199	Adjusted Average 2002 Count	3,586	Baseline-established 90% Confidence Interval (2001)	+/- 109	Baseline-established Significant Traffic Increase (2001)	3,555	Baseline-established 1% Increase Trigger (2001)	3,591	Result (Falls below the 1% Trigger by 5 vehicles)	-5
Adjusted Average 2002 Count	3,275																				
Baseline-established 90% Confidence Interval (2001)	+/- 120																				
Baseline-established Significant Traffic Increase (2001)	3,439																				
Baseline-established 1% Increase Trigger (2001)	3,474																				
Result (Falls below the 1% Trigger by 199)	-199																				
Adjusted Average 2002 Count	3,586																				
Baseline-established 90% Confidence Interval (2001)	+/- 109																				
Baseline-established Significant Traffic Increase (2001)	3,555																				
Baseline-established 1% Increase Trigger (2001)	3,591																				
Result (Falls below the 1% Trigger by 5 vehicles)	-5																				
<b>Conclusion</b>	<p>The AM inbound adjusted average shows a decrease of 44 vehicles from the baseline, this decrease falls within the 90% confidence interval of +/- 120. The established 1% increase trigger requirement is not met and no additional mitigation is required.</p> <p>The PM inbound adjusted average shows an increase of 140 vehicles from the baseline count, this increase falls above the +90% confidence interval by 31 vehicles. This increase falls below the 1% increase trigger by 5 vehicles. Since the established 1% increased trigger requirement is not met, no additional mitigation is required. The 2002 volumes compared to 2001 baseline volumes do not constitute a statistical significant increase in either the AM or the PM peak hours and no mitigation measure is required.</p>																				

## Traffic Report #2

Traffic Report #2 was the second year of monitoring compared back to the Traffic Baseline Report.

<b>Data Collection:</b>	Week of April 7, 2003 and week of April 21, 2003 through week of May 19, 2003, week of September 29, 2003 and week of October 20, 2003.																								
<b>Final Report Issued:</b>	January 2004																								
<b>Final Report Revised:</b>	October 2004																								
<b>Findings:</b>	<p>The following were the results of the Report #2, 2003 Traffic Monitoring:</p> <p><u>Inbound AM:</u></p> <table> <tr> <td>Adjusted Average 2003 Count</td> <td>3,413</td> </tr> <tr> <td>Baseline-established 90% Confidence Interval (2001)</td> <td>+/- 120</td> </tr> <tr> <td>Baseline-established Significant Traffic Increase (2001)</td> <td>3,439</td> </tr> <tr> <td>Baseline-established 1% Increase Trigger (2001)</td> <td>3,474</td> </tr> <tr> <td>Result (Falls below the 90% Confidence Interval by 26)</td> <td>-26</td> </tr> <tr> <td>Result (Falls below the 1% Trigger by 61 vehicles)</td> <td>-61</td> </tr> </table> <p><u>Outbound PM:</u></p> <table> <tr> <td>Adjusted Average 2003 Count</td> <td>3,476</td> </tr> <tr> <td>Baseline-established 90% Confidence Interval (2001)</td> <td>+/- 109</td> </tr> <tr> <td>Baseline-established Significant Traffic Increase (2001)</td> <td>3,555</td> </tr> <tr> <td>Baseline-established 1% Increase Trigger (2001)</td> <td>3,591</td> </tr> <tr> <td>Result (Falls below the 90% Confidence Interval by 79 vehicles)</td> <td>-79</td> </tr> <tr> <td>Result (Falls below the 1% Trigger by 115 vehicles)</td> <td>-115</td> </tr> </table>	Adjusted Average 2003 Count	3,413	Baseline-established 90% Confidence Interval (2001)	+/- 120	Baseline-established Significant Traffic Increase (2001)	3,439	Baseline-established 1% Increase Trigger (2001)	3,474	Result (Falls below the 90% Confidence Interval by 26)	-26	Result (Falls below the 1% Trigger by 61 vehicles)	-61	Adjusted Average 2003 Count	3,476	Baseline-established 90% Confidence Interval (2001)	+/- 109	Baseline-established Significant Traffic Increase (2001)	3,555	Baseline-established 1% Increase Trigger (2001)	3,591	Result (Falls below the 90% Confidence Interval by 79 vehicles)	-79	Result (Falls below the 1% Trigger by 115 vehicles)	-115
Adjusted Average 2003 Count	3,413																								
Baseline-established 90% Confidence Interval (2001)	+/- 120																								
Baseline-established Significant Traffic Increase (2001)	3,439																								
Baseline-established 1% Increase Trigger (2001)	3,474																								
Result (Falls below the 90% Confidence Interval by 26)	-26																								
Result (Falls below the 1% Trigger by 61 vehicles)	-61																								
Adjusted Average 2003 Count	3,476																								
Baseline-established 90% Confidence Interval (2001)	+/- 109																								
Baseline-established Significant Traffic Increase (2001)	3,555																								
Baseline-established 1% Increase Trigger (2001)	3,591																								
Result (Falls below the 90% Confidence Interval by 79 vehicles)	-79																								
Result (Falls below the 1% Trigger by 115 vehicles)	-115																								
<b>Conclusion</b>	<p>Although the AM inbound adjusted average shows an increase of 94 vehicles from the Baseline count, this increase falls within the 90% confidence interval of <math>\pm 120</math>. Therefore, this 94-vehicle increase does not represent a significant increase in traffic during the AM peak hour and no additional mitigation is required.</p> <p>The PM peak outbound adjusted average increased by 30 vehicles from the Baseline PM counts. This increase is also not significant because it falls within the 90% confidence boundary of <math>\pm 109</math>, no additional mitigation is required.</p> <p>The 2003 volumes compared to 2001 baseline volumes do not constitute a statistical significant increase in either the AM or the PM peak hours.</p>																								



