

2006 Bay Area HOV Lanes



Volumes, occupancies and violation rates for freeway High Occupancy Vehicle Lanes in the San Francisco Bay Area



California Department of Transportation
District 4 Oakland
Office of Highway Operations



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INTRODUCTION

The ANNUAL HOV LANE REPORT is prepared by the California Department of Transportation (Caltrans) District 4 Office of Highway Operations. This report contains information concerning High Occupancy Vehicle (HOV) lanes on the San Francisco Bay Area freeway system. Traffic performance data for mainline HOV lanes and HOV toll gates are provided for calendar year 2006. This data includes, traffic volumes, vehicle occupancies, HOV lane time savings, and HOV lane violation rates. Data for this report is collected twice annually — once in the spring and once in the fall — when normal commute traffic patterns and conditions generally occur. Volumes and occupancy data for HOV bypass lanes at metered freeway on-ramps are not included in this annual report; however, general information on these ramps is included.

Major changes in 2006:

- A new section of HOV Lane on Interstate 101, in Marin County, opened to traffic in the southbound direction on July 17, 2006 and in the northbound direction on July 20, 2006. The limits of the HOV lane in the southbound direction are now from Anderson Drive to south of the Strawberry pedestrian overcrossing, a distance of 5.2 miles. The limits of the HOV lane in the northbound direction are now from south of Richardson Bay Bridge to Nellen Avenue undercrossing, a distance of 4.3 miles.
- HOV lane direct connectors at the U.S. 101/SR 85 interchange, in Mountain View, in Santa Clara County, opened to traffic on May 26, 2006.
- A new section of HOV lane on State Route 4, in Contra Costa County, opened to traffic on July 24, 2006. The limits of the HOV lane are now from Port Chicago Highway to west of Loveridge Road, a distance of 8.5 miles.

HOV Report Website: This report is available for download at www.dot.ca.gov/dist4/ by clicking on the Commute Help Link.

ACKNOWLEDGMENTS:

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HOV FACILITIES SUMMARIES

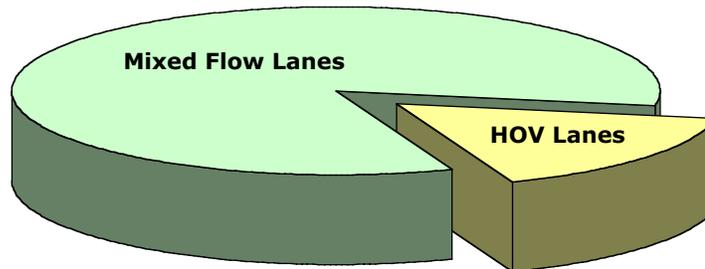
- **Comparison of HOV Lanes vs. Mixed Flow Lanes**
 - **Existing Mainline HOV Lanes**
 - **Metered On-Ramps with HOV Bypasses**
 - **Non-Metered HOV Lane On-Ramp**
 - **Mainline HOV Lanes Under Construction**
 - **Programmed HOV Lane Projects**
 - **Proposed HOV Lane Projects (Not Programmed)**
-

COMPARISON OF HOV LANES VS. MIXED FLOW LANES (Peak-Hour)

VEHICLES

(308,900 - vehicles per hour)

83%—



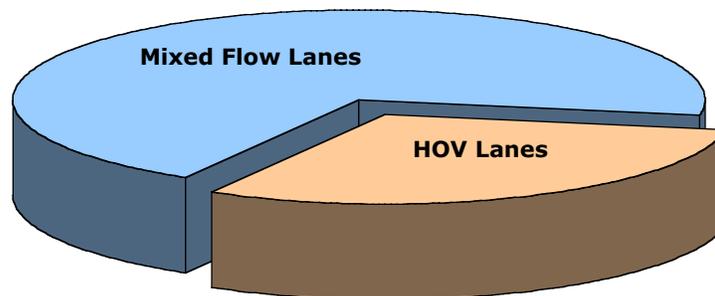
—17%

(61,100- vehicles per hour)

PEOPLE

(341,000 - persons per hour)

70%—



—30%

(149,300 - persons per hour)

NOTE: *Data shown is the relative proportion of vehicles or people in the mixed flow and carpool lanes averaged over all count locations.*

EXISTING MAINLINE HOV LANES

Route	Dir	Limits	Lane-miles	Min. occ.	Period of operation*	
ALA-80	W/B	Bay Bridge Toll Plaza	2.9	3+	5-10 AM	3-7 PM
ALA-80	W/B	Contra Costa Co Line to I-880 Viaduct	4.2	3+	5-10 AM	3-7 PM
	E/B	I 880 Viaduct to Contra Costa Co Line	5.8	3+	5-10 AM	3-7 PM
ALA-84	W/B	Newark Blvd. to Dumbarton Bridge Toll Plaza	1.8	2+	5-10 AM	3-6 PM
ALA-92	W/B	Hesperian Blvd to San Mateo Bridge Toll Plaza	2.8	2+	5-10 AM	3-6 PM
ALA-680	S/B	Route 84 to Route 237 Calaveras Blvd.	14.0	2+	5- 9 AM	3-7 PM
ALA-880	S/B	Marina Blvd to Mission Blvd	20.5	2+	5- 9 AM	3-7 PM
	N/B	Mission Blvd to South of Rte 238 I/C	16.7	2+	5- 9 AM	3-7 PM
ALA-880	N/B	West Grand Ave to Rte 80	1.1	3+	5-10 AM	3-7 PM
ALA-880	N/B	16th Street to SFOBB Toll Plaza	1.4	3+	5-10 AM	3-7 PM
CC-04	W/B	Loveridge Road to Port Chicago Hwy	8.7	2+	6- 9 AM	
	E/B	Port Chicago Hwy to Railroad Ave.	7.3	2+	3-7 PM	
CC-80	W/B	Rte 4 to Alameda County Line	10.1	3+	5-10 AM	3-7 PM
	E/B	Alameda County Line to Rte 4	9.5	3+	5-10 AM	3-7 PM
CC-680	S/B	Marina Vista to N/O N. Main St.	7.8	2+	6- 9 AM	3-7 PM
	N/B	Route 242 to Marina Vista I/C	4.4	2+	6- 9 AM	3-7 PM
CC-680	S/B	Livorna Rd to Alcosta Blvd	11.9	2+	6- 9 AM	3-6 PM
	N/B	Alcosta Blvd to Livorna Rd	12.9	2+	6- 9 AM	3-6 PM
MRN-101	S/B	Anderson Dr. to Strawberry ped o/c	5.2	2+	6:30-8:30 AM	
	N/B	S/O Richardson Bay Br to Nellen Ave. UC	4.3	2+	4:30-7:00 PM	
	S/B	Rte 37 to San Pedro Rd	6.1	2+	6:30-8:30 AM	
	N/B	San Pedro Rd to Rte 37	6.1	2+	4:30-7:00 PM	
SCL-85	S/B	Rte 101 (Mountain View) to Rte 101 (So. San Jose)	23.8	2+	5- 9 AM	3-7 PM
	N/B	Rte 101 (So. San Jose) to Rte 101 (Mt. View)	24.2	2+	5- 9 AM	3-7 PM
SCL-87	SB	Route 101 I/C to Taylor Avenue	2.4	2+	5-10 AM	3-7 PM
	NB	Taylor Avenue to Route 101 I/C	2.4	2+	5-10 AM	3-7 PM
SCL-101	S/B	San Mateo Co. Line to Cochrane Rd	34.2	2+	5- 9 AM	3-7 PM
	N/B	Cochrane Rd to San Mateo Co. Line	34.9	2+	5- 9 AM	3-7 PM
SCL-237	W/B	Jct. Rte 880/237 to Mathilda Ave	6.1	2+	5- 9 AM	3-7 PM
	E/B	Mathilda Ave to Rte 880/237 Jct.	6.5	2+	5- 9 AM	3-7 PM
SCL-280	S/B	Magdalena Ave to Meridian Ave	10.5	2+	5- 9 AM	3-7 PM
	N/B	Leland Ave to Magdalena Ave	10.8	2+	5- 9 AM	3-7 PM
SCL-880	S/B	Dixon Landing Road to I/880/SR237 Junction	1.2	2+	5- 9 AM	3-7 PM
	N/B	I 880/SR 237 Junction to Dixon Landing Road	2.0	2+	5- 9 AM	3-7 PM
SM-101	S/B	Whipple Ave to Santa Clara Co. Line	6.7	2+	5- 9 AM	3-7 PM
	N/B	Santa Clara Co. Line to Whipple Ave	6.9	2+	5- 9 AM	3-7 PM
SOL-80	E/B	Carquinez Bridge Toll Plaza	0.1	3+	5-10 AM	3-7 PM
SON-101	S/B	Route 12 to Wilfred Avenue	4.0	2+	7 - 9 AM	3-6:30 PM
	N/B	Wilfred Avenue to Route 12	4.0	2+	7 - 9 AM	3-6:30 PM

TOTAL EXISTING LANE-MILES

346.2

* **NOTE:** All HOV lanes currently operate Monday thru Friday.

METERED ON-RAMPS with HOV BYPASS LANES

Route	Dir	Ramp	Hours	HOVL metered?	HOVL Date opened	Notes
ALA-580	EB	Hopyard loop	2:30-7:30 pm	Yes	Jun 30, 2003	
ALA-580	EB	Hopyard diagonal	2:30-7:30 pm	Yes	Jun 30, 2003	
ALA-580	EB	Hacienda Loop	2:30-7:30 pm	Yes	Jun 30, 2003	
ALA-580	EB	Hacienda diagonal	2:30-7:30 pm	Yes	Jun 30, 2003	
ALA-580	EB	Santa Rita loop	2:30-7:30 pm	Yes	Jun 30, 2003	
ALA-580	EB	Santa Rita diagonal	2:30-7:30 pm	Yes	Jun 30, 2003	
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ALA-880	NB	Dixon Landing diagonal	24 hrs	Yes	Mar 30, 2004	
ALA-880	NB	Fremont Blvd loop	24 hrs	Yes	Oct 20, 1999	
ALA-880	NB	Auto Mall Pkwy(Durham) loop	24 hrs	Yes	Oct 20, 1999	
ALA-880	NB	Auto Mall Pkwy(Durham)diag	24 hrs	Yes	Oct 20, 1999	
ALA-880	NB	Stevenson Blvd. diagonal	24 hrs	Yes	Oct 20, 1999	
ALA-880	NB	E/B Mowry Ave loop	24 hrs	Yes	Oct 20, 1999	
ALA-880	NB	Thornton Ave loop	24 hrs	Yes	Oct 20, 1999	
ALA-880	NB	Thornton Ave diagonal	24 hrs	Yes	Oct 20, 1999	
ALA-880	NB	Alvarado-Fremont Blvd diag	24 hrs	Yes	Oct 20, 1999	
ALA-880	NB	Alvarado-Niles Rd diagonal	24 hrs	Yes	Oct 20, 1999	
ALA-880	NB	Industrial Parkway diagonal	24 hrs	Yes	Dec 3, 1996	
ALA-880	NB	Tennyson Rd diag	24 hrs	Yes	Dec 3, 1996	
ALA-880	NB	West A-Street diag	24 hrs	Yes	Dec 3, 1996	
ALA-880	NB	Lewelling Blvd diagonal	24 hrs	Yes	Apr 28, 1999	
ALA-880	NB	98th Ave loop	24 hrs	Yes	Apr 28, 1999	
ALA-880	NB	E/B 23rd Ave. diag	24 hrs	Yes	Apr 28, 1999	
ALA-880	SB	Dixon Landing Loop	24hrs	Yes	Mar 30, 2004	
ALA-880	SB	Fremont Blvd. diag	24 hrs	Yes	Oct 19, 1999	
ALA-880	SB	Fremont Blvd. loop	24 hrs	Yes	Oct 19, 1999	
ALA-880	SB	Auto Mall Pkwy(Durham)Diag	24 hrs	Yes	Oct 19, 1999	
ALA-880	SB	Auto Mall Pkwy(Durham)loop	24 hrs	Yes	Oct 19, 1999	
ALA-880	SB	W/B Mowry Ave loop	24 hrs	Yes	Oct 19, 1999	
ALA-880	SB	Thornton Ave. diagonal	24 hrs	Yes	Oct 19, 1999	
ALA-880	SB	Thornton Ave. loop	24 hrs	Yes	Oct 19, 1999	
ALA-880	SB	Alvarado-Fremont Blvd diag	24 hrs	Yes	Oct 19, 1999	
ALA-880	SB	Alvarado-Niles Rd diagonal	24 hrs	Yes	Oct 19, 1999	
ALA-880	SB	Alvarado-Niles Rd loop	24 hrs	Yes	Oct 19, 1999	
ALA-880	SB	Whipple Rd diag	24 hrs	Yes	Oct 29, 1996	
ALA-880	SB	Tennyson Rd diag	24 hrs	Yes	Oct 29, 1996	
ALA-880	SB	Winton Ave diag	24 hrs	Yes	Oct 29, 1996	
ALA-880	SB	West A-Street diag	24 hrs	Yes	Oct 29, 1996	
ALA-880	SB	E/B Davis St(Route 112) diag	24 hrs	Yes	Apr 27, 1999	
ALA-880	SB	W/B Davis St(Route 112)loop	24 hrs	Yes	Apr 27, 1999	
ALA-880	SB	98th Ave diagonal	24 hrs	Yes	Apr 27, 1999	
ALA-880	SB	Hegenberger diagonal	24 hrs	Yes	Apr 27, 1999	
ALA-880	SB	Oak St. diagonal	24 hrs	Yes	Apr 27, 1999	

- NOTES:**
- (a) *Minimum occupancy requirement for all HOV bypass lanes is two persons per vehicle.*
 - (b) *Motorcycles and inherently low-emission vehicles (ILEVs) with DMV issued decal are permitted.*
 - (c) *Bypass lane restrictions are in effect 7 days a week unless noted otherwise.*

METERED ON-RAMPS with HOV BYPASS LANES

Route	Dir	Ramp	Hours	HOVL metered?	HOVL Date opened	Notes
SCL-85	NB	SB Rte 101 connector	5-9am & 3-7pm	Yes	Sep 20, 2004	Monday - Friday
SCL-85	NB	SB Rte 87 connector	5-9am & 3-7pm	Yes	Jul 8, 2003	Monday - Friday
SCL-85	NB	Bernal Rd Loop	24 hrs	Yes	Sep 20, 2004	7 days/week
SCL-85	NB	Bernal Rd diag	24 hrs	Yes	Aug 26, 1994	7 days/week
SCL-85	NB	SB Rte 101 connector	5-9am & 3-7pm	Yes	Sep 20, 2004	Monday - Friday
SCL-85	NB	Great Oaks Blvd diag	24 hrs	Yes	Aug 19, 1994	7 days/week
SCL-85	NB	Cottle Rd diag	24 hrs	Yes	Aug 19, 1994	7 days/week
SCL-85	NB	Blossom Hill Rd loop	24 hrs	Yes	Aug 19, 1994	7 days/week
SCL-85	NB	Santa Teresa Blvd loop	24 hrs	Yes	Oct 19, 1994	7 days/week
SCL-87	NB	SB Rte 87 connector	5-9am & 3-7pm	Yes	Jul 8, 2003	Monday - Friday
SCL-85	NB	Almaden Expwy (nb) loop	24 hrs	Yes	Mar 19, 1999	7 days/week
SCL-85	NB	Bascom Ave diag	24 hrs	Yes	Oct 19, 1994	7 days/week
SCL-85	NB	Winchester Blvd diag	24 hrs	Yes	Nov 14, 1994	7 days/week
SCL-85	NB	Saratoga Ave diag	24 hrs	Yes	Oct 20, 1994	7 days/week
SCL-85	SB	Almaden Expwy diag	24 hrs	Yes	Oct. 19, 1994	7 days/week
SCL-85	SB	Bascom Ave diag	24 hrs	Yes	Oct 19, 1994	7 days/week
SCL-85	SB	Camden Ave diag	24 hrs	Yes	Apr 4, 1995	7 days/week
SCL-85	SB	Stevens Creek diag	24 hrs	Yes	Oct 19, 1994	7 days/week
SCL-101	NB	Bernal Rd diagonal	24 hrs	Yes	Aug 18, 2005	7 days/week
SCL-101	NB	Blossom Hill diag	24 hrs	Yes	Jun 23, 1992	7 days/week
SCL-101	NB	Capitol Expwy diag	24 hrs	Yes	Jul 11, 1997	7 days/week
SCL-101	NB	SB Rte 680 connector	5:30-9am	No	Sep 2, 1982	Monday - Friday
SCL-101	NB	Guadalupe Pkwy connector	5:30-9am	Yes	Feb 12, 1980	Monday - Friday
SCL-101	NB	Trimble Rd diag	24 hrs	Yes	Nov 1, 1991	7 days/week
SCL-101	NB	San Tomas Expwy loop	5:30-9am	No	Feb 12, 1980	Monday - Friday
SCL-101	NB	Montague Expwy diag	24 hrs	Yes	Feb 12, 1980	7 days/week
SCL-101	NB	Lawrence Expwy (nb) loop	24 hrs	Yes	Mar 8, 1999	7 days/week
SCL-101	NB	Lawrence Expwy (sb)diag	24 hrs	Yes	Mar 8, 1999	7 days/week
SCL-101	NB	San Tomas Expwy loop	5:30-9 am	No	Feb 12, 1980	Monday - Friday
SCL-237	EB	Lawrence Expwy diag	24 hrs	Yes	Aug. 14, 1998	7 days/week
SCL-237	EB	Great America Pkwy diag	24 hrs	Yes	Sep 24, 1996	7 days/week
SCL-237	EB	N. First Street diag	24 hrs	Yes	Sep 24, 1996	7 days/week
SCL-237	EB	Zanker Rd diag	24 hrs	Yes	Sep 24, 1996	7 days/week
SCL-280	NB	Wolfe Rd loop	6-9 am	Yes	Jun 8, 1976	Monday - Friday
SCL-280	SB	Wolfe Rd loop	24 hrs	Yes	Apr 27, 1993	7 days/week
SCL-280	SB	Wolfe Rd diag	24 hrs	Yes	Apr 27, 1993	7 days/week
SCL-280	SB	De Anza Blvd diag	24 hrs	Yes	Apr 27, 1993	7 days/week
SCL-880	NB	Calaveras Blv (wb) (diag)	24 hrs	Yes	Sep 9, 2003	7 days/week
SCL-880	SB	Dixon Landing diagonal	24hrs	Yes	Mar 30, 2004	7 days/week

NON-METERED HOV LANE ON-RAMP

Route	Dir	Ramp	Hours	HOVL metered?	HOVL Date opened	Notes
SF-80	EB	Sterling St on-ramp to SFOBB	3:30-7:00 PM	No	Aug 30, 1982	

NOTES

- (a) *Minimum occupancy requirement is 3 or more persons per vehicle.*
- (b) *2 - seater vehicles with 2 persons, motorcycles and inherently low-emission vehicles (ILEVs) with DMV issued decal are permitted.*

MAINLINE HOV LANES UNDER CONSTRUCTION

Estimated Opening	County Route	Location	Lane Miles	Min. Occ.
2009	SON-101	Rte 12 to Steele Lane	2.8	2+
May-07	SCL-87	Julian St to Rte 280 I/C (NB, SB)	2.4	2+
Mar-07	SCL-87	Rte 280 I/C to Santa Teresa Blvd. (NB,SB)	9.8	2+
2009	ALA-880	Dixon Landing Road to Mission Blvd (Rte 262)	8.6	2+

TOTAL LANE-MILES UNDER CONSTRUCTION 23.6

PROGRAMMED HOVL PROJECTS (From STIP)

County Route	EA	Location	Construct year	Cost Est. (Prog. year)	Lane Miles
ALA-84	444001	Newark Ave to I-880/SR 84 I/C	2008	\$6,800,000	1.6
ALA-580	290810	Hacienda to E. of Greenville Rd. (EB)	2010	\$56,200,000	11.3
ALA-580	290820	W of Hacienda to Greenville Rd. (WB)	2013	\$84,000,000	11.3
SCL/ALA-680	286000	Rte 237 to Rte 84 - NB	2010	\$80,000,000	13.0
CC-4	228500	Loveridge to Somersville	2008	\$77,400,000	4.2
CC-80	263700	Carquinez Bridge to Rte 4 - WB	2006	\$20,000,000	2.7
MRN/SON-101	264000	Route 37 to Old Redwood Highway	2016	\$169,400,000	32.9
MRN-101	2261V1	580/101 Separation to Coleman School POC	2008	\$42,900,000	3
SON-101	0A1800	Old Redwood Highway to Rohnert Park Expwy	2010	\$120,400,000	12.8
SON-101	129650	Rohnert Park Expwy to Wilfred Ave	2010	\$36,100,000	2.6
SON-101	263900	Steel Lane to Bicentennial Way	2008	\$14,500,000	1.2
SON-101	0A100K	Bicentennial Way to Windsor	2010	\$68,900,000	14.2
ALA-880	3A920K	Marina Blvd. to Hegenberger Rd.	2013	\$86,500,000	2.9

TOTAL	\$863,100,000	113.7
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PROGRAMMED HOVL PROJECTS (Locally Funded)

County Route	EA	Location	Construct year	Cost (Prog. Year)	Lane Miles
SOL-80	0A5310	Red Top Road to North Texas Street		\$51,500,000	17.4
MRN-101	226141	Coleman School POC to N. San Pedro Rd.	2008	\$51,730,000	3.2
CC-80	26372K	West of Rte 4 to Carquinez Bridge		\$45,300,000	4.7
ALA-84	443901	Westbound HOV On-ramp at Newark Ave	2009	\$8,600,000	1.0

TOTAL	\$157,130,000	26.3
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PROPOSED HOVL PROJECTS (Not Programmed)

County Route	EA	Location	Post-Mile	Cost (Prog. year)	Lane Miles
CC-4	2285XK	Somersville to SR 160	26.0/31.0	\$300,000	7.2
CC-680	0A610K	NB from North Main to Route 242	15.0/18.8	\$137,000	3.8
CC-680	3A580K	SB from North Main St to Livorna Rd	11.2/15.7	\$40,000	3.5
TOTAL				\$477,000	14.5

DATA SUMMARIES

- **HOV Lane Peak Hour Volumes**
 - **HOV & Non-HOV Lane Peak Hour Comparisons**
 - **HOV Lane Peak Period Violation Rates**
 - **HOV Lane Peak Hour Time Savings and Average Speeds**
-

HOV LANE PEAK HOUR VOLUMES

			A.M.	P.M.
			Peak Hr (veh)	Peak Hr (veh)
ALA-80	WB	Bay Bridge Toll Plaza	3661	1017
ALA-80	WB	Contra Costa County Line to Powell St	1650	N/A
	EB	I 880 Viaduct to Contra Costa Co. Line	N/A	1553
ALA-80	WB	HOV FLYOVER	1467	322
ALA-84	WB	Newark Blvd to Dumbarton Bridge Toll Plaza	1420	370
ALA-92	WB	Hesperian Blvd to San Mateo Bridge Toll Plaza	1011	553
ALA-680	SB	Route 84 to Route 237 Calaveras Blvd.	832	589
ALA-880	SB	Marina Blvd to Whipple Road	922	1071
		Whipple Road to Mission Blvd.	1005	923
	NB	Mission Blvd to Whipple Road	417	842
		Whipple Road to South of Rte 238 I/C	965	1243
ALA-880	NB	16th St to SFOBB Toll Plaza	634	N/A
CC-04	WB	Loveridge Road to Port Chicago Hwy	882	**
	EB	Port Chicago Hwy to Railroad Ave.	**	1064
CC-80	WB	Route 4 to Alameda County Line	1493	N/A
	EB	Alameda County Line to Route 4	N/A	1444
CC-680	SB	Marina Vista I/C to N/O North Main St	1005	458
	NB	Route 242 to Marina Vista I/C	195	598
CC-680	SB	Livorna Rd. to Alcosta Blvd.	1157	1173
	NB	Alcosta Blvd. to Livorna Rd.	978	1398
MRN-101	SB	Rte 37 to N. San Pedro Rd	1199	**
		Anderson Dr. to Strawberry ped o/c	618	**
	NB	S/O Richardson Bay Br to Nellen Ave UC	**	717
		N. San Pedro Rd to Rte 37	**	802
SCL-85	SB	Rte 101 (Mountain View) to Rte 280	N/A	931
		Rte 280 to Almaden Expwy	N/A	854
		Almaden Expwy to Rte 101 (So. San Jose)	N/A	625
	NB	Rte 101 (So. San Jose) to Almaden Expwy	607	N/A
		Almaden Expwy to Rte 280	1351	N/A
		Rte 280 to Rte 101 (Mountain View)	1169	N/A
SCL-87	SB	Route 101 I/C to Taylor Avenue*		
	NB	Taylor Avenue to Route 101 I/C	164	N/A

HOV LANE PEAK HOUR VOLUMES

			A.M.	P.M.
			Peak Hr (veh)	Peak Hr (veh)
SCL-101	SB	San Mateo Co. Line to Ellis St	566	1097
		Ellis St to Guadalupe Pkwy	N/A	1041
		Guadalupe Pkwy to 101/280/680 I/C	N/A	838
		101/280/680 I/C to Bernal Rd	N/A	723
		Bernal Rd to Cochrane Rd	N/A	693
	NB	Cochrane Road to Bernal Road	1091	N/A
		Bernal Rd to 101/280/680 I/C	710	N/A
		101/280/680 I/C to Guadalupe Pkwy	1245	N/A
		Guadalupe Pkwy to Ellis St	705	N/A
		Ellis St to San Mateo Co. Line	836	728
SCL-237	WB	Rte 880/237 Jct to Mathilda Ave	714	494
	EB	Mathilda Ave to Rte 880/237 Jct.	324	747
SCL-280	SB	Magdalena Ave to Leland Ave	N/A	724
	NB	Leland Ave to Magdalena Ave	814	N/A
SCL-880	SB	Dixon Landing Road to I 880/SR237 Junction*		
	NB	I 880/SR237 Junction to Dixon Landing Road*		
SM-101	SB	Whipple Ave to Santa Clara Co. Line	481	671
	NB	Santa Clara Co. Line to Whipple Ave	560	778
SOL-80	EB	Carquinez Bridge Toll Plaza	N/A	913
SON-101	S/B	Route 12 to Wilfred Avenue	351	636
	N/B	Wilfred Avenue to Route 12	476	566

N/A : Due to Resource shortfall 2006 data is not available.

* Data collection location not available within these limits.

** HOVL not in operation during this Peak Period.

PEAK HOUR HOV & non-HOV LANE COMPARISONS

			% of all vehicles		% of all Persons				
			in HOVL	in Non-HOVL	in HOVL	in Non-HOVL	Number of Non-HOV Lanes	in Non-HOVL (Avg per Lane)	
ALA-80	WB	Bay Bridge Toll Plaza	AM	* 41%	** 59%	* 67%	** 33%	18	2%
			PM	* 13%	** 87%	* 29%	** 71%	18	4%
ALA-80	WB	Contra Costa County Line to Powell Street	AM	19%	81%	40%	60%	4	15%
			PM	N/A	N/A	N/A	N/A	4	N/A
	EB	I 880 Viaduct to Contra Costa Co. Line	AM	N/A	N/A	N/A	N/A	4	N/A
			PM	18%	82%	38%	62%	4	15%
ALA-84	WB	Newark Blvd to Dumbarton Bridge Toll Plaza	AM	30%	70%	48%	52%	3	17%
			PM	N/A	N/A	N/A	N/A	3	N/A
ALA-92	WB	Hesperian Blvd to San Mateo Bridge Toll Plaza	AM	20%	80%	35%	65%	3	22%
			PM	N/A	N/A	N/A	N/A	3	N/A
ALA-680	SB	Route 84 to Route 237 Calaveras Blvd	AM	13%	87%	22%	78%	3	26%
			PM	13%	87%	22%	78%	3	26%
ALA-880	SB	Marina Blvd to Whipple Rd	AM	17%	83%	28%	72%	3	24%
			PM	18%	82%	30%	70%	3	23%
				Whipple Rd to Mission Blvd	AM	17%	83%	25%	75%
	NB	Mission Blvd to Whipple Rd	PM	18%	82%	29%	71%	3	24%
			AM	10%	90%	17%	83%	3	28%
			PM	15%	85%	27%	73%	3	24%
		Whipple Rd to South of Rte 238 I/C	AM	19%	81%	35%	65%	3	22%
			PM	21%	79%	34%	66%	3	22%
ALA-880	NB	16th Street to SFOBB	AM	39%	61%	61%	39%	2	19%
			PM	N/A	N/A	N/A	N/A	2	N/A
CC-04	WB	Liveridge Road to Port Chicago Hwy	AM	14%	86%	26%	74%	3	25%
			PM	16%	84%	27%	73%	3	24%
CC-80	WB	Route 4 to Alameda County Line	AM	22%	78%	47%	53%	3	18%
			PM	N/A	N/A	N/A	N/A	3	N/A
				Alameda County Line to Route 4	AM	N/A	N/A	N/A	N/A
			PM	22%	78%	46%	54%	3	18%
CC-680	SB	Marina Vista I/C to N/O North Main St	AM	18%	82%	28%	72%	5	14%
			PM	8%	92%	15%	85%	5	17%
	NB	Route 242 to Marina Vista I/C	AM	7%	93%	14%	86%	4	21%
			PM	16%	84%	29%	71%	4	18%
CC-680	SB	Livorna Rd to Alcosta Blvd	AM	19%	81%	32%	68%	3	23%
			PM	18%	82%	32%	68%	3	23%
	SB	Alcosta Blvd to Livorna Rd	AM	16%	84%	31%	69%	3	23%
			PM	22%	78%	39%	61%	3	20%
MRN-101	SB	Rte 37 to N. San Pedro Rd	AM	22%	78%	35%	65%	3	22%
				Anderson Dr. to Strawberry ped o/c	AM	12%	88%	28%	72%
	NB	S/O Richardson Bay Br to Nellen Avenue	PM	11%	89%	25%	75%	3	25%
				N. San Pedro Rd to Rte 37	PM	11%	89%	23%	77%
SCL-85	SB	Rte 101 (Mtn View) to Rte 280	AM	N/A	N/A	N/A	N/A	2	N/A
			PM	21%	79%	34%	66%	2	33%
		Rte 280 to Almaden Expwy	AM	N/A	N/A	N/A	N/A	2	N/A
			PM	19%	81%	32%	68%	2	34%
		Almaden Expwy to Rte 101 (So. San Jose)	AM	N/A	N/A	N/A	N/A	2	N/A
			PM	14%	86%	23%	77%	2	38%
	NB	Rte 101 (So. San Jose) to Almaden Expwy	AM	16%	84%	24%	76%	2	38%
			PM	N/A	N/A	N/A	N/A	2	N/A
		Almaden Expwy to Rte 280	AM	28%	72%	43%	57%	2	28%
			PM	N/A	N/A	N/A	N/A	2	N/A
Rte 280 to Rte 101 (Mtn View)	AM	23%	77%	36%	64%	2	32%		
	PM	N/A	N/A	N/A	N/A	2	N/A		
SCL-87	SB	Route 101 I/C to Taylor Avenue ***	AM						
			PM						
	NB	Taylor Avenue to Route 101 I/C	AM	5%	95%	9%	91%	4	46%
			PM	N/A	N/A	N/A	N/A	2	0%

PEAK HOUR HOV & non-HOV LANE COMPARISONS

				% of all vehicles		% of all Persons			
				in HOVL	in Non-HOVL	in HOVL	in Non-HOVL	Number of Non-HOV Lanes	in Non-HOVL (Avg per Lane)
SCL-101	SB	San Mateo Co. Line to Ellis St	AM	10%	90%	20%	80%	3	27%
			PM	19%	81%	32%	68%	3	23%
		Ellis St to Guadalupe Pkwy	AM	N/A	N/A	N/A	N/A	3	N/A
			PM	18%	82%	30%	70%	3	23%
		Guadalupe Pkwy to 101/280/680 I/C	AM	N/A	N/A	N/A	N/A	3	N/A
			PM	16%	84%	28%	72%	3	24%
		101/280/680 I/C to Bernal Rd	AM	N/A	N/A	N/A	N/A	3	N/A
			PM	14%	86%	23%	77%	3	26%
		Bernal Rd to Cochrane Rd	AM	N/A	N/A	N/A	N/A	3	N/A
			PM	14%	86%	24%	76%	3	25%
	NB	Cochrane Rd to Bernal Road	AM	21%	79%	34%	66%	3	22%
			PM	N/A	N/A	N/A	N/A	3	N/A
		Bernal Rd to 101/280/680 I/C	AM	13%	87%	22%	78%	3	26%
			PM	N/A	N/A	N/A	N/A	3	N/A
101/280/680 I/C to Guadalupe Pkwy		AM	18%	82%	29%	71%	3	24%	
		PM	N/A	N/A	N/A	N/A	3	N/A	
Guadalupe Pkwy to Ellis St	AM	12%	88%	22%	78%	3	26%		
	PM	N/A	N/A	N/A	N/A	3	N/A		
Ellis St to San Mateo Co. Line	AM	14%	86%	22%	78%	3	26%		
	PM	13%	87%	21%	79%	3	26%		
SCL-237	WB	880/237 Jct to Mathilda Ave	AM	14%	86%	24%	76%	2	38%
			PM	11%	89%	20%	80%	2	40%
	EB	Mathilda Ave to Rte 880/237 Jct	AM	8%	92%	14%	86%	2	43%
			PM	15%	85%	25%	75%	2	37%
SCL-280	SB	Magdalena Ave to Leland Ave	AM	N/A	N/A	N/A	N/A	3	N/A
			PM	12%	88%	21%	79%	3	26%
	NB	Leland Ave to Magdalena Ave	AM	13%	87%	22%	78%	3	26%
			PM	N/A	N/A	N/A	N/A	3	N/A
SCL-880	SB	Dixon Landing Rd to I 880/SR237 Jct***	AM						
			PM						
	NB	I 880/SR237 Jct to Dixon Landing Rd***	AM						
			PM						
SM-101	SB	Whipple Ave to Santa Clara Co. Line	AM	9%	91%	18%	82%	3	27%
			PM	10%	90%	17%	83%	3	28%
	NB	Santa Clara Co. Line to Whipple Ave	AM	12%	88%	20%	80%	3	27%
			PM	15%	85%	27%	73%	3	24%
SOL-80	EB	Carquinez Bridge	AM	N/A	N/A	N/A	N/A	11	N/A
			PM	18%	82%	41%	59%	11	5%
SON-101	SB	Route 12 to Wilfred Avenue	AM	9%	91%	18%	82%	2	41%
			PM	14%	86%	23%	77%	2	39%
	NB	Wilfred Avenue to Route 12	AM	14%	86%	25%	75%	2	38%
			PM	14%	86%	26%	74%	2	37%

* Total in all 4 HOVL's combined.

** Total in all 18 Non HOVL's combined.

*** Data collection location not available within these limits.

N/A : Due to Resource shortfall 2006 data is not available.

HOV LANE PEAK PERIOD VIOLATION RATE SUMMARY

			A.M.	P.M.
ALA-80	WB	Bay Bridge Toll Plaza	9.7%	14.9%
ALA-80	WB	Contra Costa County Line to Powell St	9.2%	N/A
	EB	I 880 Viaduct to Contra Costa Co. Line	N/A	10.3%
ALA-80	WB	HOV FLYOVER RAMP	16.3%	16.2%
ALA-84	WB	Newark Blvd to Dumbarton Bridge Toll Plaza	0.6%	1.0%
ALA-92	WB	Hesperian Blvd to San Mateo Bridge Toll Plaza	1.3%	2.0%
ALA-680	SB	Route 84 to Route 237 Calaveras Blvd	3.0%	1.1%
ALA-880	SB	Marina Blvd to Whipple Road	3.2%	1.5%
		Whipple Road to Mission Blvd.	12.0%	0.7%
	NB	Mission Blvd to Whipple Road	0.7%	1.0%
		Whipple Road to South of Rte 238 I/C	2.2%	1.1%
ALA-880	NB	16th St to SFOBB Toll Plaza	8.5%	N/A
CC-04	WB	Loveridge Road to Port Chicago Hwy.	3.0%	**
	EB	Port Chicago Hwy to Railroad Ave	**	1.7%
CC-80	WB	Rte 4 to Alameda County Line	10.9%	N/A
	EB	Alameda County Line to Rte 4	N/A	6.7%
CC-680	SB	Marina Vista to N/O North Main St.	1.0%	1.4%
	NB	Route 242 to Marina Vista I/C	13.7%	2.3%
CC-680	SB	Livorna Rd. to Alcosta Blvd.	7.6%	1.3%
	NB	Alcosta Blvd. to Livorna Rd.	2.1%	0.9%
MRN-101	SB	Rte 37 to N. San Pedro Rd	1.4%	**
		Anderson Dr. to Strawberry ped o/c	1.4%	**
	NB	S/O Richardson Bay Br to Nellen Ave UC	**	1.4%
		N. San Pedro Rd to Rte 37	**	2.2%
SCL-85	SB	Rte 101 (Mountain View) to Rte 280	N/A	0.5%
		Rte 280 to Almaden Expwy	N/A	0.2%
		Almaden Expwy to Rte 101 (So. San Jose)	N/A	3.4%
	NB	Rte 101 (So. San Jose) to Almaden Expwy	3.8%	N/A
		Almaden Expwy to Rte 280	1.2%	N/A
		Rte 280 to Rte 101 (Mountain View)	0.7%	N/A
SCL-87	SB	Route 101 I/C to Taylor Avenue*		
	NB	Taylor Avenue to Route 101 I/C	1.7%	N/A
SCL-101	SB	San Mateo Co. Line to Ellis St	0.7%	3.1%
		Ellis St to Guadalupe Pkwy	N/A	0.3%
		Guadalupe Pkwy to 101/280/680 I/C	N/A	0.1%
		101/280/680 I/C to Bernal Rd	N/A	3.3%
		Bernal Rd to Cochrane Road	N/A	1.2%

HOV LANE PEAK PERIOD VIOLATION RATE SUMMARY

		A.M.	P.M.	
	NB	Cochrane Rd to Bernal Rd	1.0%	N/A
		Bernal Rd to 101/280/680 I/C	2.2%	N/A
		101/280/680 I/C to Guadalupe Pkwy	3.8%	N/A
		Guadalupe Pkwy to Ellis St	0.7%	N/A
		Ellis St to San Mateo Co. Line	12.1%	0.1%
SCL-237	WB	880/237 Jct to Mathilda Ave	0.3%	4.3%
	EB	Mathilda Ave to Rte 880/237 Jct.	11.1%	4.2%
SCL-280	SB	Magdalena Ave to Leland Ave	N/A	3.5%
	NB	Leland Ave to Magdalena Ave	0.1%	N/A
SCL-880	SB	Dixon Landing Road to I 880/SR237 Jct*		
	NB	I 880/SR237 Jct to Dixon Landing Road*		
SM-101	SB	Whipple Ave to Santa Clara Co. Line	0.8%	0.5%
	NB	Santa Clara Co. Line to Whipple Ave	0.2%	0.0%
SOL-80	EB	Carquinez Bridge Toll Plaza	N/A	11.0%
SON-101	SB	Route 12 to Wilfred Avenue	4.7%	3.6%
	NB	Wilfred Avenue to Route 12	3.5%	3.7%

N/A: Due to Resource shortfall 2006 data is not available.

* Data collection location not available within these limits.

