

2011 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 2011. 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. The intent of this HOV lane monitoring report is to compile statistics and measurements of collected data. This report should not be construed to be a conclusion on the performance of HOV lanes. In the future this report will be known as the Bay Area Managed Lanes report, as the report will include information and data on HOV Lanes along with Express Lanes. Managed Lanes are lanes that are proactively managed in response to changing operating conditions in efforts to achieve improved efficiency and performance.

Major changes in 2011:

- A new section of HOV lane on Interstate 80 from west of State Route 4 to Cummings Skyway in Contra Costa County opened to traffic in the eastbound direction on May 27, 2011. The limits of the HOV lane now extend from the I-880 viaduct to Cummings Skyway, a distance of 18.7 miles.
- A new section of HOV lane on Interstate 680 from Rudgear Rd. to Livorna Rd. in Contra Costa County opened to traffic in the southbound direction on November 11, 2011. The limits of the HOV lane now extend from Rudgear Rd. to Alcosta Blvd., a distance of 12.9 miles.
- An HOV lane on U.S. 101, in Sonoma County, opened to traffic on December 5, 2011. The limits of the HOV lane in the northbound direction are from Old Redwood Highway to State Route 116 and in the southbound direction are from Rohnert Park Expressway to Old Redwood Highway, a distance of 5.8 miles.

HOV Report Website: This report is available at www.dot.ca.gov/dist4/.

ACKNOWLEDGMENTS: The following Caltrans personnel contributed to the preparation of this report:

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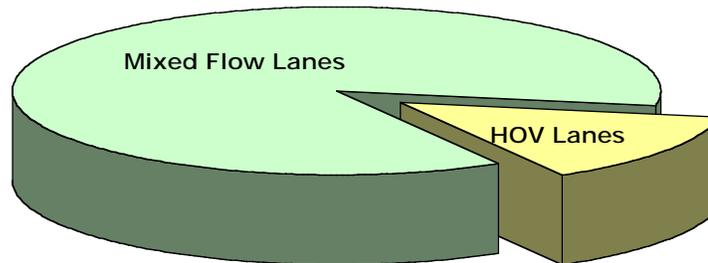
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COMPARISON OF HOV LANES VS. MIXED FLOW LANES (Peak-Hour)

VEHICLES

(* 196,820 - vehicles per hour)

86%—



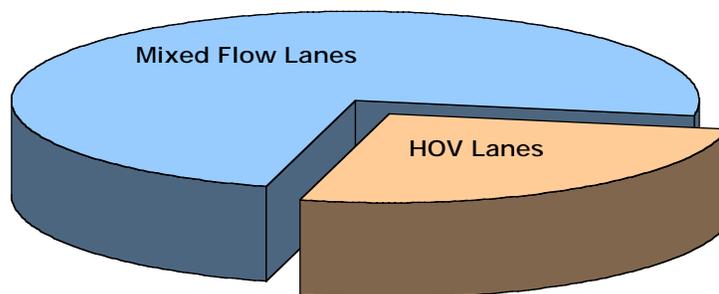
—14%

(* 31,390- vehicles per hour)

PEOPLE

(* 225,310 - persons per hour)

74%—



—26%

(* 80,880 - 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.*

**Approximately only 60% of the count locations are included in this data compared to the 2010 data*

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EXISTING MAINLINE HOV LANES

Route	Dir	Limits	Lane-miles	Min. occ.	Period of operation*	
ALA-80	W/B	Bay Bridge Toll Plaza	1.1	3+	5-10 AM	3-7 PM
ALA-80	W/B	Contra Costa Co. Line to Powell St.	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	I-880 to Dumbarton Bridge Toll Plaza	2.8	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-580	E/B	Hacienda Dr to Greenville Rd	10.4	2+	5-9 AM	3-7 PM
ALA-680	S/B	Route 84 to SCL County Line ^	11.2	2+	5:00 AM - 8:00 PM	
ALA-880	S/B	Marina Blvd to Santa Clara Co. Line	22.5	2+	5-9 AM	3-7 PM
	N/B	Santa Clara Co. Line to South of Rte 238 I/C	19.1	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+	5-9 AM	
	E/B	Port Chicago Hwy to Railroad Ave.	7.3	2+	3-7 PM	
CC-80	W/B	Solano Co. Line to Alameda Co. Line	14.1	3+	5-10 AM	3-7 PM
	E/B	Alameda Co. Line to Cummings Skyway	12.9	3+	5-10 AM	3-7 PM
CC-680	N/B	Benicia-Martinez Bridge Toll Plaza	1.0	3+	5-10 AM	3-7 PM
CC-680	S/B	Marina Vista to N/O N. Main St.	7.8	2+	5-9 AM	3-7 PM
	N/B	Route 242 to Marina Vista I/C	4.4	2+	5-9 AM	3-7 PM
CC-680	S/B	Rudgear Rd to Alcosta Blvd	12.9	2+	5-9 AM	3-7 PM
	N/B	Alcosta Blvd to Livorna Rd	11.9	2+	5-9 AM	3-7 PM
MRN-101	S/B	Route 37 to Richardson Bridge	14.1	2+	6:30-8:30 AM	
	N/B	Richardson Bridge to Route 37	14.4	2+	4:30-7 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 Route 85 I/C	9.6	2+	5-9 AM	3-7 PM
	NB	Route 85 I/C to Route 101 I/C	9.2	2+	5-9 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	34.8	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-680	S/B	ALA Co. Line to Rte 237 Calaveras Blvd. ^	2.3	2+	5:00 AM - 8:00 PM	
SCL-880	S/B	Alameda Co. Line to I-880/SR 237 Junction	2.0	2+	5-9 AM	3-7 PM
	N/B	I-880/SR 237 Junction to Alameda Co. Line	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	W/B	Route 29 to Contra Costa Co. Line	0.9	3+	5-10 AM	3-7 PM
	E/B	Carquinez Bridge Toll Plaza	0.1	3+	5-10 AM	3-7 PM
SOL-80	W/B	East of Airbase Parkway to Red Top Rd	8.1	2+	5-10 AM	3-7 PM
	E/B	Red Top Rd to East of Airbase Parkway	8.2	2+	5-10 AM	3-7 PM
SON-101	S/B	Rohnert Park Exp to Old Redwood Hwy	5.7	2+	7-9 AM	3-6:30 PM
	N/B	Old Redwood Hwy to Rohnert Park Exp	5.8	2+	7-9 AM	3-6:30 PM
SON-101	S/B	Windsor River Road to Wilfred Avenue	13.8	2+	7-9 AM	3-6:30 PM
	N/B	Wilfred Avenue to Windsor River Road	13.6	2+	7-9 AM	3-6:30 PM
TOTAL EXISTING LANE-MILES			437.7			