### Traffic Report #3

Traffic Report #3 was the third year of monitoring compared back to the Traffic Baseline Report.

<b>Data Collection:</b>	Week of April 12, 2004 through week of May 17, 2004 and week of September 27, 2004 through week of October 4, 2004.																												
<b>Final Report Issued:</b>	March 2005																												
<b>Findings:</b>	<p>The following were the results of the Report #3, 2004 Traffic Monitoring:</p> <p><u>Inbound AM:</u></p> <table> <tr> <td>Adjusted Average 2004 Count</td> <td>3,176</td> </tr> <tr> <td>Baseline-established 90% Confidence Interval (2001)</td> <td>+/- 120</td> </tr> <tr> <td>Baseline-established Significant Traffic Increase (2001)</td> <td>3,439</td> </tr> <tr> <td>Baseline-established 1% Increase Trigger (2001)</td> <td>3,474</td> </tr> <tr> <td>Result (Falls below the 90% Confidence Interval by 263)</td> <td>-263</td> </tr> <tr> <td>Result (Falls below the 1% Trigger by 298 vehicles)</td> <td>-298</td> </tr> </table> <p><u>Outbound PM:</u></p> <table> <tr> <td>Adjusted Average 2004 Count</td> <td>3,642</td> </tr> <tr> <td>Baseline-established 90% Confidence Interval (2001)</td> <td>+/- 109</td> </tr> <tr> <td>Baseline-established Significant Traffic Increase (2001)</td> <td>3,555</td> </tr> <tr> <td>Baseline-established 1% Increase Trigger (2001)</td> <td>3,591</td> </tr> <tr> <td>Result (Falls above the 90% Confidence Interval by 87 vehicles)</td> <td>+87</td> </tr> <tr> <td>Result (Falls above the 1% Trigger by 51 vehicles)</td> <td>+51</td> </tr> <tr> <td>2004 Trip Credit</td> <td>-66</td> </tr> <tr> <td>Result with Trip Credit (Falls below the 1% Trigger by 15 vehicles)</td> <td>-15</td> </tr> </table>	Adjusted Average 2004 Count	3,176	Baseline-established 90% Confidence Interval (2001)	+/- 120	Baseline-established Significant Traffic Increase (2001)	3,439	Baseline-established 1% Increase Trigger (2001)	3,474	Result (Falls below the 90% Confidence Interval by 263)	-263	Result (Falls below the 1% Trigger by 298 vehicles)	-298	Adjusted Average 2004 Count	3,642	Baseline-established 90% Confidence Interval (2001)	+/- 109	Baseline-established Significant Traffic Increase (2001)	3,555	Baseline-established 1% Increase Trigger (2001)	3,591	Result (Falls above the 90% Confidence Interval by 87 vehicles)	+87	Result (Falls above the 1% Trigger by 51 vehicles)	+51	2004 Trip Credit	-66	Result with Trip Credit (Falls below the 1% Trigger by 15 vehicles)	-15
Adjusted Average 2004 Count	3,176																												
Baseline-established 90% Confidence Interval (2001)	+/- 120																												
Baseline-established Significant Traffic Increase (2001)	3,439																												
Baseline-established 1% Increase Trigger (2001)	3,474																												
Result (Falls below the 90% Confidence Interval by 263)	-263																												
Result (Falls below the 1% Trigger by 298 vehicles)	-298																												
Adjusted Average 2004 Count	3,642																												
Baseline-established 90% Confidence Interval (2001)	+/- 109																												
Baseline-established Significant Traffic Increase (2001)	3,555																												
Baseline-established 1% Increase Trigger (2001)	3,591																												
Result (Falls above the 90% Confidence Interval by 87 vehicles)	+87																												
Result (Falls above the 1% Trigger by 51 vehicles)	+51																												
2004 Trip Credit	-66																												
Result with Trip Credit (Falls below the 1% Trigger by 15 vehicles)	-15																												
<b>Conclusion:</b>	<p>The AM inbound adjusted average shows a decrease of 143 vehicles from the Baseline, this decrease falls below the +90% confidence interval by 263. The established 1% increase trigger requirement is not met, no additional mitigation is required.</p> <p>The PM peak outbound adjusted average increased by 196 vehicles from the Baseline counts. This increase is above the +90% confidence interval by 87 vehicles. This increase is significant because it falls above the 1% increase trigger by 51 vehicles. However, after applying 66 trip credits the PM peak outbound traffic was within the 1% trigger, therefore, no additional mitigation is required.</p>																												