** HOV not in operation during this Peak Period

HOV LANE PEAK HOUR TIME SAVINGS AND AVERAGE SPEEDS

				Travel Time	Travel Time	HOVL	Avg. Speed	Avg. Speed
				(minutes)	(minutes)	Time Saving	(mph)	(mph)
				Non-HOVL	HOVL	(minutes)	Non-HOVL	HOVL
ALA-80	WB	Bay Bridge Toll Plaza	AM	20	5	15	3	13
			PM	5	1	4	13	50
ALA-80	WB	Contra Costa County Line to Powell St	AM	9	7	2	28	36
			PM	12	8	4	21	32
	EB	I 880 Viaduct to Contra Costa Co. Line	AM	5	5	0	65	65
			PM	22	10	12	16	35
ALA-80	WB	HOV FLYOVER RAMP	AM	9	7	2	6	8
			PM	1	1	0	55	55
ALA-84	WB	Newark Blvd to Dumbarton Bridge Toll Plaza	AM	5	2	3	24	62
			PM	2	2	0	62	62
ALA-92	WB	Hesperian Blvd to San Mateo Bridge Toll Plaza	AM	3	3	0	59	65
			PM	3	3	0	56	65
ALA-680	SB	Route 84 to Route 237 Calaveras Blvd.	AM	20	13	7	41	65
			PM	14	13	1	61	65
ALA-880	SB	Marina Blvd. to Whipple Road	AM	22	8	14	24	65
			PM	16	8	8	33	65
		Whipple Road to Mission Blvd	AM	29	11	18	24	65
			PM	17	11	6	40	65
	NB	Mission Blvd. to Whipple Road	AM	16	11	5	44	65
			PM	17	11	6	41	65
		Whipple Road to South of Rte 238 I/C	AM	10	5	5	33	65
			PM	11	5	6	29	65
ALA-880	NB	Route 237 to Dixon Landing Road	AM	1	1	0	62	65
			PM	2	1	1	35	65
	SB	Dixon Landing Road to Route 237	AM	2	2	0	60	65
			PM	2	2	0	60	65
ALA-880	NB	16th St to SFOBB Toll Plaza	AM	20	2	18	5	50
			PM	3	2	1	36	50
CC-04	WB	Loveridge Rd. to Port Chicago Hwy	AM	23	8	15	22	65
			PM	11	7	4	39	65
CC-80	WB	Rte 4 to Alameda County Line	AM	21	18	3	29	34
			PM	9	9	0	65	65
	EB	Alameda County Line to Rte 4	AM	9	9	0	65	65
			PM	22	14	8	26	41
CC-680	SB	Marina Vista I/C to N/O North Main St	AM	22	7	15	21	65
			PM	8	7	1	61	65
	NB	Route 242 to Marina Vista	AM	5	4	1	54	65
			PM	6	4	2	47	65
CC-680	SB	Livorna Rd to Alcosta Blvd	AM	20	11	9	36	65
			PM	15	11	4	48	65
	NB	Alcosta Blvd to Livorna Rd	AM	19	12	7	41	65
			PM	27	12	15	29	65
MRN-101	SB	Rte 37 to N. San Pedro Rd	AM	31	23	8	12	16
			AM	6	6	0	55	55
	NB	Richardson Bay Brdg to Nellen Ave. UC	PM	15	8	7	17	32
			PM	6	6	0	65	65
SCL-85	SB	Rte 101 (Mtn View) to Rte 280	AM	5	5	0	64	65
			PM	16	5	11	22	65
		Rte 280 to Almaden Expwy	AM	11	11	0	65	65
			PM	30	11	19	24	65
		Almaden Expwy to Rte 101 (So. San Jose)	AM	6	6	0	65	65
			PM	7	6	1	55	65
	NB	Rte 101 (So. San Jose) to Almaden Expwy	AM	14	6	8	28	65
			PM	7	6	1	58	65
		Almaden Expwy to Rte 280	AM	24	12	12	31	65
			PM	12	12	0	65	65
	Rte 280 to Rte 101 (Mtn View)	AM	14	5	9	23	65	
		PM	5	5	0	64	65	

HOV LANE PEAK HOUR TIME SAVINGS AND AVERAGE SPEEDS

				Travel Time	Travel Time	HOVL	Avg. Speed	Avg. Speed	
				(minutes)	(minutes)	Time Saving	(mph)	(mph)	
				Non-HOVL	HOVL	(minutes)	Non-HOVL	HOVL	
SCL-87	SB	Route 101 I/C to Taylor Avenue	AM	3	3	0	55	55	
			PM	9	3	6	16	55	
	NB	Taylor Avenue to Route 101 I/C	AM	11	3	9	12	55	
			PM	3	3	0	55	55	
SCL-101	SB	San Mateo Co. Line to Ellis St	AM	7	5	2	47	65	
			PM	10	5	5	30	65	
		Ellis St to Guadalupe Pkwy	AM	7	6	1	61	65	
			PM	19	6	13	22	65	
		Guadalupe Pkwy to 101/280/680 I/C	AM	5	5	0	65	65	
			PM	21	11	10	17	32	
		101/280/680 I/C to Bernal Rd	AM	7	7	0	65	65	
			PM	10	7	3	46	65	
		Bernal Rd to Cochrane Road	AM	8	8	0	65	65	
			PM	9	8	1	60	65	
	NB	Cochrane Road to Bernal Road	AM	9	9	0	65	65	
			PM	9	9	0	65	65	
		Bernal Rd to 101/280/680 I/C	AM	16	8	8	31	65	
			PM	8	8	0	63	65	
		101/280/680 I/C to Guadalupe Pkwy	AM	15	9	6	20	32	
			PM	5	5	0	65	65	
		Guadalupe Pkwy to Ellis Street	AM	13	7	6	33	65	
			PM	11	7	4	40	65	
Ellis to San Mateo Co. Line	AM	11	5	6	27	65			
	PM	12	5	7	25	65			
SCL-237	WB	McCarthy Blvd to Mathilda Ave	AM	13	6	7	29	65	
			PM	8	6	2	46	65	
	EB	Mathilda Ave to Rte 880/237 Jct.	AM	8	6	2	47	65	
			PM	12	6	6	32	65	
SCL-280	SB	Magdalena Ave to Leland Ave	AM	11	10	1	60	65	
			PM	16	10	6	40	65	
	NB	Leland Ave to Magdalena Ave	AM	27	10	17	24	65	
			PM	13	10	3	51	65	
SCL-880	NB	Route 237 to Dixon Landing Road	AM	2	2	0	65	65	
			PM	12	2	10	10	65	
	SB	Dixon Landing Road to Route 237	AM	2	2	0	65	65	
			PM	2	2	0	65	65	
	SM-101	SB	Whipple Ave to Santa Clara Co. Line	AM	21	6	15	19	65
				PM	15	6	9	27	65
NB		Santa Clara Co. Line to Whipple Ave	AM	8	6	2	52	65	
			PM	9	6	3	46	65	
SOL-80	EB	Carquinez Bridge Toll Plaza	AM	1	1	0	65	65	
			PM	1	1	0	65	65	
SON-101	SB	Rte 12 to Wilfred Avenue	AM	4	4	0	65	65	
			PM	5	4	1	48	65	
	NB	Wilfred Ave to Rte 12	AM	8	4	4	30	65	
			PM	5	4	1	48	65	
Overall Average Speed							42.1	60.1	

GENERAL FACILITY INFORMATION

- **Mainline HOV Lanes**
 - **Toll Bridge HOV Bypass Lanes**
-

MAINLINE HOV LANES

ALA-80: San Francisco-Oakland Bay Bridge Toll Plaza

OCCUPANCY	Three or more persons per vehicle, motorcycles, 2-seat vehicles with 2 persons, inherently low-emission vehicles (ILEVs) with DMV issued decal.	
WESTBOUND	HOURS: 5:00 - 10:00 AM, 3:00 - 7:00 PM, Monday thru Friday	
	LIMITS:	<p>Lane 1: Route 880 left side HOV ramp to metering signals Length = 0.4 mile</p> <p>Lane 2: Route 580 connector to metering signals Length = 1.1 miles</p> <p>Lane 21: Route 880 right side HOV ramp to metering signals Length = 0.6 mile</p> <p>Lane 22: HOV slip ramp to metering signals Length = 0.8 miles</p>
	DATES:	<p>Apr 17, 1970 Opened; Buses only</p> <p>Dec 8, 1971 Carpools permitted; min. occ. three persons per vehicle</p> <p>Feb 2, 1979 Buses only in lane 17; 6:30-8:30, Mon-Fri-only lane on W. Grand Ave, approached from Maritime on-ramp to toll plaza; temporary measure in response to BART tube closure</p> <p>Apr 17, 1979 Bus-only in lane 17 & W. Grand Ave approach made permanent; W. Grand Ave slip ramp designated for buses only; hours of operation changed to 6:00-9:00 AM, Mon-Fri; lane 8 reverted to mixed flow; carpools permitted to use lane 10 during AM peak</p> <p>Oct 12, 1981 Opened; lanes 18 & 19; buses only, 24 hours/day, 7 days/week; carpools permitted, 6:00-9:00 AM, Mon-Fri; lane 17 reverted to mixed flow</p> <p>Jul 18, 1983 Lanes 8 & 9 reverted to mixed flow; lane 1 converted to HOV; lanes 18/19 merge moved from downstream of toll plaza to downstream of metering signals</p> <p>Apr 22, 1986 Mini toll plaza (lane 18, 19, 20) opened; right side HOV lanes designated as lanes 21 & 22</p> <p>Sep 7, 1988 Hours of Operation were extended from 6-9 AM to 5-10 AM on September 7, 1988.</p> <p>Sep 7, 1988 The HOVL violation fine increased in early 1989.</p> <p>Nov 3, 1989 Lane 2 converted to HOV; left HOVL extended upstream to 32nd St on-ramp; AM HOV hours changed to 5:00- 10:00 AM, Mon-Fri</p> <p>Mar 1, 1992 Motorcycles permitted</p> <p>Oct 1, 1995 Two-seat vehicles with two occupants permitted</p> <p>Apr 8, 1997 HOV slip ramp approaching right side of toll plaza opened; buses only, 24 hours/day, 7 days/week; carpools/motorcycles OK, 5:00-10:00 AM, 3:00-6:00 PM, Mon-Fri</p> <p>Jul 23, 1997 Route 880 right side HOV ramp opened; buses only, 24 hours/day, 7 days/week; carpools/motorcycles OK, 5:00-10:00 AM; 3:00-6:00 PM, Mon-Fri</p> <p>Feb. 2, 1998 PM Hours of operation changed to 3:00-7:00 PM</p> <p>May 16, 1998 Route 880 left side HOV ramp opened; buses/carpools/ motorcycles only, 5:00-10:00 AM, 3:00-7:00 PM, Mon-Fri</p> <p>Jul 1, 2000 Inherently low-emission vehicles with DMV issued decals permitted.</p>

ALA-80: HOV FLYOVER

OCCUPANCY	Three or more persons per vehicle, motorcycles, 2 seater vehicles with 2 persons, inherently low-emission vehicles (ILEVs) with DMV issued decal.	
WESTBOUND	HOURS:	5:00 - 10:00 AM, 3:00 - 7:00 PM, Monday thru Friday
	LIMITS:	Powell St (MP 3.8) to HOV Slip Ramp(MP. 4.8) Length = 1.0 miles
	Feb 2, 1998	Opened; HOV flyover. Hours of operation 5:00 AM-7:00 PM, Monday thru Friday
	Aug 3, 1998	Hours of operation changed to 5-10 AM, 3-7 PM, Mon-Fri

ALA-80: Contra Costa County Line to I-880 Viaduct

OCCUPANCY	Three or more persons per vehicle, motorcycles, 2 seater vehicles with 2 persons, inherently low-emission vehicles (ILEVs) with DMV issued decal.	
WESTBOUND	HOURS:	5:00 - 10:00 AM, 3:00 - 7:00 PM, Monday thru Friday
	LIMITS:	Contra Costa County Line (MP 8.0) to Powell St (MP 3.8) Length = 4.2 miles
	DATES:	Feb. 2, 1998 Opened; Contra Costa County Line to Powell St; HOV flyover opened; hours of operation 5:00 AM-7:00 PM, Monday thru Friday
	Aug 3, 1998	Hours of operation changed to 5-10 AM, 3-7 PM, Mon-Fri
EASTBOUND	HOURS:	5:00 - 10:00 AM, 3:00 - 7:00 PM, Monday thru Friday
	LIMITS:	I-880 Viaduct(MP 2.2) to Contra Costa County Line (MP 8.0) Length = 5.8 miles
	DATES:	Jul 31, 1998 Opened; Gilman St to Contra Costa County Line
	Aug 3, 1998	Hours of operation changed to 5-10 AM, 3-7 PM, Mon-Fri
	Nov 20, 1998	Extended; Powell St to Gilman St.
	Nov 12, 2003	Extended; I 880 Viaduct to Powell St.

ALA-84: Newark Blvd to Dumbarton Bridge Toll Plaza

OCCUPANCY	Two or more persons per vehicle, motorcycles, inherently low-emission vehicles (ILEVs) with DMV issued decal.	
WESTBOUND	HOURS:	5:00 - 10:00 AM, 3:00 - 6:00 PM, Monday thru Friday
	LIMITS:	Newark Blvd U/C (MP 4.9) to west of Toll Plaza (MP 3.1) Length = 1.8 miles
	DATES:	Oct 6, 1982 Opened with new bridge; 1000-ft long bypass lane at booths
	Nov 22, 1989	Extended due to Loma Prieta quake; Newark Blvd to University Ave
	Nov 17, 1990	Shortened; Newark Blvd to west of Toll Plaza
	Jan 1, 1992	Minimum occupancy reduced from three to two persons per vehicle

NORTHBOUND HOURS: 5:00 - 9:00 AM, 3:00 - 7:00 PM, Monday thru Friday

LIMITS: Mission Blvd. (MP 2.4) to one mile south of Rte 238 (MP 19.3)
Length = 16.7 miles

DATES: Sep 19, 1991 Opened; north of Tennyson to A-Street
Nov 8, 1991 Extended; Industrial Pkwy to Tennyson
Jun 26, 1992 Extended; A-Street to Rte 238
Dec 3, 1993 Extended; Whipple Rd to Industrial Pkwy
Dec 1994 Hours of operation changed from 5-10 AM and 3-6 PM to
5-9 AM, 3-7 PM respectively
Sep 23, 1996 Shortened; Whipple Rd to one mile south of Rte 238
Jun 15, 1998 Extended; Alvarado/Fremont Blvd. to Whipple Rd.
Oct 30, 1998 Extended; Mowry Ave. to Alvarado/Fremont Blvd.
Nov 30, 1998 Extended; Mission Blvd. (Rte 262) to Mowry Ave.

ALA-880: 16th Street to SFOBB Toll Plaza

OCCUPANCY Three or more persons per vehicle, motorcycles, 2-seat vehicles with 2 persons, inherently low-emission vehicles (ILEVs) with DMV issued decal.

NORTHBOUND HOURS: 5:00 - 10:00 AM, 3:00 - 7:00 PM, Monday thru Friday

LIMITS: 16th Street to NB Rte 880/WB Rte 80 Jct
Length = 1.4 miles

DATES: May 16, 1998 Opened; 16th Street to left HOV ramp at SFOBB Toll Plaza

ALA-880: West Grand Ave. to EB Rte 80 HOV Lane Merge

OCCUPANCY Three or more persons per vehicle, motorcycles, 2-seat vehicles with 2 persons, inherently low-emission vehicles (ILEVs) with DMV issued decal.

NORTHBOUND HOURS: 5:00 - 10:00 AM, 3:00 - 7:00 PM, Monday thru Friday

LIMITS: West Grand Ave.(MP R34.7) to EB Rte 80 HOV Lane Merge (MP R35.8)
Length = 1.1 miles

DATES: Nov 12, 2003 Opened; West Grand Ave to EB Rte 80 HOV Lane Merge

CC-4: Loveridge Rd. to Port Chicago Highway

OCCUPANCY	Two or more persons per vehicle, motorcycles, inherently low-emission vehicles (ILEVs) with DMV issued decal.	
WESTBOUND	HOURS:	6:00 - 9:00 AM, Monday thru Friday
	LIMITS:	Loveridge Rd. (MP 24.4) to Port Chicago Highway (MPR 15.7) Length = 8.7 miles
	DATES:	May 1, 2000 Opened; Bay Point to Port Chicago Highway; 6-9 AM, Mon-Fri May 5, 2000 Extended: Bailey Road to Port Chicago Highway Jul 23, 2001 Extended: West of Railroad Ave. to Port Chicago Highway Jul 24, 2006 Extended: Loveridge Rd. to Port Chicago Highway
EASTBOUND	HOURS:	3:00 - 7:00 PM, Monday thru Friday
	LIMITS:	Port Chicago Highway (MPR 16.2) to Railroad Ave. (MPR23.5) Length = 7.3 miles
	DATES:	Aug 6, 2001 Opened; Port Chicago Highway to West of Railroad Ave. Jul 24, 2006 Extended: Port Chicago Highway to Railroad Ave.

CC-80 Route 4 to Alameda County Line

OCCUPANCY	Three or more persons per vehicle, motorcycles, 2-seat vehicles with 2 persons, inherently low-emission vehicles (ILEVs) with DMV issued decal.	
WESTBOUND	HOURS:	5:00 - 10:00 AM, 3:00 - 7:00 PM, Monday thru Friday
	LIMITS:	Route 4 (MP 10.1) to Alameda County Line (MP 0.0) Length = 10.1 miles
	DATES:	Mar 5, 1997 Opened; Pinole Valley Rd to Cutting Blvd; 5-10 AM, Mon-Fri Apr 18, 1997 2-seat vehicles with 2 persons permitted to use HOVL May 3, 1997 Extended: Cutting Blvd to Central Ave Sep 20, 1997 Extended; Route 4 to Pinole Valley Rd Feb 2, 1998 Extended; Central Ave to Alameda County Line; Hours of operation changed to 5:00 AM-7:00 PM, Mon-Fri Aug 3, 1998 Hours of operation changed to 5-10 AM, 3-7 PM, Mon-Fri
EASTBOUND	HOURS:	5:00 - 10:00 AM, 3:00 - 7:00 PM, Monday thru Friday
	LIMITS:	Alameda County Line (MP 0.0) to West of Route 4 off-ramp (MP 9.5) Length = 9.5 miles
	DATES:	Feb 12, 1997 Opened; San Pablo Dam Rd to Pinole Valley Rd; 3-7 PM, Mon-Fri Feb 13, 1997 Extended; Cutting Blvd to San Pablo Dam Rd Apr 18, 1997 2-seat vehicles with 2 persons permitted to use HOVL May 3, 1997 Extended; Central Ave to Cutting Blvd Aug 30, 1997 Extended; Pinole Valley Rd to Route 4 Feb 2, 1998 Hours of operation changed to 5:00 AM-7:00 PM, Mon-Fri Aug 3, 1998 Hours of operation changed to 5-10 AM, 3-7 PM, Mon-Fri Extended; Central Ave to Alameda County Line

CC-680: Marina Vista to N/O North Main St.

OCCUPANCY	Two or more persons per vehicle, motorcycles, inherently low-emission vehicles (ILEVs) with DMV issued decal.
SOUTHBOUND	HOURS: 6:00 - 9:00 AM, 3:00 - 7:00 PM, Monday thru Friday
	LIMITS: South of Marina Vista(MP 24.1) to 0.7 miles N/O North Main St. off-ramp (MP R16.3) Length = 7.8 miles
	DATES: Sep 11, 2004 Opened; S/O Route 4 to N/O North Main St. Jun 14, 2005 Extended S/O Marina Vista to North Main St.
NORTHBOUND	HOURS: 6:00 - 9:00 AM, 3:00 - 7:00 PM, Monday thru Friday
	LIMITS: Route 242 I/C (R018.707) to South of Marina Vista(24.1) Length = 4.4 miles
	DATES: Apr 28, 2005 Opened; Route 242 to South of Marina Vista.

CC-680: Livorna Rd to Alcosta Blvd.

OCCUPANCY	Two or more persons per vehicle, motorcycles, inherently low-emission vehicles (ILEVs) with DMV issued decal.
SOUTHBOUND	HOURS: 6:00 - 9:00 AM, 3:00 - 6:00 PM, Monday thru Friday
	LIMITS: 0.5 miles north of Livorna Rd off-ramp (MP R11.9) to north of Alcosta Blvd on-ramp (MP R21.6) Length = 11.9 miles
	DATES: Oct 3, 1994 Opened; Stone Valley Rd on-ramp to Alcosta Blvd on-ramp Feb 6, 1995 Extended; Livorna Rd on-ramp to Alcosta Blvd May 5, 1999 Shortened; Livorna Rd on-ramp to north of Alcosta Blvd off-ramp
NORTHBOUND	HOURS: 6:00 - 9:00 AM, 3:00 - 6:00 PM, Monday thru Friday
	LIMITS: 0.4 miles south of Alcosta on-ramp (MP R21.6) to Livorna on-ramp (MP R11.9) Length = 12.9 miles
	DATES: Oct 3, 1994 Opened; Alcosta Blvd on-ramp to Stone Valley Rd on-ramp Feb 6, 1995 Extended; Alcosta Blvd to Livorna Rd on-ramp

MRN-101: Richardson Bay Bridge to Anderson Dr.

OCCUPANCY	Two or more persons per vehicle, motorcycles permitted, inherently low-emission vehicles (ILEVs) with DMV issued decal.	
SOUTHBOUND	HOURS:	6:30 - 8:30 AM, Monday thru Friday
	LIMITS:	Anderson Dr. (MP 9.9) to south of Strawberry ped OC (MP 4.7) Length = 5.2 miles
	DATES:	Dec 23, 1974 Opened; buses only Jun 16, 1976 Carpools permitted; min. occ. three persons per vehicle Oct 1, 1988 Minimum occupancy reduced from three to two persons per vehicle Sep 23, 1990 Motorcycles permitted Jul 13, 1998 HOV hours extended to 5:00-9:00 AM Dec 14, 1998 Extended hours cancelled Jul 17, 2006 Extended: Anderson Dr. to North of Greenbrae ped OC
NORTHBOUND	HOURS:	4:30 - 7:00 PM, Monday thru Friday
	LIMITS:	South of Richardson Bay Bridge (MP 3.8) to Nellen Ave. UC (MP 8.1) Length = 4.3 miles
	DATES:	Dec 20, 1974 Opened; buses only Jun 15, 1976 Carpools permitted; min. occ. three persons per vehicle Oct 1, 1988 Minimum occupancy reduced from three to two persons per vehicle Sep 23, 1990 Motorcycles permitted Jul 13, 1998 HOV hours extended to 3:00-7:00 PM Dec 14, 1998 Extended hours cancelled Jul 20, 2006 Extended: North of Corte Madeera to Nellen Ave. UC

MRN-101: North San Pedro Rd to Rte 37

OCCUPANCY	Two or more persons per vehicle, motorcycles, inherently low-emission vehicles (ILEVs) with DMV issued decal.	
SOUTHBOUND	HOURS:	6:30 - 8:30 AM, Monday thru Friday
	LIMITS:	Route 37/S. Novato Blvd (MP 18.9) to north of San Pedro U/C (MP 12.8) Length = 6.1 miles
	DATES:	Jul 24, 1987 Opened; Marinwood to North San Pedro Rd Oct 1, 1988 Minimum occupancy reduced from three to two persons per vehicle Sep 23, 1990 Motorcycles permitted Feb 8, 1991 Extended; Marinwood to Rte 37 Jul 13, 1998 HOV hours extended to 5:00-9:00 AM Dec 14, 1998 Extended hours cancelled
NORTHBOUND	HOURS:	4:30 - 7:00 PM, Monday thru Friday
	LIMITS:	North of San Pedro U/C (MP 12.8) to Route 37/S. Novato Blvd (MP 18.9) Length = 6.1 miles

DATES: Aug 12, 1986 Opened; North San Pedro to Marinwood
 Oct 1, 1988 Minimum occupancy reduced from three to two persons per vehicle
 Sep 23, 1990 Motorcycles permitted
 Feb 21, 1991 Extended; Marinwood to Rte 37
 Jul 13, 1998 HOV hours extended to 3:00-7:00 PM
 Dec 14, 1998 Extended hours cancelled

SCL-85: Rte 101 (Mountain View) to Rte 101 (So. San Jose)

OCCUPANCY Two or more persons per vehicle, motorcycles, inherently low-emission vehicles (ILEVs) with DMV issued decal.

SOUTHBOUND HOURS: 5:00 - 9:00 AM, 3:00 - 7:00 PM, Monday thru Friday

LIMITS: Rte 85/101 connector ramp in So. San Jose (MP 23.8) to Rte 101 in Mountain View (MP 0.0)
Length = 23.8 miles

DATES: Apr 25, 1990 Opened; Rte 237 to Rte 280
 Aug 12, 1994 New section; Almaden Expwy to Bernal Rd
 Oct 19, 1994 Extended; Rte 280 to Almaden Expwy
 Nov 13, 1998 Extended; Rte 101 (Mountain View) to Rte 237
 Oct 22, 2004 Opened direct HOV Connector from SB 85 to SB 101

NORTHBOUND HOURS: 5:00 - 9:00 AM, 3:00 - 7:00 PM, Monday thru Friday

LIMITS: Rte 85/101 connector ramp in So. San Jose (MP 0.0) to Rte 101 in Mountain View (MP 24.2)
Length = 24.2 miles

DATES: Feb 22, 1990 Opened; Rte 280 to Rte 237
 Aug 12, 1994 New section; Rte 101 (So. San Jose) to Almaden Expwy
 Oct 19, 1994 Extended; Almaden Expwy to Rte 280
 Nov 6, 1998 Extended; Rte 237 to Rte 101 (Mountain View)
 Sep 20, 2004 Opened direct HOV Connector from NB 101 to NB 85

SCL-87: Route 101 I/C to Taylor Avenue

OCCUPANCY Two or more persons per vehicle, motorcycles, inherently low-emission vehicles (ILEVs) with DMV issued decal.

SOUTHBOUND HOURS: 5:00 - 9:00 AM, 3:00 - 7:00 PM, Monday thru Friday

LIMITS: Route 101 I/C to Taylor Avenue
Length = 2.4 miles

DATES: Dec 23, 2004 Opened

NORTHBOUND HOURS: 5:00 - 9:00 AM, 3:00 - 7:00 PM, Monday thru Friday

LIMITS: Taylor Avenue to Route 101 I/C
Length = 2.4 miles

DATES: Apr 18, 2005 Opened

Oct 2, 1996 Shortened; Mathilda Ave to 1.1 miles west of Rte 880
Apr. 29, 2005 Opened; Route 880/237 HOVL Direct Connector

SCL-280: Magdalena Ave to Leland Ave

OCCUPANCY Two or more persons per vehicle, motorcycles, inherently low-emission vehicles (ILEVs) with DMV issued decal.

SOUTHBOUND HOURS: 5:00 - 9:00 AM, 3:00 - 7:00 PM, Monday thru Friday

LIMITS: Magdalena Ave on-ramp (MP 14.0) to north of Meridian Ave (MP R4.2)
Length = 10.5 miles

DATES: Dec 1, 1990 Opened; Magdalena Ave to north of Meridian Ave

NORTHBOUND HOURS: 5:00 - 9:00 AM, 3:00 - 7:00 PM, Monday thru Friday

LIMITS: South of Leland Ave (MP L4.7) to Magdalena Ave off-ramp (MP 14.0)
Length = 10.8 miles

DATES: Nov 21, 1990 Opened; south of Leland Ave to Magdalena Ave

SCL-880: I-880/ 237 Junction to Dixon Landing Road

OCCUPANCY Two or more persons per vehicle, motorcycles, inherently low-emission vehicles (ILEVs) with DMV issued decal.

SOUTHBOUND HOURS: 5:00 - 9:00 AM, 3:00 - 7:00 PM, Monday thru Friday

LIMITS: Dixon Landing Road to Jct I-880/237
Length = 1.2 miles

DATES: May 1, 2005 Opened

NORTHBOUND HOURS: 5:00 - 9:00 AM, 3:00 - 7:00 PM, Monday thru Friday

LIMITS: I-880/237 Jct to Dixon Landing Road
Length = 2.0 miles

DATES: Apr 22, 2005 Opened

SM-101: Whipple Ave to Santa Clara County Line

OCCUPANCY Two or more persons per vehicle, motorcycles, inherently low-emission vehicles (ILEVs) with DMV issued decal.

SOUTHBOUND HOURS: 5:00 - 9:00 AM, 3:00 - 7:00 PM, Monday thru Friday

LIMITS: Whipple Ave (MP 6.6) to Santa Clara Co. Line (MP 0.0)
Length = 6.7 miles

DATES: Jul 18, 1991 Opened

NORTHBOUND HOURS: 5:00 - 9:00 AM, 3:00 - 7:00 PM, Monday thru Friday
LIMITS: Santa Clara Co. Line (MP 0.0) to Whipple Ave (MP 6.6)
Length = 6.9 miles
DATES: Jul 16, 1991 Opened

SOL-80: Carquinez Bridge Toll Plaza

OCCUPANCY Three or more persons per vehicle, motorcycles, 2-seat vehicles with 2 persons, inherently low-emission vehicles (ILEVs) with DMV issued decals.

EASTBOUND HOURS: 5:00 - 10:00 AM, 3:00 - 7:00 PM, Monday thru Friday
LIMITS: 0.1 miles West of Toll Plaza (MP 0.5) to east of Toll Plaza (MP 0.6)
Length = 0.1 mile
DATES: Jul 1, 1991 Reduced 10c toll tickets for HOVs (with purchase of 50-ticket book)
Oct 1, 1995 Toll-free passage in designated booth only;
Two-seat vehicles with two occupants permitted
Jul 30, 1997 Opened; West of Toll Plaza to east of Toll Plaza
NOTE: HOV lane is located in toll booth #6

SON-101: Rte 12 to Wilfred Avenue

OCCUPANCY Two or more persons per vehicle, motorcycles, inherently low-emission vehicles (ILEVs) with DMV issued decal.

SOUTHBOUND HOURS: 7:00 - 9:00 AM, 3:00 - 6:30 PM, Monday thru Friday
LIMITS: Route 12 to North of Wilfred Avenue
Length = 4 miles
DATES: Nov 4, 2002 Opened.
Dec 11, 2003 Hours of Operation changed to 7-9 AM, 3-6:30 PM, MON - FRI

NORTHBOUND HOURS: 7:00 - 9:00 AM, 3:00 - 6:30 PM, Monday thru Friday
LIMITS: Wilfred Avenue to South of Route 12
Length = 4 miles
DATES: Nov 4, 2002 Opened.
Dec 11, 2003 Hours of Operation changed to 7-9 AM, 3-6:30 PM, MON - FRI

TOLL BRIDGE HOV BYPASS LANES

Benicia-Martinez, Antioch Bridges

OCCUPANCY	Three or more persons per vehicle, motorcycles, two-seat vehicles with two occupants, inherently low-emission vehicles (ILEVs) with DMV issued decals.	
HOURS	5:00 - 10:00 AM, 3:00 - 7:00 PM, Monday thru Friday	
TOLL-FREE BOOTH	Benicia	#4, #5
	Antioch	#2, #3
DATES	Jul 1, 1991	Reduced 10¢ toll tickets for HOVs (with purchase of 50-ticket book)
	Oct 1, 1995	Toll-free passage in designated booth only; Two-seat vehicles with two occupants permitted

Richmond-San Rafael Bridge

OCCUPANCY	Three or more persons per vehicle, motorcycles, two-seat vehicles with two occupants, inherently low-emission vehicles (ILEVs) with DMV issued decals.	
HOURS	5:00 - 10:00 AM, 3:00 - 6:00 PM, Monday thru Friday	
TOLL-FREE BOOTH	#4	
DATES	Oct. 23, 1989	Toll-free passage in designated booth only;
	Oct 1, 1995	Two-seat vehicles with two occupants permitted

San Mateo-Hayward, Dumbarton Bridges

OCCUPANCY	Two or more persons per vehicle, motorcycles, inherently low-emission vehicles (ILEVs) with DMV issued decal.	
HOURS	5:00 - 10:00 AM, 3:00 - 6:00 PM, Monday thru Friday	
TOLL-FREE BOOTH	San Mateo	#1
	Dumbarton	Left side bypass lane
DATES	See information in Mainline HOV Lane section	

TOLL BRIDGE HOV BYPASS LANES

San Francisco-Oakland Bay Bridge

OCCUPANCY	Three or more persons per vehicle, motorcycles, two-seat vehicles with two occupants, inherently low-emissions vehicles (ILEVs) with DMV issued decal.
HOURS	5:00 - 10:00 AM, 3:00 - 7:00 PM, Monday thru Friday
TOLL-FREE BOOTHS	#1, #2, Lanes 21 & 22
DATES	See information in Ala-80 Mainline HOV Lane section

Carquinez Bridge

OCCUPANCY	Three or more persons per vehicle, motorcycles, two-seat vehicles with two occupants, inherently low-emissions vehicles (ILEVs) with DMV issued decal.
HOURS	5:00 - 10:00 AM, 3:00 - 7:00 PM, Monday thru Friday
TOLL-FREE BOOTHS	# 6
DATES	See information in Sol-80 Mainline HOV lane section

MAINLINE HOV LANES

VOLUME/PERSON DATA and VIOLATION HISTORY

ALAMEDA-80

San Francisco-Oakland Bay Bridge Toll Plaza

Westbound - A.M.

Typical data for 2006 ⁽⁶⁾

VEHICLES	PEAK PERIOD ⁽⁵⁾ 6:00 - 10:00 AM		PEAK HOUR 7:00 - 8:00 AM	
	HOV Lanes	Mixed Flow Lanes	HOV Lanes	Mixed Flow Lanes
Motorcycles	575	—	164	—
Buses ⁽⁴⁾	257	—	70	—
Carpools ⁽¹⁾	6265	—	2461	—
2 - seaters ⁽²⁾	2192	—	693	—
Vanpools	101	—	24	—
Violators	1004	—	249	—
TOTAL	10394	29567 ⁽⁷⁾	3661	5180

PERSONS	PEAK PERIOD ⁽⁵⁾ 6:00 - 10:00 AM		PEAK HOUR 7:00 - 8:00 AM	
	HOV Lanes	Mixed Flow Lanes	HOV Lanes	Mixed Flow Lanes
Motorcycles	575	—	164	—
Buses ⁽⁴⁾	8995	—	2450	—
Carpools ⁽¹⁾	19422	—	7629	—
2 - seaters ⁽²⁾	4384	—	1386	—
Vanpools	1010	—	240	—
Violators	1405	—	370	—
TOTAL	35791	34002 ⁽⁷⁾	12239	5957

RATES	PEAK PERIOD ⁽⁵⁾ 6:00 - 10:00 AM		PEAK HOUR 7:00 - 8:00 AM	
	HOV Lane Occupancy Rate	3.4 persons/veh		3.3 persons/veh
Mixed Flow Occupancy Rate ⁽⁷⁾	1.1 persons/veh		1.1 persons/veh	
Violation rate ⁽³⁾ (HOV Lane)	9.7 %		6.8 %	

- NOTES:** (1) 3 or more persons per vehicle.
 (2) 2 - seater vehicles with 2 persons.
 (3) $\text{Violation rate} = \frac{\text{no. of violators in HOV lane} \times 100\%}{\text{Total no. of vehicles in HOV lane}}$
 (4) Assumed AM bus occupancy = 35 persons/vehicle.
 (5) HOV lanes in operation from 5:00 to 10:00 AM.
 (6) Observations conducted 5/31/06 at the SFOBB Toll Plaza.
 (7) Data from Toll Plaza Vehicle Registration Report.

ALAMEDA-80

San Francisco-Oakland Bay Bridge Toll Plaza

Westbound - P.M.

Typical data for 2006 ⁽⁶⁾

VEHICLES	PEAK PERIOD ⁽⁵⁾ 3:00 - 7:00 PM		PEAK HOUR 5:00 - 6:00 P.M.	
	HOV Lanes	Mixed Flow Lanes	HOV Lanes	Mixed Flow Lanes
Motorcycles	294	—	67	—
Buses ⁽⁴⁾	312	—	77	—
Carpools ⁽¹⁾	1514	—	431	—
2 - seaters ⁽²⁾	476	—	151	—
Hybrid	398	—	113	—
Vanpools	107	—	33	—
Violators	544	—	145	—
TOTAL	3645	26863 ⁽⁷⁾	1017	7105

PERSONS	PEAK PERIOD ⁽⁵⁾ 3:00 - 7:00 PM		PEAK HOUR 5:00 - 6:00 P.M.	
	HOV Lanes	Mixed Flow Lanes	HOV Lanes	Mixed Flow Lanes
Motorcycles	294	—	67	—
Buses ⁽⁴⁾	4992	—	1232	—
Carpools ⁽¹⁾	4693	—	1336	—
2 - seaters ⁽²⁾	952	—	302	—
Hybrid	398	—	113	—
Vanpools	856	—	264	—
Violators	908	—	231	—
TOTAL	13093	32236 ⁽⁷⁾	3545	8526

RATES	PEAK PERIOD ⁽⁵⁾ 3:00 - 7:00 PM		PEAK HOUR 5:00 - 6:00 P.M.	
	HOV Lanes	Mixed Flow Lanes	HOV Lanes	Mixed Flow Lanes
HOV Lane Occupancy Rate	3.6 persons/veh		3.5 persons/veh	
Mixed Flow Occupancy Rate ⁽⁷⁾	1.1 persons/veh		1.1 persons/veh	
Violation rate (HOV Lane) ⁽³⁾	14.9 %		14.3 %	

- NOTES:** (1) 3 or more persons per vehicle.
 (2) 2 - seater vehicles with 2 persons.
 (3) $\text{Violation rate} = \frac{\text{no. of violators in HOV lane} \times 100\%}{\text{Total no. of vehicles in HOV lane}}$
 (4) Assumed PM bus occupancy = 16 persons/vehicle.
 (5) HOV lanes in operation from 3:00 to 7:00 P.M.
 (6) Observations conducted 10/19/06 at the SFOBB Toll Plaza.
 (7) Data from Toll Plaza Hourly Vehicle Registration Report.

ALAMEDA-80

San Francisco-Oakland Bay Bridge

Violation History

Westbound

	DATE	TOTAL HOVL VOLUME	VIOLATION RATE	By Lane		By Time				
				Lanes 1 & 2	Lanes 21&22	5 - 6 AM	6 - 7 AM	7 - 8 AM	8 - 9 AM	9 - 10 AM
A.M.	Wed May 31, 2006	10394	9.7%	10.3%	9.1%	---	18.4%	6.8%	6.0%	5.9%
PEAK	Tue Nov 15, 2005	10261	9.9%	8.7%	11.2%	---	13.3%	8.1%	5.8%	16.1%
	Wed Nov 3, 2004	10917	10.0%	8.2%	11.7%	21.4%	12.5%	7.9%	6.3%	9.0%
	Wed May 28, 2003	10803	8.2%	7.4%	9.0%	15.5%	8.4%	7.0%	6.1%	9.6%
	Thu May 9, 2002	11481	9.5%	4.9%	13.8%	22.4%	12.0%	7.5%	3.8%	10.5%
	Wed May 23, 2001	13100	10.0%	7.2%	12.8%	22.3%	12.2%	5.8%	6.9%	10.4%
	Thu Nov 9, 2000	12991	14.7%	8.9%	19.9%	37.8%	16.9%	10.4%	6.4%	14.3%
	Thu Oct 14, 1999	11644	19.5%	9.8%	29.7%	60.1%	32.6%	7.7%	6.9%	11.5%
	Tue Apr 21, 1998	9696	10.6%	7.6%	12.5%	14.2%	22.7%	6.4%	4.1%	9.2%
	Wed Jun 11, 1997	7655	10.9%	1.0%	12.4%	20.9%	10.6%	8.1%	6.0%	21.5%
	Tue Apr 23, 1996	7258	10.6%	10.9%	9.6%	17.1%	12.5%	8.2%	7.5%	16.9%
							3 - 4 PM	4 - 5 PM	5 - 6 PM	6 - 7 PM
P.M.	Thu Oct 19, 2006	3645	14.9%	11.0%	19.0%		15.2%	14.8%	14.3%	15.5%
PEAK	Tue Oct 25, 2005	3106	16.3%	18.5%	13.5%		20.2%	13.5%	13.9%	18.5%
	Thu Oct 28, 2004	3290	9.1%	10.6%	7.0%		10.9%	7.9%	8.1%	9.6%
	Tue May 27, 2003	3891	14.7%	17.2%	11.8%		24.4%	11.7%	9.3%	15.7%
	Wed Sep 18, 2002	3327	11.7%	12.7%	15.0%		16.5%	11.6%	10.9%	15.8%
	Wed Oct 3, 2001	3602	9.8%	10.6%	8.8%		12.6%	7.6%	9.3%	10.1%
	Thu Oct 19, 2000	3673	25.6%	17.0%	33.3%		32.0%	24.4%	21.1%	25.3%
	Thu Oct 14, 1999	3193	10.6%	12.0%	9.0%		15.6%	10.4%	7.6%	0.097
	Tue Oct 20, 1998	2335	19.1%	15.6%	21.6%		26.6%	24.9%	10.1%	0.17
	Wed Jun 11, 1997	1905	17.0%	19.2%	12.5%		23.0%	14.3%	13.7%	—
	Tue Apr 23, 1996	1737	14.7%	17.2%	7.7%		16.1%	12.5%	15.7%	—

NOTES: (a) Two-seater vehicles with 2 persons allowed in HOVL effective October 1, 1995.
 (b) Hours of operation were extended from 3-6 PM to 3-7 PM on February 2, 1998.
 (c) Hours of operation from 5:00 to 10:00 AM and 3:00 to 7:00 PM.