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

^ Express Lane

METERED ON-RAMPS with HOV BYPASS LANES

Route	Dir	Ramp	Hours	HOVL metered?	HOVL Date opened	Notes
ALA-580	EB	Isabel Avenue Diagonal	24 hrs	Yes	Nov 16, 2011	7 days/week
ALA-580	EB	Isabel Avenue Loop	24 hrs	Yes	Nov 16, 2011	7 days/week
ALA-580	EB	Airway Boulevard Loop	24 hrs	Yes	Jan 22, 2008	7 days/week
ALA-580	EB	El Charro Road diagonal	24 hrs	Yes	Nov 17, 2009	7 days/week
ALA-580	EB	El Charro Road Loop	24 hrs	Yes	Oct 7, 2009	7 days/week
ALA-580	EB	N/B Hacienda diagonal	24 hrs	Yes	Jun 30, 2003	7 days/week
ALA-580	EB	Hopyard Road Loop	24 hrs	Yes	Jun 30, 2003	7 days/week
ALA-580	EB	San Ramon/Foothill Blvd NB diag	24 hrs	Yes	Jan 22, 2008	7 days/week
ALA-580	WB	Isabel Avenue Diagonal	24 hrs	Yes	Nov 16, 2011	7 days/week
ALA-580	WB	Isabel Avenue Loop	24 hrs	Yes	Nov 16, 2011	7 days/week
ALA-580	WB	Airway Boulevard Loop	24 hrs	Yes	Sep 16, 2008	7 days/week
ALA-580	WB	Airway Boulevard Diagonal	24 hrs	Yes	Sep 16, 2008	7 days/week
ALA-580	WB	Fallon Road Loop	24 hrs	Yes	Nov 23, 2009	7 days/week
ALA-580	WB	Fallon Road Diagonal	24 hrs	Yes	Nov 23, 2009	7 days/week
ALA-580	WB	S/B Santa Rita Rd Diagonal	24 hrs	Yes	Sep 16, 2008	7 days/week
ALA-580	WB	NB Hacienda Dr. Loop	24 hrs	Yes	Sep 16, 2008	7 days/week
ALA-580	WB	SB Hacienda Dr Diagonal	24 hrs	Yes	Sep 16, 2008	7 days/week
ALA-580	WB	Hopyard Road Loop	24 hrs	Yes	Sep 16, 2008	7 days/week
ALA-580	WB	Hopyard Road Diagonal	24 hrs	Yes	Sep 16, 2008	7 days/week
ALA-580	WB	San Ramon/Foothill Blvd SB diag	24 hrs	Yes	Sep 16, 2008	7 days/week
ALA-880	NB	Dixon Landing diagonal	24 hrs	Yes	Mar 30, 2004	7 days/week
ALA-880	NB	Warren Avenue loop	24 hrs	Yes	May 25, 2010	7 days/week
ALA-880	NB	s/b Mission Blvd.(Rte262)	24 hrs	Yes	May 25, 2010	7 days/week
ALA-880	NB	Fremont Blvd loop	24 hrs	Yes	Oct 20, 1999	7 days/week
ALA-880	NB	Auto Mall Pkwy(Durham) loop	24 hrs	Yes	Oct 20, 1999	7 days/week
ALA-880	NB	Auto Mall Pkwy(Durham)diag	24 hrs	Yes	Oct 20, 1999	7 days/week
ALA-880	NB	Stevenson Blvd. diagonal	24 hrs	Yes	Oct 20, 1999	7 days/week
ALA-880	NB	E/B Mowry Ave loop	24 hrs	Yes	Oct 20, 1999	7 days/week
ALA-880	NB	Thornton Ave loop	24 hrs	Yes	Oct 20, 1999	7 days/week
ALA-880	NB	Thornton Ave diagonal	24 hrs	Yes	Oct 20, 1999	7 days/week
ALA-880	NB	Alvarado-Fremont Blvd diag	24 hrs	Yes	Oct 20, 1999	7 days/week
ALA-880	NB	Alvarado-Niles Rd diagonal	24 hrs	Yes	Oct 20, 1999	7 days/week
ALA-880	NB	Industrial Parkway diagonal	24 hrs	Yes	Dec 3, 1996	7 days/week
ALA-880	NB	Tennyson Rd diag	24 hrs	Yes	Dec 3, 1996	7 days/week
ALA-880	NB	Route 92 EB Connector	24 hrs	Yes	Nov 8, 2011	7 days/week
ALA-880	NB	West A-Street diag	24 hrs	Yes	Dec 3, 1996	7 days/week
ALA-880	NB	Lewelling Blvd diagonal	24 hrs	Yes	Apr 28, 1999	7 days/week