## Traffic Report #4

Traffic Report #4 was the fourth year of monitoring compared back to the Traffic Baseline Report.

<b>Data Collection:</b>	Week of April 4, 2005 through week of May 9, 2005 and week of September 26 through week of October 3, 2005.																												
<b>Final Report Issued:</b>	May 2006																												
<b>Findings:</b>	<p>The following were the results of the Report #4, 2005 Traffic Monitoring:</p> <p><u>Inbound AM:</u></p> <table> <tr> <td>Adjusted Average 2005 Count</td> <td>3,383</td> </tr> <tr> <td>Baseline-established 90% Confidence Interval (2001)</td> <td>+/- 120</td> </tr> <tr> <td>Baseline-established Significant Traffic Increase (2001)</td> <td>3,439</td> </tr> <tr> <td>Baseline-established 1% Increase Trigger (2001)</td> <td>3,474</td> </tr> <tr> <td>Result (Falls below the 90% Confidence Interval by 56)</td> <td>-56</td> </tr> <tr> <td>Result (Falls below the 1% Trigger by 91 vehicles)</td> <td>-91</td> </tr> </table> <p><u>Outbound PM:</u></p> <table> <tr> <td>Adjusted Average 2005 Count (Including 2 modifications)</td> <td>3,735</td> </tr> <tr> <td>Baseline-established 90% Confidence Interval (2001)</td> <td>+/- 109</td> </tr> <tr> <td>Baseline-established Significant Traffic Increase (2001)</td> <td>3,555</td> </tr> <tr> <td>Baseline-established 1% Increase Trigger (2001)</td> <td>3,591</td> </tr> <tr> <td>Result (falls above the 90% confidence Interval by 180 vehicles)</td> <td>+180</td> </tr> <tr> <td>Result (falls above the 1% trigger by 144 vehicles)</td> <td>+144</td> </tr> <tr> <td>2005 trip credit</td> <td>-174</td> </tr> <tr> <td>Result with trip credit (falls below the 1 %trigger by 30 vehicles)</td> <td>-30</td> </tr> </table>	Adjusted Average 2005 Count	3,383	Baseline-established 90% Confidence Interval (2001)	+/- 120	Baseline-established Significant Traffic Increase (2001)	3,439	Baseline-established 1% Increase Trigger (2001)	3,474	Result (Falls below the 90% Confidence Interval by 56)	-56	Result (Falls below the 1% Trigger by 91 vehicles)	-91	Adjusted Average 2005 Count (Including 2 modifications)	3,735	Baseline-established 90% Confidence Interval (2001)	+/- 109	Baseline-established Significant Traffic Increase (2001)	3,555	Baseline-established 1% Increase Trigger (2001)	3,591	Result (falls above the 90% confidence Interval by 180 vehicles)	+180	Result (falls above the 1% trigger by 144 vehicles)	+144	2005 trip credit	-174	Result with trip credit (falls below the 1 %trigger by 30 vehicles)	-30
Adjusted Average 2005 Count	3,383																												
Baseline-established 90% Confidence Interval (2001)	+/- 120																												
Baseline-established Significant Traffic Increase (2001)	3,439																												
Baseline-established 1% Increase Trigger (2001)	3,474																												
Result (Falls below the 90% Confidence Interval by 56)	-56																												
Result (Falls below the 1% Trigger by 91 vehicles)	-91																												
Adjusted Average 2005 Count (Including 2 modifications)	3,735																												
Baseline-established 90% Confidence Interval (2001)	+/- 109																												
Baseline-established Significant Traffic Increase (2001)	3,555																												
Baseline-established 1% Increase Trigger (2001)	3,591																												
Result (falls above the 90% confidence Interval by 180 vehicles)	+180																												
Result (falls above the 1% trigger by 144 vehicles)	+144																												
2005 trip credit	-174																												
Result with trip credit (falls below the 1 %trigger by 30 vehicles)	-30																												
<b>Conclusion:</b>	<p>The AM inbound adjusted average shows an increase of 64 vehicles from the Baseline, this increase falls below the + 90% confidence interval by 56. The established 1% increase trigger requirement is not met, no additional mitigation is required.</p> <p>The PM peak outbound adjusted average increased by 289 vehicles from the Baseline counts. This increase is above the +90% confidence interval by 180 vehicles. This increase is significant because it falls above the 1% increase trigger by 144 vehicles. However, after applying 174 trip credits the PM peak hour outbound traffic was within the 1% trigger, therefore, no additional mitigation is required.</p>																												