ALAMEDA-80

HOV FLYOVER RAMP

Powell Street to SFOBB

Westbound - A.M.

Typical data for 2006 ⁽⁵⁾

PEAK PERIOD ⁽⁴⁾

5:00 - 10:00 AM

PEAK HOUR

6:00 - 7:00 AM

VEHICLES

	HOV Lane	SOV Lane	HOV Lane	SOV Lane
Motorcycles	211	—	39	—
Buses	92	—	20	—
Carpool ⁽¹⁾	3001	—	749	—
2 - seaters ⁽²⁾	1185	—	392	—
Vanpools	83	—	41	—
Violators	890	—	226	—
TOTAL	5462	N/A	1467	N/A

PERSONS

	HOV Lane	SOV Lane	HOV Lane	SOV Lane
Motorcycles	211	—	39	—
Buses	3220	—	700	—
Carpool ⁽¹⁾	9303	—	2322	—
2 - seaters ⁽²⁾	2370	—	784	—
Vanpools	830	—	410	—
Violators	1407	—	381	—
TOTAL	17341	N/A	4636	N/A

RATES

HOV Lane occupancy rate	3.2 persons/veh	3.2 persons/veh
Violation rate ⁽³⁾ (HOV Lane)	16.3 %	15.4 %

NOTES: (1) 3 or more persons per vehicle.

(2) 2 - seater vehicles with 2 persons.

(3) Violation rate = $\frac{\text{no. of violators in HOV lane} \times 100\%}{\text{Total no. of vehicles in HOV lane}}$

(4) HOV lane in operation from 5:00 to 10:00 AM.

(5) Observations conducted 6/8/06 at the downstream touchdown of the flyover

ALAMEDA-80

HOV FLYOVER RAMP

Powell Street to SFOBB

Westbound - P.M.

Typical data for 2006 ⁽⁵⁾

PEAK PERIOD ⁽⁴⁾

3:00 - 7:00 PM

PEAK HOUR

5:00 - 6:00 PM

VEHICLES

	HOV Lane	SOV Lane	HOV Lane	SOV Lane
Motorcycles	63	—	22	—
Buses	97	—	24	—
Carpool ⁽¹⁾	640	—	172	—
2 - seaters ⁽²⁾	116	—	22	—
Hybrid	94	—	27	—
Vanpools	18	—	4	—
Violators	199	—	51	—
TOTAL	1227	N/A	322	N/A

PERSONS

	HOV Lane	SOV Lane	HOV Lane	SOV Lane
Motorcycles	63	—	22	—
Buses	1552	—	384	—
Carpool ⁽¹⁾	1984	—	533	—
2 - seaters ⁽²⁾	232	—	44	—
Hybrid	94	—	27	—
Vanpools	144	—	32	—
Violators	291	—	75	—
TOTAL	4360	N/A	1117	N/A

RATES

HOV Lane occupancy rate	3.6 persons/veh	3.5 persons/veh
Violation rate ⁽³⁾ (HOV Lane)	16.2 %	15.8 %

NOTES: (1) 3 or more persons per vehicle.

(2) 2 - seater vehicles with 2 persons.

(3) Violation rate = $\frac{\text{no. of violators in HOV lane} \times 100\%}{\text{Total no. of vehicles in HOV lane}}$

(4) HOV lane in operation from 3:00 to 7:00 PM.

(5) Observations conducted 10/25/06 at the downstream touchdown of the flyover.

ALAMEDA-80

HOV FLYOVER RAMP

Powell Street to SFOBB

Violation History

Westbound

	DATE	PERIOD MONITORED	TOTAL HOVL VOLUME	VIOLATION RATE
A.M. PEAK	Thu Jun 8, 2006	5:00 - 10:00 AM	5462	16.3%
	Thu Jun 2, 2005	6:00 - 10:00 AM	4848	13.3%
	Tue Dec 14, 2004	6:00 - 10:00 AM	2937	16.3%
	Wed Nov 5, 2003	6:00 - 10:00 AM	4286	13.9%
	Wed May 29, 2002	6:00 - 10:00 AM	4644	2.9%
	Wed Mar 28, 2001	5:00 - 10:00 AM	5108	18.6%
	Wed May 17, 2000	5:00 - 10:00 AM	5274	16.5%
	Wed Apr 21, 1999	7:00 - 10:00 AM	3900	5.6%
	Tue Oct 20, 1998	5:00 - 10:00 AM	4575	20.4%
P.M. PEAK	Wed Oct 25, 2006	3:00 - 7:00 PM	1227	16.2%
	Wed May 18, 2005	3:00 - 7:00 PM	1209	20.6%
	Wed Nov 3, 2004	3:00 - 6:00 PM	953	17.5%
	Tue Nov 4, 2003	3:00 - 6:00 PM	839	26.8%
	Tue Sep 17, 2002	3:00 - 7:00 PM	1123	20.4%
	Wed Oct 3, 2001	3:00 - 7:00 PM	1045	26.1%
	Tue Dec 12, 2000	3:00 - 5:00 PM	490	16.1%
	Wed Feb 3, 1999	3:00 - 7:00 PM	946	30.7%
	Wed Oct 7, 1998	3:00 - 7:00 PM	1055	22.7%

NOTES: (a) Morning period of operation from 5:00 to 10:00 AM
(b) Evening period of operation from 3:00 to 7:00 PM.

ALAMEDA-80

Contra Costa County Line to Powell Street

Westbound - A.M.

Typical data for 2006 ⁽⁵⁾

VEHICLES	PEAK PERIOD ⁽⁴⁾ 6:00 - 10:00 AM		PEAK HOUR 6:00 - 7:00 AM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	249	73	85	19
Buses	95	33	28	8
Carpools ⁽¹⁾	4220	939	1390	256
Vanpools	81	11	49	8
Single Occ. ⁽²⁾	—	26056	—	6740
Violators	469	—	98	—
TOTAL	5114	27112	1650	7031

PERSONS	PEAK PERIOD ⁽⁴⁾ 6:00 - 10:00 AM		PEAK HOUR 6:00 - 7:00 AM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	249	73	85	19
Buses	3325	1155	980	280
Carpools ⁽¹⁾	11898	2262	3887	590
Vanpools	810	110	490	80
Single Occ. ⁽²⁾	—	28741	—	7325
Violators	622	—	131	—
TOTAL	16904	32341	5573	8294

RATES	PEAK PERIOD ⁽⁴⁾ 6:00 - 10:00 AM		PEAK HOUR 6:00 - 7:00 AM	
	HOV Lane occupancy rate	3.3 persons/veh		3.4 persons/veh
Mixed Flow occupancy rate	1.2 persons/veh		1.2 persons/veh	
Overall occupancy (incl. buses)	1.5 persons/veh		1.6 persons/veh	
Violation rate ⁽³⁾ (HOV Lane)	9.2 %		5.9 %	

- NOTES:**
- (1) 3 or more persons per vehicle & 2 - seater vehicles with 2 persons.
 - (2) Mixed flow lanes only.
 - (3) Violation rate = $\frac{\text{no. of violators in HOV lane} \times 100\%}{\text{Total no. of vehicles in HOV lane}}$
 - (4) HOV lane in operation from 5:00 to 10:00 A.M.
 - (5) Observations conducted 5/25/06 at Ashby Avenue Interchange.

ALAMEDA-80

I-880 Viaduct to Contra Costa County Line

Eastbound - P.M.

Typical data for 2006⁽⁵⁾

VEHICLES	PEAK PERIOD ⁽⁴⁾ 3:00 - 7:00 PM		PEAK HOUR 5:00 - 6:00 PM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	348	64	108	11
Buses	87	11	28	3
Carpools ⁽¹⁾	4233	1144	1266	267
Vanpools	187	25	33	5
1 and 2 Occ. ⁽²⁾	—	26623	—	6585
Violators	560	—	118	—
TOTAL	5415	27867	1553	6871

PERSONS	PEAK PERIOD ⁽⁴⁾ 3:00 - 7:00 PM		PEAK HOUR 5:00 - 6:00 PM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	348	64	108	11
Buses	3045	385	980	105
Carpools ⁽¹⁾	11813	3040	3544	702
Vanpools	1870	250	330	50
1 and 2 Occ. ⁽²⁾	—	30177	—	7371
Violators	842	—	185	—
TOTAL	17918	33916	5147	8239

RATES	PEAK PERIOD ⁽⁴⁾ 3:00 - 7:00 PM		PEAK HOUR 5:00 - 6:00 PM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
HOV Lane occupancy rate	3.3 persons/veh		3.3 persons/veh	
Mixed Flow occupancy rate		1.2 persons/veh		1.2 persons/veh
Overall occupancy (incl. buses)	1.6 persons/veh		1.6 persons/veh	
Violation rate ⁽³⁾ (HOV Lane)	10.3 %		7.6 %	

NOTES: (1) 3 or more persons per vehicle & 2 - seater vehicles with 2 persons.

(2) Mixed flow lanes only.

(3) Violation rate = $\frac{\text{no. of violators in HOV lane} \times 100\%}{\text{Total no. of vehicles in HOV lane}}$

(4) HOV lane in operation from 3:00 to 7:00 P.M.

(5) Observations conducted 5/10/06 at Ashby Avenue Interchange.

ALAMEDA-80

Contra Costa County Line to Powell Street

Violation History

Westbound

	DATE	PERIOD MONITORED	TOTAL HOVL VOLUME	VIOLATION RATE
A.M. PEAK	Thu May 25, 2006	6:00 - 10:00 AM	5114	9.2%
	Wed Nov 16, 2005	7:00 - 10:00 AM	3907	9.0%
	Wed Nov 17, 2004	7:00 - 10:00 AM	3734	7.9%
	Tue Jun 10, 2003	6:00 - 10:00 AM	5181	4.4%
	Wed May 8, 2002	6:00 - 10:00 AM	5414	8.7%
	Wed May 16, 2001	6:00 - 10:00 AM	5289	13.8%
	Thu Oct 5, 2000	7:00 - 10:00 AM	3184	18.5%
	Thu Apr 15, 1999	7:00 - 10:00 AM	3156	11.0%
	Thu Oct 8, 1998	7:00 - 10:00 AM	3019	8.8%
P.M. PEAK	Year 2006	-	-	-
	Year 2005	-	-	-
	Year 2004	-	-	-
	Year 2003	-	-	-
	Thu May 9, 2002	3:00 - 7:00 PM	3102	18.9%
	Thu May 10, 2001	3:00 - 7:00 PM	1936	24.4%
	Thu Jun 1, 2000	3:00 - 7:00 PM	2593	25.9%
	Thu Apr 15, 1999	3:00 - 7:00 PM	2710	21.4%
	Thu Oct 8, 1998	3:00 - 7:00 PM	1943	20.5%

- NOTES:** (a) Morning period of operation from 5:00 to 10:00 AM
(b) Evening period of operation from 3:00 to 7:00 PM.
(c) Data was not collected in 2006 for off-peak directions.

ALAMEDA-80

I-880 Viaduct to Contra Costa County Line

Violation History

Eastbound

	DATE	PERIOD MONITORED	TOTAL HOVL VOLUME	VIOLATION RATE
A.M. PEAK	Year 2006	-	-	-
	Year 2005	-	-	-
	Year 2004	-	-	-
	Year 2003	-	-	-
	Wed Jun 5, 2002	6:00 - 10:00 PM	677	17.6%
	Wed May 30, 2001	6:00 - 10:00 PM	606	21.5%
	Tue Dec 19, 2000	7:00 - 10:00 PM	221	7.7%
	Tue Apr 20, 1999	7:00 - 10:00 PM	531	20.9%
	Thu Dec 17, 1998	7:00 - 10:00 PM	311	16.7%
	P.M. PEAK	Wed May 10, 2006	3:00 - 7:00 PM	5415
Tue May 17, 2005		3:00 - 7:00 PM	5048	14.7%
Wed Nov 17, 2004		3:00 - 5:00 PM	1995	21.5%
Thu May 29, 2003		3:00 - 7:00 PM	4225	9.3%
Thu May 16, 2002		3:00 - 7:00 PM	4535	2.7%
Thu Sep 27, 2001		3:00 - 7:00 PM	4655	6.5%
Thu Sep 14, 2000		3:00 - 7:00 PM	4415	3.4%
Wed Oct 20, 1999		3:00 - 7:00 PM	4287	1.3%
Tue Dec 15, 1998		3:00 - 5:00 PM	1415	7.1%

- NOTES:** (a) Morning period of operation from 5:00 to 10:00 AM
(b) Evening period of operation from 3:00 to 7:00 PM
(c) Data was not collected in 2006 for off-peak direction

ALAMEDA-84

Newark Boulevard to Dumbarton Bridge Toll Plaza

Westbound - A.M.

Typical data for 2006⁽⁵⁾

VEHICLES	PEAK PERIOD ⁽⁴⁾ 6:00 - 9:00 AM		PEAK HOUR 7:00 - 8:00 AM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	102	1	44	1
Buses	20	2	7	1
Carpools ⁽¹⁾	2748	40	1308	10
Vanpools	24	0	9	0
Hybrid / Single Occ. ⁽²⁾	132	8863	49	3309
Violators	19	—	3	—
TOTAL	3045	8906	1420	3321

PERSONS	PEAK PERIOD ⁽⁴⁾ 6:00 - 9:00 AM		PEAK HOUR 7:00 - 8:00 AM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	102	1	44	1
Buses	700	70	245	35
Carpools ⁽¹⁾	5590	84	2673	21
Vanpools	240	0	90	0
Hybrid / Single Occ. ⁽²⁾	132	8863	49	3309
Violators	19	—	3	—
TOTAL	6783	9018	3104	3366

RATES	PEAK PERIOD ⁽⁴⁾ 6:00 - 9:00 AM		PEAK HOUR 7:00 - 8:00 AM	
	HOV Lane occupancy rate	2.2 persons/veh		2.2 persons/veh
Mixed Flow occupancy rate	1.0 persons/veh		1.0 persons/veh	
Overall occupancy (incl. buses)	1.3 persons/veh		1.4 persons/veh	
Violation rate ⁽³⁾ (HOV Lane)	0.6 %		0.2 %	

- NOTES:**
- (1) Two or more persons per vehicle.
 - (2) Hybrid HOV lane only/Single Occupancy mixed flow lanes only.
 - (3) Violation rate = $\frac{\text{no. of violators in HOV lane} \times 100\%}{\text{Total no. of vehicles in HOV lane}}$
 - (4) HOV lane in operation from 5:00 to 10:00 A.M.
 - (5) Observations conducted 09/27/06 at Dumbarton Bridge Toll Plaza.

ALAMEDA-84

Newark Boulevard to Dumbarton Bridge Toll Plaza

Westbound - P.M.

Typical data for 2006⁽⁵⁾

VEHICLES	PEAK PERIOD ⁽⁴⁾ 3:00 - 6:00 PM		PEAK HOUR 5:00 - 6:00 PM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	22	2	10	0
Buses	20	8	8	1
Carpools ⁽¹⁾	960	143	334	49
Vanpools	5	2	0	0
Hybrid / Single Occ. ⁽²⁾	18	4421	9	1641
Violators	10	—	9	—
TOTAL	1035	4576	370	1691

PERSONS	PEAK PERIOD ⁽⁴⁾ 3:00 - 6:00 PM		PEAK HOUR 5:00 - 6:00 PM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	22	2	10	0
Buses	700	280	280	35
Carpools ⁽¹⁾	2000	297	707	107
Vanpools	50	20	0	0
Hybrid / Single Occ. ⁽²⁾	18	4421	9	1641
Violators	10	—	9	—
TOTAL	2800	5020	1015	1783

RATES	PEAK PERIOD ⁽⁴⁾ 3:00 - 6:00 PM		PEAK HOUR 5:00 - 6:00 PM	
	HOV Lane occupancy rate	2.7 persons/veh		2.7 persons/veh
Mixed Flow occupancy rate	1.1 persons/veh		1.1 persons/veh	
Overall occupancy (incl. buses)	1.4 persons/veh		1.4 persons/veh	
Violation rate ⁽³⁾ (HOV Lane)	1.0 %		2.4 %	

- NOTES:**
- (1) Two or more persons per vehicle.
 - (2) Hybrid HOV lane only/Single Occupancy mixed flow lanes only.
 - (3) Violation rate = $\frac{\text{no. of violators in HOV lane} \times 100\%}{\text{Total no. of vehicles in HOV lane}}$
 - (4) HOV lane in operation from 3:00 to 6:00 P.M.
 - (5) Observations conducted 09/26/06 at Dumbarton Bridge Toll Plaza.

ALAMEDA-84

Newark Boulevard to Dumbarton Bridge Toll Plaza

Violation History

Westbound

	DATE	PERIOD MONITORED	TOTAL HOVL VOLUME	VIOLATION RATE
A.M. PEAK	Wed Sep 27, 2006	6:00 - 9:00 AM	3045	0.6%
	Thu Oct 20, 2005	6:00 - 9:00 AM	2769	1.4%
	Thu Oct 14, 2004	6:00 - 9:00 AM	2495	0.6%
	Thu Jun 5, 2003	6:00 - 9:00 AM	2496	0.9%
	Tue May 14, 2002	6:00 - 9:00 AM	3044	3.5%
	Tue Apr 10, 2001	6:00 - 10:00 AM	4480	3.1%
	Thu Oct 19, 2000	6:00 - 9:00 AM	4106	3.5%
	Tue Mar 16, 1999	6:00 - 9:00 AM	3906	5.7%
	Thu Apr 2, 1998	6:00 - 9:00 AM	3601	0.4%
	Tue Apr 29, 1997	6:00 - 9:00 AM	2900	16.9%
	Tue May 14, 1996	6:00 - 10:00 AM	3095	15.0%
	Thu Mar 30, 1995	6:00 - 9:00 AM	2248	13.0%
P.M. PEAK	Tue Sep 26, 2006	3:00 - 6:00 PM	1035	1.0%
	Tue May 10, 2005	3:00 - 6:00 PM	1032	1.1%
	Year 2004	-	-	-
	Thu May 8, 2003	3:00 - 6:00 PM	995	1.1%
	Wed Jun 12, 2002	3:00 - 6:00 PM	959	1.8%
	Tue Mar 20, 2001	3:00 - 6:00 PM	919	2.2%
	Thu Oct 19, 2000	3:00 - 6:00 PM	849	3.1%
	Wed Sep 22, 1999	3:00 - 6:00 PM	949	2.0%
	Wed Apr 15, 1998	3:00 - 6:00 PM	981	1.6%
	Thu Oct 2, 1997	3:00 - 6:00 PM	819	6.6%
	Tue May 14, 1996	3:00 - 6:00 PM	605	2.8%
	Thu Mar 30, 1995	3:00 - 6:00 PM	709	3.8%
	Tue Sep 27, 1994	3:00 - 6:00 PM	701	7.8%

NOTES: (a) Morning period of operation from 5:00 to 10:00 AM.

(b) Evening period of operation from 3:00 to 6:00 PM.

(c) Data was not collected in 2004 for off-peak direction

ALAMEDA-92

Hesperian Boulevard to San Mateo Bridge Toll Plaza

Westbound - A.M.

Typical data for 2006⁽⁵⁾

VEHICLES	PEAK PERIOD ⁽⁴⁾ 6:00 - 9:00 AM		PEAK HOUR 7:00 - 8:00 AM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	30	10	12	7
Buses	6	1	2	1
Carpools ⁽¹⁾	2310	129	959	49
Vanpools	28	2	13	1
Hybrid / Single Occ. ⁽²⁾	45	11447	22	4061
Violators	33	—	3	—
TOTAL	2452	11589	1011	4119

PERSONS	PEAK PERIOD ⁽⁴⁾ 6:00 - 9:00 AM		PEAK HOUR 7:00 - 8:00 AM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	30	10	12	7
Buses	210	35	70	35
Carpools ⁽¹⁾	4804	284	2012	109
Vanpools	280	20	130	10
Hybrid / Single Occ. ⁽²⁾	45	11447	22	4061
Violators	33	—	3	—
TOTAL	5402	11796	2249	4222

RATES	PEAK PERIOD ⁽⁴⁾ 6:00 - 9:00 AM		PEAK HOUR 7:00 - 8:00 AM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
HOV Lane occupancy rate	2.2 persons/veh		2.2 persons/veh	
Mixed Flow occupancy rate	1.0 persons/veh		1.0 persons/veh	
Overall occupancy (incl. buses)	1.2 persons/veh		1.3 persons/veh	
Violation rate ⁽³⁾ (HOV Lane)	1.3 %		0.3 %	

- NOTES:**
- (1) Two or more persons per vehicle.
 - (2) Hybrid HOV lane only/Single Occupancy mixed flow lanes only.
 - (3) Violation rate = $\frac{\text{no. of violators in HOV lane} \times 100\%}{\text{Total no. of vehicles in HOV lane}}$
 - (4) HOV lane in operation from 5:00 to 10:00 A.M.
 - (5) Observations conducted 03/08/06 at San Mateo Bridge Toll Plaza.

ALAMEDA-92

Hesperian Boulevard to San Mateo Bridge Toll Plaza

Westbound - P.M.

Typical data for 2006⁽⁵⁾

VEHICLES	PEAK PERIOD ⁽⁴⁾ 3:00 - 6:00 PM		PEAK HOUR 5:00 - 6:00 PM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	25	15	8	2
Buses	16	1	4	0
Carpools ⁽¹⁾	1395	519	514	162
Vanpools	17	15	6	6
Hybrid / Single Occ. ⁽²⁾	34	6444	12	2409
Violators	31	—	9	—
TOTAL	1518	6994	553	2579

PERSONS	PEAK PERIOD ⁽⁴⁾ 3:00 - 6:00 PM		PEAK HOUR 5:00 - 6:00 PM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	25	15	8	2
Buses	560	35	140	0
Carpools ⁽¹⁾	2936	1106	1076	349
Vanpools	170	150	60	60
Hybrid / Single Occ. ⁽²⁾	34	6444	12	2409
Violators	31	—	9	—
TOTAL	3756	7750	1305	2820

RATES	PEAK PERIOD ⁽⁴⁾ 3:00 - 6:00 PM		PEAK HOUR 5:00 - 6:00 PM	
	HOV Lane occupancy rate	2.5 persons/veh		2.4 persons/veh
Mixed Flow occupancy rate	1.1 persons/veh		1.1 persons/veh	
Overall occupancy (incl. buses)	1.4 persons/veh		1.3 persons/veh	
Violation rate ⁽³⁾ (HOV Lane)	2.0 %		1.6 %	

- NOTES:**
- (1) Two or more persons per vehicle.
 - (2) Hybrid HOV lane only/Single Occupancy mixed flow lanes only.
 - (3) Violation rate = $\frac{\text{no. of violators in HOV lane} \times 100\%}{\text{Total no. of vehicles in HOV lane}}$
 - (4) HOV lane in operation from 3:00 to 6:00 P.M.
 - (5) Observations conducted 09/21/06 at San Mateo Bridge Toll Plaza.

ALAMEDA-92

Hesperian Blvd. to West of San Mateo - Hayward Bridge Toll Plaza

Violation History

Westbound

	DATE	PERIOD MONITORED	TOTAL HOVL VOLUME	VIOLATION RATE
A.M. PEAK	Wed Mar 8, 2006	6:00 - 9:00 AM	2452	1.3%
	Tue May 24, 2005	6:00 - 9:00 AM	2448	1.1%
	Wed Oct 13, 2004	6:00 - 9:00 AM	2218	2.3%
	Thu May 29, 2003	6:00 - 9:00 AM	2449	1.3%
	Tue Apr 30, 2002	6:00 - 9:00 AM	1834	3.9%
	Thu Sep 20, 2001	6:00 - 9:00 AM	2075	8.1%
	Tue Oct 24, 2000	6:00 - 9:00 AM	2480	8.2%
	Wed Mar 17, 1999	6:00 - 9:00 AM	2534	9.4%
	Tue Mar 17, 1998	6:00 - 9:00 AM	2255	8.2%
	Tue Oct 7, 1997	6:00 - 9:00 AM	2111	14.9%
	Tue Apr 30, 1996	6:00 - 10:00 AM	1899	11.2%
	Tue Apr 4, 1995	6:00 - 9:00 AM	1344	21.1%
P.M. PEAK	Thu Sep 21, 2006	3:00 - 6:00 PM	1518	2.0%
	Tue Sep 13, 2005	3:00 - 6:00 PM	1318	0.5%
	Year 2004	-	-	-
	Tue Jun 11, 2002	3:00 - 6:00 PM	1275	4.4%
	Wed Oct 3, 2001	3:00 - 6:00 PM	1177	5.4%
	Thu Apr 13, 2000	3:00 - 6:00 PM	1243	1.4%
	Thu Mar 4, 1999	3:00 - 6:00 PM	1128	3.2%
	Thu Mar 26, 1998	3:00 - 6:00 PM	1210	3.8%
	Wed Oct 8, 1997	3:00 - 6:00 PM	1138	6.8%
	Tue Apr 30, 1996	3:00 - 6:00 PM	973	7.9%
	Tue Apr 4, 1995	3:00 - 6:00 PM	944	10.3%
	Wed Oct 5, 1994	3:00 - 6:00 PM	1003	14.1%

NOTES: (a) Morning period of operation from 5:00 to 10:00 AM.
 (b) Evening period of operation from 3:00 to 6:00 PM.
 (c) Data was not collected in 2004 for off-peak direction

ALAMEDA-680

Route 84 to Route 237 Calaveras Blvd.

Southbound - A.M.

Typical data for 2006⁽⁵⁾

VEHICLES	PEAK PERIOD ⁽⁴⁾ 6:00 - 9:00 AM		PEAK HOUR 8:00 - 9:00 AM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	102	8	39	2
Buses	0	5	0	5
Carpools ⁽¹⁾	1860	204	699	41
Vanpools	2	11	2	0
Hybrid / Single Occ. ⁽²⁾	93	15455	49	5313
Violators	64	—	43	—
TOTAL	2121	15683	832	5361

PERSONS	PEAK PERIOD ⁽⁴⁾ 6:00 - 9:00 AM		PEAK HOUR 8:00 - 9:00 AM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	102	8	39	2
Buses	0	175	0	175
Carpools ⁽¹⁾	3811	438	1441	86
Vanpools	20	110	20	0
Hybrid / Single Occ. ⁽²⁾	93	15455	49	5313
Violators	64	—	43	—
TOTAL	4090	16186	1592	5576

RATES	PEAK PERIOD ⁽⁴⁾ 6:00 - 9:00 AM		PEAK HOUR 8:00 - 9:00 AM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
HOV Lane occupancy rate	1.9 persons/veh		1.9 persons/veh	
Mixed Flow occupancy rate		1.0 persons/veh		1.0 persons/veh
Overall occupancy (incl. buses)	1.1 persons/veh		1.2 persons/veh	
Violation rate ⁽³⁾ (HOV Lane)	3.0 %		5.2 %	

- NOTES:**
- (1) Two or more persons per vehicle.
 - (2) Hybrid HOV lane only/Single occupancy mixed flow lanes only.
 - (3) Violation rate = $\frac{\text{no. of violators in HOV lane} \times 100\%}{\text{Total no. of vehicles in HOV lane}}$
 - (4) HOV lane in operation from 5:00 to 9:00 A.M.
 - (5) Observations conducted 06/13/06 at Vargas Rd. I/C.

ALAMEDA-680

Route 84 to Route 237 Calaveras Blvd.

Southbound - P.M.

Typical data for 2006⁽⁵⁾

VEHICLES	PEAK PERIOD ⁽⁴⁾ 3:00 - 6:00 PM		PEAK HOUR 4:00 - 5:00 PM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	43	26	15	11
Buses	2	14	1	5
Carpools ⁽¹⁾	1565	1572	559	571
Vanpools	9	78	5	27
Hybrid / Single Occ. ⁽²⁾	32	11095	8	3798
Violators	18	—	1	—
TOTAL	1669	12785	589	4412

PERSONS	PEAK PERIOD ⁽⁴⁾ 3:00 - 6:00 PM		PEAK HOUR 4:00 - 5:00 PM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	43	26	15	11
Buses	70	490	35	175
Carpools ⁽¹⁾	3277	3450	1173	1272
Vanpools	90	780	50	270
Hybrid / Single Occ. ⁽²⁾	32	11095	8	3798
Violators	18	—	1	—
TOTAL	3530	15841	1282	5526

RATES	PEAK PERIOD ⁽⁴⁾ 3:00 - 6:00 PM		PEAK HOUR 4:00 - 5:00 PM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
HOV Lane occupancy rate	2.1 persons/veh		2.2 persons/veh	
Mixed Flow occupancy rate	1.2 persons/veh		1.3 persons/veh	
Overall occupancy (incl. buses)	1.3 persons/veh		1.4 persons/veh	
Violation rate ⁽³⁾ (HOV Lane)	1.1 %		0.2 %	

- NOTES:**
- (1) Two or more persons per vehicle.
 - (2) Hybrid HOV lane only/Single occupancy mixed flow lanes only.
 - (3) Violation rate = $\frac{\text{no. of violators in HOV lane} \times 100\%}{\text{Total no. of vehicles in HOV lane}}$
 - (4) HOV lane in operation from 3:00 to 7:00 P.M.
 - (5) Observations conducted 09/19/06 at Vargas Rd. I/C.

ALAMEDA - 680

Route 84 to Route 237 Calaveras Blvd.

Violation History

Southbound

	DATE	PERIOD MONITORED	TOTAL HOVL VOLUME	VIOLATION RATE
A.M. PEAK	Tue Jun 13, 2006	6:00 - 9:00 AM	2121	3.0%
	Tue Oct 4, 2005	6:00 - 9:00 AM	2133	3.6%
	Thu Dec 2, 2004	6:00 - 9:00 AM	1970	9.8%
	Thu Oct 9, 2003	6:00 - 9:00 AM	2138	0.2%
	Thu Dec 5, 2002	6:00 - 9:00 AM	1098	4.4%
P.M. PEAK	Tue Sep 19, 2006	3:00 - 6:00 PM	1669	1.1%
	Thu Nov 3, 2005	3:00 - 6:00 PM	1752	1.0%
	Year 2004	-	-	-
	Tue Jun 3, 2003	3:00 - 6:00 PM	1149	4.4%

NOTES: (a) Morning period of operation from 5:00 to 9:00 AM.
(b) Evening period of operation from 3:00 to 7:00 PM.
(c) Data was not collected in 2004 for off-peak direction

ALAMEDA-880

Marina Boulevard to Whipple Road

Southbound - A.M.

Typical data for 2006⁽⁵⁾

VEHICLES	PEAK PERIOD ⁽⁴⁾ 6:00 - 9:00 AM		PEAK HOUR 7:00 - 8:00 AM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	54	5	20	1
Buses	7	22	2	9
Carpools ⁽¹⁾	1927	300	754	133
Vanpools	51	5	19	0
Hybrid / Single Occ. ⁽²⁾	247	13192	101	4331
Violators	75	—	26	—
TOTAL	2361	13524	922	4474

PERSONS	PEAK PERIOD ⁽⁴⁾ 6:00 - 9:00 AM		PEAK HOUR 7:00 - 8:00 AM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	54	5	20	1
Buses	245	770	70	315
Carpools ⁽¹⁾	3934	642	1547	287
Vanpools	510	50	190	0
Hybrid / Single Occ. ⁽²⁾	247	13192	101	4331
Violators	75	—	26	—
TOTAL	5065	14659	1954	4934

RATES	PEAK PERIOD ⁽⁴⁾ 6:00 - 9:00 AM		PEAK HOUR 7:00 - 8:00 AM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
HOV Lane occupancy rate	2.1 persons/veh		2.1 persons/veh	
Mixed Flow occupancy rate	1.1 persons/veh		1.1 persons/veh	
Overall occupancy (incl. buses)	1.2 persons/veh		1.3 persons/veh	
Violation rate ⁽³⁾ (HOV Lane)	3.2 %		2.8 %	

- NOTES:**
- (1) Two or more persons per vehicle.
 - (2) Hybrid HOV lane only/Single occupancy mixed flow lanes only.
 - (3) Violation rate = $\frac{\text{no. of violators in HOV lane} \times 100\%}{\text{Total no. of vehicles in HOV lane}}$
 - (4) HOV lane in operation from 5:00 to 9:00 A.M.
 - (5) Observations conducted 10/04/06 at Tennyson Road I/C.

ALAMEDA-880

Marina Boulevard to Whipple Road

Southbound - P.M.

Typical data for 2006⁽⁵⁾

VEHICLES	PEAK PERIOD ⁽⁴⁾ 3:00 - 6:00 PM		PEAK HOUR 4:00 - 5:00 PM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	76	8	20	2
Buses	9	18	2	4
Carpools ⁽¹⁾	3286	515	1023	165
Vanpools	9	45	2	14
Hybrid / Single Occ. ⁽²⁾	63	13153	22	4567
Violators	51	—	2	—
TOTAL	3494	13739	1071	4752

PERSONS	PEAK PERIOD ⁽⁴⁾ 3:00 - 6:00 PM		PEAK HOUR 4:00 - 5:00 PM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	76	8	20	2
Buses	315	630	70	140
Carpools ⁽¹⁾	6796	1130	2122	360
Vanpools	90	450	20	140
Hybrid / Single Occ. ⁽²⁾	63	13153	22	4567
Violators	51	—	2	—
TOTAL	7391	15371	2256	5209

RATES	PEAK PERIOD ⁽⁴⁾ 3:00 - 6:00 PM		PEAK HOUR 4:00 - 5:00 PM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
HOV Lane occupancy rate	2.1 persons/veh		2.1 persons/veh	
Mixed Flow occupancy rate	1.1 persons/veh		1.1 persons/veh	
Overall occupancy (incl. buses)	1.3 persons/veh		1.3 persons/veh	
Violation rate ⁽³⁾ (HOV Lane)	1.5 %		0.2 %	

- NOTES:**
- (1) Two or more persons per vehicle.
 - (2) Hybrid HOV lane only/Single occupancy mixed flow lanes only.
 - (3) Violation rate = $\frac{\text{no. of violators in HOV lane} \times 100\%}{\text{Total no. of vehicles in HOV lane}}$
 - (4) HOV lane in operation from 3:00 to 7:00 P.M.
 - (5) Observations conducted 09/28/06 at Tennyson Road I/C.

ALAMEDA-880

Whipple Road to South of Route 238

Northbound - A.M.

Typical data for 2006⁽⁵⁾

VEHICLES	PEAK PERIOD ⁽⁴⁾ 6:00 - 9:00 AM		PEAK HOUR 7:00 - 8:00 AM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	44	3	27	2
Buses	22	2	9	0
Carpools ⁽¹⁾	2231	156	865	56
Vanpools	29	0	11	0
Hybrid / Single Occ. ⁽²⁾	69	11822	29	4152
Violators	54	—	24	—
TOTAL	2449	11983	965	4210

PERSONS	PEAK PERIOD ⁽⁴⁾ 6:00 - 9:00 AM		PEAK HOUR 7:00 - 8:00 AM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	44	3	27	2
Buses	770	70	315	0
Carpools ⁽¹⁾	4583	332	1786	118
Vanpools	290	0	110	0
Hybrid / Single Occ. ⁽²⁾	69	11822	29	4152
Violators	54	—	24	—
TOTAL	5810	12227	2291	4272

RATES	PEAK PERIOD ⁽⁴⁾ 6:00 - 9:00 AM		PEAK HOUR 7:00 - 8:00 AM	
	HOV Lane occupancy rate	2.4 persons/veh		2.4 persons/veh
Mixed Flow occupancy rate	1.0 persons/veh		1.0 persons/veh	
Overall occupancy (incl. buses)	1.2 persons/veh		1.3 persons/veh	
Violation rate ⁽³⁾ (HOV Lane)	2.2 %		2.5 %	

- NOTES:**
- (1) Two or more persons per vehicle.
 - (2) Hybrid HOV lane only/Single occupancy mixed flow lanes only.
 - (3) Violation rate = $\frac{\text{no. of violators in HOV lane} \times 100\%}{\text{Total no. of vehicles in HOV lane}}$
 - (4) HOV lane in operation from 5:00 to 9:00 A.M.
 - (5) Observations conducted 12/07/06 at Tennyson Road I/C.

ALAMEDA-880

Whipple Road to South of Route 238

Northbound - P.M.

Typical data for 2006⁽⁵⁾

VEHICLES	PEAK PERIOD ⁽⁴⁾ 3:00 - 6:00 PM		PEAK HOUR 4:00 - 5:00 PM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	64	11	23	3
Buses	15	16	4	5
Carpools ⁽¹⁾	3003	639	1191	217
Vanpools	21	16	5	3
Hybrid / Single Occ. ⁽²⁾	65	13358	20	4581
Violators	35	—	0	—
TOTAL	3203	14040	1243	4809

PERSONS	PEAK PERIOD ⁽⁴⁾ 3:00 - 6:00 PM		PEAK HOUR 4:00 - 5:00 PM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	64	11	23	3
Buses	525	560	140	175
Carpools ⁽¹⁾	6245	1381	2479	459
Vanpools	210	160	50	30
Hybrid / Single Occ. ⁽²⁾	65	13358	20	4581
Violators	35	—	0	—
TOTAL	7144	15470	2712	5248

RATES	PEAK PERIOD ⁽⁴⁾ 3:00 - 6:00 PM		PEAK HOUR 4:00 - 5:00 PM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
HOV Lane occupancy rate	2.2 persons/veh		2.2 persons/veh	
Mixed Flow occupancy rate	1.1 persons/veh		1.1 persons/veh	
Overall occupancy (incl. buses)	1.3 persons/veh		1.3 persons/veh	
Violation rate ⁽³⁾ (HOV Lane)	1.1 %		0.0 %	

- NOTES:**
- (1) Two or more persons per vehicle.
 - (2) Hybrid HOV lane only/Single occupancy mixed flow lanes only.
 - (3) Violation rate = $\frac{\text{no. of violators in HOV lane} \times 100\%}{\text{Total no. of vehicles in HOV lane}}$
 - (4) HOV lane in operation from 3:00 to 7:00 P.M.
 - (5) Observations conducted 10/24/06 at Tennyson Road I/C.