- NOTES:**
- (a) Minimum occupancy requirement for all HOV bypass lanes is two persons per vehicle.
 - (b) Motorcycles and inherently low-emission vehicles (ILEVs) and hybrids with DMV issued decal are permitted

METERED ON-RAMPS with HOV BYPASS LANES

Route	Dir	Ramp	Hours	HOVL metered?	HOVL Date opened	Notes
ALA-880	NB	98th Ave loop	24 hrs	Yes	Apr 28, 1999	7 days/week
ALA-880	NB	E/B 23rd Ave. diag	24 hrs	Yes	Apr 28, 1999	7 days/week
ALA-880	SB	Dixon Landing Loop	24hrs	Yes	Mar 30, 2004	7 days/week
ALA-880	SB	Mission Blvd connector	24hrs	Yes	May 25, 2010	7 days/week
ALA-880	SB	Warren Avenue loop	24hrs	Yes	May 25, 2010	7 days/week
ALA-880	SB	Fremont Blvd. diag	24 hrs	Yes	Oct 19, 1999	7 days/week
ALA-880	SB	Fremont Blvd. loop	24 hrs	Yes	Oct 19, 1999	7 days/week
ALA-880	SB	Auto Mall Pkwy(Durham)Diag	24 hrs	Yes	Oct 19, 1999	7 days/week
ALA-880	SB	Auto Mall Pkwy(Durham)loop	24 hrs	Yes	Oct 19, 1999	7 days/week
ALA-880	SB	W/B Mowry Ave loop	24 hrs	Yes	Oct 19, 1999	7 days/week
ALA-880	SB	Thornton Ave. diagonal	24 hrs	Yes	Oct 19, 1999	7 days/week
ALA-880	SB	Thornton Ave. loop	24 hrs	Yes	Oct 19, 1999	7 days/week
ALA-880	SB	Alvarado-Fremont Blvd diag	24 hrs	Yes	Oct 19, 1999	7 days/week
ALA-880	SB	Alvarado-Niles Rd diagonal	24 hrs	Yes	Oct 19, 1999	7 days/week
ALA-880	SB	Alvarado-Niles Rd loop	24 hrs	Yes	Oct 19, 1999	7 days/week
ALA-880	SB	Whipple Rd diag	24 hrs	Yes	Oct 29, 1996	7 days/week
ALA-880	SB	Tennyson Rd diag	24 hrs	Yes	Oct 29, 1996	7 days/week
ALA-880	SB	Route 92 (Jackson)wb	24 hrs	Yes	Nov 8, 2011	7 days/week
ALA-880	SB	Winton Ave diag	24 hrs	Yes	Oct 29, 1996	7 days/week
ALA-880	SB	West A-Street diag	24 hrs	Yes	Oct 29, 1996	7 days/week
ALA-880	SB	E/B Davis St(Route 112) diag	24 hrs	Yes	Apr 27, 1999	7 days/week
ALA-880	SB	W/B Davis St(Route 112)loop	24 hrs	Yes	Apr 27, 1999	7 days/week
ALA-880	SB	98th Ave diagonal	24 hrs	Yes	Apr 27, 1999	7 days/week
ALA-880	SB	Hegenberger diagonal	24 hrs	Yes	Apr 27, 1999	7 days/week
ALA-880	SB	Oak St. diagonal	24 hrs	Yes	Apr 27, 1999	7 days/week
SCL-17	NB	Camden Ave diag	24 hrs	Yes	May 11, 2007	7 days/week