## Traffic Report #5

Traffic Report #5 was the fifth year of monitoring compared back to the Traffic Baseline Report.

<b>Data Collection:</b>	Week of April 17, 2006 through week May 22, 2006 and week of October 16 and October 23, 2006.																								
<b>Final Report Issued:</b>	November 2006																								
<b>Findings:</b>	<p>The following were the results of the Report #5, 2006 Traffic Monitoring:</p> <p><u>Inbound AM:</u></p> <table> <tr> <td>Adjusted Average 2006 Count</td> <td>3,048</td> </tr> <tr> <td>Baseline-established 90% Confidence Interval (2001)</td> <td>+/- 120</td> </tr> <tr> <td>Baseline-established Significant Traffic Increase (2001)</td> <td>3,439</td> </tr> <tr> <td>Baseline-established 1% Increase Trigger (2001)</td> <td>3,474</td> </tr> <tr> <td>Result (Falls below the 90% Confidence Interval by 391)</td> <td>-391</td> </tr> <tr> <td>Result (Falls below the 1% Trigger by 426 vehicles)</td> <td>-426</td> </tr> </table> <p><u>Outbound PM:</u></p> <table> <tr> <td>Adjusted Average 2006 Count</td> <td>3,427</td> </tr> <tr> <td>Baseline-established 90% Confidence Interval (2001)</td> <td>+/- 109</td> </tr> <tr> <td>Baseline-established Significant Traffic Increase (2001)</td> <td>3,555</td> </tr> <tr> <td>Baseline-established 1% Increase Trigger (2001)</td> <td>3,591</td> </tr> <tr> <td>Result (falls below the 90% confidence Interval by 128 vehicles)</td> <td>-128</td> </tr> <tr> <td>Result (falls below the 1% trigger by 164 vehicles)</td> <td>-164</td> </tr> </table>	Adjusted Average 2006 Count	3,048	Baseline-established 90% Confidence Interval (2001)	+/- 120	Baseline-established Significant Traffic Increase (2001)	3,439	Baseline-established 1% Increase Trigger (2001)	3,474	Result (Falls below the 90% Confidence Interval by 391)	-391	Result (Falls below the 1% Trigger by 426 vehicles)	-426	Adjusted Average 2006 Count	3,427	Baseline-established 90% Confidence Interval (2001)	+/- 109	Baseline-established Significant Traffic Increase (2001)	3,555	Baseline-established 1% Increase Trigger (2001)	3,591	Result (falls below the 90% confidence Interval by 128 vehicles)	-128	Result (falls below the 1% trigger by 164 vehicles)	-164
Adjusted Average 2006 Count	3,048																								
Baseline-established 90% Confidence Interval (2001)	+/- 120																								
Baseline-established Significant Traffic Increase (2001)	3,439																								
Baseline-established 1% Increase Trigger (2001)	3,474																								
Result (Falls below the 90% Confidence Interval by 391)	-391																								
Result (Falls below the 1% Trigger by 426 vehicles)	-426																								
Adjusted Average 2006 Count	3,427																								
Baseline-established 90% Confidence Interval (2001)	+/- 109																								
Baseline-established Significant Traffic Increase (2001)	3,555																								
Baseline-established 1% Increase Trigger (2001)	3,591																								
Result (falls below the 90% confidence Interval by 128 vehicles)	-128																								
Result (falls below the 1% trigger by 164 vehicles)	-164																								
<b>Conclusion:</b>	<p>The AM inbound adjusted average shows a decrease of 271 vehicles from the Baseline, this decrease falls below the + 90% confidence interval by 391 vehicles. The established 1% increase trigger requirement is not met, no additional mitigation is required.</p> <p>The PM peak outbound adjusted average decreased by 19 vehicles from the Baseline counts. This decrease is below the +90% confidence interval by 128 vehicles. The established 1% increase trigger requirement is not met, no additional mitigation is required.</p>																								