ALAMEDA-880

Marina Boulevard to Whipple Road

Violation History

Southbound

	DATE	PERIOD MONITORED	TOTAL HOVL VOLUME	VIOLATION RATE
A.M. PEAK	Wed Oct 4, 2006	6:00 - 9:00 AM	2361	3.2%
	Wed Mar 30, 2005	6:00 - 9:00 AM	2278	2.9%
	Wed Nov 3, 2004	6:00 - 9:00 AM	2723	3.6%
	Tue Oct 7, 2003	6:00 - 9:00 AM	3049	3.7%
	Tue Jun 11, 2002	6:00 - 9:00 AM	3638	7.5%
	Wed Mar 21, 2001	6:00 - 9:00 AM	3971	5.2%
	Tue May 9, 2000	6:00 - 9:00 AM	3661	4.6%
	Thu Mar 4, 1999	6:00 - 9:00 AM	3012	5.7%
	Tue Oct 27, 1998	6:00 - 9:00 AM	2958	10.1%
	Thu May 8, 1997	6:00 - 9:00 AM	2257	16.0%
	Tue May 21, 1996	6:00 - 9:00 AM	1926	13.7%
	Wed Mar 29, 1995	6:00 - 9:00 AM	1088	2.8%
P.M. PEAK	Thu Sep 28, 2006	3:00 - 6:00 PM	2494	1.5%
	Tue Nov 8, 2005	3:00 - 6:00 PM	3053	2.0%
	Wed Dec 1, 2004	3:00 - 6:00 PM	3036	2.6%
	Wed Jun 4, 2003	3:00 - 6:00 PM	3708	6.0%
	Wed Jun 5, 2002	3:00 - 6:00 PM	3401	5.2%
	Thu Apr 26, 2001	3:00 - 6:00 PM	3134	3.9%
	Tue May 9, 2000	3:00 - 6:00 PM	2484	5.6%
	Tue Mar 2, 1999	3:00 - 6:00 PM	2307	4.3%
	Tue Oct 27, 1998	3:00 - 6:00 PM	2218	6.0%
	Wed May 7, 1997	3:00 - 7:00 PM	2665	8.0%
	Tue May 7, 1996	3:00 - 7:00 PM	2609	4.2%
	Wed Apr 5, 1995	3:00 - 7:00 PM	3238	3.1%

NOTES: (a) Morning period of operation from 5:00 to 9:00 AM.
(b) Evening period of operation from 3:00 to 7:00 PM.

ALAMEDA-880

Whipple Road to South of Route 238

Violation History

Northbound

	DATE	PERIOD MONITORED	TOTAL HOVL VOLUME	VIOLATION RATE
A.M. PEAK	Thu Dec 7, 2006	6:00 - 9:00 AM	2449	2.2%
	Thu Oct 6, 2005	6:00 - 9:00 AM	2735	2.0%
	Tue Nov 2, 2004	6:00 - 9:00 AM	2954	5.3%
	Thu May 22, 2003	6:00 - 9:00 AM	2920	1.4%
	Thu Sep 12, 2002	6:00 - 9:00 AM	2560	8.8%
	Thu Oct 11, 2001	6:00 - 9:00 AM	2212	5.2%
	Tue Nov 7, 2000	6:00 - 9:00 AM	1648	7.6%
	Tue Nov 2, 1999	6:00 - 9:00 AM	1845	8.1%
	Wed Oct 28, 1998	6:00 - 9:00 AM	1582	17.2%
	Wed Oct 8, 1997	6:00 - 9:00 AM	1147	12.7%
	Tue Nov 5, 1996	6:00 - 9:00 AM	2291	8.1%
	Wed Mar 29, 1995	6:00 - 9:00 AM	1158	17.8%
	P.M. PEAK	Tue Oct 24, 2006	3:00 - 6:00 PM	3203
Tue Apr 5, 2005		3:00 - 6:00 PM	3780	2.8%
Tue Nov 30, 2004		3:00 - 6:00 PM	3422	1.6%
Thu Oct 9, 2003		3:00 - 6:00 PM	3657	3.0%
Wed May 8, 2002		3:00 - 6:00 PM	3878	8.4%
Wed May 2, 2001		3:00 - 6:00 PM	4069	4.8%
Thu Oct 5, 2000		3:00 - 6:00 PM	4433	6.4%
Tue Nov 2, 1999		3:00 - 6:00 PM	2238	26.5%
Wed Oct 28, 1998		3:00 - 6:00 PM	2515	8.3%
Tue May 6, 1997		3:00 - 7:00 PM	3788	11.1%
Thu Oct 10, 1996		3:00 - 7:00 PM	4098	6.0%
Wed Mar 29, 1995		3:00 - 7:00 PM	3869	11.0%

NOTES: (a) Morning period of operation from 5:00 to 9:00 AM.

(b) Evening period of operation from 3:00 to 7:00 PM.

ALAMEDA-880

Whipple Road to Mission Boulevard

Southbound - A.M.

Typical data for 2006⁽⁵⁾

VEHICLES	PEAK PERIOD ⁽⁴⁾ 6:00 - 9:00 AM		PEAK HOUR 8:00 - 9:00 AM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	55	4	24	1
Buses	1	21	0	6
Carpools ⁽¹⁾	1937	339	692	150
Vanpools	15	8	6	5
Hybrid / Single Occ. ⁽²⁾	200	13814	108	4865
Violators	301	—	175	—
TOTAL	2509	14186	1005	5027

PERSONS	PEAK PERIOD ⁽⁴⁾ 6:00 - 9:00 AM		PEAK HOUR 8:00 - 9:00 AM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	55	4	24	1
Buses	35	735	0	210
Carpools ⁽¹⁾	4089	698	1470	309
Vanpools	150	80	60	50
Hybrid / Single Occ. ⁽²⁾	200	13814	108	4865
Violators	301	—	175	—
TOTAL	4830	15331	1837	5435

RATES	PEAK PERIOD ⁽⁴⁾ 6:00 - 9:00 AM		PEAK HOUR 8:00 - 9:00 AM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
HOV Lane occupancy rate	1.9 persons/veh		1.8 persons/veh	
Mixed Flow occupancy rate		1.1 persons/veh		1.1 persons/veh
Overall occupancy (incl. buses)	1.2 persons/veh		1.2 persons/veh	
Violation rate ⁽³⁾ (HOV Lane)	12.0 %		17.4 %	

- NOTES:**
- (1) Two or more persons per vehicle.
 - (2) Hybrid HOV lane only/Single Occupancy mixed flow lanes only.
 - (3) Violation rate = $\frac{\text{no. of violators in HOV lane} \times 100\%}{\text{Total no. of vehicles in HOV lane}}$
 - (4) HOV lane in operation from 5:00 to 9:00 A.M.
 - (5) Observations conducted 12/05/06 at Mowry I/C.

ALAMEDA-880

Whipple Road to Mission Boulevard

Southbound - P.M.

Typical data for 2006⁽⁵⁾

VEHICLES	PEAK PERIOD ⁽⁴⁾ 3:00 - 6:00 PM		PEAK HOUR 5:00 - 6:00 PM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	21	3	5	0
Buses	0	12	0	5
Carpools ⁽¹⁾	2532	515	907	101
Vanpools	66	24	5	4
Hybrid / Single Occ. ⁽²⁾	32	11654	6	4106
Violators	18	—	0	—
TOTAL	2669	12208	923	4216

PERSONS	PEAK PERIOD ⁽⁴⁾ 3:00 - 6:00 PM		PEAK HOUR 5:00 - 6:00 PM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	21	3	5	0
Buses	0	420	0	175
Carpools ⁽¹⁾	5158	1095	1817	214
Vanpools	660	240	50	40
Hybrid / Single Occ. ⁽²⁾	32	11654	6	4106
Violators	18	—	0	—
TOTAL	5889	13412	1878	4535

RATES	PEAK PERIOD ⁽⁴⁾ 3:00 - 6:00 PM		PEAK HOUR 5:00 - 6:00 PM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
HOV Lane occupancy rate	2.2 persons/veh		2.0 persons/veh	
Mixed Flow occupancy rate	1.1 persons/veh		1.1 persons/veh	
Overall occupancy (incl. buses)	1.3 persons/veh		1.2 persons/veh	
Violation rate ⁽³⁾ (HOV Lane)	0.7 %		0.0 %	

- NOTES:**
- (1) Two or more persons per vehicle.
 - (2) Hybrid HOV lane only/Single occupancy mixed flow lanes only.
 - (3) Violation rate = $\frac{\text{no. of violators in HOV lane} \times 100\%}{\text{Total no. of vehicles in HOV lane}}$
 - (4) HOV lane in operation from 3:00 to 7:00 P.M.
 - (5) Observations conducted 11/08/06 at Mowry I/C.

ALAMEDA-880

Mission Boulevard to Whipple Road

Northbound - A.M.

Typical data for 2006⁽⁵⁾

VEHICLES	PEAK PERIOD ⁽⁴⁾ 6:00 - 9:00 AM		PEAK HOUR 7:00 - 8:00 AM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	17	11	7	7
Buses	1	15	1	8
Carpools ⁽¹⁾	1316	452	383	187
Vanpools	0	5	0	2
Hybrid / Single Occ. ⁽²⁾	39	9479	22	3435
Violators	10	—	4	—
TOTAL	1383	9962	417	3639

PERSONS	PEAK PERIOD ⁽⁴⁾ 6:00 - 9:00 AM		PEAK HOUR 7:00 - 8:00 AM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	17	11	7	7
Buses	35	525	35	280
Carpools ⁽¹⁾	2700	952	799	388
Vanpools	0	50	0	20
Hybrid / Single Occ. ⁽²⁾	39	9479	22	3435
Violators	10	—	4	—
TOTAL	2801	11017	867	4130

RATES	PEAK PERIOD ⁽⁴⁾ 6:00 - 9:00 AM		PEAK HOUR 7:00 - 8:00 AM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
HOV Lane occupancy rate	2.0 persons/veh		2.1 persons/veh	
Mixed Flow occupancy rate	1.1 persons/veh		1.1 persons/veh	
Overall occupancy (incl. buses)	1.2 persons/veh		1.2 persons/veh	
Violation rate ⁽³⁾ (HOV Lane)	0.7 %		1.0 %	

- NOTES:**
- (1) Two or more persons per vehicle.
 - (2) Hybrid HOV lane only/Single occupancy mixed flow lanes only.
 - (3) Violation rate = $\frac{\text{no. of violators in HOV lane} \times 100\%}{\text{Total no. of vehicles in HOV lane}}$
 - (4) HOV lane in operation from 5:00 to 9:00 A.M.
 - (5) Observations conducted 11/15/06 at Mowry I/C.

ALAMEDA-880

Mission Boulevard to Whipple Road

Northbound - P.M.

Typical data for 2006⁽⁵⁾

VEHICLES	PEAK PERIOD ⁽⁴⁾ 3:00 - 6:00 PM		PEAK HOUR 5:00 - 6:00 PM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	85	11	43	3
Buses	10	12	4	1
Carpools ⁽¹⁾	1875	645	774	83
Vanpools	4	23	0	4
Hybrid / Single Occ. ⁽²⁾	60	12015	20	4623
Violators	20	—	1	—
TOTAL	2054	12706	842	4714

PERSONS	PEAK PERIOD ⁽⁴⁾ 3:00 - 6:00 PM		PEAK HOUR 5:00 - 6:00 PM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	85	11	43	3
Buses	350	420	140	35
Carpools ⁽¹⁾	3870	1393	1558	173
Vanpools	40	230	0	40
Hybrid / Single Occ. ⁽²⁾	60	12015	20	4623
Violators	20	—	1	—
TOTAL	4425	14069	1762	4874

RATES	PEAK PERIOD ⁽⁴⁾ 3:00 - 6:00 PM		PEAK HOUR 5:00 - 6:00 PM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
HOV Lane occupancy rate	2.2 persons/veh		2.1 persons/veh	
Mixed Flow occupancy rate	1.1 persons/veh		1.0 persons/veh	
Overall occupancy (incl. buses)	1.3 persons/veh		1.2 persons/veh	
Violation rate ⁽³⁾ (HOV Lane)	1.0 %		0.1 %	

- NOTES:**
- (1) Two or more persons per vehicle.
 - (2) Hybrid HOV lane only/Single occupancy mixed flow lanes only.
 - (3) Violation rate = $\frac{\text{no. of violators in HOV lane} \times 100\%}{\text{Total no. of vehicles in HOV lane}}$
 - (4) HOV lane in operation from 3:00 to 7:00 P.M.
 - (5) Observations conducted 11/07/06 at Mowry I/C.

ALAMEDA-880

Whipple Road to Mission Boulevard

Violation History

Southbound

	DATE	PERIOD MONITORED	TOTAL HOVL VOLUME	VIOLATION RATE
A.M. PEAK	Tue Dec 5, 2006	6:00 - 9:00 AM	2509	12.0%
	Wed Oct 26, 2005	6:00 - 9:00 AM	1948	3.0%
	Tue Nov 9, 2004	6:00 - 9:00 AM	2355	2.7%
	Tue Jun 3, 2003	6:00 - 9:00 AM	2418	3.5%
	Tue Sep 24, 2002	6:00 - 9:00 AM	2525	3.2%
	Tue Mar 27, 2001	6:00 - 9:00 AM	3423	4.8%
	Tue Mar 28, 2000	6:00 - 9:00 AM	2438	6.2%
	Wed May 19, 1999	6:00 - 9:00 AM	2118	3.7%
P.M. PEAK	Wed Nov 8, 2006	3:00 - 6:00 PM	2669	0.7%
	Wed Nov 9, 2005	3:00 - 6:00 PM	2539	1.7%
	Tue Dec 14, 2004	3:00 - 6:00 PM	2639	6.8%
	Wed May 7, 2003	3:00 - 6:00 PM	2227	4.2%
	Tue May 7, 2002	3:00 - 6:00 PM	2114	5.8%
	Wed Oct 17, 2001	3:00 - 6:00 PM	2157	3.8%
	Thu Nov 9, 2000	3:00 - 6:00 PM	2060	5.9%
	Tue Mar 9, 1999	3:00 - 6:00 PM	1966	20.7%

NOTES: (a) Morning period of operation from 5:00 to 9:00 AM.
(b) Evening period of operation from 3:00 to 7:00 PM.

ALAMEDA-880

Mission Boulevard to Whipple Road

Violation History

Northbound

	DATE	PERIOD MONITORED	TOTAL HOVL VOLUME	VIOLATION RATE
A.M. PEAK	Wed Nov 15, 2006	6:00 - 9:00 AM	1383	0.7%
	Thu Apr 14, 2005	6:00 - 9:00 AM	1327	4.7%
	Thu Nov 4, 2004	6:00 - 9:00 AM	1160	3.8%
	Wed Oct 15, 2003	6:00 - 9:00 AM	1413	2.5%
	Tue Apr 16, 2002	6:00 - 9:00 AM	925	2.9%
	Thu Nov 1, 2001	6:00 - 9:00 AM	856	9.7%
	Wed Mar 29, 2000	6:00 - 9:00 AM	956	5.6%
	Wed Mar 10, 1999	6:00 - 9:00 AM	833	13.2%
P.M. PEAK	Tue Nov 7, 2006	3:00 - 6:00 PM	2054	1.0%
	Tue Oct 18, 2005	3:00 - 6:00 PM	2695	3.7%
	Tue Nov 23, 2004	3:00 - 6:00 PM	2150	0.2%
	Wed Oct 15, 2003	3:00 - 6:00 PM	2366	3.1%
	Wed May 15, 2002	3:00 - 6:00 PM	2663	6.0%
	Thu Jun 7, 2001	3:00 - 6:00 PM	2755	3.9%
	Wed Nov 1, 2000	3:00 - 6:00 PM	3263	3.6%
	Thu Mar 18, 1999	3:00 - 6:00 PM	2657	4.6%

NOTES: (a) Morning period of operation from 5:00 to 9:00 AM.
(b) Evening period of operation from 3:00 to 7:00 PM.

ALAMEDA-880

16th Street to SFOBB Toll Plaza

Northbound - A.M.

Typical data for 2006

(5)

VEHICLES	PEAK PERIOD ⁽⁴⁾ 6:00 - 10:00 AM		PEAK HOUR 7:00 - 8:00 AM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	98	3	27	0
Buses	55	6	12	3
Carpools ⁽¹⁾	1449	0	547	0
Vanpools	12	27	1	0
1 and 2 Occ. ⁽²⁾	—	4174	—	989
Violators	149	—	47	—
TOTAL	1763	4210	634	992

PERSONS	PEAK PERIOD ⁽⁴⁾ 6:00 - 10:00 AM		PEAK HOUR 7:00 - 8:00 AM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	98	3	34	2
Buses	1925	210	420	105
Carpools ⁽¹⁾	3985	0	1536	0
Vanpools	120	270	10	0
1 and 2 Occ. ⁽²⁾	—	4915	—	1210
Violators	234	—	81	—
TOTAL	6362	5398	2081	1317

RATES	PEAK PERIOD ⁽⁴⁾ 6:00 - 10:00 AM		PEAK HOUR 7:00 - 8:00 AM	
	HOV Lane occupancy rate	3.6 persons/veh		3.3 persons/veh
Mixed Flow occupancy rate	1.3 persons/veh		1.3 persons/veh	
Overall occupancy (incl. buses)	2.0 persons/veh		2.1 persons/veh	
Violation rate ⁽³⁾ (HOV Lane)	8.5 %		7.4 %	

- NOTES:** (1) 3 or more persons per vehicle & 2 - seater vehicles with 2 persons.
 (2) Mixed flow lanes only.
 (3) Violation rate = $\frac{\text{no. of violators in HOV lane} \times 100\%}{\text{Total no. of vehicles in HOV lane}}$
 (4) HOV lane in operation from 5:00 to 10:00 A.M.
 (5) Observations conducted 5/10/06 north of 7th Street Interchange.

ALAMEDA-880

16th Street to SFOBB Toll Plaza

Violation History

Northbound

	DATE	PERIOD MONITORED	TOTAL HOVL VOLUME	VIOLATION RATE
A.M. PEAK	Wed May 10, 2006	6:00 - 10:00 AM	1763	8.5%
	Wed Mar 16, 2005	6:00 - 10:00 AM	1483	10.5%
	Thu Oct 28, 2004	7:00 - 10:00 AM	1647	15.5%
	Wed May 21, 2003	5:00 - 10:00 AM	1451	5.6%
	Wed Apr 17, 2002	6:00 - 10:00 AM	1613	4.8%
	Thu Mar 22, 2001	6:00 - 10:00 AM	2402	15.5%
	Wed Sep 27, 2000	7:00 - 10:00 AM	2983	16.4%
	Tue May 18, 1999	6:00 - 10:00 AM	3471	3.1%
	Thu Sep 10, 1998	6:00 - 10:00 AM	1937	11.7%
P.M. PEAK	Year 2006	-	-	-
	Year 2005	-	-	-
	Year 2004	-	-	-
	Tue May 20, 2003	3:00 - 7:00 PM	457	3.5%
	Wed Apr 17, 2002	3:00 - 7:00 PM	486	6.8%
	Thu Oct 11, 2001	3:00 - 7:00 PM	397	14.6%
	Wed Oct 18, 2000	3:00 - 7:00 PM	513	43.3%
	Thu Sep 30, 1999	3:00 - 7:00 PM	587	16.5%
	Thu Sep 10, 1998	3:00 - 7:00 PM	343	14.9%

NOTES: (a) Morning period of operation from 5:00 to 10:00 AM
(b) Evening period of operation from 3:00 to 7:00 PM.
(c) Data was not collected in 2006 off-peak direction

CONTRA COSTA-4

Loveridge Road to Port Chicago Highway

Westbound - A.M.

Typical data for 2006⁽⁵⁾

VEHICLES	PEAK PERIOD ⁽⁴⁾ 6:00 - 9:00 AM		PEAK HOUR 6:00 - 7:00 AM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	119	18	59	5
Buses	7	16	6	7
Carpools ⁽¹⁾	2170	581	769	168
Vanpools	12	10	10	3
Hybrid / Single Occ. ⁽²⁾	56	14394	14	5107
Violators	73	—	24	—
TOTAL	2437	15019	882	5290

PERSONS	PEAK PERIOD ⁽⁴⁾ 6:00 - 9:00 AM		PEAK HOUR 6:00 - 7:00 AM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	119	18	59	5
Buses	245	560	210	245
Carpools ⁽¹⁾	4504	1272	1599	368
Vanpools	120	100	100	30
Hybrid / Single Occ. ⁽²⁾	56	14394	14	5107
Violators	73	—	24	—
TOTAL	5117	16344	2006	5755

RATES	PEAK PERIOD ⁽⁴⁾ 6:00 - 9:00 AM		PEAK HOUR 6:00 - 7:00 AM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
HOV Lane occupancy rate	2.1 persons/veh		2.3 persons/veh	
Mixed Flow occupancy rate	1.1 persons/veh		1.1 persons/veh	
Overall occupancy (incl. buses)	1.2 persons/veh		1.3 persons/veh	
Violation rate ⁽³⁾ (HOV Lane)	3.0 %		2.7 %	

- NOTES:**
- (1) Two or more persons per vehicle.
 - (2) Hybrid HOV lane only/Single occupancy mixed flow lanes only.
 - (3) Violation rate = $\frac{\text{no. of violators in HOV lane} \times 100\%}{\text{Total no. of vehicles in HOV lane}}$
 - (4) HOV lane in operation from 6:00 to 9:00 A.M.
 - (5) Observations conducted 09/07/06 at Bailey Road I/C.

CONTRA COSTA-4

Port Chicago Highway to Railroad Avenue

Eastbound - P.M.

Typical data for 2006⁽⁵⁾

VEHICLES	PEAK PERIOD ⁽⁴⁾ 3:00 - 6:00 PM		PEAK HOUR 5:00 - 6:00 PM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	105	38	36	13
Buses	1	14	0	2
Carpools ⁽¹⁾	2686	1623	990	533
Vanpools	61	9	19	2
Hybrid / Single Occ. ⁽²⁾	38	14966	16	5008
Violators	51	—	3	—
TOTAL	2942	16650	1064	5558

PERSONS	PEAK PERIOD ⁽⁴⁾ 3:00 - 6:00 PM		PEAK HOUR 5:00 - 6:00 PM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	105	38	36	13
Buses	35	490	0	70
Carpools ⁽¹⁾	5486	3477	2013	1139
Vanpools	610	90	190	20
Hybrid / Single Occ. ⁽²⁾	38	14966	16	5008
Violators	51	—	3	—
TOTAL	6325	19061	2258	6250

RATES	PEAK PERIOD ⁽⁴⁾ 3:00 - 6:00 PM		PEAK HOUR 5:00 - 6:00 PM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
HOV Lane occupancy rate	2.2 persons/veh		2.1 persons/veh	
Mixed Flow occupancy rate	1.1 persons/veh		1.1 persons/veh	
Overall occupancy (incl. buses)	1.3 persons/veh		1.3 persons/veh	
Violation rate ⁽³⁾ (HOV Lane)	1.7 %		0.3 %	

- NOTES:**
- (1) Two or more persons per vehicle.
 - (2) Hybrid HOV lane only/Single Occupancy mixed flow lanes only.
 - (3) Violation rate = $\frac{\text{no. of violators in HOV lane} \times 100\%}{\text{Total no. of vehicles in HOV lane}}$
 - (4) HOV lane in operation from 3:00 to 7:00 P.M.
 - (5) Observations conducted 09/06/06 at San Marcos I/C.

CONTRA COSTA-4

Loveridge Road to Port Chicago Highway

Violation History

Westbound

	DATE	PERIOD MONITORED	TOTAL HOVL VOLUME	VIOLATION RATE
A.M. PEAK	Thu Sep 7, 2006	6:00 - 9:00 AM	2437	3.0%
	Tue Jun 7, 2005	6:00 - 9:00 AM	2634	3.3%
	Thu Oct 21, 2004	6:00 - 9:00 AM	2436	2.0%
	Thu Oct 16, 2003	6:00 - 9:00 AM	2657	3.6%
	Thu May 23, 2002	6:00 - 9:00 AM	2225	4.5%
	Wed Sep 19, 2001	6:00 - 9:00 AM	1174	7.0%
	Wed May 10, 2000	6:00 - 9:00 AM	861	5.6%

NOTES: (a) Morning period of operation from 6:00 to 9:00 AM.

CONTRA COSTA-4

Port Chicago Highway to Railroad Ave.

Violation History

Eastbound

	DATE	PERIOD MONITORED	TOTAL HOVL VOLUME	VIOLATION RATE
P.M. PEAK	Wed Sep 6, 2006	3:00 - 6:00 PM	2942	1.7%
	Thu Oct 20, 2005	3:00 - 6:00 PM	2524	3.8%
	Tue Dec 7, 2004	3:00 - 6:00 PM	2289	1.7%
	Wed May 14, 2003	3:00 - 6:00 PM	2292	1.9%
	Tue Mar 19, 2002	3:00 - 6:00 PM	2248	4.4%
	Tue Oct 30, 2001	3:00 - 6:00 PM	2011	4.0%

NOTES: (a) Evening period of operation from 3:00 to 7:00 PM.

CONTRA COSTA-80

Route 4 to Alameda County Line

Westbound - A.M.

Typical data for 2006⁽⁵⁾

VEHICLES	PEAK PERIOD ⁽⁴⁾ 6:00 - 10:00 AM		PEAK HOUR 6:00 - 7:00 AM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	125	38	41	11
Buses	124	24	39	8
Carpools ⁽¹⁾	3337	773	1265	227
Vanpools	63	11	50	3
1 and 2 Occ. ⁽²⁾	—	18978	—	4958
Violators	446	—	98	—
TOTAL	4095	19824	1493	5207

PERSONS	PEAK PERIOD ⁽⁴⁾ 6:00 - 10:00 AM		PEAK HOUR 6:00 - 7:00 AM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	125	38	41	11
Buses	4340	840	1365	280
Carpools ⁽¹⁾	9367	1893	3516	510
Vanpools	630	110	500	30
1 and 2 Occ. ⁽²⁾	—	21092	—	5402
Violators	587	—	151	—
TOTAL	15049	23973	5573	6233

RATES	PEAK PERIOD ⁽⁴⁾ 6:00 - 10:00 AM		PEAK HOUR 6:00 - 7:00 AM	
	HOV Lane occupancy rate	3.7 persons/veh		3.7 persons/veh
Mixed Flow occupancy rate	1.2 persons/veh		1.2 persons/veh	
Overall occupancy (incl. buses)	1.6 persons/veh		1.8 persons/veh	
Violation rate ⁽³⁾ (HOV Lane)	10.9 %		6.6 %	

- NOTES:** (1) 3 or more persons per vehicle & 2 - seater vehicles with 2 persons.
 (2) Mixed flow lanes only.
 (3) Violation rate = $\frac{\text{no. of violators in HOV lane} \times 100\%}{\text{Total no. of vehicles in HOV lane}}$
 (4) HOV lane in operation from 5:00 to 10:00 A.M.
 (5) Observations conducted 5/24/06 east of Hilltop Drive Interchange.

CONTRA COSTA-80

Alameda County Line to Route 4

Eastbound - P.M.

Typical data for 2006 ⁽⁵⁾

VEHICLES	PEAK PERIOD ⁽⁴⁾ 3:00 - 7:00 PM		PEAK HOUR 5:00 - 6:00 PM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	211	84	66	18
Buses	122	15	38	5
Carpools ⁽¹⁾	3819	576	1229	94
Vanpools	119	13	28	4
1 and 2 Occ. ⁽²⁾	—	20481	—	5023
Violators	309	—	83	—
TOTAL	4580	21169	1444	5144

PERSONS	PEAK PERIOD ⁽⁴⁾ 3:00 - 7:00 PM		PEAK HOUR 5:00 - 6:00 PM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	211	84	66	18
Buses	4270	525	1330	175
Carpools ⁽¹⁾	10891	1658	3507	275
Vanpools	1190	130	280	40
1 and 2 Occ. ⁽²⁾	—	23195	—	5656
Violators	432	—	116	—
TOTAL	16994	25592	5299	6164

RATES	PEAK PERIOD ⁽⁴⁾ 3:00 - 7:00 PM		PEAK HOUR 5:00 - 6:00 PM	
	HOV Lane occupancy rate	3.7 persons/veh		3.7 persons/veh
Mixed Flow occupancy rate	1.2 persons/veh		1.2 persons/veh	
Overall occupancy (incl. buses)	1.7 persons/veh		1.7 persons/veh	
Violation rate ⁽³⁾ (HOV Lane)	6.7 %		5.7 %	

- NOTES:** (1) 3 or more persons per vehicle & 2 - seater vehicles with 2 persons.
 (2) Mixed flow lanes only.
 (3) Violation rate = $\frac{\text{no. of violators in HOV lane} \times 100\%}{\text{Total no. of vehicles in HOV lane}}$
 (4) HOV lane in operation from 3:00 to 7:00 P.M.
 (5) Observations conducted 5/2/06 east of Hilltop Drive Interchange.

CONTRA COSTA-80

Route 4 to Alameda County Line

Violation History

Westbound

	DATE	PERIOD MONITORED	TOTAL HOVL VOLUME	VIOLATION RATE
A.M. PEAK	Wed May 24, 2006	6:00 - 10:00 AM	4095	10.9%
	Thu Nov 10, 2005	7:00 - 10:00 AM	2635	12.5%
	Tue Nov 9, 2004	7:00 - 10:00 AM	2507	9.2%
	Fri May 9, 2003	6:00 - 10:00 AM	4509	27.2%
	Tue Apr 16, 2002	7:00 - 10:00 AM	2656	6.4%
	Tue Mar 27, 2001	6:00 - 10:00 AM	3640	8.7%
	Tue Oct 3, 2000	7:00 - 10:00 AM	2643	9.5%
	Tue Nov 9, 1999	7:00 - 10:00 AM	2186	11.1%
	Tue Oct 6, 1998	7:00 - 10:00 AM	1743	10.0%
P.M. PEAK	Year 2006	-	-	-
	Year 2005	-	-	-
	Year 2004	-	-	-
	Year 2003	-	-	-
	Tue May 7, 2002	3:00 - 7:00 PM	1401	25.7%
	Thu Oct 4, 2001	3:00 - 7:00 PM	1432	24.2%
	Thu Apr 13, 2000	3:00 - 7:00 PM	1167	37.3%
	Wed Apr 21, 1999	3:00 - 7:00 PM	1068	18.5%
	Tue Oct 6, 1998	3:00 - 7:00 PM	802	31.9%

NOTES: (a) Morning period of operation from 5:00 to 10:00 AM.
 (b) Evening period of operation from 3:00 to 7:00 PM.
 (c) Data was not collected in 2006 for off-peak direction

CONTRA COSTA-80

Alameda County Line to Route 4

Violation History

Eastbound

	DATE	PERIOD MONITORED	TOTAL HOVL VOLUME	VIOLATION RATE
A.M. PEAK	Year 2006	-	-	-
	Year 2005	-	-	-
	Year 2004	-	-	-
	Year 2003	-	-	-
	Tue Apr 23, 2002	6:00 - 10:00 AM	632	19.8%
	Tue May 15, 2001	6:00 - 10:00 AM	553	18.3%
	Thu Dec 14, 2000	7:00 - 10:00 AM	483	26.3%
	Wed Apr 7, 1999	7:00 - 10:00 AM	498	26.9%
	Thu Oct 1, 1998	6:00 - 10:00 AM	386	43.0%
	P.M. PEAK	Tue May 2, 2006	3:00 - 7:00 PM	4580
Tue Apr 19, 2005		3:00 - 7:00 PM	3897	6.4%
Thu Oct 21, 2004		3:00 - 6:00 PM	3214	9.3%
Wed May 28, 2003		3:00 - 7:00 PM	4256	11.5%
Tue Apr 16, 2002		3:00 - 7:00 PM	3921	9.0%
Thu Sep 20, 2001		3:00 - 7:00 PM	4649	4.4%
Tue Sep 26, 2000		3:00 - 7:00 PM	3780	18.0%
Tue Apr 13, 1999		3:00 - 7:00 PM	2956	9.5%
Thu Oct 22, 1998		3:00 - 6:00 PM	2422	17.8%

NOTES: (a) Morning period of operation from 5:00 to 10:00 AM.
(b) Evening period of operation from 3:00 to 7:00 PM.
(c) Data was not collected in 2006 off-peak direction

CONTRA COSTA-680

Marina Vista I/C. to N/O North Main St.

Southbound - A.M.

Typical data for 2006⁽⁵⁾

VEHICLES	PEAK PERIOD ⁽⁴⁾ 6:00 - 9:00 AM		PEAK HOUR 8:00 - 9:00 AM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	88	10	33	2
Buses	5	5	0	4
Carpools ⁽¹⁾	2554	526	918	273
Vanpools	1	3	0	0
Hybrid / Single Occ. ⁽²⁾	52	13530	27	4432
Violators	27	—	27	—
TOTAL	2727	14074	1005	4711

PERSONS	PEAK PERIOD ⁽⁴⁾ 6:00 - 9:00 AM		PEAK HOUR 8:00 - 9:00 AM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	88	10	33	2
Buses	175	175	0	140
Carpools ⁽¹⁾	5247	1139	1899	591
Vanpools	10	30	0	0
Hybrid / Single Occ. ⁽²⁾	52	13530	27	4432
Violators	27	—	27	—
TOTAL	5599	14884	1986	5165

RATES	PEAK PERIOD ⁽⁴⁾ 6:00 - 9:00 AM		PEAK HOUR 8:00 - 9:00 AM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
HOV Lane occupancy rate	2.1 persons/veh		2.0 persons/veh	
Mixed Flow occupancy rate	1.1 persons/veh		1.1 persons/veh	
Overall occupancy (incl. buses)	1.2 persons/veh		1.3 persons/veh	
Violation rate ⁽³⁾ (HOV Lane)	1.0 %		2.7 %	

- NOTES:**
- (1) Two or more persons per vehicle.
 - (2) Hybrid HOV lane only/Single occupancy mixed flow lanes only.
 - (3) Violation rate = $\frac{\text{no. of violators in HOV lane} \times 100\%}{\text{Total no. of vehicles in HOV lane}}$
 - (4) HOV lane in operation from 6:00 to 9:00 A.M.
 - (5) Observations conducted 10/11/06 at Truck Scale.

CONTRA COSTA-680

Marina Vista I/C. to N/O North Main St.

Southbound - P.M.

Typical data for 2006⁽⁵⁾

VEHICLES	PEAK PERIOD ⁽⁴⁾ 3:00 - 6:00 PM		PEAK HOUR 4:00 - 5:00 PM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	26	35	7	14
Buses	3	8	1	6
Carpools ⁽¹⁾	1184	856	432	278
Vanpools	5	40	4	16
Hybrid / Single Occ. ⁽²⁾	34	13249	12	4680
Violators	18	—	2	—
TOTAL	1270	14188	458	4994

PERSONS	PEAK PERIOD ⁽⁴⁾ 3:00 - 6:00 PM		PEAK HOUR 4:00 - 5:00 PM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	26	35	7	14
Buses	105	280	35	210
Carpools ⁽¹⁾	2451	1867	885	615
Vanpools	50	400	40	160
Hybrid / Single Occ. ⁽²⁾	34	13249	12	4680
Violators	18	—	2	—
TOTAL	2684	15831	981	5679

RATES	PEAK PERIOD ⁽⁴⁾ 3:00 - 6:00 PM		PEAK HOUR 4:00 - 5:00 PM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
HOV Lane occupancy rate	2.1 persons/veh		2.1 persons/veh	
Mixed Flow occupancy rate	1.1 persons/veh		1.1 persons/veh	
Overall occupancy (incl. buses)	1.2 persons/veh		1.2 persons/veh	
Violation rate ⁽³⁾ (HOV Lane)	1.4 %		0.4 %	

- NOTES:**
- (1) Two or more persons per vehicle.
 - (2) Hybrid HOV lane only/Single Occupancy mixed flow lanes only.
 - (3) Violation rate = $\frac{\text{no. of violators in HOV lane} \times 100\%}{\text{Total no. of vehicles in HOV lane}}$
 - (4) HOV lane in operation from 3:00 to 7:00 P.M.
 - (5) Observations conducted 10/25/06 at Truck Scale.

CONTRA COSTA-680

Route 242 to Marina Vista I/C.

Northbound - A.M.

Typical data for 2006⁽⁵⁾

VEHICLES	PEAK PERIOD ⁽⁴⁾ 6:00 - 9:00 AM		PEAK HOUR 8:00 - 9:00 AM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	19	16	7	5
Buses	5	7	1	1
Carpools ⁽¹⁾	395	506	168	190
Vanpools	6	1	3	1
Hybrid / Single Occ. ⁽²⁾	16	6314	9	2302
Violators	70	—	7	—
TOTAL	511	6844	195	2499

PERSONS	PEAK PERIOD ⁽⁴⁾ 6:00 - 9:00 AM		PEAK HOUR 8:00 - 9:00 AM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	19	16	7	5
Buses	175	245	35	35
Carpools ⁽¹⁾	886	1108	365	403
Vanpools	60	10	30	10
Hybrid / Single Occ. ⁽²⁾	16	6314	9	2302
Violators	70	—	7	—
TOTAL	1226	7693	453	2755

RATES	PEAK PERIOD ⁽⁴⁾ 6:00 - 9:00 AM		PEAK HOUR 8:00 - 9:00 AM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
HOV Lane occupancy rate	2.4 persons/veh		2.3 persons/veh	
Mixed Flow occupancy rate	1.1 persons/veh		1.1 persons/veh	
Overall occupancy (incl. buses)	1.2 persons/veh		1.2 persons/veh	
Violation rate ⁽³⁾ (HOV Lane)	13.7 %		3.6 %	

- NOTES:**
- (1) Two or more persons per vehicle.
 - (2) Hybrid HOV lane only/Single Occupancy mixed flow lanes only.
 - (3) Violation rate = $\frac{\text{no. of violators in HOV lane} \times 100\%}{\text{Total no. of vehicles in HOV lane}}$
 - (4) HOV lane in operation from 6:00 to 9:00 A.M.
 - (5) Observations conducted 04/26/06 at Pacheco Boulevard.

CONTRA COSTA-680

Route 242 to Marina Vista I/C.

Northbound - P.M.

Typical data for 2006⁽⁵⁾

VEHICLES	PEAK PERIOD ⁽⁴⁾ 3:00 - 6:00 PM		PEAK HOUR 5:00 - 6:00 PM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	41	17	10	5
Buses	6	20	4	3
Carpools ⁽¹⁾	1541	738	522	214
Vanpools	54	18	21	6
Hybrid / Single Occ. ⁽²⁾	51	8543	21	2907
Violators	39	—	20	—
TOTAL	1732	9336	598	3135

PERSONS	PEAK PERIOD ⁽⁴⁾ 3:00 - 6:00 PM		PEAK HOUR 5:00 - 6:00 PM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	41	17	10	5
Buses	210	700	140	105
Carpools ⁽¹⁾	3180	1578	1079	469
Vanpools	540	180	210	60
Hybrid / Single Occ. ⁽²⁾	51	8543	21	2907
Violators	39	—	20	—
TOTAL	4061	11018	1480	3546

RATES	PEAK PERIOD ⁽⁴⁾ 3:00 - 6:00 PM		PEAK HOUR 5:00 - 6:00 PM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
HOV Lane occupancy rate	2.3 persons/veh		2.5 persons/veh	
Mixed Flow occupancy rate	1.2 persons/veh		1.1 persons/veh	
Overall occupancy (incl. buses)	1.4 persons/veh		1.3 persons/veh	
Violation rate ⁽³⁾ (HOV Lane)	2.3 %		3.3 %	

- NOTES:**
- (1) Two or more persons per vehicle.
 - (2) Hybrid HOV lane only/Single Occupancy mixed flow lanes only.
 - (3) Violation rate = $\frac{\text{no. of violators in HOV lane} \times 100\%}{\text{Total no. of vehicles in HOV lane}}$
 - (4) HOV lane in operation from 3:00 to 7:00 P.M.
 - (5) Observations conducted 10/26/06 at Pacheco Boulevard.