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	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-85	NB	Almaden Expwy 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-87	NB	Rte 85 SB Connector	24 hrs	Yes	Jan 13, 2009	7 days/week
SCL-87	NB	Curtner Ave diag	24 hrs	Yes	Mar 16, 2007	7 days/week
SCL-87	NB	Almaden Expwy diag	24 hrs	Yes	May 11, 2007	7 days/week
SCL-87	NB	Lelong St diag	24 hrs	Yes	May 11, 2007	7 days/week
SCL-87	NB	Park Avenue diag	24 hrs	Yes	Jan 13, 2009	7 days/week
SCL-87	NB	Julian St diag	24 hrs	Yes	Jan 13, 2009	7 days/week
SCL-87	NB	Taylor St. diag	24 hrs	Yes	Jan 13, 2009	7 days/week
SCL-87	NB	Skyport Blvd diag	24 hrs	Yes	Jan 13, 2009	7 days/week
SCL-87	SB	Auzerias Ave/Delma St diag	24 hrs	Yes	Apr 7, 2009	7 days/week
SCL-87	SB	EB Julian St diag	24 hrs	Yes	Apr 7, 2009	7 days/week
SCL-87	SB	Taylor St. diag	24 hrs	Yes	Apr 7, 2009	7 days/week
SCL-87	SB	Skyport Blvd diag	24 hrs	Yes	Apr 7, 2009	7 days/week

METERED ON-RAMPS with HOV BYPASS LANES

Route	Dir	Ramp	Hours	HOVL metered?	HOVL Date opened	Notes
SCL-101	NB	Bernal Rd diagonal	24 hrs	Yes	Aug 1, 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	Yes	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	Yes	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	SB	Bernal Rd diagonal	24 hrs	Yes	Aug 1, 2005	7 days/week
SCL-101	SB	Blossom Hill diag	24 hrs	Yes	Jun 23, 1992	7 days/week
SCL-101	SB	Capitol Expwy diag	24 hrs	Yes	Jul 11, 1997	7 days/week
SCL-101	SB	SB Rte 680 connector	5:30-9am	Yes	Sep 2, 1982	Monday - Friday
SCL-101	SB	Guadalupe Pkwy connector	5:30-9am	Yes	Feb 12, 1980	Monday - Friday
SCL-101	SB	Trimble Rd diag	24 hrs	Yes	Nov 1, 1991	7 days/week
SCL-101	SB	San Tomas Expwy loop	5:30-9am	Yes	Feb 12, 1980	Monday - Friday
SCL-101	SB	Montague Expwy diag	24 hrs	Yes	Feb 12, 1980	7 days/week
SCL-101	SB	Lawrence Expwy (nb) loop	24 hrs	Yes	Mar 8, 1999	7 days/week
SCL-101	SB	Lawrence Expwy (sb)diag	24 hrs	Yes	Mar 8, 1999	7 days/week
SCL-101	SB	De La Cruz Blvd. Diag	24 hrs	Yes	Nov 9, 2009	7 days/week
SCL-101	SB	Trimble Rd loop	24 hrs	Yes	Nov 9, 2009	7 days/week
SCL-101	SB	Montague Expwy diag	24 hrs	Yes	Nov 9, 2009	7 days/week
SCL-101	SB	Montague Expwy loop	24 hrs	Yes	Nov 9, 2009	7 days/week
SCL-101	SB	Bowers Ave Diag.	24 hrs	Yes	Nov 9, 2009	7 days/week
SCL-101	SB	Great America Pkwy Loop	24 hrs	Yes	Nov 9, 2009	7 days/week
SCL-101	SB	Lawrence Expwy Diag	24 hrs	Yes	Nov 9, 2009	7 days/week
SCL-101	SB	Lawrence Expwy Loop	24 hrs	Yes	Nov 9, 2009	7 days/week
SCL-101	SB	Fair Oaks Ave. Diag	24 hrs	Yes	Nov 9, 2009	7 days/week
SCL-101	SB	Fair Oaks Ave. Loop	24 hrs	Yes	Nov 9, 2009	7 days/week
SCL-101	SB	Mathilda Ave. Diag	24 hrs	Yes	Nov 9, 2009	7 days/week
SCL-101	SB	Mathilda Ave. Loop	24 hrs	Yes	Nov 9, 2009	7 days/week
SCL-101	SB	Ellis Street Diag	24 hrs	Yes	Nov 9, 2009	7 days/week
SCL-101	SB	Moffet Blvd. Diag	24 hrs	Yes	Nov 9, 2009	7 days/week
SCL-101	SB	Shoreline Blvd. Diag	24 hrs	Yes	Nov 9, 2009	7 days/week
SCL-101	SB	Rengstorff Ave. Diag	24 hrs	Yes	Nov 9, 2009	7 days/week
SCL-101	SB	Oregon Xpwy. Diag	24 hrs	Yes	Nov 9, 2009	7 days/week
SCL-101	SB	Embarcadero Ro. Loop	24 hrs	Yes	Nov 9, 2009	7 days/week
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