## Traffic Report #6

Traffic Report #6 was the sixth year of monitoring compared back to the Traffic Baseline Report.

<b>Data Collection:</b>	Week of April 9, 2007 through week May 14, 2007 and week of October 15 and October 22, 2007.																								
<b>Final Report Issued:</b>	--																								
<b>Findings:</b>	<p>The following were the results of the Report #6, 2007 Traffic Monitoring:</p> <p><u>Inbound AM:</u></p> <table data-bbox="548 548 1469 730"> <tr> <td>Adjusted Average 2007 Count</td> <td>3,058</td> </tr> <tr> <td>Baseline-established 90% Confidence Interval (2001)</td> <td>+/- 120</td> </tr> <tr> <td>Baseline-established Significant Traffic Increase (2001)</td> <td>3,439</td> </tr> <tr> <td>Baseline-established 1% Increase Trigger (2001)</td> <td>3,474</td> </tr> <tr> <td>Result (Falls below the 90% Confidence Interval by 381)</td> <td>-381</td> </tr> <tr> <td>Result (Falls below the 1% Trigger by 416 vehicles)</td> <td>-416</td> </tr> </table> <p><u>Outbound PM:</u></p> <table data-bbox="548 768 1469 951"> <tr> <td>Adjusted Average 2007 Count</td> <td>3,493</td> </tr> <tr> <td>Baseline-established 90% Confidence Interval (2001)</td> <td>+/- 109</td> </tr> <tr> <td>Baseline-established Significant Traffic Increase (2001)</td> <td>3,555</td> </tr> <tr> <td>Baseline-established 1% Increase Trigger (2001)</td> <td>3,591</td> </tr> <tr> <td>Result (falls below the 90% confidence Interval by 61 vehicles)</td> <td>-61</td> </tr> <tr> <td>Result (falls below the 1% trigger by 97 vehicles)</td> <td>-97</td> </tr> </table>	Adjusted Average 2007 Count	3,058	Baseline-established 90% Confidence Interval (2001)	+/- 120	Baseline-established Significant Traffic Increase (2001)	3,439	Baseline-established 1% Increase Trigger (2001)	3,474	Result (Falls below the 90% Confidence Interval by 381)	-381	Result (Falls below the 1% Trigger by 416 vehicles)	-416	Adjusted Average 2007 Count	3,493	Baseline-established 90% Confidence Interval (2001)	+/- 109	Baseline-established Significant Traffic Increase (2001)	3,555	Baseline-established 1% Increase Trigger (2001)	3,591	Result (falls below the 90% confidence Interval by 61 vehicles)	-61	Result (falls below the 1% trigger by 97 vehicles)	-97
Adjusted Average 2007 Count	3,058																								
Baseline-established 90% Confidence Interval (2001)	+/- 120																								
Baseline-established Significant Traffic Increase (2001)	3,439																								
Baseline-established 1% Increase Trigger (2001)	3,474																								
Result (Falls below the 90% Confidence Interval by 381)	-381																								
Result (Falls below the 1% Trigger by 416 vehicles)	-416																								
Adjusted Average 2007 Count	3,493																								
Baseline-established 90% Confidence Interval (2001)	+/- 109																								
Baseline-established Significant Traffic Increase (2001)	3,555																								
Baseline-established 1% Increase Trigger (2001)	3,591																								
Result (falls below the 90% confidence Interval by 61 vehicles)	-61																								
Result (falls below the 1% trigger by 97 vehicles)	-97																								
<b>Conclusion:</b>	<p>The AM inbound adjusted average shows a decrease of 261 vehicles from the Baseline, this decrease falls below the +90% confidence interval by 381 vehicles. The established 1% increase trigger requirement is not met, no additional mitigation is required.</p> <p>The PM peak outbound adjusted average increased by 48 vehicles from the Baseline counts. This increase is below the +90% confidence interval by 61 vehicles. The established 1% increase trigger requirement is not met, no additional mitigation is required.</p>																								