CONTRA COSTA - 680

Marina Vista I/C. to N/O North Main St

Violation History

Southbound

	DATE	PERIOD MONITORED	TOTAL HOVL VOLUME	VIOLATION RATE
A.M. PEAK	Wed Oct 11, 2006	6:00 - 9:00 AM	2727	1.0%
	Tue May 3, 2005	6:00 - 9:00 AM	2387	0.9%
	Wed Oct 6, 2004	6:00 - 9:00 AM	2068	2.0%
P.M. PEAK	Wed Oct 25, 2006	3:00 - 6:00 PM	1270	1.4%
	Tue Sep 27, 2005	3:00 - 6:00 PM	1095	2.1%
	Tue Oct 5, 2004	3:00 - 6:00 PM	1083	4.2%

NOTES: (a) Morning period of operation from 6:00 to 9:00 AM.
(b) Evening period of operation from 3:00 to 7:00 PM.

CONTRA COSTA - 680

Route 242 to Marina Vista I/C.

Violation History

Northbound

	DATE	PERIOD MONITORED	TOTAL HOVL VOLUME	VIOLATION RATE
A.M. PEAK	Wed Apr 26, 2006	6:00 - 9:00 AM	511	13.7%
	Thu Sep 22, 2005	6:00 - 9:00 AM	560	5.5%
P.M. PEAK	Thu Oct 26, 2006	3:00 - 6:00 PM	1732	2.3%
	Thu Oct 6, 2005	3:00 - 6:00 PM	1910	8.8%

NOTES: (a) Morning period of operation from 6:00 to 9:00 AM.
(b) Evening period of operation from 3:00 to 7:00 PM.

CONTRA COSTA-680

Livorna Road to Alcosta Boulevard

Southbound - A.M.

Typical data for 2006⁽⁵⁾

VEHICLES	PEAK PERIOD ⁽⁴⁾ 6:00 - 9:00 AM		PEAK HOUR 7:00 - 8:00 AM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	117	16	53	4
Buses	11	15	6	4
Carpools ⁽¹⁾	2502	511	962	132
Vanpools	36	2	8	0
Hybrid / Single Occ. ⁽²⁾	150	14043	57	4886
Violators	231	—	71	—
TOTAL	3047	14587	1157	5026

PERSONS	PEAK PERIOD ⁽⁴⁾ 6:00 - 9:00 AM		PEAK HOUR 7:00 - 8:00 AM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	117	16	53	4
Buses	385	525	210	140
Carpools ⁽¹⁾	5386	1106	2063	296
Vanpools	360	20	80	0
Hybrid / Single Occ. ⁽²⁾	150	14043	57	4886
Violators	231	—	71	—
TOTAL	6629	15710	2534	5326

RATES	PEAK PERIOD ⁽⁴⁾ 6:00 - 9:00 AM		PEAK HOUR 7:00 - 8:00 AM	
	HOV Lane occupancy rate	2.2 persons/veh		2.2 persons/veh
Mixed Flow occupancy rate	1.1 persons/veh		1.1 persons/veh	
Overall occupancy (incl. buses)	1.3 persons/veh		1.3 persons/veh	
Violation rate ⁽³⁾ (HOV Lane)	7.6 %		6.1 %	

- NOTES:**
- (1) Two or more persons per vehicle.
 - (2) Hybrid HOV lane only/Single Occupancy mixed flow lanes only.
 - (3) Violation rate = $\frac{\text{no. of violators in HOV lane} \times 100\%}{\text{Total no. of vehicles in HOV lane}}$
 - (4) HOV lane in operation from 6:00 to 9:00 A.M.
 - (5) Observations conducted 06/08/06 at Stone Valley Road.

CONTRA COSTA-680

Livorna Road to Alcosta Boulevard

Southbound - P.M.

Typical data for 2006⁽⁵⁾

VEHICLES	PEAK PERIOD ⁽⁴⁾ 3:00 - 6:00 PM		PEAK HOUR 5:00 - 6:00 PM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	33	7	13	0
Buses	5	4	0	1
Carpools ⁽¹⁾	2932	939	1107	254
Vanpools	88	1	31	0
Hybrid / Single Occ. ⁽²⁾	43	13561	8	4929
Violators	42	—	14	—
TOTAL	3143	14512	1173	5184

PERSONS	PEAK PERIOD ⁽⁴⁾ 3:00 - 6:00 PM		PEAK HOUR 5:00 - 6:00 PM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	33	7	13	0
Buses	175	140	0	35
Carpools ⁽¹⁾	6051	2046	2272	562
Vanpools	880	10	310	0
Hybrid / Single Occ. ⁽²⁾	43	13561	8	4929
Violators	42	—	14	—
TOTAL	7224	15764	2617	5526

RATES	PEAK PERIOD ⁽⁴⁾ 3:00 - 6:00 PM		PEAK HOUR 5:00 - 6:00 PM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
HOV Lane occupancy rate	2.3 persons/veh		2.2 persons/veh	
Mixed Flow occupancy rate	1.1 persons/veh		1.1 persons/veh	
Overall occupancy (incl. buses)	1.3 persons/veh		1.3 persons/veh	
Violation rate ⁽³⁾ (HOV Lane)	1.3 %		1.2 %	

- NOTES:**
- (1) Two or more persons per vehicle.
 - (2) Hybrid HOV lane only/Single Occupancy mixed flow lanes only.
 - (3) Violation rate = $\frac{\text{no. of violators in HOV lane} \times 100\%}{\text{Total no. of vehicles in HOV lane}}$
 - (4) HOV lane in operation from 3:00 to 6:00 P.M.
 - (5) Observations conducted 09/20/06 at Stone Valley Road.

CONTRA COSTA-680

Alcosta Boulevard to Livorna Road

Northbound - A.M.

Typical data for 2006⁽⁵⁾

VEHICLES	PEAK PERIOD ⁽⁴⁾ 6:00 - 9:00 AM		PEAK HOUR 8:00 - 9:00 AM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	59	14	23	9
Buses	24	0	13	0
Carpools ⁽¹⁾	1952	339	854	115
Vanpools	8	0	4	0
Hybrid / Single Occ. ⁽²⁾	106	12797	54	4911
Violators	45	—	30	—
TOTAL	2194	13150	978	5035

PERSONS	PEAK PERIOD ⁽⁴⁾ 6:00 - 9:00 AM		PEAK HOUR 8:00 - 9:00 AM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	59	14	23	9
Buses	840	0	455	0
Carpools ⁽¹⁾	4010	785	1758	264
Vanpools	80	0	40	0
Hybrid / Single Occ. ⁽²⁾	106	12797	54	4911
Violators	45	—	30	—
TOTAL	5140	13596	2360	5184

RATES	PEAK PERIOD ⁽⁴⁾ 6:00 - 9:00 AM		PEAK HOUR 8:00 - 9:00 AM	
	HOV Lane occupancy rate	2.3 persons/veh		2.4 persons/veh
Mixed Flow occupancy rate	1.0 persons/veh		1.0 persons/veh	
Overall occupancy (incl. buses)	1.2 persons/veh		1.3 persons/veh	
Violation rate ⁽³⁾ (HOV Lane)	2.1 %		3.1 %	

- NOTES:**
- (1) Two or more persons per vehicle.
 - (2) Hybrid HOV lane only/Single Occupancy mixed flow lanes only.
 - (3) Violation rate = $\frac{\text{no. of violators in HOV lane} \times 100\%}{\text{Total no. of vehicles in HOV lane}}$
 - (4) HOV lane in operation from 6:00 to 9:00 A.M.
 - (5) Observations conducted 09/13/06 at Stone Valley Road.

CONTRA COSTA-680

Alcosta Boulevard to Livorna Road

Northbound - P.M.

Typical data for 2006⁽⁵⁾

VEHICLES	PEAK PERIOD ⁽⁴⁾ 3:00 - 6:00 PM		PEAK HOUR 4:00 - 5:00 PM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	34	2	11	1
Buses	29	2	13	0
Carpools ⁽¹⁾	3485	519	1275	189
Vanpools	30	19	18	6
Hybrid / Single Occ. ⁽²⁾	146	13423	72	4724
Violators	33	—	9	—
TOTAL	3757	13965	1398	4920

PERSONS	PEAK PERIOD ⁽⁴⁾ 3:00 - 6:00 PM		PEAK HOUR 4:00 - 5:00 PM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	34	2	11	1
Buses	1015	70	455	0
Carpools ⁽¹⁾	7149	1122	2633	397
Vanpools	300	190	180	60
Hybrid / Single Occ. ⁽²⁾	146	13423	72	4724
Violators	33	—	9	—
TOTAL	8677	14807	3360	5182

RATES	PEAK PERIOD ⁽⁴⁾ 3:00 - 6:00 PM		PEAK HOUR 4:00 - 5:00 PM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
HOV Lane occupancy rate	2.3 persons/veh		2.4 persons/veh	
Mixed Flow occupancy rate	1.1 persons/veh		1.1 persons/veh	
Overall occupancy (incl. buses)	1.3 persons/veh		1.4 persons/veh	
Violation rate ⁽³⁾ (HOV Lane)	0.9 %		0.6 %	

- NOTES:**
- (1) Two or more persons per vehicle.
 - (2) Hybrid HOV lane only/Single Occupancy mixed flow lanes only.
 - (3) Violation rate = $\frac{\text{no. of violators in HOV lane} \times 100\%}{\text{Total no. of vehicles in HOV lane}}$
 - (4) HOV lane in operation from 3:00 to 6:00 P.M.
 - (5) Observations conducted 11/29/06 at Stone Valley Road.

CONTRA COSTA-680

Violation History

Livorna Road to Alcosta Boulevard

Southbound

	DATE	PERIOD MONITORED	TOTAL HOVL VOLUME	VIOLATION RATE
A.M. PEAK	Thu Jun 8, 2006	6:00 - 9:00 AM	3047	7.6%
	Wed Nov 16, 2005	6:00 - 9:00 AM	2793	4.4%
	Tue Oct 5, 2004	6:00 - 9:00 AM	2118	4.5%
	Thu Apr 3, 2003	6:00 - 9:00 AM	2114	0.6%
	Thu Jun 13, 2002	6:00 - 9:00 AM	2480	1.7%
	Thu Mar 15, 2001	6:00 - 9:00 AM	2609	5.3%
	Thu Apr 6, 2000	6:00 - 9:00 AM	2258	2.8%
	Wed Sep 29, 1999	6:00 - 9:00 AM	1974	3.1%
	Tues Mar 10, 1998	6:00 - 9:00 AM	1545	9.0%
	Wed Oct 29, 1997	6:00 - 9:00 AM	1791	3.9%
	Thu Oct 10, 1996	6:00 - 9:00 AM	1359	2.6%
	Tue Nov 7, 1995	6:00 - 9:00 AM	1179	1.2%
P.M. PEAK	Wed Sep 20, 2006	3:00 - 6:00 PM	3143	1.3%
	Tue Nov 15, 2005	3:00 - 6:00 PM	2640	3.0%
	Thu Oct 28, 2004	3:00 - 6:00 PM	2527	2.6%
	Tue Apr 8, 2003	3:00 - 6:00 PM	2109	2.4%
	Wed Mar 13, 2002	3:00 - 6:00 PM	2009	7.8%
	Wed May 9, 2001	3:00 - 6:00 PM	1831	8.5%
	Tue Dec 12, 2000	3:00 - 6:00 PM	1337	4.3%
	Wed Sep 29, 1999	3:00 - 6:00 PM	1604	7.2%
	Tue Sep 22, 1998	3:00 - 6:00 PM	2004	8.4%
	Thu Apr 17, 1997	3:00 - 6:00 PM	1344	2.0%
	Wed Oct 9, 1996	3:00 - 6:00 PM	1182	4.1%
	Tue Nov 7, 1995	3:00 - 6:00 PM	645	7.0%

NOTES: (a) Morning period of operation from 6:00 to 9:00 AM.
(b) Evening period of operation from 3:00 to 6:00 PM.

CONTRA COSTA-680

Violation History

Alcosta Boulevard to Livorna Road

Northbound

	DATE	PERIOD MONITORED	TOTAL HOVL VOLUME	VIOLATION RATE
A.M. PEAK	Wed Sep 13, 2006	6:00 - 9:00 AM	2194	2.1%
	Wed Apr 27, 2005	6:00 - 9:00 AM	1891	3.5%
	Thu Oct 7, 2004	6:00 - 9:00 AM	1899	3.0%
	Tue Oct 21, 2003	6:00 - 9:00 AM	1920	5.0%
	Thu Apr 25, 2002	6:00 - 9:00 AM	1746	6.9%
	Tue Sep 25, 2001	6:00 - 9:00 AM	1681	3.0%
	Thu Nov 2, 2000	6:00 - 9:00 AM	1263	7.0%
	Tue Sep 28, 1999	6:00 - 9:00 AM	621	7.1%
	Thu Nov 5, 1998	6:00 - 9:00 AM	1213	4.6%
	Tue Oct 28, 1997	6:00 - 9:00 AM	1139	4.1%
	Wed Oct 9, 1996	6:00 - 9:00 AM	958	6.6%
	Thu Nov 2, 1995	6:00 - 9:00 AM	1064	4.4%
P.M. PEAK	Wed Nov 29, 2006	3:00 - 6:00 PM	3757	0.9%
	Tue Apr 26, 2005	3:00 - 6:00 PM	3727	3.2%
	Thu Dec 2, 2004	3:00 - 6:00 PM	3842	2.4%
	Tue Oct 21, 2003	3:00 - 6:00 PM	3677	3.4%
	Wed Nov 20, 2002	3:00 - 6:00 PM	3989	4.5%
	Tue May 8, 2001	3:00 - 6:00 PM	3742	5.0%
	Wed Oct 4, 2000	3:00 - 6:00 PM	4165	3.6%
	Tue Oct 26, 1999	3:00 - 6:00 PM	3224	4.9%
	Tue Oct 6, 1998	3:00 - 6:00 PM	2819	3.1%
	Wed Oct 15, 1997	3:00 - 6:00 PM	2755	4.9%
	Thu Oct 3, 1996	3:00 - 6:00 PM	2523	6.1%
	Thu Nov 2, 1995	3:00 - 6:00 PM	1902	1.2%

NOTES: (a) Morning period of operation from 6:00 to 9:00 AM.
(b) Evening period of operation from 3:00 to 6:00 PM.

MARIN-101

Anderson Dr. to Richardson Bridge

Southbound - A.M.

Typical data for 2006 ⁽⁵⁾

VEHICLES	PEAK PERIOD ⁽⁴⁾ 6:30 - 8:30 AM		PEAK HOUR 7:30 - 8:30 AM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	26	10	13	6
Buses	42	47	28	22
Carpools ⁽¹⁾	871	798	526	432
Vanpools	6	8	5	3
Hybrid/Single Occ. ⁽²⁾	89	7760	40	4030
Violators	15	—	6	—
TOTAL	1049	8623	618	4493

PERSONS	PEAK PERIOD ⁽⁴⁾ 6:30 - 8:30 AM		PEAK HOUR 7:30 - 8:30 AM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	26	10	13	6
Buses	1470	1645	980	770
Carpools ⁽¹⁾	1843	1692	1133	926
Vanpools	60	80	50	30
Hybrid/Single Occ. ⁽²⁾	89	7760	40	4030
Violators	15	—	6	—
TOTAL	3503	11187	2222	5762

RATES	PEAK PERIOD ⁽⁴⁾ 6:30 - 8:30 AM		PEAK HOUR 7:30 - 8:30 AM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
HOV Lane occupancy rate	3.3 persons/veh		3.6 persons/veh	
Mixed Flow occupancy rate	1.3 persons/veh		1.3 persons/veh	
Overall occupancy (incl. buses)	1.5 persons/veh		1.6 persons/veh	
Violation rate ⁽³⁾ (HOV Lane)	1.4 %		1.0 %	

- NOTES:** (1) Two or more occupants per vehicle.
 (2) Hybrid HOV lane only/Single Occupancy mixed flow lane only.
 (3) Violation rate = $\frac{\text{no. of violators in HOV lane}}{\text{Total no. of vehicles in HOV lane}} \times 100\%$
 (4) HOV lane in operation from 6:30 to 8:30 A.M.
 (5) Observations conducted 04/13/06 at Route 131, East Blithdale Ave. I/C.

MARIN-101

Richardson Bridge to Nellen Ave UC

Northbound - P.M.

Typical data for 2006⁽⁵⁾

VEHICLES	PEAK PERIOD ⁽⁴⁾ 4:30 - 7:00 PM		PEAK HOUR 5:30 - 6:30 PM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	57	41	24	19
Buses	70	29	27	12
Carpools ⁽¹⁾	1528	1846	628	744
Vanpools	14	4	2	1
Hybrid/Single Occ. ⁽²⁾	87	11413	33	4864
Violators	25	—	3	—
TOTAL	1781	13333	717	5640

PERSONS	PEAK PERIOD ⁽⁴⁾ 4:30 - 7:00 PM		PEAK HOUR 5:30 - 6:30 PM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	57	41	24	19
Buses	2450	1015	945	420
Carpools ⁽¹⁾	3156	3934	1296	1587
Vanpools	140	40	20	10
Hybrid/Single Occ. ⁽²⁾	87	11413	33	4864
Violators	25	—	3	—
TOTAL	5915	16443	2321	6900

RATES	PEAK PERIOD ⁽⁴⁾ 4:30 - 7:00 PM		PEAK HOUR 5:30 - 6:30 PM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
HOV Lane occupancy rate	3.3 persons/veh		3.2 persons/veh	
Mixed Flow occupancy rate	1.2 persons/veh		1.2 persons/veh	
Overall occupancy (incl. buses)	1.5 persons/veh		1.4 persons/veh	
Violation rate ⁽³⁾ (HOV Lane)	1.4 %		0.4 %	

- NOTES:** (1) Two or more occupants per vehicle.
 (2) Hybrid HOV lane only/Single Occupancy mixed flow lane only.
 (3) Violation rate = $\frac{\text{no. of violators in HOV lane} \times 100\%}{\text{Total no. of vehicles in HOV lane}}$
 (4) HOV lane in operation from 4:30 to 7:00 P.M.
 (5) Observations conducted 04/06/06 at Route 131, E. Blithdale Ave. I/C.

MARIN-101

Anderson Dr. to Richardson Bay Bridge

Violation History

Southbound

	DATE	PERIOD MONITORED	TOTAL HOVL VOLUME	VIOLATION RATE
A.M. PEAK	Thu Apr 13, 2006	6:30 - 8:30 AM	1049	1.4%
	Thu Mar 3, 2005	6:30 - 8:30 AM	1099	3.0%
	Thu Nov 4, 2004	6:30 - 8:30 AM	1015	4.4%
	Tue Apr 8, 2003	6:30 - 8:30 AM	1118	3.4%
	Wed Mar 20, 2002	6:30 - 8:30 AM	1591	1.9%
	Wed Mar 28, 2001	6:30 - 8:30 AM	1495	2.3%
	Thu Mar 23, 2000	6:30 - 8:30 AM	1538	2.8%
	Wed Mar 17, 1999	6:30 - 8:30 AM	1394	2.3%
	Tue Mar 3, 1998	6:30 - 8:30 AM	1106	1.6%
	Tue Mar 11, 1997	6:30 - 8:30 AM	1367	2.4%
	Thu Oct 17, 1996	6:30 - 8:30 AM	1446	1.2%
	Tue Oct 31, 1995	6:30 - 8:30 AM	1389	3.7%
	Thu Oct 13, 1994	6:30 - 8:30 AM	1135	6.4%
	Wed Apr 21, 1993	6:30 - 8:30 AM	1325	7.2%

NOTES: (a) Minimum occupancy requirement was reduced to 2 persons per vehicle on October 1, 1988
(b) Morning period of operation from 6:30 to 8:30 AM.

MARIN-101

Violation History

Richardson Bay Bridge to Nellen Ave UC

Northbound

	DATE	PERIOD MONITORED	TOTAL HOVL VOLUME	VIOLATION RATE
P.M. PEAK	Thu Apr 6, 2006	4:30 - 7:00 PM	1781	1.4%
	Thu Sep 29, 2005	4:30 - 7:00 PM	1953	1.6%
	Wed Oct 13, 2004	4:30 - 7:00 PM	1529	1.9%
	Wed Apr 16, 2003	4:30 - 7:00 PM	1370	2.4%
	Tue Sep 17, 2002	4:30 - 7:00 PM	1365	1.5%
	Tue Apr 3, 2001	4:30 - 7:00 PM	1544	3.9%
	Tue Oct 3, 2000	4:30 - 7:00 PM	1771	1.6%
	Tue Mar 16, 1999	4:30 - 7:00 PM	1719	1.9%
	Wed Apr 22, 1998	4:30 - 7:00 PM	1838	4.8%
	Wed Oct 1, 1997	4:30 - 7:00 PM	2217	5.4%
	Thu Oct 24, 1996	4:30 - 7:00 PM	1820	3.4%
	Tue Oct 24, 1995	4:30 - 7:00 PM	1779	3.9%
	Tue Apr 5, 1994	4:30 - 7:00 PM	2031	0.2%
	Tue Apr 20, 1993	4:30 - 7:00 PM	1516	13.5%

NOTES: (a) Minimum occupancy requirement was reduced to 2 persons per vehicle on October 1, 1988
(b) Evening period of operation from 4:30 to 7:00 PM.

MARIN-101

Route 37 to N. San Pedro Road

Southbound - A.M.

Typical data for 2006⁽⁵⁾

VEHICLES	PEAK PERIOD ⁽⁴⁾ 6:30 - 8:30 AM		PEAK HOUR 6:30 - 7:30 AM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	52	25	29	12
Buses	23	39	13	23
Carpools ⁽¹⁾	1964	332	1082	165
Vanpools	15	4	7	0
Hybrid/Single Occ. ⁽²⁾	90	8456	52	4006
Violators	30	—	16	—
TOTAL	2174	8856	1199	4206

PERSONS	PEAK PERIOD ⁽⁴⁾ 6:30 - 8:30 AM		PEAK HOUR 6:30 - 7:30 AM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	52	25	29	12
Buses	805	1365	455	805
Carpools ⁽¹⁾	4022	723	2230	359
Vanpools	150	40	70	0
Hybrid/Single Occ. ⁽²⁾	90	8456	52	4006
Violators	30	—	16	—
TOTAL	5149	10609	2852	5182

RATES	PEAK PERIOD ⁽⁴⁾ 6:30 - 8:30 AM		PEAK HOUR 6:30 - 7:30 AM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
HOV Lane occupancy rate	2.4 persons/veh		2.4 persons/veh	
Mixed Flow occupancy rate	1.2 persons/veh		1.2 persons/veh	
Overall occupancy (incl. buses)	1.4 persons/veh		1.5 persons/veh	
Violation rate ⁽³⁾ (HOV Lane)	1.4 %		1.3 %	

- NOTES:**
- (1) Two or more occupants per vehicle.
 - (2) Hybrid HOV Lane only/Single Occupancy mixed flow lane only.
 - (3) $\text{Violation rate} = \frac{\text{no. of violators in HOV lane} \times 100\%}{\text{Total no. of vehicles in HOV lane}}$
 - (4) HOV lane in operation from 6:30 to 8:30 A.M.
 - (5) Observations conducted 10/03/06 at Alameda Del Prado Dr. I/C.

MARIN-101

N. San Pedro Road to Route 37

Northbound - P.M.

Typical data for 2006 ⁽⁵⁾

VEHICLES	PEAK PERIOD ⁽⁴⁾ 4:30 - 7:00 PM		PEAK HOUR 4:30 - 5:30 PM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	21	13	10	4
Buses	43	27	22	6
Carpools ⁽¹⁾	1365	1712	706	618
Vanpools	15	13	5	6
Hybrid/Single Occ. ⁽²⁾	81	14125	43	6102
Violators	34	—	16	—
TOTAL	1559	15890	802	6736

PERSONS	PEAK PERIOD ⁽⁴⁾ 4:30 - 7:00 PM		PEAK HOUR 4:30 - 5:30 PM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	21	13	10	4
Buses	1505	945	770	210
Carpools ⁽¹⁾	2831	3628	1465	1313
Vanpools	150	130	50	60
Hybrid/Single Occ. ⁽²⁾	81	14125	43	6102
Violators	34	—	16	—
TOTAL	4622	18841	2354	7689

RATES	PEAK PERIOD ⁽⁴⁾ 4:30 - 7:00 PM		PEAK HOUR 4:30 - 5:30 PM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
HOV Lane occupancy rate	3.0 persons/veh		3.0 persons/veh	
Mixed Flow occupancy rate	1.2 persons/veh		1.1 persons/veh	
Overall occupancy (incl. buses)	1.3 persons/veh		1.3 persons/veh	
Violation rate ⁽³⁾ (HOV Lane)	2.2 %		2.0 %	

- NOTES:** (1) Two or more occupants per vehicle.
 (2) Hybrid HOV lane only/Single Occupancy mixed flow lane only.
 (3) Violation rate = $\frac{\text{no. of violators in HOV lane}}{\text{Total no. of vehicles in HOV lane}} \times 100\%$
 (4) HOV lane in operation from 4:30 to 7:00 P.M.
 (5) Observations conducted 04/05/06 at the Manuel Freitas Truck Scale.

MARIN-101

Route 37 to N. San Pedro Road

Violation History

Southbound

	DATE	PERIOD MONITORED	TOTAL HOVL VOLUME	VIOLATION RATE
A.M. PEAK	Tue Oct 3, 2006	6:30 - 8:30 AM	2174	1.4%
	Wed Nov 2, 2005	6:30 - 8:30 AM	2276	1.3%
	Wed Nov 3, 2004	6:30 - 8:30 AM	2343	1.9%
	Thu Apr 3, 2003	6:30 - 8:30 AM	2335	2.2%
	Tue Mar 19, 2002	6:30 - 8:30 AM	2564	1.2%
	Wed Oct 31, 2001	6:30 - 8:30 AM	2520	1.4%
	Wed Mar 22, 2000	6:30 - 8:30 AM	2610	1.1%
	Thu Mar 18, 1999	6:30 - 8:30 AM	2256	1.8%
	Wed Mar 4, 1998	6:30 - 8:30 AM	2047	3.3%
	Wed Nov 5, 1997	6:30 - 8:30 AM	2690	5.1%
	Tue Nov 19, 1996	6:30 - 8:30 AM	2507	2.6%
	Wed Oct 25, 1995	6:30 - 8:30 AM	2609	4.3%
	Wed Mar 30, 1994	6:30 - 8:30 AM	1702	1.8%
	Tue Apr 27, 1993	6:30 - 8:30 AM	2042	4.8%

NOTES: (a) Minimum occupancy requirement was reduced to 2 persons per vehicle on October 1, 1988
(b) Morning period of operation from 6:30 to 8:30 AM.

MARIN-101

Violation History

N. San Pedro Road to Route 37

Northbound

	DATE	PERIOD MONITORED	TOTAL HOVL VOLUME	VIOLATION RATE
P.M. PEAK	Wed Apr 5, 2006	4:30 - 7:00 PM	1559	2.2%
	Thu Apr 21, 2005	4:30 - 7:00 PM	1545	4.0%
	Thu Oct 7, 2004	4:30 - 7:00 PM	1577	2.5%
	Wed Apr 9, 2003	4:30 - 7:00 PM	1851	3.2%
	Thu Sep 19, 2002	4:30 - 7:00 PM	1552	2.6%
	Tue Sep 18, 2001	4:30 - 7:00 PM	1580	1.1%
	Tue Mar 21, 2000	4:30 - 7:00 PM	1921	2.7%
	Thu Sep 16, 1999	4:30 - 7:00 PM	1841	4.0%
	Tue Apr 7, 1998	4:30 - 7:00 PM	2147	2.4%
	Thu Oct 2, 1997	4:30 - 7:00 PM	1867	3.2%
	Thu Oct 17, 1996	4:30 - 7:00 PM	1983	3.9%
	Wed Apr 19, 1995	4:30 - 7:00 PM	1817	0.3%
	Thu Apr 7, 1994	4:30 - 7:00 PM	1233	0.9%
	Wed Apr 21, 1993	4:30 - 7:00 PM	1599	7.9%

NOTES: (a) Minimum occupancy requirement was reduced to 2 persons per vehicle on October 1, 1988
(b) Evening period of operation from 4:30 to 7:00 PM.

SANTA CLARA-85

Route 101 (Mountain View) to Route 280

Southbound - P.M.

Typical data for 2006⁽⁵⁾

VEHICLES	PEAK PERIOD ⁽⁴⁾ 3:00 - 6:00 PM		PEAK HOUR 5:00 - 6:00 PM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	141	3	61	1
Buses	10	1	5	0
Carpools ⁽¹⁾	1791	354	729	95
Vanpools	5	2	4	1
Hybrid/Single Occ. ⁽²⁾	207	10321	130	3496
Violators	10	—	2	—
TOTAL	2164	10681	931	3593

PERSONS	PEAK PERIOD ⁽⁴⁾ 3:00 - 6:00 PM		PEAK HOUR 5:00 - 6:00 PM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	141	3	61	1
Buses	350	35	175	0
Carpools ⁽¹⁾	3689	797	1477	223
Vanpools	50	20	40	10
Hybrid/Single Occ. ⁽²⁾	207	10321	130	3496
Violators	10	—	2	—
TOTAL	4447	11176	1885	3730

RATES	PEAK PERIOD ⁽⁴⁾ 3:00 - 6:00 PM		PEAK HOUR 5:00 - 6:00 PM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
HOV Lane occupancy rate	2.1 persons/veh		2.0 persons/veh	
Mixed Flow occupancy rate	1.0 persons/veh		1.0 persons/veh	
Overall occupancy (incl. buses)	1.2 persons/veh		1.2 persons/veh	
Violation rate ⁽³⁾ (HOV Lane)	0.5 %		0.2 %	

- NOTES:**
- (1) Two or more occupants per vehicle.
 - (2) Hybrid HOV lane only/Single Occupancy mixed flow lanes only.
 - (3) Violation rate = $\frac{\text{no. of violators in HOV lane} \times 100\%}{\text{Total no. of vehicles in HOV lane}}$
 - (4) HOV lane in operation from 3:00 to 7:00 P.M.
 - (5) Observations conducted 10/24/06 at Fremont avenue I/C

SANTA CLARA-85

Route 280 to Route 101 (Mountain View)

Northbound - A.M.

Typical data for 2006⁽⁵⁾

VEHICLES	PEAK PERIOD ⁽⁴⁾ 6:00 - 9:00 AM		PEAK HOUR 8:00 - 9:00 AM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	129	11	53	0
Buses	5	0	3	0
Carpools ⁽¹⁾	1995	80	882	35
Vanpools	7	0	6	0
Hybrid/Single Occ. ⁽²⁾	348	11379	219	3947
Violators	17	—	5	—
TOTAL	2501	11470	1168	3982

PERSONS	PEAK PERIOD ⁽⁴⁾ 6:00 - 9:00 AM		PEAK HOUR 8:00 - 9:00 AM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	129	11	53	0
Buses	175	0	105	0
Carpools ⁽¹⁾	4044	169	1785	74
Vanpools	70	0	60	0
Hybrid/Single Occ. ⁽²⁾	348	11379	219	3947
Violators	17	—	5	—
TOTAL	4783	11559	2227	4021

RATES	PEAK PERIOD ⁽⁴⁾ 6:00 - 9:00 AM		PEAK HOUR 8:00 - 9:00 AM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
HOV Lane occupancy rate	1.9 persons/veh		1.9 persons/veh	
Mixed Flow occupancy rate		1.0 persons/veh		1.0 persons/veh
Overall occupancy (incl. buses)	1.2 persons/veh		1.2 persons/veh	
Violation rate ⁽³⁾ (HOV Lane)	0.7 %		0.4 %	

- NOTES:**
- (1) Two or more occupants per vehicle.
 - (2) Hybrid HOV lane only/Single Occupancy mixed flow lanes only.
 - (3) Violation rate = $\frac{\text{no. of violators in HOV lane} \times 100\%}{\text{Total no. of vehicles in HOV lane}}$
 - (4) HOV lane in operation from 5:00 to 9:00 A.M.
 - (5) Observations conducted 10/11/06 at Fremont Avenue I/C

SANTA CLARA-85

Violation History

Route 101 (Mountain View) to Route 280

Southbound

	DATE	PERIOD MONITORED	TOTAL HOVL VOLUME	VIOLATION RATE
A.M. PEAK	Year 2006	-	-	-
	Year 2005	-	-	-
	Year 2004	-	-	-
	Year 2003	-	-	-
	Wed Oct 23, 2002	7:00 - 9:00 AM	540	10.0%
	Thu Jun 7, 2001	6:00 - 9:00 AM	560	4.1%
	Wed Sep 27, 2000	6:00 - 9:00 AM	604	13.2%
	Tue Jun 8, 1999	6:00 - 9:00 AM	597	9.4%
	Wed Mar 04, 1998	6:00 - 9:00 AM	551	0.5%
	Tue Feb 25, 1997	6:45 - 9:00 AM	397	5.3%
	Wed Apr 3, 1996	6:00 - 9:00 AM	359	5.0%
	Wed Sept 20, 1995	7:00 - 9:00 AM	345	6.4%
	Thu Dec 1, 1994	7:00 - 9:00 AM	618	2.1%
	Wed Jun 9, 1993	6:00 - 9:00 AM	286	26.6%
P.M. PEAK	Tue Oct 24, 2006	3:00 - 6:00 PM	2164	0.5%
	Wed Oct 12, 2005	3:00 - 6:00 PM	2265	0.7%
	Tue Nov 30, 2004	3:00 - 5:15 PM	1510	0.7%
	Wed Jun 4, 2003	3:00 - 6:00 PM	2323	1.6%
	Wed May 29, 2002	3:00 - 6:00 PM	2647	4.4%
	Tue Sep 25, 2001	3:00 - 6:00 PM	2656	6.4%
	Thu Jun 1, 2000	3:00 - 6:00 PM	2792	0.9%
	Thu May 13, 1999	3:00 - 6:00 PM	3121	1.4%
	Thu Apr 9, 1998	4:00 - 6:00 PM	2058	0.2%
	Tue Sept 30, 1997	3:00 - 6:00 PM	2277	1.2%
	Thu May 16, 1996	3:00 - 6:00 PM	2165	3.0%
	Thu Sept 21, 1995	3:00 - 6:00 PM	3671	2.4%
	Tue Nov 29, 1994	3:00 - 5:00 PM	970	2.1%
	Tue May 18, 1993	3:00 - 6:00 PM	1279	7.8%

NOTES: (a) Morning period of operation from 5:00 to 9:00 AM.
(b) Evening period of operation from 3:00 to 7:00 PM.
(c) Data was not collected in 2006 off-peak direction

SANTA CLARA-85

Route 280 to Route 101 (Mountain View)

Violation History

Northbound

	DATE	PERIOD MONITORED	TOTAL HOVL VOLUME	VIOLATION RATE
A.M. PEAK	Wed Oct 11, 2006	6:00 - 9:00 AM	2501	0.7%
	Tue Oct 18, 2005	6:00 - 9:00 AM	1703	3.0%
	Wed Nov 3, 2004	6:00 - 9:00 AM	2132	0.7%
	Wed Oct 29, 2003	6:00 - 9:00 AM	1151	0.8%
	Tue Oct 8, 2002	7:00 - 9:00 AM	1435	1.5%
	Tue Apr 10, 2001	6:00 - 9:00 AM	2471	1.8%
	Tue Oct 17, 2000	7:00 - 9:00 AM	2188	10.1%
	Wed Oct 6, 1999	6:00 - 9:00 AM	2402	4.9%
	Tue Dec 1, 1998	6:00 - 9:00 AM	2473	4.7%
	Thu Dec 4, 1997	7:00 - 9:00 AM	1584	0.1%
	Wed Nov 20, 1996	6:45 - 9:00 AM	1840	0.2%
	Tue Sept 12, 1995	7:00 - 9:00 AM	1896	1.4%
	Tue Nov 29, 1994	7:00 - 9:00 AM	1073	1.8%
	Tue Nov 16, 1993	6:30 - 9:00 AM	1031	11.1%
P.M. PEAK	Year 2006	-	-	-
	Year 2005	-	-	-
	Year 2004	-	-	-
	Year 2003	-	-	-
	Thu Oct 31, 2002	3:00 - 5:30 PM	761	2.2%
	Wed Oct 10, 2001	3:00 - 6:00 PM	1124	0.4%
	Thu May 4, 2000	3:00 - 6:00 PM	940	2.1%
	Thu Oct 28, 1999	3:00 - 6:00 PM	845	1.2%
	Wed Mar 4, 1998	3:00 - 6:00 PM	852	3.5%
	Tue Feb 25, 1997	3:00 - 6:00 PM	1051	2.7%
	Tue Jun 4, 1996	3:00 - 6:00 PM	1008	8.2%
	Tue Sept 12, 1995	3:00 - 6:00 PM	652	9.8%
	Thu Dec 1, 1994	3:00 - 5:00 PM	569	4.4%
	Thu Apr 29, 1993	3:00 - 6:00 PM	382	31.4%

NOTES: (a) Morning period of operation from 5:00 to 9:00 AM.
(b) Evening period of operation from 3:00 to 7:00 PM.
(c) Data was not collected in 2006 for off-peak direction

SANTA CLARA-85

Route 280 to Almaden Expressway

Southbound - P.M.

Typical data for 2006⁽⁵⁾

VEHICLES	PEAK PERIOD ⁽⁴⁾ 3:00 - 6:00 PM		PEAK HOUR 4:00 - 5:00 PM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	154	9	60	1
Buses	7	4	5	1
Carpools ⁽¹⁾	2115	668	729	143
Vanpools	3	1	2	0
Hybrid/Single Occ. ⁽²⁾	146	10539	56	3614
Violators	4	—	2	—
TOTAL	2429	11221	854	3759

PERSONS	PEAK PERIOD ⁽⁴⁾ 3:00 - 6:00 PM		PEAK HOUR 4:00 - 5:00 PM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	154	9	60	1
Buses	245	140	175	35
Carpools ⁽¹⁾	4413	1405	1535	307
Vanpools	30	10	20	0
Hybrid/Single Occ. ⁽²⁾	146	10539	56	3614
Violators	4	—	2	—
TOTAL	4992	12103	1848	3957

RATES	PEAK PERIOD ⁽⁴⁾ 3:00 - 6:00 PM		PEAK HOUR 4:00 - 5:00 PM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
HOV Lane occupancy rate	2.1 persons/veh		2.2 persons/veh	
Mixed Flow occupancy rate	1.1 persons/veh		1.1 persons/veh	
Overall occupancy (incl. buses)	1.3 persons/veh		1.3 persons/veh	
Violation rate ⁽³⁾ (HOV Lane)	0.2 %		0.2 %	

- NOTES:**
- (1) Two or more occupants per vehicle.
 - (2) Hybrid HOV lane only/Single Occupancy mixed flow lanes only.
 - (3) Violation rate = $\frac{\text{no. of violators in HOV lane} \times 100\%}{\text{Total no. of vehicles in HOV lane}}$
 - (4) HOV lane in operation from 3:00 to 7:00 P.M.
 - (5) Observations conducted 05/16/06 at Winchester Boulevard I/C

SANTA CLARA-85

Almaden Expressway to Route 280

Northbound - A.M.