METERED ON-RAMPS with HOV BYPASS LANE

Route	Dir	Ramp	Hours	HOVL metered?	HOVL Date opened	Notes
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	SB	SB Coleman Ave diag	24 hrs	Yes	Jul 27, 2007	7 days/week
SCL-880	SB	NB Coleman Ave loop	24hrs	Yes	Jul 27, 2007	7 days/week
SCL-880	SB	Airport Blvd (SJ Airport) diag	24 hrs	Yes	Feb 23, 2011	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
SM-101	NB	SB Marsh Rd diag	24 hrs	Yes	Feb 27, 2007	7 days/week
SM-101	NB	SB Woodside diag	24 hrs	Yes	Feb 27, 2007	7 days/week
SM-101	NB	EB Holly St collector	24 hrs	Yes	Feb 27, 2007	7 days/week
SM-101	NB	WB Holly St diag	24 hrs	Yes	Feb 27, 2007	7 days/week
SM-101	NB	EB Ralston/Marine collector	24 hrs	Yes	Feb 27, 2007	7 days/week
SM-101	NB	WB Ralston/Marine diag	24 hrs	Yes	Feb 27, 2007	7 days/week
SM-101	NB	EB Hillsdale Blvd loop	24 hrs	No	Feb 27, 2007	7 days/week
SM-101	SB	NB Marsh Rd diag	24 hrs	Yes	Jan 30, 2007	7 days/week
SM-101	SB	NB Woodside diag	24 hrs	Yes	Jan 30, 2007	7 days/week
SM-101	SB	EB Whipple Ave diag	24 hrs	Yes	Jan 30, 2007	7 days/week
SM-101	SB	Ralston-Harbor collector	24 hrs	Yes	Jan 30, 2007	7 days/week
SM-280	NB	Westborough Blvd. diag	24 hrs	Yes	Aug 30, 2011	7 days/week
SM-280	SB	Avalon Drive diagonal	24 hrs	Yes	Oct 21, 2008	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, trucks and inherently low-emission vehicles (ILEVs) and hybrids with DMV issued decal are permitted.*

MAINLINE HOV LANES UNDER CONSTRUCTION

Estimated Opening	County Route	Location	Lane Miles	Min. Occ.
2013	CC-4	Loveridge Rd. to Somersville Rd.	4.2	2+
2015	CC-4	Somersville Rd. to Contra Loma Blvd.	1.0	2+
2012	MRN-101	Route 37 to Atherton Ave.	5.9	2+
2012	SON-101	Rohnert Park Expwy to Wilfred Ave.	3.7	2+

TOTAL LANE-MILES UNDER CONSTRUCTION 14.8

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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**
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HOV LANE PEAK HOUR VOLUMES

			A.M.	P.M.
			Peak Hr (veh)	Peak Hr (veh)
ALA-80	WB	Bay Bridge Toll Plaza	3462	650
ALA-80	WB	Contra Costa Co. Line to Powell St	N/A	N/A
	EB	I 880 Viaduct to Contra Costa Co. Line	N/A	N/A
ALA-80	WB	HOV FLYOVER	N/A	274
ALA-84	WB	I-880 to Dumbarton Bridge Toll Plaza	N/A	119
ALA-92	WB	Hesperian Blvd to San Mateo Bridge Toll Plaza	933	344
ALA-580	EB	Hacienda Dr. to N. Livermore Ave.	N/A	784
		N. Livermore Ave to Greenville Rd	N/A	721
ALA-680	SB	Route 84 to ALA/SCL Co. Line ^	967	236
ALA-880	SB	Marina Blvd to Whipple Road	N/A	N/A
		Whipple Road to SCL County Line	977	768
	NB	SCL County Line to Whipple Road	N/A	820
		Whipple Road to South of Rte 238 I/C	N/A	1090
ALA-880	NB	16th St to SFOBB Toll Plaza	N/A	N/A
CC-04	WB	Loveridge Road to Port Chicago Hwy	N/A	**
	EB	Port Chicago Hwy to Railroad Ave.	**	N/A
CC-80	WB	Solano Co. Line to Route 4	629	N/A
		Route 4 to Alameda Co. Line	N/A	N/A
	EB	Alameda Co. Line to Route 4	N/A	1240
		Route 4 to Cummings Skyway	N/A	N/A
CC-680	N/B	Benicia-Martinez Bridge Toll Plaza	N/A	N/A
CC-680	SB	Marina Vista I/C to N/O North Main St	N/A	432
	NB	Route 242 to Marina Vista I/C	N/A	410
CC-680	SB	Rudgear Rd. to Alcosta Blvd.	1183	759
	NB	Alcosta Blvd. to Livorna Rd.	759	1107
MRN-101	SB	Route 37 to Mission Avenue	1174	**
		Mission Avenue to Richardson Bridge	829	**
	NB	Richardson Bridge to Mission Avenue	**	1276
		Mission Avenue to Route 37	**	1001
SCL-85	SB	Rte 101 (Mountain View) to Rte 280	N/A	914
		Rte 280 to Almaden Expwy	N/A	761
		Almaden Expwy to Rte 101 (So. San Jose)	N/A	353
	NB	Rte 101 (So. San Jose) to Almaden Expwy	N/A	N/A
		Almaden Expwy to Rte 280	N/A	N/A
		Rte 280 to Rte 101 (Mountain View)	N/A	N/A
SCL-87	SB	Route 101 I/C to Route 280 I/C	N/A	320
		Route 280 I/C to Route 85/87 Jct	N/A	427
	NB	Route 85/87 Jct to Route 280 I/C	N/A	N/A
		Route 280 I/C to Route 101 I/C	N/A	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	N/A	N/A
		Ellis St to Guadalupe Pkwy	N/A	N/A
		Guadalupe Pkwy to 101/280/680 I/C	N/A	N/A
		101/280/680 I/C to Bernal Rd	N/A	N/A
		Bernal Rd to Cochrane Rd	N/A	N/A
	NB	Cochrane Road to Bernal Road	N/A	N/A
		Bernal Rd to 101/280/680 I/C	N/A	N/A
		101/280/680 I/C to Guadalupe Pkwy	N/A	N/A
		Guadalupe Pkwy to Ellis St	N/A	N/A
		Ellis St to San Mateo Co. Line	N/A	N/A
SCL-237	WB	Rte 880/237Jct to Mathilda Ave	565	398
	EB	Mathilda Ave to Rte 880/237 Jct.	184	579
SCL-280	SB	Magdalena Ave to Leland Ave	N/A	N/A
	NB	Leland Ave to Magdalena Ave	N/A	N/A
SCL-680	SB	ALA/SCL Co. Line to Route 237 ^	N/A	N/A
SCL-880	SB	Alameda Co. Line to I 880/SR237 Junction	~	~
	NB	I 880/SR237 Junction to Alameda Co. Line	~	~
SM-101	SB	Whipple Ave to Santa Clara Co. Line	N/A	N/A
	NB	Santa Clara Co. Line to Whipple Ave	N/A	N/A
SOL-80	WB	Route 29 to Contra Costa County Line	N/A	N/A
	EB	Carquinez Bridge Toll Plaza	N/A	675
SOL-80	WB	Airbase Parkway to Red Top Rd	392	303
	EB	Red Top Rd to Airbase Parkway	162	419
SON-101	SB	Rohnert Park Exp to Old Redwood Hwy	351	N/A
	NB	Old Redwood Hwy to Rohnert Park Exp.	N/A	609
SON-101	SB	Windsor River Road to Route 12	307	481
		Route 12 to Wilfred Avenue	357	671
	NB	Wilfred Avenue to Route 12	342	665
		Route 12 to Windsor River Road	363	526