## Traffic Report #7

Traffic Report #7 was the seventh year of monitoring compared back to the Traffic Baseline Report.

<b>Data Collection:</b>	Week of April 7, 2008 through week May 12, 2008 and week of October 13 and October 20, 2008.																								
<b>Final Report Issued:</b>																									
<b>Findings:</b>	<p>The following were the results of the Report #7, 2008 Traffic Monitoring:</p> <p><u>Inbound AM:</u></p> <table data-bbox="548 583 1458 768"> <tr> <td>Adjusted Average 2008 Count</td> <td>3,020</td> </tr> <tr> <td>Baseline-established 90% Confidence Interval (2001)</td> <td>+/- 120</td> </tr> <tr> <td>Baseline-established Significant Traffic Increase (2001)</td> <td>3,439</td> </tr> <tr> <td>Baseline-established 1% Increase Trigger (2001)</td> <td>3,474</td> </tr> <tr> <td>Result (Falls below the 90% Confidence Interval by 419)</td> <td>-419</td> </tr> <tr> <td>Result (Falls below the 1% Trigger by 454 vehicles)</td> <td>-454</td> </tr> </table> <p><u>Outbound PM:</u></p> <table data-bbox="548 810 1458 995"> <tr> <td>Adjusted Average 2008 Count</td> <td>3,460</td> </tr> <tr> <td>Baseline-established 90% Confidence Interval (2001)</td> <td>+/- 109</td> </tr> <tr> <td>Baseline-established Significant Traffic Increase (2001)</td> <td>3,555</td> </tr> <tr> <td>Baseline-established 1% Increase Trigger (2001)</td> <td>3,591</td> </tr> <tr> <td>Result (falls below the 90% confidence Interval by 95 vehicles)</td> <td>-95</td> </tr> <tr> <td>Result (falls below the 1% trigger by 131 vehicles)</td> <td>-131</td> </tr> </table>	Adjusted Average 2008 Count	3,020	Baseline-established 90% Confidence Interval (2001)	+/- 120	Baseline-established Significant Traffic Increase (2001)	3,439	Baseline-established 1% Increase Trigger (2001)	3,474	Result (Falls below the 90% Confidence Interval by 419)	-419	Result (Falls below the 1% Trigger by 454 vehicles)	-454	Adjusted Average 2008 Count	3,460	Baseline-established 90% Confidence Interval (2001)	+/- 109	Baseline-established Significant Traffic Increase (2001)	3,555	Baseline-established 1% Increase Trigger (2001)	3,591	Result (falls below the 90% confidence Interval by 95 vehicles)	-95	Result (falls below the 1% trigger by 131 vehicles)	-131
Adjusted Average 2008 Count	3,020																								
Baseline-established 90% Confidence Interval (2001)	+/- 120																								
Baseline-established Significant Traffic Increase (2001)	3,439																								
Baseline-established 1% Increase Trigger (2001)	3,474																								
Result (Falls below the 90% Confidence Interval by 419)	-419																								
Result (Falls below the 1% Trigger by 454 vehicles)	-454																								
Adjusted Average 2008 Count	3,460																								
Baseline-established 90% Confidence Interval (2001)	+/- 109																								
Baseline-established Significant Traffic Increase (2001)	3,555																								
Baseline-established 1% Increase Trigger (2001)	3,591																								
Result (falls below the 90% confidence Interval by 95 vehicles)	-95																								
Result (falls below the 1% trigger by 131 vehicles)	-131																								
<b>Conclusion:</b>	<p>The AM inbound adjusted average shows a decrease of 299 vehicles from the Baseline, this decrease falls below the +90% confidence interval by 419 vehicles. The established 1% increase trigger requirement is not met, no additional mitigation is required.</p> <p>The PM peak outbound adjusted average increased by 14 vehicles from the Baseline counts. This increase is below the +90% confidence interval by 95 vehicles. The established 1% increase trigger requirement is not met, no additional mitigation is required.</p>																								