Typical data for 2006⁽⁵⁾

VEHICLES	PEAK PERIOD ⁽⁴⁾ 6:00 - 9:00 AM		PEAK HOUR 7:00 - 8:00 AM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	119	11	49	6
Buses	8	0	3	0
Carpools ⁽¹⁾	2900	216	1178	70
Vanpools	5	0	3	0
Hybrid/Single Occ. ⁽²⁾	226	10158	89	3414
Violators	40	—	29	—
TOTAL	3298	10385	1351	3490

PERSONS	PEAK PERIOD ⁽⁴⁾ 6:00 - 9:00 AM		PEAK HOUR 7:00 - 8:00 AM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	119	11	49	6
Buses	280	0	105	0
Carpools ⁽¹⁾	5890	462	2420	152
Vanpools	50	0	30	0
Hybrid/Single Occ. ⁽²⁾	226	10158	89	3414
Violators	40	—	29	—
TOTAL	6605	10631	2722	3572

RATES	PEAK PERIOD ⁽⁴⁾ 6:00 - 9:00 AM		PEAK HOUR 7:00 - 8:00 AM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
HOV Lane occupancy rate	2.0 persons/veh		2.0 persons/veh	
Mixed Flow occupancy rate	1.0 persons/veh		1.0 persons/veh	
Overall occupancy (incl. buses)	1.3 persons/veh		1.3 persons/veh	
Violation rate ⁽³⁾ (HOV Lane)	1.2 %		2.1 %	

- NOTES:**
- (1) Two or more occupants per vehicle.
 - (2) Hybrid HOV lane only/Single Occupancy mixed flow lanes only.
 - (3) Violation rate = $\frac{\text{no. of violators in HOV lane} \times 100\%}{\text{Total no. of vehicles in HOV lane}}$
 - (4) HOV lane in operation from 5:00 to 9:00 A.M.
 - (5) Observations conducted 09/27/06 at Union Avenue I/C

SANTA CLARA-85

Route 280 to Almaden Expressway

Violation History

Southbound

	DATE	PERIOD MONITORED	TOTAL HOVL VOLUME	VIOLATION RATE
A.M. PEAK	Year 2006	-	-	-
	Year 2005	-	-	-
	Year 2004	-	-	-
	Year 2003	-	-	-
	Wed May 1, 2002	6:00 - 9:00 AM	256	9.0%
	Tue Apr 17, 2001	6:00 - 9:00 AM	341	5.9%
	Tue May 2, 2000	6:00 - 9:00 AM	363	1.7%
	Thu Mar 11, 1999	6:30 - 9:00 AM	371	0.3%
	Tue Mar 3, 1998	6:00 - 9:00 AM	416	2.4%
	Thu Nov 6, 1997	6:00 - 9:00 AM	456	8.6%
	Wed May 01, 1996	6:30 - 9:00 AM	328	9.1%
	Thu Sept 14, 1995	7:00 - 9:00 AM	514	5.6%
	Wed Dec 7, 1994	7:00 - 9:00 AM	179	20.1%
P.M. PEAK	Tue May 16, 2006	3:00 - 6:00 PM	2429	0.2%
	Thu Oct 13, 2005	3:00 - 6:00 PM	2311	0.9%
	Wed Oct 6, 2004	3:00 - 6:00 PM	2288	0.5%
	Wed Oct 22, 2003	3:00 - 6:00 PM	2151	2.3%
	Wed Mar 13, 2002	3:00 - 6:00 PM	2866	3.4%
	Thu Apr 5, 2001	3:00 - 6:00 PM	2798	0.5%
	Tue Apr 18, 2000	3:00 - 6:00 PM	3056	0.5%
	Thu Mar 11, 1999	3:00 - 6:00 PM	2963	0.1%
	Thu Jun 4, 1998	3:00 - 6:00 PM	3004	0.1%
	Thu Feb 27, 1997	3:00 - 6:00 PM	2460	1.3%
	Tue Apr 30, 1996	3:00 - 6:00 PM	3167	7.0%
	Wed Sept 13, 1995	3:00 - 6:00 PM	2774	1.9%
	Thu Dec 15, 1994	3:00 - 5:00 PM	1856	1.3%

NOTES: (a) Morning period of operation from 5:00 to 9:00 AM.
(b) Evening period of operation from 3:00 to 7:00 PM.
(c) Data was not collected in 2006 for off-peak direction

SANTA CLARA-85

Almaden Expressway to Route 280

Violation History

Northbound

	DATE	PERIOD MONITORED	TOTAL HOVL VOLUME	VIOLATION RATE
A.M. PEAK	Wed Sep 27, 2006	6:00 - 9:00 AM	3298	1.2%
	Thu Oct 6, 2005	6:00 - 9:00 AM	2418	0.4%
	Thu Oct 28, 2004	7:00 - 9:00 AM	1813	0.4%
	Wed Oct 22, 2003	7:00 - 9:00 AM	2012	0.0%
	Wed Mar 27, 2002	6:00 - 9:00 AM	2572	4.6%
	Tues Oct 16, 2001	6:00 - 9:00 AM	3298	6.4%
	Wed Jun 7, 2000	6:00 - 9:00 AM	3555	9.9%
	Tue Oct 26, 1999	7:00 - 9:00 AM	2350	3.0%
	Wed May 13, 1998	6:00 - 9:00 AM	2801	12.2%
	Wed Nov 5, 1997	6:00 - 9:00 AM	3036	0.4%
	Wed Nov 20, 1996	6:45 - 9:00 AM	1840	0.2%
	Tue Apr 18, 1995	6:30 - 9:00 AM	2145	2.0%
	Tue Dec 6, 1994	7:00 - 9:00 AM	1927	1.9%
P.M. PEAK	Year 2006	-	-	-
	Year 2005	-	-	-
	Year 2004	-	-	-
	Year 2003	-	-	-
	Thu Apr 4, 2002	3:00 - 6:00 PM	1068	7.5%
	Tue Jun 12, 2001	3:00 - 6:00 PM	985	8.9%
	Tue Oct 17, 2000	3:00 - 6:00 PM	642	3.6%
	Tue Feb 23, 1999	3:00 - 6:00 PM	866	8.7%
	Wed Apr 8, 1998	3:00 - 6:00 PM	1097	4.4%
	Wed Oct 8, 1997	3:00 - 6:00 PM	895	0.3%
	Wed Sep 25, 1996	3:00 - 6:00 PM	1417	0.6%
	Tue Oct 3, 1995	3:00 - 6:00 PM	748	6.1%
	Thu Dec 8, 1994	3:00 - 5:00 PM	339	7.4%

- NOTES:** (a) Morning period of operation from 5:00 to 9:00 AM.
 (b) Evening period of operation from 3:00 to 7:00 PM.
 (c) Data was not collected in 2006 for off-peak direction

SANTA CLARA-85

Almaden Expressway to Route 101 (So. San Jose)

Southbound - P.M.

Typical data for 2006⁽⁵⁾

VEHICLES	PEAK PERIOD ⁽⁴⁾ 3:00 - 6:00 PM		PEAK HOUR 5:00 - 6:00 PM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	57	32	24	9
Buses	8	2	0	1
Carpools ⁽¹⁾	1424	1155	576	291
Vanpools	6	0	3	0
Single Occ. ⁽²⁾	—	9714	—	3402
Violators	52	—	22	—
TOTAL	1547	10903	625	3703

PERSONS	PEAK PERIOD ⁽⁴⁾ 3:00 - 6:00 PM		PEAK HOUR 5:00 - 6:00 PM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	57	32	24	9
Buses	280	70	0	35
Carpools ⁽¹⁾	2910	2613	1175	666
Vanpools	60	0	30	0
Single Occ. ⁽²⁾	—	9714	—	3402
Violators	52	—	22	—
TOTAL	3359	12429	1251	4112

RATES	PEAK PERIOD ⁽⁴⁾ 3:00 - 6:00 PM		PEAK HOUR 5:00 - 6:00 PM	
	HOV Lane occupancy rate	2.2 persons/veh		2.0 persons/veh
Mixed Flow occupancy rate	1.1 persons/veh		1.1 persons/veh	
Overall occupancy (incl. buses)	1.3 persons/veh		1.2 persons/veh	
Violation rate ⁽³⁾ (HOV Lane)	3.4 %		3.5 %	

NOTES: (1) Two or more occupants per vehicle.

(2) Mixed flow lanes only.

(3) Violation rate = $\frac{\text{no. of violators in HOV lane} \times 100\%}{\text{Total no. of vehicles in HOV lane}}$

(4) HOV lane in operation from 3:00 to 7:00 P.M.

(5) Observations conducted 04/20/06 at Blossom Hill Road Train Station

SANTA CLARA-85

Route 101 (So. San Jose) to Almaden Expressway

Northbound - A.M.

Typical data for 2006⁽⁵⁾

VEHICLES	PEAK PERIOD ⁽⁴⁾ 6:00 - 9:00 AM		PEAK HOUR 7:00 - 8:00 AM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	36	15	12	8
Buses	0	20	0	12
Carpools ⁽¹⁾	1050	696	576	310
Vanpools	2	3	1	2
Single Occ. ⁽²⁾	—	8113	—	2803
Violators	43	—	18	—
TOTAL	1131	8847	607	3135

PERSONS	PEAK PERIOD ⁽⁴⁾ 6:00 - 9:00 AM		PEAK HOUR 7:00 - 8:00 AM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	36	15	12	8
Buses	0	700	0	420
Carpools ⁽¹⁾	2147	1456	1176	652
Vanpools	20	30	10	20
Single Occ. ⁽²⁾	—	8113	—	2803
Violators	43	—	18	—
TOTAL	2246	10314	1216	3903

RATES	PEAK PERIOD ⁽⁴⁾ 6:00 - 9:00 AM		PEAK HOUR 7:00 - 8:00 AM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
HOV Lane occupancy rate	2.0 persons/veh		2.0 persons/veh	
Mixed Flow occupancy rate		1.2 persons/veh		1.2 persons/veh
Overall occupancy (incl. buses)	1.3 persons/veh		1.4 persons/veh	
Violation rate ⁽³⁾ (HOV Lane)	3.8 %		3.0 %	

NOTES: (1) Two or more occupants per vehicle.

(2) Mixed flow lanes only.

(3) Violation rate = $\frac{\text{no. of violators in HOV lane} \times 100\%}{\text{Total no. of vehicles in HOV lane}}$

(4) HOV lane in operation from 5:00 to 9:00 A.M.

(5) Observations conducted 05/23/06 at Blossom Hill Road train Station

SANTA CLARA-85

Almaden Expressway to Route 101 (So. San Jose)

Violation History

Southbound

	DATE	PERIOD MONITORED	TOTAL HOVL VOLUME	VIOLATION RATE
A.M. PEAK	Year 2006	-	-	-
	Year 2005	-	-	-
	Year 2004	-	-	-
	Year 2003	-	-	-
	Wed Apr 24, 2002	6:00 - 9:00 AM	675	0.3%
	Wed May 2, 2001	6:00 - 9:00 AM	595	1.7%
	Wed May 3, 2000	6:00 - 9:00 AM	635	7.1%
	Wed Feb 3, 1999	6:00 - 9:00 AM	739	0.0%
	Tue May 19, 1998	6:00 - 9:00 AM	602	0.0%
	Thu Dec 4, 1997	6:00 - 9:00 AM	282	12.8%
	Tue May 21, 1996	6:00 - 9:00 AM	324	13.0%
	Tue Sept 26, 1995	7:00 - 9:00 AM	240	8.8%
	P.M. PEAK	Thu Apr 20, 2006	3:00 - 6:00 PM	1547
Thu Sep 29, 2005		3:00 - 6:00 PM	1601	0.9%
Thu Oct 14, 2004		3:00 - 6:00 PM	2050	0.2%
Thu Jun 5, 2003		3:00 - 6:00 PM	1652	0.6%
Thu May 2, 2002		3:00 - 6:00 PM	1981	3.8%
Wed Oct 3, 2001		3:00 - 6:00 PM	2418	0.2%
Wed Oct 18, 2000		3:00 - 6:00 PM	2354	0.6%
Tue May 18, 1999		3:00 - 6:00 PM	2112	2.5%
Thu Dec 3, 1998		3:00 - 6:00 PM	4447	0.0%
Thu Oct 16, 1997		3:00 - 6:00 PM	1754	3.6%
Thu Sep 19, 1996		3:00 - 6:00 PM	960	5.4%
Thu Oct 5, 1995		3:00 - 6:00 PM	960	5.4%

NOTES: (a) Morning period of operation from 5:00 to 9:00 AM.
 (b) Evening period of operation from 3:00 to 7:00 PM.
 (c) Data was not collected in 2006 for off-peak direction

SANTA CLARA-85

Route 101 (So. San Jose) to Almaden Expressway

Violation History

Northbound

	DATE	PERIOD MONITORED	TOTAL HOVL VOLUME	VIOLATION RATE
A.M. PEAK	Tue May 23, 2006	6:00 - 9:00 AM	1131	3.8%
	Thu Oct 13, 2005	6:00 - 9:00 AM	960	2.4%
	Tue Nov 30, 2004	6:00 - 9:00 AM	1044	0.0%
	Thu Oct 23, 2003	7:00 - 9:00 AM	1035	0.0%
	Tue Mar 12, 2002	6:00 - 9:00 AM	939	2.6%
	Thu Apr 12, 2001	6:00 - 9:00 AM	1678	7.3%
	Thu Oct 5, 2000	7:00 - 9:00 AM	1222	5.2%
	Tue Oct 5, 1999	6:00 - 9:00 AM	1669	1.1%
	Wed Mar 25, 1998	6:00 - 9:00 AM	1482	0.4%
	Thu Mar 6, 1997	6:30 - 9:00 AM	1019	7.7%
	Thu Jun 13, 1996	6:00 - 9:00 AM	1151	8.4%
	Thu Sept 21, 1995	7:00 - 9:00 AM	981	2.5%
	Thu Dec 8, 1994	7:00 - 9:00 AM	618	3.7%
P.M. PEAK	Year 2006	-	-	-
	Year 2005	-	-	-
	Year 2004	-	-	-
	Year 2003	-	-	-
	Wed Apr 24, 2002	3:00 - 6:00 PM	976	5.0%
	Tue Oct 9, 2001	3:00 - 6:00 PM	814	8.6%
	Wed May 3, 2000	3:00 - 6:00 PM	784	5.6%
	Thu Nov 17, 1999	3:00 - 5:30 PM	826	6.5%
	Thu May 7, 1998	3:00 - 6:00 PM	1062	10.1%
	Tue Oct 30, 1997	3:00 - 6:00 PM	1245	0.2%
	Wed Mar 20, 1996	3:00 - 6:00 PM	907	9.0%
Tue Sept 19, 1995	3:00 - 6:00 PM	717	8.9%	
Tue Dec 20, 1994	3:00 - 5:00 PM	557	16.5%	

NOTES: (a) Morning period of operation from 5:00 to 9:00 AM.
(b) Evening period of operation from 3:00 to 7:00 PM.
(c) Data was not collected in 2006 for off-peak direction

SANTA CLARA-87

S/O Taylor Ave to Route 101 I/C

Northbound - A.M.

Typical data for 2006 ⁽⁵⁾

VEHICLES	PEAK PERIOD ⁽⁴⁾ 6:00 - 9:00 AM		PEAK HOUR 8:00 - 9:00 AM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	62	15	26	8
Buses	3	10	1	1
Carpools ⁽¹⁾	438	187	128	59
Vanpools	0	2	0	1
Hybrid/Single Occ. ⁽²⁾	20	8446	7	3276
Violators	9	—	2	—
TOTAL	532	8660	164	3345

PERSONS	PEAK PERIOD ⁽⁴⁾ 6:00 - 9:00 AM		PEAK HOUR 8:00 - 9:00 AM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	62	15	26	8
Buses	105	350	35	35
Carpools ⁽¹⁾	900	389	265	122
Vanpools	0	20	0	10
Hybrid/Single Occ. ⁽²⁾	20	8446	7	3276
Violators	9	—	2	—
TOTAL	1096	9220	335	3451

RATES	PEAK PERIOD ⁽⁴⁾ 6:00 - 9:00 AM		PEAK HOUR 8:00 - 9:00 AM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
HOV Lane occupancy rate	2.1 persons/veh		2.0 persons/veh	
Mixed Flow occupancy rate	1.1 persons/veh		1.0 persons/veh	
Overall occupancy (incl. buses)	1.1 persons/veh		1.1 persons/veh	
Violation rate ⁽³⁾ (HOV Lane)	1.7 %		1.2 %	

- NOTES:**
- (1) Two or more occupants per vehicle.
 - (2) Hybrid HOV lane only/Single Occupancy mixed flow lanes only.
 - (3) Violation rate = $\frac{\text{no. of violators in HOV lane} \times 100\%}{\text{Total no. of vehicles in HOV lane}}$
 - (4) HOV lane in operation from 5:00 to 9:00 A.M.
 - (5) Observations conducted 09/21/06 at Taylor Avenue I/C

SANTA CLARA-87

S/O of Taylor Avenue to Route 101 I/C

Violation History

Northbound

	DATE	PERIOD MONITORED	TOTAL HOVL VOLUME	VIOLATION RATE
A.M. PEAK	Thu Sep 21, 2006	6:00 - 9:00 AM	532	1.7%
	Tue Nov 8, 2005	6:00 - 9:00 AM	494	3.2%
P.M. PEAK	Year 2006	-	-	-
	Year 2005	-	-	-

- NOTES:** (a) Morning period of operation from 5:00 to 9:00 AM.
(b) Evening period of operation from 3:00 to 7:00 PM.
(c) Data was not collected in 2006 for off-peak direction

SANTA CLARA-101

SM/SCL County Line to Ellis Street

Southbound - A.M.

Typical data for 2006 ⁽⁵⁾

VEHICLES	PEAK PERIOD ⁽⁴⁾ 6:00 - 9:00 AM		PEAK HOUR 8:00 - 9:00 AM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	42	7	21	3
Buses	16	5	10	3
Carpools ⁽¹⁾	1180	436	460	189
Vanpools	2	6	2	4
Hybrid/Single Occ. ⁽²⁾	102	13262	63	5020
Violators	10	—	10	—
TOTAL	1352	13716	566	5219

PERSONS	PEAK PERIOD ⁽⁴⁾ 6:00 - 9:00 AM		PEAK HOUR 8:00 - 9:00 AM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	42	7	21	3
Buses	560	175	350	105
Carpools ⁽¹⁾	2424	922	945	392
Vanpools	20	60	20	40
Hybrid/Single Occ. ⁽²⁾	102	13262	63	5020
Violators	10	—	10	—
TOTAL	3158	14426	1409	5560

RATES	PEAK PERIOD ⁽⁴⁾ 6:00 - 9:00 AM		PEAK HOUR 8:00 - 9:00 AM	
	HOV Lane occupancy rate	2.3 persons/veh		2.5 persons/veh
Mixed Flow occupancy rate	1.1 persons/veh		1.1 persons/veh	
Overall occupancy (incl. buses)	1.2 persons/veh		1.2 persons/veh	
Violation rate ⁽³⁾ (HOV Lane)	0.7 %		1.8 %	

- NOTES:**
- (1) Two or more occupants per vehicle.
 - (2) Hybrid HOV lane only/Single Occupancy mixed flow lanes only.
 - (3) Violation rate = $\frac{\text{no. of violators in HOV lane} \times 100\%}{\text{Total no. of vehicles in HOV lane}}$
 - (4) HOV lane in operation from 5:00 to 9:00 A.M.
 - (5) Observations conducted 12/05/06 at the San Antonio Road

SANTA CLARA-101

SM/SCL County Line to Ellis Street

Southbound - P.M.

Typical data for 2006⁽⁵⁾

VEHICLES	PEAK PERIOD ⁽⁴⁾ 3:00 - 6:00 PM		PEAK HOUR 5:00 - 6:00 PM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	52	9	22	3
Buses	6	4	3	0
Carpools ⁽¹⁾	2359	955	1036	206
Vanpools	15	5	4	0
Single Occ. ⁽²⁾	—	12915	—	4610
Violators	77	—	32	—
TOTAL	2509	13888	1097	4819

PERSONS	PEAK PERIOD ⁽⁴⁾ 3:00 - 6:00 PM		PEAK HOUR 5:00 - 6:00 PM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	52	9	22	3
Buses	210	140	105	0
Carpools ⁽¹⁾	4874	2050	2141	451
Vanpools	150	50	40	0
Single Occ. ⁽²⁾	—	12915	—	4610
Violators	77	—	32	—
TOTAL	5363	15164	2340	5064

RATES	PEAK PERIOD ⁽⁴⁾ 3:00 - 6:00 PM		PEAK HOUR 5:00 - 6:00 PM	
	HOV Lane occupancy rate	2.1 persons/veh		2.1 persons/veh
Mixed Flow occupancy rate	1.1 persons/veh		1.1 persons/veh	
Overall occupancy (incl. buses)	1.3 persons/veh		1.3 persons/veh	
Violation rate ⁽³⁾ (HOV Lane)	3.1 %		2.9 %	

- NOTES:**
- (1) Two or more occupants per vehicle.
 - (2) Mixed flow lanes only.
 - (3) Violation rate = $\frac{\text{no. of violators in HOV lane} \times 100\%}{\text{Total no. of vehicles in HOV lane}}$
 - (4) HOV lane in operation from 3:00 to 7:00 P.M.
 - (5) Observations conducted 04/26/06 at the San Antonio Road

SANTA CLARA-101

Ellis Street to SM/SCL County Line

Northbound - A.M.

Typical data for 2006⁽⁵⁾

VEHICLES	PEAK PERIOD ⁽⁴⁾ 6:00 - 9:00 AM		PEAK HOUR 7:00 - 8:00 AM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	89	28	25	10
Buses	0	6	0	2
Carpools ⁽¹⁾	2018	335	683	141
Vanpools	4	9	1	4
Hybrid/Single Occ. ⁽²⁾	158	14218	47	5127
Violators	312	—	80	—
TOTAL	2581	14596	836	5284

PERSONS	PEAK PERIOD ⁽⁴⁾ 6:00 - 9:00 AM		PEAK HOUR 7:00 - 8:00 AM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	89	28	25	10
Buses	0	210	0	70
Carpools ⁽¹⁾	4253	709	1440	293
Vanpools	40	90	10	40
Hybrid/Single Occ. ⁽²⁾	158	14218	47	5127
Violators	312	—	80	—
TOTAL	4852	15255	1602	5540

RATES	PEAK PERIOD ⁽⁴⁾ 6:00 - 9:00 AM		PEAK HOUR 7:00 - 8:00 AM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
HOV Lane occupancy rate	1.9 persons/veh		1.9 persons/veh	
Mixed Flow occupancy rate		1.0 persons/veh		1.0 persons/veh
Overall occupancy (incl. buses)	1.2 persons/veh		1.2 persons/veh	
Violation rate ⁽³⁾ (HOV Lane)	12.1 %		9.6 %	

- NOTES:**
- (1) Two or more occupants per vehicle.
 - (2) Hybrid HOV Lane only/Single Occupancy mixed flow lanes only.
 - (3) Violation rate = $\frac{\text{no. of violators in HOV lane} \times 100\%}{\text{Total no. of vehicles in HOV lane}}$
 - (4) HOV lane in operation from 5:00 to 9:00 A.M.
 - (5) Observations conducted 06/01/06 at the San Antonio Road I/C

SANTA CLARA-101

Ellis Street to SM/SCL County Line

Northbound - P.M.

Typical data for 2006⁽⁵⁾

VEHICLES	PEAK PERIOD ⁽⁴⁾ 3:00 - 6:00 PM		PEAK HOUR 4:00 - 5:00 PM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	43	6	18	3
Buses	2	9	0	2
Carpools ⁽¹⁾	1938	680	660	246
Vanpools	8	6	2	2
Hybrid/Single Occ. ⁽²⁾	96	14148	45	4710
Violators	3	—	3	—
TOTAL	2090	14849	728	4963

PERSONS	PEAK PERIOD ⁽⁴⁾ 3:00 - 6:00 PM		PEAK HOUR 4:00 - 5:00 PM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	43	6	18	3
Buses	70	315	0	70
Carpools ⁽¹⁾	3957	1468	1352	533
Vanpools	80	60	20	20
Hybrid/Single Occ. ⁽²⁾	96	14148	45	4710
Violators	3	—	3	—
TOTAL	4249	15997	1438	5336

RATES	PEAK PERIOD ⁽⁴⁾ 3:00 - 6:00 PM		PEAK HOUR 4:00 - 5:00 PM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
HOV Lane occupancy rate	2.0 persons/veh		2.0 persons/veh	
Mixed Flow occupancy rate	1.1 persons/veh		1.1 persons/veh	
Overall occupancy (incl. buses)	1.2 persons/veh		1.2 persons/veh	
Violation rate ⁽³⁾ (HOV Lane)	0.1 %		0.4 %	

- NOTES:**
- (1) Two or more occupants per vehicle.
 - (2) Hybrid HOV lane only/Single Occupancy mixed flow lanes only.
 - (3) Violation rate = $\frac{\text{no. of violators in HOV lane} \times 100\%}{\text{Total no. of vehicles in HOV lane}}$
 - (4) HOV lane in operation from 3:00 to 7:00 P.M.
 - (5) Observations conducted 12/05/06 at the San Antonio Road I/C

SANTA CLARA-101

SM/SCL County Line to Ellis Street

Violation History

Southbound

	DATE	PERIOD MONITORED	TOTAL HOVL VOLUME	VIOLATION RATE
A.M. PEAK	Tue Dec 5, 2006	6:00 - 9:00 AM	1352	0.7%
	Thu Sep 15, 2005	6:00 - 9:00 AM	1654	0.5%
	Wed Nov 17, 2004	6:00 - 9:00 AM	1762	0.3%
	Thu Oct 30, 2003	6:00 - 9:00 AM	1970	6.6%
	Wed May 15, 2002	6:00 - 9:00 AM	1949	6.6%
	Wed Mar 21, 2001	6:00 - 9:00 AM	2710	0.8%
	Wed Sep 13, 2000	6:00 - 9:00 AM	2823	10.5%
	Wed Apr 28, 1999	6:00 - 9:00 AM	2817	3.3%
	Thu Mar 12, 1998	6:00 - 9:00 AM	2885	0.6%
	Tue Dec 2, 1997	6:00 - 9:00 AM	2773	2.1%
	Thu Apr 25, 1996	6:30 - 9:00 AM	3742	1.5%
	Thu Jun 8, 1995	6:00 - 9:00 AM	2973	1.6%
	Thu May 5, 1994	6:00 - 9:00 AM	2684	4.8%
	Thu Jun 24, 1993	6:00 - 9:00 AM	1629	8.0%
P.M. PEAK	Wed Apr 26, 2006	3:00 - 6:00 PM	2509	3.1%
	Wed Mar 30, 2005	3:00 - 6:00 PM	3001	3.6%
	Wed Oct 27, 2004	3:00 - 6:00 PM	2420	0.3%
	Tue Oct 28, 2003	3:00 - 5:45 PM	2608	1.4%
	Tue May 14, 2002	3:00 - 6:00 PM	2119	0.7%
	Wed Oct 24, 2001	3:00 - 6:00 PM	2935	4.4%
	Thu Mar 25, 1999	3:00 - 6:00 PM	3037	1.2%
	Thu Mar 25, 1999	3:00 - 6:00 PM	3037	1.2%
	Tue Mar 17, 1998	3:00 - 6:00 PM	2406	0.7%
	Wed Oct 29, 1997	3:00 - 6:00 PM	2666	0.0%
	Wed Oct 2 1996	3:00 - 6:00 PM	2836	0.6%
	Wed Oct 4 1995	3:00 - 6:00 PM	2591	3.9%
	Thu Apr 21, 1994	3:00 - 7:00 PM	4979	14.7%
	Wed May 12, 1993	3:00 - 6:00 PM	1995	13.4%

NOTES: (a) Morning period of operation from 5:00 to 9:00 AM.
(b) Evening period of operation from 3:00 to 7:00 PM.

SANTA CLARA-101

Ellis Street to SM/SCL County Line

Violation History

Northbound

	DATE	PERIOD MONITORED	TOTAL HOVL VOLUME	VIOLATION RATE
A.M. PEAK	Thu Jun 1, 2006	6:00 - 9:00 AM	2581	12.1%
	Thu Sep 22, 2005	6:00 - 9:00 AM	2494	4.5%
	Tue Nov 2, 2004	6:00 - 9:00 AM	1641	0.3%
	Thu May 22, 2003	6:00 - 9:00 AM	2132	5.8%
	Wed Sept 25, 2002	6:45 - 9:00 AM	1479	2.4%
	Thu Oct 4, 2001	6:00 - 9:00 AM	1942	6.0%
	Thu May 18, 2000	6:00 - 9:00 AM	2047	5.1%
	Thu Nov 18, 1999	6:30 - 9:00 AM	1745	2.5%
	Thu Mar 26, 1998	6:00 - 9:00 AM	1986	0.1%
	Tue Dec 2, 1997	7:00 - 9:00 AM	1720	3.8%
	Wed Jun 12, 1996	6:00 - 9:00 AM	3249	0.7%
	Thu May 4, 1995	6:00 - 9:00 AM	2070	5.9%
	Thu Apr 21, 1994	6:00 - 9:00 AM	3114	3.5%
	Wed May 12, 1993	6:00 - 9:00 AM	1509	7.7%
P.M. PEAK	Tue Dec 5, 2006	3:00 - 6:00 PM	2090	0.1%
	Wed Oct 5, 2005	3:00 - 6:00 PM	1656	0.8%
	Thu Dec 2, 2004	3:00 - 5:00 PM	1369	2.8%
	Tue Jun 3, 2003	3:00 - 6:00 PM	2635	7.2%
	Thu Jun 6, 2002	3:00 - 6:00 PM	3064	2.1%
	Wed Oct 17, 2001	3:00 - 6:00 PM	2523	3.2%
	Tue Nov 7, 2000	3:00 - 6:00 PM	3032	4.6%
	Tue Apr 27, 1999	3:00 - 6:00 PM	3034	1.5%
	Wed Mar 11, 1998	3:00 - 6:00 PM	2464	1.3%
	Thu Apr 24, 1997	3:00 - 6:00 PM	3693	0.2%
	Tue Nov 12, 1996	3:00 - 6:00 PM	3151	0.1%
	Wed Mar 15, 1995	3:00 - 6:00 PM	4260	3.4%
	Wed Sep 28, 1994	3:00 - 6:00 PM	4122	2.4%
	Thu Jun 3, 1993	3:00 - 6:00 PM	2831	7.5%

NOTES: (a) Morning period of operation from 5:00 to 9:00 AM.
(b) Evening period of operation from 3:00 to 7:00 PM.

SANTA CLARA-101

Ellis Street to Guadalupe Parkway

Southbound - P.M.

Typical data for 2006⁽⁵⁾

VEHICLES	PEAK PERIOD ⁽⁴⁾ 3:00 - 6:00 PM		PEAK HOUR 5:00 - 6:00 PM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	85	22	41	11
Buses	6	5	3	1
Carpools ⁽¹⁾	2619	799	964	214
Vanpools	3	20	1	4
Hybrid/Single Occ. ⁽²⁾	58	12541	30	4452
Violators	8	—	2	—
TOTAL	2779	13387	1041	4682

PERSONS	PEAK PERIOD ⁽⁴⁾ 3:00 - 6:00 PM		PEAK HOUR 5:00 - 6:00 PM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	85	22	41	11
Buses	210	175	105	35
Carpools ⁽¹⁾	5448	1728	1997	462
Vanpools	30	200	10	40
Hybrid/Single Occ. ⁽²⁾	58	12541	30	4452
Violators	8	—	2	—
TOTAL	5839	14666	2185	5000

RATES	PEAK PERIOD ⁽⁴⁾ 3:00 - 6:00 PM		PEAK HOUR 5:00 - 6:00 PM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
HOV Lane occupancy rate	2.1 persons/veh		2.1 persons/veh	
Mixed Flow occupancy rate	1.1 persons/veh		1.1 persons/veh	
Overall occupancy (incl. buses)	1.3 persons/veh		1.3 persons/veh	
Violation rate ⁽³⁾ (HOV Lane)	0.3 %		0.2 %	

- NOTES:**
- (1) Two or more occupants per vehicle.
 - (2) Hybrid HOV lane only/Single Occupancy mixed flow lanes only.
 - (3) Violation rate = $\frac{\text{no. of violators in HOV lane} \times 100\%}{\text{Total no. of vehicles in HOV lane}}$
 - (4) HOV lane in operation from 3:00 to 7:00 P.M.
 - (5) Observations conducted 04/18/06 at the San Tomas Expressway I/C

SANTA CLARA-101

Guadalupe Parkway to Ellis Street

Northbound - A.M.

Typical data for 2006⁽⁵⁾

VEHICLES	PEAK PERIOD ⁽⁴⁾ 6:00 - 9:00 AM		PEAK HOUR 7:00 - 8:00 AM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	26	19	11	8
Buses	5	3	3	1
Carpools ⁽¹⁾	1686	477	662	262
Vanpools	9	1	3	0
Hybrid/Single Occ. ⁽²⁾	73	12983	26	4798
Violators	12	—	—	—
TOTAL	1811	13483	705	5069

PERSONS	PEAK PERIOD ⁽⁴⁾ 6:00 - 9:00 AM		PEAK HOUR 7:00 - 8:00 AM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	26	19	11	8
Buses	175	105	105	35
Carpools ⁽¹⁾	3457	1031	1363	563
Vanpools	90	10	30	0
Hybrid/Single Occ. ⁽²⁾	73	12983	26	4798
Violators	12	—	—	—
TOTAL	3833	14148	1535	5404

RATES	PEAK PERIOD ⁽⁴⁾ 6:00 - 9:00 AM		PEAK HOUR 7:00 - 8:00 AM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
HOV Lane occupancy rate	2.1 persons/veh		2.2 persons/veh	
Mixed Flow occupancy rate	1.0 persons/veh		1.1 persons/veh	
Overall occupancy (incl. buses)	1.2 persons/veh		1.2 persons/veh	
Violation rate ⁽³⁾ (HOV Lane)	0.7 %		0.0 %	

- NOTES:**
- (1) Two or more occupants per vehicle.
 - (2) Hybrid HOV lane only/Single Occupancy mixed flow lanes only.
 - (3) Violation rate = $\frac{\text{no. of violators in HOV lane} \times 100\%}{\text{Total no. of vehicles in HOV lane}}$
 - (4) HOV lane in operation from 5:00 to 9:00 A.M.
 - (5) Observations conducted 11/14/06 at the Fair Oaks Avenue I/C

SANTA CLARA-101

Ellis Street to Guadalupe Parkway

Violation History

Southbound

	DATE	PERIOD MONITORED	TOTAL HOVL VOLUME	VIOLATION RATE
A.M. PEAK	Year 2006	-	-	-
	Year 2005	-	-	-
	Year 2004	-	-	-
	Year 2003	-	-	-
	Tue Dec 3, 2002	6:00 - 9:00 AM	668	2.2%
	Tue Jun 5, 2001	6:00 - 9:00 AM	765	2.1%
	Thu Apr 20, 2000	6:00 - 9:00 AM	916	3.8%
	Thur Oct 21, 1999	7:00 - 9:00 AM	739	1.8%
	Thu Apr 9, 1998	6:00 - 9:00 AM	1163	4.3%
	Wed Dec 3, 1997	6:00 - 9:00 AM	1272	8.6%
	Thu Nov 7, 1996	6:45 - 9:00 AM	2212	1.1%
	Wed Oct 4, 1995	7:00 - 9:00 AM	1057	4.5%
	Wed Nov 2, 1994	6:30 - 9:00 AM	1124	20.7%
	Tue Jun 15, 1993	6:00 - 9:00 AM	664	2.9%
P.M. PEAK	Tue Apr 18, 2006	3:00 - 6:00 PM	2779	0.3%
	Wed Apr 27, 2005	3:00 - 6:00 PM	2964	0.3%
	Tue Nov 16, 2004	3:00 - 5:30 PM	2190	0.4%
	Thu May 29, 2003	3:00 - 6:00 PM	3454	3.6%
	Thu Apr 11, 2002	3:00 - 6:00 PM	2912	1.2%
	Thu Mar 29, 2001	3:00 - 6:00 PM	3903	3.1%
	Wed Nov 15, 2000	3:00 - 5:30 PM	3077	2.7%
	Wed Oct 20, 1999	3:00 - 6:00 PM	3954	2.3%
	Thu May 14, 1998	4:00 - 6:30 PM	3124	0.2%
	Tue Apr 22, 1997	3:00 - 6:00 PM	3268	1.0%
	Wed May 22, 1996	3:00 - 6:00 PM	3832	1.3%
	Thu Apr 20, 1995	3:00 - 7:00 PM	5831	1.5%
	Wed Nov 2, 1994	3:00 - 5:15 PM	2698	9.5%
	Wed Oct 6, 1993	3:00 - 6:00 PM	3056	7.0%

NOTES: (a) Morning period of operation from 5:00 to 9:00 AM.
(b) Evening period of operation from 3:00 to 7:00 PM.
(c) Data was not collected in 2006 for off-peak direction

SANTA CLARA-101

Violation History

Guadalupe Parkway to Ellis Street

Northbound

	DATE	PERIOD MONITORED	TOTAL HOVL VOLUME	VIOLATION RATE
A.M. PEAK	Tue Nov 14, 2006	6:00 - 9:00 AM	1811	0.7%
	Wed Oct 26, 2005	7:00 - 9:00 AM	1221	0.4%
	Tue Nov 16, 2004	6:00 - 9:00 AM	1799	0.7%
	Wed May 7, 2003	6:00 - 9:00 AM	2142	0.6%
	Thu Apr 4, 2002	6:00 - 9:00 AM	1646	7.5%
	Wed Sep 26, 2001	6:00 - 9:00 AM	1607	0.8%
	Tue Apr 4, 2000	6:00 - 9:00 AM	1527	2.8%
	Wed Oct 20, 1999	7:00 - 9:00 AM	1299	0.5%
	Thu Oct 1, 1998	7:00 - 9:00 AM	1268	1.6%
	Thu Nov 20, 1997	6:00 - 9:00 AM	1700	0.0%
	Thu Sep 26, 1996	7:00 - 9:00 AM	1765	0.7%
	Thu Oct 5, 1995	7:00 - 9:00 AM	1594	3.8%
	Tue Nov 1, 1994	6:30 - 9:00 AM	1861	4.8%
	Wed Oct 6, 1993	7:00 - 9:00 AM	977	14.4%
P.M. PEAK	Year 2006	-	-	-
	Year 2005	-	-	-
	Year 2004	-	-	-
	Year 2003	-	-	-
	Wed May 22, 2002	3:00 - 6:00 PM	1487	3.8%
	Wed May 10, 2000	3:00 - 6:00 PM	1684	0.3%
	Tue Jun 8, 1999	3:00 - 6:00 PM	1765	2.2%
	Thu May 21, 1998	3:00 - 6:00 PM	2066	4.5%
	Thu Apr 10, 1997	3:00 - 6:00 PM	1563	1.5%
	Tue May 21, 1996	3:00 - 6:00 PM	2126	4.2%
	Tue Oct 17, 1995	3:00 - 6:00 PM	1910	6.0%
	Tue Dec 6, 1994	3:00 - 5:00 PM	708	9.3%
	Tue Jun 8, 1993	3:00 - 6:00 PM	1765	2.2%

NOTES: (a) Morning period of operation from 5:00 to 9:00 AM.
 (b) Evening period of operation from 3:00 to 7:00 PM.
 (c) Data was not collected in 2006 for off-peak direction

SANTA CLARA-101

Guadalupe Parkway to Route 280/680

Southbound - P.M.