Notes:

N/A : Due to resource shortfall 2011 data is not available.

** HOVL not in operation during this Peak Period.

~ Data collection location not available within these limits

^ Express Lane

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	44%	56%	70%	30%	18	2%
			PM	8%	92%	25%	75%	18	4%
ALA-80	WB	Contra Costa Co. Line to Powell Street	AM	N/A	N/A	N/A	N/A	4	N/A
			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	N/A	N/A	N/A	N/A	4	N/A
ALA-84	WB	I-880 to Dumbarton Bridge Toll Plaza	AM	N/A	N/A	N/A	N/A	3	N/A
			PM	10%	90%	26%	74%	3	25%
ALA-92	WB	Hesperian Blvd to San Mateo Bridge Toll Plaza	AM	19%	81%	32%	68%	3	23%
			PM	13%	87%	26%	74%	3	25%
ALA-580	EB	Hacienda Dr. to N. Livermore Ave.	AM	N/A	N/A	N/A	N/A	3	N/A
			PM	10%	90%	19%	81%	3	27%
		N. Livermore Ave to Greenville Rd	AM	N/A	N/A	N/A	N/A	3	N/A
			PM	17%	83%	30%	70%	3	23%
ALA-680	SB	Route 84 to ALA/SCL Co. Line^	AM	12%	88%	18%	82%	3	27%
			PM	7%	93%	9%	91%	3	30%
ALA-880	SB	Marina Blvd to Whipple Rd	AM	N/A	N/A	N/A	N/A	3	N/A
			PM	N/A	N/A	N/A	N/A	3	N/A
		Whipple Rd to Santa Clara Co. Line	AM	20%	80%	34%	66%	3	22%
			PM	14%	86%	25%	75%	3	25%
	NB	Santa Clara Co. Line to Whipple Rd	AM	N/A	N/A	N/A	N/A	3	N/A
			PM	19%	81%	32%	68%	3	23%
		Whipple Rd to South of Rte 238 I/C	AM	N/A	N/A	N/A	N/A	3	N/A
			PM	22%	78%	35%	65%	3	22%
ALA-880	NB	16th Street to SFOBB	AM	N/A	N/A	N/A	N/A	2	N/A
			PM	N/A	N/A	N/A	N/A	2	N/A
CC-04	WB	Loveridge Road to Port Chicago Hwy	AM	N/A	N/A	N/A	N/A	3	N/A
			PM	N/A	N/A	N/A	N/A	3	N/A
CC-80	WB	Solano Co. Line to Route 4	AM	15%	85%	31%	69%	3	23%
			PM	N/A	N/A	N/A	N/A	3	N/A
		Route 4 to Alameda Co. Line	AM	N/A	N/A	N/A	N/A	3	N/A
			PM	N/A	N/A	N/A	N/A	3	N/A
	EB	Alameda Co. Line to Route 4	AM	N/A	N/A	N/A	N/A	3	N/A
			PM	19%	81%	40%	60%	3	20%
		Route 4 to Cummings Skyway	AM	N/A	N/A	N/A	N/A	3	N/A
			PM	N/A	N/A	N/A	N/A	3	N/A
CC-680	NB	Benicia-Martinez Bridge Toll Plaza EB	AM	N/A	N/A	N/A	N/A	11	N/A
			PM	N/A	N/A	N/A	N/A	11	N/A
CC-680	SB	Marina Vista I/C to N/O North Main St	AM	N/A	N/A	N/A	N/A	5	N/A
			PM	6%	94%	11%	89%	5	18%
	NB	Route 242 to Marina Vista I/C	AM	N/A	N/A	N/A	N/A	4	N/A
			PM	11%	89%	20%	80%	4	20%
CC-680	SB	Rudgear Rd to Alcosta Blvd	AM	21%	79%	36%	64%	3	21%
			PM	13%	80%	21%	79%	3	26%
	NB	Alcosta Blvd to Livorna Rd	AM	14%	86%	26%	74%	3	25%
			PM	20%	80%	37%	63%	3	21%
MRN-101	SB	Route 37 to Mission Avenue	AM	18%	82%	33%	67%	3	22%
			PM	23%	77%	41%	59%	3	20%
	NB	Richardson Bridge to Mission Avenue	AM	20%	80%	36%	64%	3	21%
			PM	13%	87%	25%	75%	3	25%
SCL-85	SB	Rte 101 (Mtn View) to Rte 280	AM	N/A	N/A	N/A	N/A	2	N/A