## Traffic Report #8

Traffic Report #8 was the eight year of monitoring compared back to the Traffic Baseline Report.

<b>Data Collection:</b>	Week of April 13, 2009 through week May 18, 2009 and week of October 5 and October 12, 2009.																								
<b>Final Report Issued:</b>																									
<b>Findings:</b>	<p>The following were the results of the Report #8, 2009 Traffic Monitoring:</p> <p><u>Inbound AM:</u></p> <table> <tr> <td>Adjusted Average 2009 Count</td> <td>2,840</td> </tr> <tr> <td>Baseline-established 90% Confidence Interval (2001)</td> <td>+/- 120</td> </tr> <tr> <td>Baseline-established Significant Traffic Increase (2001)</td> <td>3,439</td> </tr> <tr> <td>Baseline-established 1% Increase Trigger (2001)</td> <td>3,474</td> </tr> <tr> <td>Result (Falls below the 90% Confidence Interval by 599)</td> <td>-599</td> </tr> <tr> <td>Result (Falls below the 1% Trigger by 634 vehicles)</td> <td>-634</td> </tr> </table> <p><u>Outbound PM:</u></p> <table> <tr> <td>Adjusted Average 2009 Count</td> <td>3,227</td> </tr> <tr> <td>Baseline-established 90% Confidence Interval (2001)</td> <td>+/- 109</td> </tr> <tr> <td>Baseline-established Significant Traffic Increase (2001)</td> <td>3,555</td> </tr> <tr> <td>Baseline-established 1% Increase Trigger (2001)</td> <td>3,591</td> </tr> <tr> <td>Result (falls below the 90% confidence Interval by 328 vehicles)</td> <td>-328</td> </tr> <tr> <td>Result (falls below the 1% trigger by 364 vehicles)</td> <td>-364</td> </tr> </table>	Adjusted Average 2009 Count	2,840	Baseline-established 90% Confidence Interval (2001)	+/- 120	Baseline-established Significant Traffic Increase (2001)	3,439	Baseline-established 1% Increase Trigger (2001)	3,474	Result (Falls below the 90% Confidence Interval by 599)	-599	Result (Falls below the 1% Trigger by 634 vehicles)	-634	Adjusted Average 2009 Count	3,227	Baseline-established 90% Confidence Interval (2001)	+/- 109	Baseline-established Significant Traffic Increase (2001)	3,555	Baseline-established 1% Increase Trigger (2001)	3,591	Result (falls below the 90% confidence Interval by 328 vehicles)	-328	Result (falls below the 1% trigger by 364 vehicles)	-364
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<b>Conclusion:</b>	<p>The AM inbound adjusted average shows a decrease of 479 vehicles from the Baseline, this decrease falls below the +90% confidence interval by 599 vehicles. The established 1% increase trigger requirement is not met, no additional mitigation is required.</p> <p>The PM peak outbound adjusted average decrease by 219 vehicles from the Baseline counts. This decrease is below the +90% confidence interval by 328 vehicles. The established 1% increase trigger requirement is not met, no additional mitigation is required.</p>																								