Typical data for 2006⁽⁵⁾

VEHICLES	PEAK PERIOD ⁽⁴⁾ 3:00 - 6:00 PM		PEAK HOUR 5:00 - 6:00 PM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	95	21	51	7
Buses	3	13	2	0
Carpools ⁽¹⁾	2067	909	758	192
Vanpools	5	7	1	2
Hybrid/Single Occ. ⁽²⁾	44	11847	26	4051
Violators	2	—	0	—
TOTAL	2216	12797	838	4252

PERSONS	PEAK PERIOD ⁽⁴⁾ 3:00 - 6:00 PM		PEAK HOUR 5:00 - 6:00 PM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	95	21	51	7
Buses	105	455	70	0
Carpools ⁽¹⁾	4254	1918	1567	414
Vanpools	50	70	10	20
Hybrid/Single Occ. ⁽²⁾	44	11847	26	4051
Violators	2	—	0	—
TOTAL	4550	14311	1724	4492

RATES	PEAK PERIOD ⁽⁴⁾ 3:00 - 6:00 PM		PEAK HOUR 5:00 - 6:00 PM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
HOV Lane occupancy rate	2.1 persons/veh		2.1 persons/veh	
Mixed Flow occupancy rate	1.1 persons/veh		1.1 persons/veh	
Overall occupancy (incl. buses)	1.3 persons/veh		1.2 persons/veh	
Violation rate ⁽³⁾ (HOV Lane)	0.1		0.0 %	

- NOTES:**
- (1) Two or more occupants per vehicle.
 - (2) Hybrid HOV Lane only/Single Occupancy mixed flow lanes only.
 - (3) Violation rate = $\frac{\text{no. of violators in HOV lane} \times 100\%}{\text{Total no. of vehicles in HOV lane}}$
 - (4) HOV lane in operation from 3:00 to 7:00 P.M.
 - (5) Observations conducted 05/09/06 at the McKee Road I/C

SANTA CLARA-101

Route 280/680 I/C to Guadalupe Parkway

Northbound - A.M.

Typical data for 2006⁽⁵⁾

VEHICLES	PEAK PERIOD ⁽⁴⁾ 6:00 - 9:00 AM		PEAK HOUR 7:00 - 8:00 AM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	180	16	48	5
Buses	4	3	1	1
Carpools ⁽¹⁾	3053	600	1151	178
Vanpools	9	9	4	2
Hybrid/Single Occ. ⁽²⁾	118	15937	37	5673
Violators	10	—	4	—
TOTAL	3374	16565	1245	5859

PERSONS	PEAK PERIOD ⁽⁴⁾ 6:00 - 9:00 AM		PEAK HOUR 7:00 - 8:00 AM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	180	16	48	5
Buses	140	105	35	35
Carpools ⁽¹⁾	6305	1280	2387	388
Vanpools	90	90	40	20
Hybrid/Single Occ. ⁽²⁾	118	15937	37	5673
Violators	10	—	4	—
TOTAL	6843	17428	2551	6121

RATES	PEAK PERIOD ⁽⁴⁾ 6:00 - 9:00 AM		PEAK HOUR 7:00 - 8:00 AM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
HOV Lane occupancy rate	2.0 persons/veh		2.0 persons/veh	
Mixed Flow occupancy rate	1.1 persons/veh		1.0 persons/veh	
Overall occupancy (incl. buses)	1.2 persons/veh		1.2 persons/veh	
Violation rate ⁽³⁾ (HOV Lane)	3.8 %		3.3 %	

- NOTES:**
- (1) Two or more occupants per vehicle.
 - (2) Hybrids HOV Lane only/Single Occupancy mixed flow lanes only.
 - (3) Violation rate = $\frac{\text{no. of violators in HOV lane} \times 100\%}{\text{Total no. of vehicles in HOV lane}}$
 - (4) HOV lane in operation from 5:00 to 9:00 A.M.
 - (5) Observations conducted 05/16/06 at the McKee Road I/C

SANTA CLARA-101

Guadalupe Parkway to Route 280/680 I/C

Violation History

Southbound

	DATE	PERIOD MONITORED	TOTAL HOVL VOLUME	VIOLATION RATE
A.M. PEAK	Year 2006	-	-	-
	Year 2005	-	-	-
	Year 2004	-	-	-
	Year 2003	-	-	-
	Thu May 30, 2002	6:00 - 9:00 AM	339	3.5%
	Thu Oct 18, 2001	6:00 - 9:00 AM	495	3.0%
	Thu Jun 8, 2000	6:00 - 9:00 AM	485	11.8%
	Wed Mar 24, 1999	6:00 - 9:00 AM	378	9.5%
	Thu Apr 2, 1998	6:00 - 9:00 AM	436	6.7%
	Wed Mar 5, 1997	6:30 - 9:00 AM	438	2.1%
	Thu Oct 24, 1996	7:00 - 9:00 AM	550	0.4%
	Wed Oct 18, 1995	7:00 - 9:00 AM	172	3.5%
	Tue Nov 8, 1994	6:30 - 9:00 AM	422	18.5%
P.M. PEAK	Tue May 9, 2006	3:00 - 6:00 PM	2216	0.1%
	Wed Sep 21, 2005	3:00 - 6:00 PM	2452	0.2%
	Tue Nov 9, 2004	3:00 - 5:30 PM	1947	0.7%
	Thu Apr 3, 2003	3:00 - 6:00 PM	1860	0.5%
	Thu Jun 13, 2002	3:00 - 6:00 PM	2342	1.3%
	Tue Mar 27, 2001	3:00 - 6:00 PM	2840	2.6%
	Thu May 11, 2000	3:00 - 6:00 PM	3049	1.7%
	Tue Dec 14, 1999	3:00 - 5:30 PM	2418	0.4%
	Thu Sep 17, 1998	3:00 - 6:00 PM	3499	2.5%
	Tue Sept 23, 1997	3:00 - 6:00 PM	2965	0.5%
	Wed Oct 23, 1996	3:00 - 6:00 PM	3230	0.3%
	Wed Apr 19, 1995	3:00 - 7:00 PM	3957	2.9%
	Thu Nov 3, 1994	3:00 - 5:15 PM	1856	1.5%

NOTES: (a) Morning period of operation from 5:00 to 9:00 AM.
(b) Evening period of operation from 3:00 to 7:00 PM.
(c) Data was not collected in 2006 for off-peak direction

SANTA CLARA-101

Route 280/680 I/C to Guadalupe Parkway

Violation History

Northbound

	DATE	PERIOD MONITORED	TOTAL HOVL VOLUME	VIOLATION RATE
A.M. PEAK	Tue May 16, 2006	6:00 - 9:00 AM	3374	3.8%
	Wed Mar 30, 2005	6:00 - 9:00 AM	4026	6.8%
	Thu Dec 2, 2004	6:00 - 9:00 AM	3561	0.2%
	Thu Jun 12, 2003	6:00 - 9:00 AM	3794	2.6%
	Thu Apr 11, 2002	6:30 - 9:00 AM	3438	2.7%
	Thu May 11, 2000	6:00 - 9:00 AM	4839	2.4%
	Wed Apr 14, 1999	6:00 - 9:00 AM	4717	2.9%
	Thu Dec 10, 1998	6:00 - 9:00 AM	4589	1.8%
	Wed Sep 24, 1997	7:00 - 9:00 AM	2994	2.4%
	Wed May 22, 1996	6:00 - 9:00 AM	5386	0.8%
	Thu Nov 2, 1995	6:00 - 9:00 AM	5061	0.5%
	Thu Nov 3, 1994	6:30 - 9:00 AM	3777	2.1%

P.M. PEAK	Year 2006	-	-	-
	Year 2005	-	-	-
	Year 2004	-	-	-
	Year 2003	-	-	-
	Thu May 23, 2002	3:00 - 6:00 PM	1264	1.6%
	Thu Apr 27, 2000	3:00 - 6:00 PM	1318	3.7%
	Tue Dec 7, 1999	3:00 - 5:00 PM	1314	4.3%
	Wed Nov 4, 1998	3:00 - 5:30 PM	1393	0.7%
	Wed Apr 30, 1997	3:00 - 6:00 PM	2171	0.2%
	Thu Nov 14, 1996	3:00 - 6:00 PM	1743	0.0%
	Wed Oct 11, 1995	3:00 - 6:00 PM	1370	6.0%
	Tue Nov 8, 1994	3:00 - 5:00 PM	1272	3.6%

NOTES: (a) Morning period of operation from 5:00 to 9:00 AM.
 (b) Evening period of operation from 3:00 to 7:00 PM.
 (c) Data was not collected in 2006 for off-peak direction

SANTA CLARA-101

Route 280/680 I/C to Bernal Road

Southbound - P.M.

Typical data for 2006⁽⁵⁾

VEHICLES	PEAK PERIOD ⁽⁴⁾ 3:00 - 6:00 PM		PEAK HOUR 5:00 - 6:00 PM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	86	22	36	7
Buses	6	10	2	1
Carpools ⁽¹⁾	1960	1554	661	522
Vanpools	5	6	0	1
Single Occ. ⁽²⁾	—	11239	—	3898
Violators	70	—	24	—
TOTAL	2127	12831	723	4429

PERSONS	PEAK PERIOD ⁽⁴⁾ 3:00 - 6:00 PM		PEAK HOUR 5:00 - 6:00 PM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	86	22	36	7
Buses	210	350	70	35
Carpools ⁽¹⁾	4098	3297	1386	1110
Vanpools	50	60	0	10
Single Occ. ⁽²⁾	—	11239	—	3898
Violators	70	—	24	—
TOTAL	4514	14968	1516	5060

RATES	PEAK PERIOD ⁽⁴⁾ 3:00 - 6:00 PM		PEAK HOUR 5:00 - 6:00 PM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
HOV Lane occupancy rate	2.1 persons/veh		2.1 persons/veh	
Mixed Flow occupancy rate	1.2 persons/veh		1.1 persons/veh	
Overall occupancy (incl. buses)	1.3 persons/veh		1.3 persons/veh	
Violation rate ⁽³⁾ (HOV Lane)	3.3 %		3.3 %	

- NOTES:**
- (1) Two or more occupants per vehicle.
 - (2) Mixed flow lanes only.
 - (3) Violation rate = $\frac{\text{no. of violators in HOV lane} \times 100\%}{\text{Total no. of vehicles in HOV lane}}$
 - (4) HOV lane in operation from 3:00 to 7:00 P.M.
 - (5) Observations conducted 05/03/06 at the Hellyer Avenue I/C

SANTA CLARA-101

Bernal Road to Route 280/680 I/C

Northbound - A.M.

Typical data for 2006⁽⁵⁾

VEHICLES	PEAK PERIOD ⁽⁴⁾ 6:00 - 9:00 AM		PEAK HOUR 7:00 - 8:00 AM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	75	5	24	2
Buses	3	10	1	1
Carpools ⁽¹⁾	1887	511	666	189
Vanpools	9	12	2	3
Single Occ. ⁽²⁾	—	13146	—	4631
Violators	45	—	17	—
TOTAL	2019	13684	710	4826

PERSONS	PEAK PERIOD ⁽⁴⁾ 6:00 - 9:00 AM		PEAK HOUR 7:00 - 8:00 AM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	75	5	24	2
Buses	105	350	35	35
Carpools ⁽¹⁾	3897	1110	1391	424
Vanpools	90	120	20	30
Single Occ. ⁽²⁾	—	13146	—	4631
Violators	45	—	17	—
TOTAL	4212	14731	1487	5122

RATES	PEAK PERIOD ⁽⁴⁾ 6:00 - 9:00 AM		PEAK HOUR 7:00 - 8:00 AM	
	HOV Lane occupancy rate	2.1 persons/veh		2.1 persons/veh
Mixed Flow occupancy rate	1.1 persons/veh		1.1 persons/veh	
Overall occupancy (incl. buses)	1.2 persons/veh		1.2 persons/veh	
Violation rate ⁽³⁾ (HOV Lane)	2.2 %		2.4 %	

- NOTES:**
- (1) Two or more occupants per vehicle.
 - (2) Mixed flow lanes only.
 - (3) Violation rate = $\frac{\text{no. of violators in HOV lane} \times 100\%}{\text{Total no. of vehicles in HOV lane}}$
 - (4) HOV lane in operation from 5:00 to 9:00 A.M.
 - (5) Observations conducted 04/18/06 at the Hellyer Avenue I/C

SANTA CLARA-101

Route 280/680 I/C to Bernal Road

Violation History

Southbound

	DATE	PERIOD MONITORED	TOTAL HOVL VOLUME	VIOLATION RATE
A.M. PEAK	Year 2006	-	-	-
	Year 2005	-	-	-
	Year 2004	-	-	-
	Year 2003	-	-	-
	Thu Jun 6, 2002	6:00 - 9:00 AM	730	5.6%
	Thu Apr 19, 2001	6:00 - 9:00 AM	746	5.4%
	Wed Oct 4, 2000	7:00 - 9:00 AM	413	5.6%
	Wed Nov 3, 1999	6:00 - 9:00 AM	660	0.9%
	Thur May 6, 1998	6:00 - 9:00 AM	576	0.7%
	Thu May 22, 1997	6:30 - 9:00 AM	473	6.1%
	Thu Oct 17, 1996	7:00 - 9:00 AM	538	0.7%
	Tue Oct 24, 1995	7:00 - 9:00 AM	538	6.5%
	Tue Nov 15, 1994	6:45 - 9:00 AM	490	11.4%
P.M. PEAK	Wed May 3, 2006	3:00 - 6:00 PM	2127	3.3%
	Thu Mar 10, 2005	3:00 - 6:00 PM	2225	0.6%
	Tue Nov 23, 2004	3:00 - 5:30 PM	1747	0.3%
	Thu May 1, 2003	3:00 - 6:00 PM	2204	1.6%
	Tue Mar 19, 2002	3:00 - 6:00 PM	1496	2.0%
	Wed May 16, 2001	3:00 - 6:00 PM	1732	0.8%
	Tue Sep 19, 2000	3:00 - 6:00 PM	1898	0.7%
	Tue Mar 16, 1999	3:00 - 6:30 PM	702	4.6%
	Wed Apr 22, 1998	3:00 - 6:00 PM	1498	0.1%
	Tue Oct 7, 1997	3:00 - 6:00 PM	1843	0.1%
	Wed Dec 11, 1996	3:00 - 5:30 PM	1426	3.6%
	Wed May 3, 1995	3:00 - 7:00 PM	2181	11.0%
	Wed Nov 30, 1994	3:00 - 5:00 PM	1116	9.2%

NOTES: (a) Morning period of operation from 5:00 to 9:00 AM.
(b) Evening period of operation from 3:00 to 7:00 PM.
(c) Data was not collected in 2006 for off-peak direction

SANTA CLARA-101

Bernal Road to Route 280/680 I/C

Violation History

Northbound

	DATE	PERIOD MONITORED	TOTAL HOVL VOLUME	VIOLATION RATE
A.M. PEAK	Tue Apr 18, 2006	6:00 - 9:00 AM	2019	2.2%
	Tue Apr 19, 2005	6:00 - 9:00 AM	2366	0.8%
	Tue Dec 14, 2004	6:00 - 9:00 AM	1668	1.3%
	Tue Jun 3, 2003	6:00 - 9:00 AM	2620	1.0%
	Thu May 16, 2002	6:00 - 9:00 AM	1859	2.7%
	Tue Apr 3, 2001	6:00 - 9:00 AM	2258	3.5%
	Thu Nov 30, 2000	7:00 - 9:00 AM	1503	2.3%
	Tue Dec 7, 1999	6:30 - 9:00 AM	2550	4.9%
	Tue Dec 8, 1998	6:00 - 9:00 AM	2663	4.8%
	Wed May 21, 1997	6:30 - 9:00 AM	1932	0.9%
	Thu Jun 6, 1996	6:00 - 9:00 AM	2225	0.2%
	Tue Apr 18, 1995	6:00 - 9:00 AM	1614	0.9%
	Wed Nov 9, 1994	6:45 - 9:00 AM	1668	1.6%
	P.M. PEAK	Year 2006	-	-
Year 2005		-	-	-
Year 2004		-	-	-
Year 2003		-	-	-
Wed Mar 27, 2002		3:00 - 6:00 PM	1156	3.1%
Tue May 15, 2001		3:00 - 6:00 PM	1155	5.4%
Wed Apr 5, 2000		3:00 - 6:00 PM	1169	5.9%
Wed May 26, 1999		3:00 - 6:00 PM	1255	5.1%
Thu Apr 23, 1998		3:00 - 6:00 PM	995	4.6%
Wed Mar 12, 1997		3:00 - 6:00 PM	803	0.4%
Wed Dec 4, 1996		3:00 - 5:30 PM	777	3.3%
Thu Oct 19, 1995		3:00 - 6:00 PM	794	2.3%
Wed Dec 7, 1994		3:00 - 5:00 PM	1156	3.4%

NOTES: (a) Morning period of operation from 5:00 to 9:00 AM.
(b) Evening period of operation from 3:00 to 7:00 PM.
(c) Data was not collected in 2006 for off-peak direction

SANTA CLARA-101

Bernal Road to Cochrane Road

Southbound - P.M.

Typical data for 2006⁽⁵⁾

VEHICLES	PEAK PERIOD ⁽⁴⁾ 3:00 - 6:00 PM		PEAK HOUR 5:00 - 6:00 PM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	72	26	27	6
Buses	0	2	0	1
Carpools ⁽¹⁾	1554	856	654	277
Vanpools	6	7	4	1
Single Occ. ⁽²⁾	—	10935	—	3819
Violators	20	—	8	—
TOTAL	1652	11826	693	4104

PERSONS	PEAK PERIOD ⁽⁴⁾ 3:00 - 6:00 PM		PEAK HOUR 5:00 - 6:00 PM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	72	26	27	6
Buses	0	70	0	35
Carpools ⁽¹⁾	3200	1843	1348	604
Vanpools	60	70	40	10
Single Occ. ⁽²⁾	—	10935	—	3819
Violators	20	—	8	—
TOTAL	3352	12944	1423	4474

RATES	PEAK PERIOD ⁽⁴⁾ 3:00 - 6:00 PM		PEAK HOUR 5:00 - 6:00 PM	
	HOV Lane occupancy rate	2.0 persons/veh		2.1 persons/veh
Mixed Flow occupancy rate	1.1 persons/veh		1.1 persons/veh	
Overall occupancy (incl. buses)	1.2 persons/veh		1.2 persons/veh	
Violation rate ⁽³⁾ (HOV Lane)	1.2 %		1.2 %	

- NOTES:**
- (1) Two or more occupants per vehicle.
 - (2) Mixed flow lanes only.
 - (3) Violation rate = $\frac{\text{no. of violators in HOV lane} \times 100\%}{\text{Total no. of vehicles in HOV lane}}$
 - (4) HOV lane in operation from 3:00 to 7:00 P.M.
 - (5) Observations conducted 04/19/06 at Coyote Creek Golf Drive I/C

SANTA CLARA-101

Cochrane Road to Bernal Road

Northbound - A.M.

Typical data for 2006⁽⁵⁾

VEHICLES	PEAK PERIOD ⁽⁴⁾ 6:00 - 9:00 AM		PEAK HOUR 6:00 - 7:00 AM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	22	4	4	0
Buses	7	2	2	1
Carpools ⁽¹⁾	2609	394	1067	0
Vanpools	0	1	0	1
Hybrid/Single Occ. ⁽²⁾	134	12171	15	4207
Violators	27	—	3	—
TOTAL	2799	12572	1091	4209

PERSONS	PEAK PERIOD ⁽⁴⁾ 6:00 - 9:00 AM		PEAK HOUR 6:00 - 7:00 AM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	22	4	4	0
Buses	245	70	70	35
Carpools ⁽¹⁾	5314	824	2144	0
Vanpools	0	10	0	10
Hybrid/Single Occ. ⁽²⁾	134	12171	15	4207
Violators	27	—	3	—
TOTAL	5742	13079	2236	4252

RATES	PEAK PERIOD ⁽⁴⁾ 6:00 - 9:00 AM		PEAK HOUR 6:00 - 7:00 AM	
	HOV Lane occupancy rate	2.1 persons/veh		2.0 persons/veh
Mixed Flow occupancy rate	1.0 persons/veh		1.0 persons/veh	
Overall occupancy (incl. buses)	1.2 persons/veh		1.2 persons/veh	
Violation rate ⁽³⁾ (HOV Lane)	1.0 %		0.3 %	

- NOTES:**
- (1) Two or more occupants per vehicle.
 - (2) Hybrid HOV Lane/Single Occupancy mixed flow lanes only
 - (3) Violation rate = $\frac{\text{no. of violators in HOV lane} \times 100\%}{\text{Total no. of vehicles in HOV lane}}$
 - (4) HOV lane in operation from 5:00 to 9:00 A.M.
 - (5) Observations conducted 12/19/06 at Coyote Creek Golf Drive I/C

SANTA CLARA-101

Bernal Road to Cochrane Road

Violation History

Southbound

	DATE	PERIOD MONITORED	TOTAL HOVL VOLUME	VIOLATION RATE
A.M. PEAK	Year 2006	-	-	-
	Year 2005	-	-	-
	Year 2004	-	-	-
	Year 2003	-	-	-
P.M. PEAK	Wed Apr 19, 2006	3:00 - 6:00 PM	1652	1.2%
	Tue Sep 13, 2005	3:00 - 6:00 PM	2102	0.1%
	Wed Nov 3, 2004	3:00 - 5:30 PM	1493	1.5%
	Wed May 21, 2003	3:00 - 6:00 PM	1775	1.1%

NOTES: (a) Morning period of operation from 5:00 to 9:00 AM.
(b) Evening period of operation from 3:00 to 7:00 PM.
(c) Data was not collected in 2006 for off-peak period

SANTA CLARA-101

Cochrane Road to Bernal Road

Violation History

Northbound

	DATE	PERIOD MONITORED	TOTAL HOVL VOLUME	VIOLATION RATE
A.M. PEAK	Tue Dec 19, 2006	6:00 - 9:00 AM	2799	1.0%
	Wed Dec 14, 2005	6:00 - 9:00 AM	1827	1.4%
	Tue Nov 9, 2004	6:00 - 9:00 AM	2120	0.2%
	Tue Oct 28, 2003	6:00 - 9:00 AM	1720	0.0%
P.M. PEAK	Year 2006	-	-	-
	Year 2005	-	-	-
	Year 2004	-	-	-
	Year 2003	-	-	-

- NOTES:** (a) Morning period of operation from 5:00 to 9:00 AM.
(b) Evening period of operation from 3:00 to 7:00 PM.
(c) Data was not collected in 2006 for off-peak direction

SANTA CLARA-237

Route 880/237 I/C to Mathilda Avenue

Westbound - A.M.

Typical data for 2006⁽⁵⁾

VEHICLES	PEAK PERIOD ⁽⁴⁾ 6:00 - 9:00 AM		PEAK HOUR 8:00 - 9:00 AM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	74	10	42	4
Buses	1	18	0	1
Carpools ⁽¹⁾	1450	199	593	44
Vanpools	9	4	1	0
Hybrid/Single Occ. ⁽²⁾	92	12320	74	4269
Violators	5	—	4	—
TOTAL	1631	12551	714	4318

PERSONS	PEAK PERIOD ⁽⁴⁾ 6:00 - 9:00 AM		PEAK HOUR 8:00 - 9:00 AM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	74	10	42	4
Buses	35	630	0	35
Carpools ⁽¹⁾	3001	432	1228	100
Vanpools	90	40	10	0
Hybrid/Single Occ. ⁽²⁾	92	12320	74	4269
Violators	5	—	4	—
TOTAL	3297	13432	1358	4408

RATES	PEAK PERIOD ⁽⁴⁾ 6:00 - 9:00 AM		PEAK HOUR 8:00 - 9:00 AM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
HOV Lane occupancy rate	2.0 persons/veh		1.9 persons/veh	
Mixed Flow occupancy rate	1.1 persons/veh		1.0 persons/veh	
Overall occupancy (incl. buses)	1.2 persons/veh		1.1 persons/veh	
Violation rate ⁽³⁾ (HOV Lane)	0.3 %		0.6 %	

- NOTES:**
- (1) Two or more occupants per vehicle.
 - (2) Hybrid HOV lane only/Single Occupancy mixed flow lanes only.
 - (3) Violation rate = $\frac{\text{no. of violators in HOV lane} \times 100\%}{\text{Total no. of vehicles in HOV lane}}$
 - (4) HOV lane in operation from 5:00 to 9:00 A.M.
 - (5) Observations conducted 04/26/06 at the Zanker Road I/C

SANTA CLARA-237

Route 880/237 I/C to Mathilda Avenue

Westbound - P.M.

Typical data for 2006⁽⁵⁾

VEHICLES	PEAK PERIOD ⁽⁴⁾ 3:00 - 6:00 PM		PEAK HOUR 5:00 - 6:00 PM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	1	4	1	0
Buses	3	27	2	8
Carpools ⁽¹⁾	958	694	464	172
Vanpools	3	1	3	0
Single Occ. ⁽²⁾	—	9338	—	3677
Violators	43	—	24	—
TOTAL	1008	10064	494	3857

PERSONS	PEAK PERIOD ⁽⁴⁾ 3:00 - 6:00 PM		PEAK HOUR 5:00 - 6:00 PM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	1	4	1	0
Buses	105	945	70	280
Carpools ⁽¹⁾	1953	1438	953	354
Vanpools	30	10	30	0
Single Occ. ⁽²⁾	—	9338	—	3677
Violators	43	—	24	—
TOTAL	2132	11735	1078	4311

RATES	PEAK PERIOD ⁽⁴⁾ 3:00 - 6:00 PM		PEAK HOUR 5:00 - 6:00 PM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
HOV Lane occupancy rate	2.1 persons/veh		2.2 persons/veh	
Mixed Flow occupancy rate	1.2 persons/veh		1.1 persons/veh	
Overall occupancy (incl. buses)	1.3 persons/veh		1.2 persons/veh	
Violation rate ⁽³⁾ (HOV Lane)	4.3 %		4.9 %	

- NOTES:**
- (1) Two or more occupants per vehicle.
 - (2) Mixed flow lanes only.
 - (3) Violation rate = $\frac{\text{no. of violators in HOV lane} \times 100\%}{\text{Total no. of vehicles in HOV lane}}$
 - (4) HOV lane in operation from 3:00 to 7:00 P.M.
 - (5) Observations conducted 03/28/06 at the Zanker Road I/C

SANTA CLARA-237

Mathilda Avenue to Route 880/237 I/C

Eastbound - A.M.

Typical data for 2006⁽⁵⁾

VEHICLES	PEAK PERIOD ⁽⁴⁾ 6:00 - 9:00 AM		PEAK HOUR 8:00 - 9:00 AM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	46	11	25	5
Buses	1	3	0	1
Carpools ⁽¹⁾	583	348	269	81
Vanpools	1	2	0	1
Single Occ. ⁽²⁾	—	8221	—	3636
Violators	79	—	30	—
TOTAL	710	8585	324	3724

PERSONS	PEAK PERIOD ⁽⁴⁾ 6:00 - 9:00 AM		PEAK HOUR 8:00 - 9:00 AM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	46	11	25	5
Buses	35	105	0	35
Carpools ⁽¹⁾	1241	744	556	174
Vanpools	10	20	0	10
Single Occ. ⁽²⁾	—	8221	—	3636
Violators	79	—	30	—
TOTAL	1411	9101	611	3860

RATES	PEAK PERIOD ⁽⁴⁾ 6:00 - 9:00 AM		PEAK HOUR 8:00 - 9:00 AM	
	HOV Lane occupancy rate	2.0 persons/veh		1.9 persons/veh
Mixed Flow occupancy rate	1.1 persons/veh		1.0 persons/veh	
Overall occupancy (incl. buses)	1.1 persons/veh		1.1 persons/veh	
Violation rate ⁽³⁾ (HOV Lane)	11.1 %		9.3 %	

- NOTES:**
- (1) Two or more occupants per vehicle.
 - (2) Mixed flow lanes only.
 - (3) $\text{Violation rate} = \frac{\text{no. of violators in HOV lane} \times 100\%}{\text{Total no. of vehicles in HOV lane}}$
 - (4) HOV lane in operation from 5:00 to 9:00 A.M.
 - (5) Observations conducted 05/09/06 at the Zanker Road I/C

SANTA CLARA-237

Mathilda Avenue to Route 880/237 I/C

Eastbound - P.M.

Typical data for 2006⁽⁵⁾

VEHICLES	PEAK PERIOD ⁽⁴⁾ 3:00 - 6:00 PM		PEAK HOUR 5:00 - 6:00 PM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	114	22	55	3
Buses	3	7	1	1
Carpools ⁽¹⁾	1481	726	662	149
Vanpools	2	1	0	0
Single Occ. ⁽²⁾	—	11555	—	4039
Violators	71	—	29	—
TOTAL	1671	12311	747	4192

PERSONS	PEAK PERIOD ⁽⁴⁾ 3:00 - 6:00 PM		PEAK HOUR 5:00 - 6:00 PM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	114	22	55	3
Buses	105	245	35	35
Carpools ⁽¹⁾	3103	1645	1388	345
Vanpools	20	10	0	0
Single Occ. ⁽²⁾	—	11555	—	4039
Violators	71	—	29	—
TOTAL	3413	13477	1507	4422

RATES	PEAK PERIOD ⁽⁴⁾ 3:00 - 6:00 PM		PEAK HOUR 5:00 - 6:00 PM	
	HOV Lane occupancy rate	2.0 persons/veh		2.0 persons/veh
Mixed Flow occupancy rate	1.1 persons/veh		1.1 persons/veh	
Overall occupancy (incl. buses)	1.2 persons/veh		1.2 persons/veh	
Violation rate ⁽³⁾ (HOV Lane)	4.2 %		3.9 %	

- NOTES:**
- (1) Two or more occupants per vehicle.
 - (2) Mixed flow lanes only.
 - (3) Violation rate = $\frac{\text{no. of violators in HOV lane} \times 100\%}{\text{Total no. of vehicles in HOV lane}}$
 - (4) HOV lane in operation from 3:00 to 7:00 P.M.
 - (5) Observations conducted 05/11/06 at the Zanker Road I/C

SANTA CLARA-237

Route 880/237 I/C to Mathilda Avenue

Violation History

Westbound

	DATE	PERIOD MONITORED	TOTAL HOVL VOLUME	VIOLATION RATE
A.M. PEAK	Wed Apr 26, 2006	6:00 - 9:00 AM	1631	0.3%
	Wed Nov 2, 2005	6:00 - 9:00 AM	1666	3.1%
	Thu Nov 18, 2004	6:00 - 9:00 AM	1407	0.9%
	Thu May 29, 2003	6:00 - 9:00 AM	1644	0.0%
	Thu May 2, 2002	6:00 - 9:00 AM	1577	3.7%
	Thu May 3, 2001	6:00 - 9:00 AM	1916	5.3%
	Wed Nov 15, 2000	6:00 - 9:00 AM	2055	2.7%
	Tue Nov 9, 1999	6:30 - 9:00 AM	1917	1.9%
	Tue Sep 29, 1998	7:00 - 9:00 AM	1770	3.3%
	Tue May 13, 1997	6:30 - 9:00 AM	2015	2.8%
	Thu May 30, 1996	6:00 - 9:00 AM	3274	0.5%
	Wed Oct 25, 1995	7:00 - 9:00 AM	1308	2.6%
P.M. PEAK	Tue Mar 28, 2006	3:00 - 6:00 PM	1008	4.3%
	Tue Oct 25, 2005	3:00 - 6:00 PM	908	2.1%
	Thu Dec 9, 2004	3:00 - 5:15 PM	493	10.8%
	Thu Oct 9, 2003	3:00 - 6:00 PM	698	5.6%
	Wed May 15, 2002	3:00 - 6:00 PM	773	2.2%
	Wed May 30, 2001	3:00 - 6:00 PM	1102	3.1%
	Wed Sep 13, 2000	3:00 - 6:00 PM	1155	2.5%
	Wed Mar 3, 1999	3:00 - 7:00 PM	1260	0.6%
	Tue Sep 29, 1998	3:00 - 6:00 PM	1658	2.8%
	Tue Oct 14, 1997	3:00 - 6:00 PM	1866	0.8%
	Wed Jun 12, 1996	3:00 - 6:00 PM	1593	0.9%
	Tue Oct 24, 1995	3:00 - 6:00 PM	1072	7.3%

NOTES: (a) Morning period of operation from 5:00 to 9:00 AM.
(b) Evening period of operation from 3:00 to 7:00 PM.

SANTA CLARA-237

Mathilda Avenue to Route 880/237 I/C

Violation History

Eastbound

	DATE	PERIOD MONITORED	TOTAL HOVL VOLUME	VIOLATION RATE
A.M. PEAK	Tue May 9, 2006	6:00 - 9:00 AM	710	11.1%
	Year 2005	-	-	-
	Year 2004	-	-	-
	Year 2003	-	-	-
	Thu Oct 31, 2002	7:00 - 9:00 AM	561	12.1%
	Thu Mar 29, 2001	6:00 - 9:00 AM	759	15.0%
	Thu May 25, 2000	6:00 - 9:00 AM	536	5.8%
	Thu Oct 14, 1999	6:00 - 9:00 AM	769	11.4%
	Thu Oct 8, 1998	7:00 - 9:00 AM	750	3.2%
	Wed Oct 29, 1997	6:30 - 9:00 AM	723	0.1%
Thu Nov 14, 1996	6:30 - 9:00 AM	845	7.5%	
Thu Oct 26, 1995	7:00 - 9:00 AM	495	2.2%	
P.M. PEAK	Thu May 11, 2006	3:00 - 6:00 PM	1671	4.2%
	Thu Oct 6, 2005	3:00 - 6:00 PM	1746	13.3%
	Wed Dec 1, 2004	3:00 - 5:00 PM	1324	0.8%
	Tue Oct 14, 2003	3:00 - 6:00 PM	1296	0.9%
	Wed May 1, 2002	3:00 - 6:00 PM	1396	1.9%
	Thu May 3, 2001	3:00 - 6:00 PM	1255	2.1%
	Tue Mar 21, 2000	4:00 - 7:00 PM	2181	0.4%
	Thu Nov 18, 1999	3:00 - 6:00 PM	2535	3.0%
	Thu Oct 15, 1998	3:00 - 6:00 PM	2418	5.0%
	Tue Oct 28, 1997	3:00 - 6:00 PM	2835	2.7%
	Thu Oct 17, 1996	3:00 - 6:00 PM	3682	0.3%
	Wed Oct 25, 1995	3:00 - 6:00 PM	1827	5.8%

NOTES: (a) Morning period of operation from 5:00 to 9:00 AM.
(b) Evening period of operation from 3:00 to 7:00 PM.

SANTA CLARA-280

Magdalena Avenue to Leland Avenue

Southbound - P.M.

Typical data for 2006⁽⁵⁾

VEHICLES	PEAK PERIOD ⁽⁴⁾ 3:00 - 6:00 PM		PEAK HOUR 5:00 - 6:00 PM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	47	27	23	6
Buses	3	18	1	3
Carpools ⁽¹⁾	1455	1205	673	222
Vanpools	9	10	3	2
Single Occ. ⁽²⁾	—	14074	—	4982
Violators	55	—	24	—
TOTAL	1569	15334	724	5215

PERSONS	PEAK PERIOD ⁽⁴⁾ 3:00 - 6:00 PM		PEAK HOUR 5:00 - 6:00 PM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	47	27	23	6
Buses	105	630	35	105
Carpools ⁽¹⁾	3026	2612	1393	487
Vanpools	90	100	30	20
Single Occ. ⁽²⁾	—	14074	—	4982
Violators	55	—	24	—
TOTAL	3323	17443	1505	5600

RATES	PEAK PERIOD ⁽⁴⁾ 3:00 - 6:00 PM		PEAK HOUR 5:00 - 6:00 PM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
HOV Lane occupancy rate	2.1 persons/veh		2.1 persons/veh	
Mixed Flow occupancy rate	1.1 persons/veh		1.1 persons/veh	
Overall occupancy (incl. buses)	1.2 persons/veh		1.2 persons/veh	
Violation rate ⁽³⁾ (HOV Lane)	3.5 %		3.3 %	

- NOTES:**
- (1) Two or more occupants per vehicle.
 - (2) Mixed flow lanes only.
 - (3) Violation rate = $\frac{\text{no. of violators in HOV lane} \times 100\%}{\text{Total no. of vehicles in HOV lane}}$
 - (4) HOV lane in operation from 3:00 to 7:00 P.M.
 - (5) Observations conducted 04/27/06 at the Wolfe Road I/C

SANTA CLARA-280

Leland Avenue to Magdalena Avenue

Northbound - A.M.

Typical data for 2006⁽⁵⁾

VEHICLES	PEAK PERIOD ⁽⁴⁾ 6:00 - 9:00 AM		PEAK HOUR 7:00 - 8:00 AM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	15	3	7	0
Buses	3	5	1	4
Carpools ⁽¹⁾	1744	201	766	99
Vanpools	12	4	5	1
Hybrid/Single Occ. ⁽²⁾	68	14422	35	5500
Violators	1	—	—	—
TOTAL	1843	14635	814	5604

PERSONS	PEAK PERIOD ⁽⁴⁾ 6:00 - 9:00 AM		PEAK HOUR 7:00 - 8:00 AM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	15	3	7	0
Buses	105	175	35	140
Carpools ⁽¹⁾	3530	434	1555	217
Vanpools	120	40	50	10
Hybrid/Single Occ. ⁽²⁾	68	14422	35	5500
Violators	1	—	—	—
TOTAL	3839	15074	1682	5867

RATES	PEAK PERIOD ⁽⁴⁾ 6:00 - 9:00 AM		PEAK HOUR 7:00 - 8:00 AM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
HOV Lane occupancy rate	2.1 persons/veh		2.1 persons/veh	
Mixed Flow occupancy rate	1.0 persons/veh		1.0 persons/veh	
Overall occupancy (incl. buses)	1.1 persons/veh		1.2 persons/veh	
Violation rate ⁽³⁾ (HOV Lane)	0.1 %		0.0 %	

- NOTES:**
- (1) Two or more occupants per vehicle.
 - (2) Hybrid HOV lane only/ Single occupancy mixed flow lanes only.
 - (3) Violation rate = $\frac{\text{no. of violators in HOV lane} \times 100\%}{\text{Total no. of vehicles in HOV lane}}$
 - (4) HOV lane in operation from 5:00 to 9:00 A.M.
 - (5) Observations conducted 12/14/06 at the Wolfe Road I/C

SANTA CLARA-280

Magdalena Avenue to Leland Avenue

Violation History

Southbound

	DATE	PERIOD MONITORED	TOTAL HOVL VOLUME	VIOLATION RATE
A.M. PEAK	Year 2006	-	-	-
	Year 2005	-	-	-
	Year 2004	-	-	-
	Year 2003	-	-	-
	Thu Apr 18, 2002	6:30 - 9:00 AM	372	4.6%
	Thu Apr 5, 2001	6:00 - 9:00 AM	524	2.7%
	Thu Apr 13, 2000	6:00 - 9:00 AM	474	9.3%
	Tue Apr 20, 1999	6:00 - 9:00 AM	608	0.3%
	Thu Jun 4, 1998	6:00 - 9:00 AM	781	0.1%
	Wed Oct 22, 1997	7:00 - 9:00 AM	592	0.0%
Wed Oct 9, 1996	7:00 - 9:00 AM	1087	1.4%	
Wed Nov 1, 1995	6:30 - 9:00 AM	566	4.9%	
Wed Nov 30, 1994	7:00 - 9:00 AM	989	1.6%	
P.M. PEAK	Thu Apr 27, 2006	3:00 - 6:00 PM	1569	3.5%
	Tue Dec 13, 2005	3:00 - 6:00 PM	2469	0.0%
	Tue Nov 2, 2004	3:00 - 5:30 PM	1817	2.3%
	Thu Jun 12, 2003	3:00 - 5:30 PM	1756	1.0%
	Thu Sep 19, 2002	3:00 - 6:00 PM	1933	0.6%
	Thu Oct 11, 2001	3:00 - 6:00 PM	2221	1.0%
	Wed Oct 11, 2000	3:00 - 6:00 PM	2325	5.0%
	Wed Apr 21, 1999	3:00 - 6:00 PM	2058	4.9%
	Tue Dec 8, 1998	3:00 - 6:00 PM	2236	1.0%
	Tue Oct 21, 1997	3:00 - 6:00 PM	2050	2.8%
	Tue Jun 11, 1996	3:00 - 6:00 PM	1716	4.3%
	Tue May 16, 1995	3:00 - 6:00 PM	1996	9.3%
	Wed Nov 16, 1994	3:00 - 5:00 PM	858	2.3%

NOTES: (a) Morning period of operation from 5:00 to 9:00 AM.
(b) Evening period of operation from 3:00 to 7:00 PM.
(c) Data was not collected in 2006 for off-peak direction

SANTA CLARA-280

Leland Avenue to Magdalena Avenue

Violation History

Northbound

	DATE	PERIOD MONITORED	TOTAL HOVL VOLUME	VIOLATION RATE
A.M. PEAK	Thu Dec 14, 2006	6:00 - 9:00 AM	1843	0.1%
	Tue Mar 8, 2005	6:00 - 9:00 AM	1602	0.8%
	Thu Oct 7, 2004	6:00 - 9:00 AM	2213	2.4%
	Thu Jun 5, 2003	6:00 - 9:00 AM	1558	7.4%
	Tue May 21, 2002	6:00 - 9:00 AM	1355	5.4%
	Tue Nov 6, 2001	6:00 - 9:00 AM	1253	1.6%
	Wed Mar 29, 2000	6:00 - 9:00 AM	2086	1.7%
	Thu Nov 4, 1999	6:30 - 9:00 AM	1884	0.3%
	Wed Dec 9, 1998	6:00 - 9:00 AM	2235	3.7%
	Wed Apr 23, 1997	6:00 - 9:00 AM	1851	0.10%
	Tue Jun 11, 1996	6:00 - 9:00 AM	1762	1.40%
	Thu May 18, 1995	6:00 - 9:00 AM	2510	1.50%
	Wed Nov 16, 1994	6:45 - 9:00 AM	1124	2.9%
P.M. PEAK	Year 2006	-	-	-
	Year 2005	-	-	-
	Year 2004	-	-	-
	Year 2003	-	-	-
	Tue May 28, 2002	3:00 - 6:00 PM	1081	1.5%
	Wed Apr 4, 2001	3:00 - 6:00 PM	1160	0.9%
	Thu Apr 13, 2000	3:00 - 6:00 PM	1106	5.4%
	Tue Apr 20, 1999	3:00 - 6:00 PM	938	0.2%
	Tue Sep 15, 1998	3:00 - 6:00 PM	955	5.3%
	Wed, Apr 23, 1997	3:00 - 6:00 PM	1975	0.5%
	Thu Dec 12, 1996	3:00 - 5:30 PM	1205	4.2%
	Wed May 17, 1995	3:00 - 6:00 PM	1095	13.2%
	Thu Nov 17, 1994	3:00 - 5:00 PM	584	9.1%

NOTES: (a) Morning period of operation from 5:00 to 9:00 AM.
 (b) Evening period of operation from 3:00 to 7:00 PM.
 (c) Data was not collected in 2006 for off-peak direction

SAN FRANCISCO-80 RAMP HOV BYPASS LANES

Sterling Street on-ramp to SFOBB

Eastbound-P.M.