			PM	26%	74%	43%	57%	2	29%
		Rte 280 to Almaden Expwy	AM	N/A	N/A	N/A	N/A	2	N/A
			PM	13%	87%	23%	77%	2	38%
		Almaden Expwy to Rte 101 (So. San Jose)	AM	N/A	N/A	N/A	N/A	2	N/A
			PM	7%	93%	11%	89%	2	44%
	NB	Rte 101 (So. San Jose) to Almaden Expwy	AM	N/A	N/A	N/A	N/A	2	N/A
			PM	N/A	N/A	N/A	N/A	2	N/A
		Almaden Expwy to Rte 280	AM	N/A	N/A	N/A	N/A	2	N/A
			PM	N/A	N/A	N/A	N/A	2	N/A
		Rte 280 to Rte 101 (Mtn View)	AM	N/A	N/A	N/A	N/A	2	N/A
			PM	N/A	N/A	N/A	N/A	2	N/A

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-87	SB	Route 101 I/C to Route 280 I/C	AM	N/A	N/A	N/A	N/A	2	N/A
			PM	7%	93%	13%	87%	2	43%
		Route 280 I/C to Route 85/87 Jct	AM	N/A	N/A	N/A	N/A	2	N/A
			PM	8%	92%	13%	87%	2	44%
	NB	Route 85/87 Jct to Route 280 I/C	AM	N/A	N/A	N/A	N/A	2	N/A
			PM	N/A	N/A	N/A	N/A	2	N/A
	Route 280 I/C to Route 101 I/C	AM	N/A	N/A	N/A	N/A	2	N/A	
		PM	N/A	N/A	N/A	N/A	2	N/A	
SCL-101	SB	San Mateo Co. Line to Ellis St	AM	N/A	N/A	N/A	N/A	3	N/A
			PM	N/A	N/A	N/A	N/A	3	N/A
		Ellis St to Guadalupe Pkwy	AM	N/A	N/A	N/A	N/A	3	N/A
			PM	N/A	N/A	N/A	N/A	3	N/A
		Guadalupe Pkwy to 101/280/680 I/C	AM	N/A	N/A	N/A	N/A	3	N/A
			PM	N/A	N/A	N/A	N/A	3	N/A
		101/280/680 I/C to Bernal Rd	AM	N/A	N/A	N/A	N/A	3	N/A
			PM	N/A	N/A	N/A	N/A	3	N/A
		Bernal Rd to Cochrane Rd	AM	N/A	N/A	N/A	N/A	3	N/A
			PM	N/A	N/A	N/A	N/A	3	N/A
	NB	Cochrane Rd to Bernal Road	AM	N/A	N/A	N/A	N/A	3	N/A
			PM	N/A	N/A	N/A	N/A	3	N/A
		Bernal Rd to 101/280/680 I/C	AM	N/A	N/A	N/A	N/A	3	N/A
			PM	N/A	N/A	N/A	N/A	3	N/A
		101/280/680 I/C to Guadalupe Pkwy	AM	N/A	N/A	N/A	N/A	3	N/A
			PM	N/A	N/A	N/A	N/A	3	N/A
		Guadalupe Pkwy to Ellis St	AM	N/A	N/A	N/A	N/A	3	N/A
			PM	N/A	N/A	N/A	N/A	3	N/A
	Ellis St to San Mateo Co. Line	AM	N/A	N/A	N/A	N/A	3	N/A	
		PM	N/A	N/A	N/A	N/A	3	N/A	
SCL-237	WB	880/237 Jct to Mathilda Ave	AM	9%	91%	18%	82%	2	41%
			PM	8%	92%	16%	84%	2	42%
	EB	Mathilda Ave to Rte 880/237 Jct	AM	4%	96%	8%	92%	2	46%
			PM	11%	89%	20%	80%	2	40%
SCL-280	SB	Magdalena Ave to Leland Ave	AM	N/A	N/A	N/A	N/A	3	N/A
			PM	N/A	N/A	N/A	N/A	3	N/A
	NB	Leland Ave to Magdalena Ave	AM	N/A	N/A	N/A	N/A	3	N/A
			PM	N/A	N/A	N/A	N/A	3	N/A
SCL-680	SB	SCL/ALA Co. Line to Route 237	AM	N/A	N/A	N/A	N/A	3	N/A
			PM	N/A	N/A	N/A	N/A	3	N/A
SCL-880	SB	Alameda Co. Line to I 880/SR237 Jct	AM	~	~	~	~	3	~
			PM	~	~	~	~	3	~
	NB	I 880/SR237 Jct to Alameda Co. Line	AM	~	~	~	~	3	~
			PM	~	~	~	~	3	~
SM-101	SB	Whipple Ave to Santa Clara Co. Line	AM	N/A	N/A	N/A	N/A	3	N/A
			PM	N/A	N/A	N/A	N/A	3	N/A
	NB	Santa Clara Co. Line to Whipple Ave	AM	N/A	N/A	N/A	N/A	3	N/A
			PM	N/A	N/A	N/A	N/A	3	N/A