Typical data for 2006 ⁽⁵⁾

PEAK PERIOD ⁽⁴⁾

3:30 - 7:00 PM

PEAK HOUR

4:00 - 5:00 PM

VEHICLES

	HOV Lane	SOV Lane	HOV Lane	SOV Lane
Motorcycles	109	—	33	—
Buses	17	—	7	—
Carpool ⁽¹⁾	1647	—	499	—
2 - seaters ⁽²⁾	296	—	121	—
Hybrid	195	—	46	—
Vanpools	82	—	49	—
Trucks	130	—	49	—
Violators	740	—	200	—
TOTAL	3216	N/A	1004	N/A

PERSONS

	HOV Lane	SOV Lane	HOV Lane	SOV Lane
Motorcycles	109	—	33	—
Buses	595	—	245	—
Carpool ⁽¹⁾	5106	—	1547	—
2 - seaters ⁽²⁾	592	—	242	—
Hybrid	195	—	46	—
Vanpools	820	—	490	—
Trucks	130	—	49	—
Violators	1087	—	311	—
TOTAL	8634	N/A	2963	N/A

RATES

HOV Lane occupancy rate	2.7 persons/veh	3.0 persons/veh
Violation rate ⁽³⁾ (HOV Lane)	23.0 %	19.9 %

- NOTES:** (1) 3 or more persons per vehicle.
 (2) 2 - seater vehicles with 2 persons.
 (3) $\text{Violation rate} = \frac{\text{no. of violators in HOV lane} \times 100\%}{\text{Total no. of vehicles in HOV lane}}$
 (4) HOV lane in operation from 3:30 to 7:00 PM.
 (5) Observations conducted 9/12/06 at the Sterling Street on-ramp

SAN FRANCISCO-80 RAMP HOV BYPASS LANES

Sterling Street On-Ramp to SFOBB

Violation History

Eastbound

	DATE	PERIOD MONITORED	TOTAL HOVL VOLUME	VIOLATION RATE
P.M. PEAK	Tue Sep 12, 2006	3:30 - 7:00 PM	3411	23.0%
	Tue Mar 8, 2005	3:30 - 7:00 PM	3391	24.4%
	Tue Oct 12, 2004	3:30 - 7:00 PM	3161	20.2%
	Wed Apr 30, 2003	3:30 - 7:00 PM	2185	22.6%
	Tue Sep 17, 2002	3:30 - 7:00 PM	2713	15.1%
	Wed Oct 10, 2001	3:30 - 7:00 PM	3133	10.4%
	Thu Oct 19, 2000	3:30 - 7:00 PM	3327	6.5%
	Thu Oct 14, 1999	3:30 - 7:00 PM	3566	27.5%
	Thu Dec 3, 1998	3:30 - 7:00 PM	3276	29.0%
	Wed Jun 11, 1997	3:30 - 7:00 PM	2810	12.4%
	Tue Apr 23, 1996	3:30 - 7:00 PM	1891	22.2%
	Wed Mar 29, 1995	3:30 - 7:00 PM	2692	52.6%
	Tue May 17, 1994	4:00 - 6:00 PM	787	28.3%
	Wed Oct 13, 1993	4:00 - 6:00 PM	1023	34.6%
	Thu Jun 4, 1992	4:00 - 6:00 PM	1051	35.0%
	Tue Dec 3, 1991	4:00 - 6:00 PM	1427	28.0%
	Thu Nov 15, 1990	4:00 - 6:00 PM	701	58.3%
	Tue Apr 18, 1989	4:30 - 6:00 PM	821	17.4%
	Tue Apr 26, 1988	4:00 - 6:00 PM	1599	69.2%
	Tue Oct 20, 1987	4:00 - 6:00 PM	1103	53.3%
Tue Apr 21, 1987	4:00 - 6:00 PM	960	40.1%	
Tue Oct 21, 1986	4:00 - 6:00 PM	1576	50.7%	
Tue Oct 22, 1985	4:00 - 6:00 PM	1252	38.4%	

NOTES: Evening period of operation from 3:30 to 7:00 P.M.

SAN MATEO-101

Whipple Avenue to SM/SCL County Line

Southbound - A.M.

Typical data for 2006⁽⁵⁾

VEHICLES	PEAK PERIOD ⁽⁴⁾ 6:00 - 9:00 AM		PEAK HOUR 8:00 - 9:00 AM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	101	31	20	4
Buses	18	24	9	9
Carpools ⁽¹⁾	1009	705	405	307
Vanpools	8	5	3	1
Hybrid/Single Occ. ⁽²⁾	92	12769	44	4772
Violators	10	—	—	—
TOTAL	1238	13534	481	5093

PERSONS	PEAK PERIOD ⁽⁴⁾ 6:00 - 9:00 AM		PEAK HOUR 8:00 - 9:00 AM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	101	31	20	4
Buses	630	840	315	315
Carpools ⁽¹⁾	2146	1505	872	649
Vanpools	80	50	30	10
Hybrid/Single Occ. ⁽²⁾	92	12769	44	4772
Violators	10	—	—	—
TOTAL	3059	15195	1281	5750

RATES	PEAK PERIOD ⁽⁴⁾ 6:00 - 9:00 AM		PEAK HOUR 8:00 - 9:00 AM	
	HOV Lane occupancy rate	2.5 persons/veh		2.7 persons/veh
Mixed Flow occupancy rate	1.1 persons/veh		1.1 persons/veh	
Overall occupancy (incl. buses)	1.2 persons/veh		1.3 persons/veh	
Violation rate ⁽³⁾ (HOV Lane)	0.8 %		0.0 %	

- NOTES:**
- (1) Two or more occupants per vehicle.
 - (2) Hybrid HOV lane only/Single Occupancy mixed flow lanes only
 - (3) Violation rate = $\frac{\text{no. of violators in HOV lane} \times 100\%}{\text{Total no. of vehicles in HOV lane}}$
 - (4) HOV lane in operation from 5:00 to 9:00 A.M.
 - (5) Observations conducted 05/31/06 at the Woodside Road I/C

SAN MATEO-101

Whipple Avenue to SM/SCL County Line

Southbound - P.M.

Typical data for 2006⁽⁵⁾

VEHICLES	PEAK PERIOD ⁽⁴⁾ 3:00 - 6:00 PM		PEAK HOUR 5:00 - 6:00 PM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	45	32	19	10
Buses	0	40	0	7
Carpools ⁽¹⁾	1635	1975	624	574
Vanpools	6	11	2	1
Hybrid/Single Occ. ⁽²⁾	60	15417	26	5281
Violators	8	—	—	—
TOTAL	1754	17475	671	5873

PERSONS	PEAK PERIOD ⁽⁴⁾ 3:00 - 6:00 PM		PEAK HOUR 5:00 - 6:00 PM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	45	32	19	10
Buses	0	1400	0	245
Carpools ⁽¹⁾	3310	4220	1288	1242
Vanpools	60	110	20	10
Hybrid/Single Occ. ⁽²⁾	60	15417	26	5281
Violators	8	—	—	—
TOTAL	3483	21179	1353	6788

RATES	PEAK PERIOD ⁽⁴⁾ 3:00 - 6:00 PM		PEAK HOUR 5:00 - 6:00 PM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
HOV Lane occupancy rate	2.0 persons/veh		2.0 persons/veh	
Mixed Flow occupancy rate	1.2 persons/veh		1.2 persons/veh	
Overall occupancy (incl. buses)	1.3 persons/veh		1.2 persons/veh	
Violation rate ⁽³⁾ (HOV Lane)	0.5 %		0.0 %	

- NOTES:**
- (1) Two or more occupants per vehicle.
 - (2) Hybrid HOV lane only/Single Occupancy mixed flow lanes only.
 - (3) Violation rate = $\frac{\text{no. of violators in HOV lane} \times 100\%}{\text{Total no. of vehicles in HOV lane}}$
 - (4) HOV lane in operation from 3:00 to 7:00 P.M.
 - (5) Observations conducted 06/13/06 at the Woodside Road I/C

SAN MATEO-101

SM/SCL County Line to Whipple Avenue

Northbound - A.M.

Typical data for 2006⁽⁵⁾

VEHICLES	PEAK PERIOD ⁽⁴⁾ 6:00 - 9:00 AM		PEAK HOUR 8:00 - 9:00 AM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	24	14	17	8
Buses	1	28	1	8
Carpools ⁽¹⁾	1468	415	497	228
Vanpools	0	2	0	0
Hybrid/Single Occ. ⁽²⁾	77	10362	45	3707
Violators	3	—	—	—
TOTAL	1573	10821	560	3951

PERSONS	PEAK PERIOD ⁽⁴⁾ 6:00 - 9:00 AM		PEAK HOUR 8:00 - 9:00 AM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	24	14	17	8
Buses	35	980	35	280
Carpools ⁽¹⁾	3044	909	1048	492
Vanpools	0	20	0	0
Hybrid/Single Occ. ⁽²⁾	77	10362	45	3707
Violators	3	—	—	—
TOTAL	3183	12285	1145	4487

RATES	PEAK PERIOD ⁽⁴⁾ 6:00 - 9:00 AM		PEAK HOUR 8:00 - 9:00 AM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
HOV Lane occupancy rate	2.0 persons/veh		2.0 persons/veh	
Mixed Flow occupancy rate	1.1 persons/veh		1.1 persons/veh	
Overall occupancy (incl. buses)	1.2 persons/veh		1.2 persons/veh	
Violation rate ⁽³⁾ (HOV Lane)	0.2 %		0.0 %	

- NOTES:**
- (1) Two or more occupants per vehicle.
 - (2) Hybrid HOV lane only/Single Occupancy mixed flow lanes only.
 - (3) Violation rate = $\frac{\text{no. of violators in HOV lane} \times 100\%}{\text{Total no. of vehicles in HOV lane}}$
 - (4) HOV lane in operation from 5:00 to 9:00 A.M.
 - (5) Observations conducted 10/26/06 at the Woodside Road I/C

SAN MATEO-101

SM/SCL County Line to Whipple Avenue

Northbound - P.M.

Typical data for 2006⁽⁵⁾

VEHICLES	PEAK PERIOD ⁽⁴⁾ 3:00 - 6:00 PM		PEAK HOUR 5:00 - 6:00 PM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	60	7	21	2
Buses	12	20	5	1
Carpools ⁽¹⁾	2165	838	706	257
Vanpools	9	6	5	0
Hybrid/Single Occ. ⁽²⁾	97	11122	41	4042
Violators	—	—	—	—
TOTAL	2343	11993	778	4302

PERSONS	PEAK PERIOD ⁽⁴⁾ 3:00 - 6:00 PM		PEAK HOUR 5:00 - 6:00 PM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	60	7	21	2
Buses	420	700	175	35
Carpools ⁽¹⁾	4530	1887	1457	577
Vanpools	90	60	50	0
Hybrid/Single Occ. ⁽²⁾	97	11122	41	4042
Violators	—	—	—	—
TOTAL	5197	13776	1744	4656

RATES	PEAK PERIOD ⁽⁴⁾ 3:00 - 6:00 PM		PEAK HOUR 5:00 - 6:00 PM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
HOV Lane occupancy rate	2.2 persons/veh		2.2 persons/veh	
Mixed Flow occupancy rate	1.1 persons/veh		1.1 persons/veh	
Overall occupancy rate (incl. buses)	1.3 persons/veh		1.3 persons/veh	
Violation rate ⁽³⁾ (HOV Lane)	0.0 %		0.0 %	

- NOTES:**
- (1) Two or more occupants per vehicle.
 - (2) Hybrid HOV lane only/Single Occupancy mixed flow lanes only.
 - (3) Violation rate = $\frac{\text{no. of violators in HOV lane} \times 100\%}{\text{Total no. of vehicles in HOV lane}}$
 - (4) HOV lane in operation from 3:00 to 7:00 P.M.
 - (5) Observations conducted 06/01/06 at the Woodside Road I/C

SAN MATEO-101

Whipple Avenue to the SM/SCL County Line

Violation History

Southbound

	DATE	PERIOD MONITORED	TOTAL HOVL VOLUME	VIOLATION RATE
A.M. PEAK	Wed May 31, 2006	6:00 - 9:00 AM	1238	0.8%
	Thu Mar 10, 2005	6:00 - 9:00 AM	1177	1.4%
	Wed Dec 15, 2004	7:00 - 9:00 AM	1355	0.1%
	Wed Apr 9, 2003	6:00 - 9:00 AM	1701	0.6%
	Tue Mar 26, 2002	6:00 - 9:00 AM	1549	3.5%
	Thu Mar 22, 2001	6:00 - 9:00 AM	1746	2.2%
	Tue Apr 25, 2000	6:00 - 9:00 AM	1849	7.0%
	Thu Dec 2, 1999	6:45 - 9:00 AM	1915	5.2%
	Tue Mar 10, 1998	6:00 - 9:00 AM	2711	0.8%
	Tue Sept 23, 1997	7:00 - 9:00 AM	1761	0.7%
	Wed Mar 27, 1996	6:00 - 9:00 AM	1681	4.6%
	Wed Jun 7, 1995	6:00 - 9:00 AM	1922	3.0%
P.M. PEAK	Tue Jun 13, 2006	3:00 - 6:00 PM	1754	0.5%
	Wed Sep 28, 2005	3:00 - 6:00 PM	1568	1.5%
	Tue Oct 26, 2004	3:00 - 6:00 PM	1296	1.5%
	Wed May 14, 2003	3:00 - 6:00 PM	1488	2.5%
	Wed Oct 2, 2002	3:00 - 6:00 PM	1895	3.2%
	Thu Nov 8, 2001	3:00 - 5:30 PM	1685	7.0%
	Thu Oct 12, 2000	3:00 - 6:00 PM	2245	3.3%
	Wed Dec 8, 1999	3:00 - 5:15 PM	1683	0.5%
	Thu Dec 10, 1998	3:00 - 6:00 PM	2537	1.6%
	Wed Nov 5, 1997	3:00 - 6:00 PM	2514	0.6%
	Wed Mar 27, 1996	3:00 - 6:00 PM	2836	1.9%
	Tue Sept 26, 1995	3:00 - 6:00 PM	2505	2.0%

NOTES: (a) Morning period of operation from 5:00 to 9:00 AM.
(b) Evening period of operation from 3:00 to 7:00 PM.

SAN MATEO-101

SM/SCL County Line to Whipple Avenue

Violation History

Northbound

	DATE	PERIOD MONITORED	TOTAL HOVL VOLUME	VIOLATION RATE
A.M. PEAK	Thu Oct 26, 2006	6:00 - 9:00 AM	1573	0.2%
	Wed Apr 6, 2005	6:00 - 9:00 AM	1409	0.5%
	Wed Dec 1, 2004	6:00 - 9:00 AM	1337	0.7%
	Thu Oct 9, 2003	7:00 - 9:00 AM	1031	1.5%
	Tue Apr 9, 2002	6:45 - 9:00 AM	865	5.7%
	Wed Oct 31, 2001	6:00 - 9:00 AM	1662	2.1%
	Thu Oct 12, 2000	6:00 - 9:00 AM	2964	4.7%
	Thu Apr 29, 1999	6:00 - 9:00 AM	2088	0.5%
	Tue Oct 27, 1998	6:00 - 9:00 AM	1873	2.1%
	Thu Sept 25, 1997	7:00 - 9:00 AM	1348	0.1%
	Wed Jun 5, 1996	6:00 - 9:00 AM	1799	3.3%
	Thu Jun 15, 1995	6:00 - 9:00 AM	2272	2.9%
	P.M. PEAK	Thu Jun 1, 2006	3:00 - 6:00 PM	2343
Tue Oct 4, 2005		3:00 - 6:00 PM	2025	0.4%
Thu Oct 28, 2004		3:00 - 6:00 PM	1929	0.1%
Tue Apr 8, 2003		3:00 - 6:00 PM	2327	2.0%
Wed Jun 5, 2002		3:00 - 6:00 PM	1969	3.4%
Wed Nov 14, 2001		3:00 - 5:30 PM	1675	0.2%
Tue Sep 12, 2000		3:00 - 6:00 PM	2329	14.3%
Tue Oct 26, 1999		3:00 - 6:00 PM	2987	8.5%
Wed Dec 9, 1998		3:00 - 6:00 PM	2670	6.6%
Tue Apr 29, 1997		3:00 - 6:00 PM	2616	0.9%
Thu Sep 26, 1996		3:00 - 6:00 PM	2619	5.8%
Tue Jun 6, 1995		3:00 - 6:30 PM	2617	4.4%

NOTES: (a) Morning period of operation from 5:00 to 9:00 AM.
(b) Evening period of operation from 3:00 to 7:00 PM.

SOLANO-80

Carquinez Bridge Toll Plaza

Eastbound - P.M.

Typical data for 2006 ⁽⁶⁾

VEHICLES	PEAK PERIOD ⁽⁵⁾ 3:00 to 7:00 P.M.		PEAK HOUR 5:00 to 6:00 P.M.	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	229	—	58	—
Buses ⁽⁴⁾	30	—	10	—
Carpools ⁽¹⁾	1890	—	575	—
2 - seaters ⁽²⁾	566	—	139	—
Hybrid	64	—	12	—
Vanpools	144	—	63	—
Violators (HOV only)	362	—	56	—
TOTAL	3285	16926 ⁽⁷⁾	913	4268

PERSONS	PEAK PERIOD ⁽⁵⁾ 3:00 to 7:00 P.M.		PEAK HOUR 5:00 to 6:00 P.M.	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	242	—	58	—
Buses ⁽⁴⁾	1680	—	350	—
Carpools ⁽¹⁾	6885	—	1783	—
2 - seaters ⁽²⁾	1326	—	278	—
Hybrid	64	—	12	—
Vanpools	1360	—	630	—
Violators (HOV only)	525	—	91	—
TOTAL	12082	18619 ⁽⁷⁾	3202	4695

RATES	PEAK PERIOD ⁽⁵⁾ 3:00 to 7:00 P.M.		PEAK HOUR 5:00 to 6:00 P.M.	
	HOV Lane occupancy rate	3.7 persons/veh		3.5 persons/veh
Mixed Flow Occupancy Rate ⁽⁷⁾	1.1 persons/veh		1.1 persons/veh	
Violation rate ⁽³⁾ (HOV Lane)	11.0 %		6.1 %	

- NOTES:** (1) 3 or more persons per vehicle.
 (2) 2 - seater vehicles with 2 persons.
 (3) $\text{Violation rate} = \frac{\text{no. of violators in HOV lane} \times 100\%}{\text{Total no. of vehicles in HOV lane}}$
 (4) Assumed PM bus occupancy = 35 persons/vehicle.
 (5) HOV lane in operation from 3:00 to 7:00 P.M.
 (6) Observations conducted 9/14/06 at the Carquinez Bridge Toll Plaza.
 (7) Data from Toll Plaza vehicle Registration Report.

SOLANO-80

Carquinez Bridge Toll Plaza

Violation History

Eastbound

	DATE	PERIOD MONITORED	TOTAL HOVL VOLUME	VIOLATION RATE
A.M. PEAK	Year 2006	-	-	-
	Year 2005	-	-	-
	Year 2004	-	-	-
	Year 2003	-	-	-
	Thu Nov 14, 2002	5:00 - 10:00 AM	706	10.1%
	Thu May 31, 2001	5:00 - 10:00 AM	804	24.5%
	Thu Nov 16, 2000	5:00 - 10:00 AM	773	34.4%
	Wed Mar 10, 1999	6:00 - 10:00 AM	664	26.2%
	Wed Sep 16, 1998	6:00 - 10:00 AM	559	27.2%
	P.M. PEAK	Thu Sep 14, 2006	3:00 - 7:00 PM	3285
Wed Sep 14, 2005		3:00 - 7:00 PM	3523	6.0%
Wed Oct 13, 2004		3:00 - 7:00 PM	3342	9.4%
Thu May 15, 2003		3:00 - 7:00 PM	3360	8.8%
Thu Sep 26, 2002		3:00 - 7:00 PM	3429	9.5%
Thu Mar 29, 2001		3:00 - 7:00 PM	3493	1.2%
Tue Oct 17, 2000		3:00 - 7:00 PM	3373	9.5%
Wed Sep 29, 1999		3:00 - 7:00 PM	2945	12.9%
Wed Sep 16, 1998		3:00 - 7:00 PM	2203	12.4%

NOTES: (a) Morning period of operation from 5:00 to 10:00 AM
(b) Evening period of operation from 3:00 to 7:00 PM.
(c) Data was not collected in 2006 for off-peak direction

SONOMA-101

Route 12 to Wilfred Avenue

Southbound - A.M.

Typical data for 2006 ⁽⁵⁾

VEHICLES	PEAK PERIOD ⁽⁴⁾ 7:00 - 9:00 AM		PEAK HOUR 8:00 - 9:00 AM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	39	5	21	4
Buses	4	5	3	2
Carpools ⁽¹⁾	598	330	309	157
Vanpools	2	3	1	3
Hybrid/Single Occ. ⁽²⁾	29	6475	8	3291
Violators	33	—	9	—
TOTAL	705	6818	351	3457

PERSONS	PEAK PERIOD ⁽⁴⁾ 7:00 - 9:00 AM		PEAK HOUR 8:00 - 9:00 AM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	39	5	21	4
Buses	140	175	105	70
Carpools ⁽¹⁾	1248	695	643	328
Vanpools	20	30	10	30
Hybrid/Single Occ. ⁽²⁾	29	6475	8	3291
Violators	33	—	9	—
TOTAL	1509	7380	796	3723

RATES	PEAK PERIOD ⁽⁴⁾ 7:00 - 9:00 AM		PEAK HOUR 8:00 - 9:00 AM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
HOV Lane occupancy rate	2.1 persons/veh		2.3 persons/veh	
Mixed Flow occupancy rate	1.1 persons/veh		1.1 persons/veh	
Overall occupancy (incl. buses)	1.2 persons/veh		1.2 persons/veh	
Violation rate ⁽³⁾ (HOV Lane)	4.7 %		2.6 %	

- NOTES:** (1) Two or more occupants per vehicle.
 (2) Hybrid HOV lane only/Single Occupancy mixed flow lane only
 (3) Violation rate = $\frac{\text{no. of violators in HOV lane}}{\text{Total no. of vehicles in HOV lane}} \times 100\%$
 (4) HOV lane in operation from 7:00 to 9:00 A.M.
 (5) Observations conducted 10/18/06 at South of Hearn Avenue Interchange.

SONOMA-101

Route 12 to Wilfred Avenue

Southbound - P.M.

Typical data for 2006⁽⁵⁾

VEHICLES	PEAK PERIOD ⁽⁴⁾ 3:00 - 6:30 PM		PEAK HOUR 5:00 - 6:00 PM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	97	34	29	8
Buses	16	36	1	8
Carpools ⁽¹⁾	2053	1190	593	342
Vanpools	4	2	2	0
Hybrid/Single Occ. ⁽²⁾	25	11147	6	3465
Violators	82	—	5	—
TOTAL	2277	12409	636	3823

PERSONS	PEAK PERIOD ⁽⁴⁾ 3:00 - 6:30 PM		PEAK HOUR 5:00 - 6:00 PM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	97	34	29	8
Buses	560	1260	35	280
Carpools ⁽¹⁾	4278	2490	1217	718
Vanpools	40	20	20	0
Hybrid/Single Occ. ⁽²⁾	25	11147	6	3465
Violators	82	—	5	—
TOTAL	5082	14951	1312	4471

RATES	PEAK PERIOD ⁽⁴⁾ 3:00 - 6:30 PM		PEAK HOUR 5:00 - 6:00 PM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
HOV Lane occupancy rate	2.2 persons/veh		2.1 persons/veh	
Mixed Flow occupancy rate	1.2 persons/veh		1.2 persons/veh	
Overall occupancy (incl. buses)	1.4 persons/veh		1.3 persons/veh	
Violation rate ⁽³⁾ (HOV Lane)	3.6 %		0.8 %	

- NOTES:** (1) Two or more occupants per vehicle.
 (2) Hybrid HOV lane only/Single Occupancy mixed flow lane only
 (3) $\text{Violation rate} = \frac{\text{no. of violators in HOV lane}}{\text{Total no. of vehicles in HOV lane}} \times 100\%$
 (4) HOV lane in operation from 3:00 to 6:30 P.M.
 (5) Observations conducted 04/27/06 at South of Hearn Avenue Interchange.

SONOMA-101

Wilfred Avenue to Route 12

Northbound - A.M.

Typical data for 2006 ⁽⁵⁾

VEHICLES	PEAK PERIOD ⁽⁴⁾ 7:00 - 9:00 AM		PEAK HOUR 8:00 - 9:00 AM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	21	0	9	0
Buses	5	31	4	8
Carpools ⁽¹⁾	717	279	433	119
Vanpools	5	2	2	0
Hybrid/Single Occ. ⁽²⁾	31	5616	20	2780
Violators	28	—	8	—
TOTAL	807	5928	476	2907

PERSONS	PEAK PERIOD ⁽⁴⁾ 7:00 - 9:00 AM		PEAK HOUR 8:00 - 9:00 AM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	21	0	9	0
Buses	175	1085	140	280
Carpools ⁽¹⁾	1502	619	899	267
Vanpools	50	20	20	0
Hybrid/Single Occ. ⁽²⁾	31	5616	20	2780
Violators	28	—	8	—
TOTAL	1807	7340	1096	3327

RATES	PEAK PERIOD ⁽⁴⁾ 7:00 - 9:00 AM		PEAK HOUR 8:00 - 9:00 AM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
HOV Lane occupancy rate	2.2 persons/veh		2.3 persons/veh	
Mixed Flow occupancy rate	1.2 persons/veh		1.1 persons/veh	
Overall occupancy (incl. buses)	1.4 persons/veh		1.3 persons/veh	
Violation rate ⁽³⁾ (HOV Lane)	3.5 %		1.7 %	

- NOTES:** (1) Two or more occupants per vehicle.
 (2) Hybrid HOV lane only/Single Occupancy mixed flow lane only
 (3) Violation rate = $\frac{\text{no. of violators in HOV lane}}{\text{Total no. of vehicles in HOV lane}} \times 100\%$
 (4) HOV lane in operation from 7:00 to 9:00 A.M.
 (5) Observations conducted 10/25/06 at North of Todd Road Interchange.

SONOMA-101

Wilfred Avenue to Route 12

Northbound - P.M.

Typical data for 2006 ⁽⁵⁾

VEHICLES	PEAK PERIOD ⁽⁴⁾ 3:00 - 6:30 PM		PEAK HOUR 5:00 - 6:00 PM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	67	16	22	3
Buses	14	30	7	9
Carpools ⁽¹⁾	1745	933	523	216
Vanpools	0	2	0	1
Hybrid/Single Occ. ⁽²⁾	10	10393	2	3129
Violators	71	—	12	—
TOTAL	1907	11374	566	3358

PERSONS	PEAK PERIOD ⁽⁴⁾ 3:00 - 6:30 PM		PEAK HOUR 5:00 - 6:00 PM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	67	16	22	3
Buses	490	1050	245	315
Carpools ⁽¹⁾	3589	1950	1069	450
Vanpools	0	20	0	10
Hybrid/Single Occ. ⁽²⁾	10	10393	2	3129
Violators	71	—	12	—
TOTAL	4227	13429	1350	3907

RATES	PEAK PERIOD ⁽⁴⁾ 3:00 - 6:30 PM		PEAK HOUR 5:00 - 6:00 PM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
HOV Lane occupancy rate	2.2 persons/veh		2.4 persons/veh	
Mixed Flow occupancy rate	1.2 persons/veh		1.2 persons/veh	
Overall occupancy (incl. buses)	1.3 persons/veh		1.3 persons/veh	
Violation rate ⁽³⁾ (HOV Lane)	3.7 %		2.1 %	

- NOTES:** (1) Two or more occupants per vehicle.
 (2) Hybrid HOV lane only/Single Occupancy mixed flow lane only
 (3) Violation rate = $\frac{\text{no. of violators in HOV lane}}{\text{Total no. of vehicles in HOV lane}} \times 100\%$
 (4) HOV lane in operation from 3:00 to 6:30 P.M.
 (5) Observations conducted 04/13/06 at North of Todd Road Interchange.

SONOMA-101

Wilfred Avenue to Route 12

Violation History

Northbound

	DATE	PERIOD MONITORED	TOTAL HOVL VOLUME	VIOLATION RATE
A.M. PEAK	Wed Oct 25, 2006	7:00 - 9:00 AM	807	3.5%
	Tue Mar 15, 2005	7:00 - 9:00 AM	836	4.9%
	Thu Oct 14, 2004	7:00 - 9:00 AM	666	4.4%
	Wed Apr 9, 2003	6:30 - 9:30 AM	839	6.0%
	Thu Dec 5, 2002	6:30 - 9:30 AM	696	6.6%
P.M. PEAK	Thu Apr 13, 2006	3:00 - 6:30 PM	1907	3.7%
	Thu Oct 6, 2005	3:00 - 6:30 PM	2263	2.0%
	Thu Oct 21, 2004	3:00 - 6:30 PM	1945	2.2%
	Thu Oct 16, 2003	3:00 - 7:00 PM	2172	3.2%
	Thu Dec 5, 2002	3:00 - 7:00 PM	2145	1.9%

NOTES: (a) Morning period of operation from 7:00 to 9:00 AM.
(b) Evening period of operation from 3:00 to 6:30 PM.

HOV TOLL GATES

VOLUME/PERSON DATA

HOV TOLL GATE

Richmond-San Rafael Bridge Toll Plaza

CONTRA COSTA - 580

Westbound - A.M.

Typical data for 2006 ⁽³⁾

VEHICLES	PEAK PERIOD ⁽²⁾	PEAK HOUR
	6:00 - 10:00 AM	7:00 - 8:00 AM
Motorcycles	56	16
Buses	42	4
Vanpools	15	5
Carpools ⁽¹⁾	869	422
Total HOVs	982	447
1 Occupancy	549	118
2 Occupancy	158	52
TOTAL	1689	617
PERSONS		
Motorcycles	56	16
Buses	1470	140
Vanpools	150	50
Carpools ⁽¹⁾	2433	1182
Total HOVs	4109	1388
1 Occupancy	549	118
2 Occupancy	316	104
TOTAL	4974	1610
RATES		
HOV Occupancy Rate	4.2 persons/veh	3.1 persons/veh
Mixed Flow Occupancy Rate	1.2 persons/veh	1.3 persons/veh
Overall Occupancy (incl. buses)	2.9 persons/veh	2.6 persons/veh

NOTES: (1) 3 or more persons per vehicle & 2 - seater vehicles with 2 persons.

(2) HOV operation hours from 5:00 to 10:00 AM and 3:00 to 6:00 PM.

(3) Observations conducted 5/4/06 at Toll Plaza.

HOV TOLL GATE

Richmond-San Rafael Bridge Toll Plaza

CONTRA COSTA - 580

Westbound - P.M.
 Typical data for 2006 ⁽³⁾

	PEAK PERIOD ⁽²⁾ 3:00 - 6:00 PM	PEAK HOUR 5:00 - 6:00 PM
VEHICLES		
Motorcycles	44	26
Buses	5	3
Vanpools	14	5
Carpools ⁽¹⁾	340	135
Total HOVs	403	169
1 Occupancy	505	203
2 Occupancy	110	29
TOTAL	1018	401
PERSONS		
Motorcycles	44	26
Buses	175	105
Vanpools	140	50
Carpools ⁽¹⁾	952	378
Total HOVs	1311	559
1 Occupancy	505	203
2 Occupancy	220	58
TOTAL	2036	820
RATES		
HOV Occupancy Rate	3.3 persons/veh	3.3 persons/veh
Mixed Flow Occupancy Rate	1.2 persons/veh	1.1 persons/veh
Overall Occupancy (incl. buses)	2.0 persons/veh	2.0 persons/veh

NOTES: (1) 3 or more persons per vehicle & 2 - seater vehicles with 2 persons.

(2) HOV operation hours from 5:00 to 10:00 AM and 3:00 to 6:00 PM.

(3) Observations conducted 9/13/06 at Toll Plaza.

HOV TOLL GATE

Antioch Bridge Toll Plaza

CONTRA COSTA -160

Northbound A.M.

Typical data for 2006⁽³⁾

PEAK PERIOD ⁽²⁾

6:00 to 9:00 A.M.

PEAK HOUR

6:00 to 7:00 A.M.

VEHICLES

Motorcycles	3	2
Buses	0	0
Vanpools	0	0
Carpools ⁽¹⁾	25	5
Total HOV	28	7
1 Occupancy	855	302
2 Occupancy	93	38
TOTAL	976	347

PERSONS

Motorcycles	3	2
Buses	0	0
Vanpools	0	0
Carpools ⁽¹⁾	78	16
Total HOV	81	18
1 Occupancy	855	302
2 Occupancy	186	76
TOTAL	1122	396

RATES

HOV Occupancy Rate	2.9 persons/veh	2.5 persons/veh
Overall occupancy (incl. buses)	1.1 persons/veh	1.1 persons/veh

- NOTES:** (1) 3 or more occupants per vehicle & 2-seater vehicles w/2 occupants.
 (2) HOV operation hours 5:00 to 10:00 AM.
 (3) Observations conducted 09/06/06 at Toll Plaza

HOV TOLL GATE

Antioch Bridge Toll Plaza

CONTRA COSTA -160

Northbound P.M.

Typical data for 2006⁽³⁾

PEAK PERIOD⁽²⁾

3:00 to 6:00 P.M.

PEAK HOUR

4:00 to 5:00 P.M.

VEHICLES

Motorcycles	6	1
Buses	0	0
Vanpools	1	1
Carpools ⁽¹⁾	74	28
Total HOV	81	30
1 Occupancy	1419	489
2 Occupancy	295	107
TOTAL	1795	626

PERSONS

Motorcycles	6	1
Buses	0	0
Vanpools	10	10
Carpools ⁽¹⁾	229	87
Total HOV	245	98
1 Occupancy	1419	489
2 Occupancy	590	214
TOTAL	2254	801

RATES

HOV Occupancy Rate	3.0 persons/veh	3.3 persons/veh
Overall occupancy (incl. buses)	1.3 persons/veh	1.3 persons/veh

- NOTES:** (1) 3 or more occupants per vehicle & 2-seater vehicles w/2 occupants.
(2) HOV operation hours 3:00 to 7:00 PM.
(3) Observations conducted 5/23/06 at Toll Plaza

HOV TOLL GATE

Benicia-Martinez Bridge Toll Plaza

SOLANO - 680

Northbound A.M.

Typical data for 2006 ⁽³⁾

PEAK PERIOD ⁽²⁾

6:00 to 9:00 A.M.

PEAK HOUR

7:00 to 8:00 A.M.

VEHICLES

Motorcycles	54	15
Buses	19	3
Vanpools	10	6
Carpools ⁽¹⁾	166	78
Total HOV	249	102
1 Occupancy	6769	2580
2 Occupancy	808	296
TOTAL	7826	2978

PERSONS

Motorcycles	54	15
Buses	665	105
Vanpools	100	60
Carpools ⁽¹⁾	515	242
Total HOV	1334	422
1 Occupancy	6769	2580
2 Occupancy	1616	592
TOTAL	9719	3594

RATES

HOV Occupancy Rate	5.4 persons/veh	4.1 persons/veh
Overall occupancy (incl. buses)	1.2 persons/veh	1.2 persons/veh

- NOTES:** (1) 3 or more persons per vehicle & 2 - seater vehicles with 2 persons.
(2) HOV operation hours from 5:00 to 10:00 AM.
(3) Observations conducted 5/4/06 at Benicia Bridge Toll Plaza.

HOV TOLL GATE

Benicia-Martinez Bridge Toll Plaza

SOLANO - 680

Northbound P.M.

Typical data for 2006 ⁽³⁾

PEAK PERIOD ⁽²⁾

3:00 to 6:00 P.M.

PEAK HOUR

4:00 to 5:00 P.M.

VEHICLES

Motorcycles	60	23
Buses	14	3
Vanpools	22	3
Carpools ⁽¹⁾	230	64
Total HOV	326	93
1 Occupancy	10729	3841
2 Occupancy	1464	325
TOTAL	12519	4259

PERSONS

Motorcycles	60	23
Buses	490	105
Vanpools	220	30
Carpools ⁽¹⁾	713	198
Total HOV	1483	356
1 Occupancy	10729	3841
2 Occupancy	2928	650
TOTAL	15140	4847

RATES

HOV Occupancy Rate	4.5 persons/veh	3.8 persons/veh
Overall occupancy (incl. buses)	1.2 persons/veh	1.1 persons/veh

- NOTES:** (1) 3 or more persons per vehicle & 2 - seater vehicles with 2 persons.
(2) HOV operation hours from 3:00 to 7:00 PM.
(3) Observations conducted 11/1/06 at Benicia Bridge Toll Plaza.