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)
SOL-80	WB	Route 29 to Contra Costa Co. Line	AM	N/A	N/A	N/A	N/A	3	N/A
			PM	N/A	N/A	N/A	N/A	3	N/A
	EB	Carquinez Bridge Toll Plaza	AM	N/A	N/A	N/A	N/A	11	N/A
			PM	16%	84%	36%	64%	11	6%
SOL-80	WB	East of Airbase Pkwy to Red Top Rd	AM	12%	88%	23%	77%	4	19%
			PM	11%	89%	18%	82%	4	20%
	EB	Red Top Rd to East of Airbase Pkwy	AM	6%	94%	22%	78%	4	20%
			PM	10%	90%	16%	84%	4	21%
SON-101	SB	Rohnert Park Exp to Old Redwood Hwy	AM	9%	91%	16%	84%	2	42%
			PM	N/A	N/A	N/A	N/A	2	N/A
	NB	Old Redwood Hwy to Rohnert Park Exp	AM	N/A	N/A	N/A	N/A	2	N/A
			PM	14%	86%	23%	77%	2	38%
SON-101	SB	Windsor River Rd to Route12	AM	10%	90%	18%	82%	2	41%
			PM	14%	86%	25%	75%	2	37%
		Route 12 to Wilfred Avenue	AM	8%	92%	16%	84%	2	42%
			PM	16%	84%	29%	71%	2	36%
	NB	Wilfred Avenue to Route 12	AM	9%	91%	16%	84%	2	42%
			PM	15%	85%	26%	74%	2	37%
		Route 12 to Windsor River Rd	AM	11%	89%	16%	84%	2	42%
			PM	12%	88%	21%	79%	2	40%

* 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 2011 data is not available.

^ Express Lane

HOV LANE PEAK PERIOD VIOLATION RATE SUMMARY

			A.M.	P.M.
ALA-80	WB	Bay Bridge Toll Plaza	10.2%	9.9%
ALA-80	WB	Contra Costa Co. Line to Powell St	N/A	N/A
	EB	I 880 Viaduct to Contra Costa Co. Line	N/A	N/A
ALA-80	WB	HOV FLYOVER RAMP	N/A	14.1%
ALA-84	WB	I-880 to Dumbarton Bridge Toll Plaza	N/A	6.1%
ALA-92	WB	Hesperian Blvd to San Mateo Bridge Toll Plaza	2.4%	1.3%
ALA-580	EB	Hacienda Dr. to N. Livermore Ave.	N/A	0.4%
		N. Livermore Ave to Greenville Road	N/A	3.6%
ALA-680	SB	Route 84 to SCL/ALA Co. Line^	N/A	N/A
ALA-880	SB	Marina Blvd to Whipple Road	N/A	N/A
		Whipple Road to Santa Clara Co. Line	8.3%	1.8%
	NB	Santa Clara Co. Line to Whipple Road	N/A	2.1%
		Whipple Road to South of Rte 238 I/C	N/A	3.3%
ALA-880	NB	16th St to SFOBB Toll Plaza	N/A	N/A
CC-04	WB	Loveridge Road to Port Chicago Hwy.	N/A	**
	EB	Port Chicago Hwy to Railroad Ave	**	N/A
CC-80	WB	Solano Co. Line to Route 4	13.2%	N/A
		Route 4 to Alameda Co. Line	N/A	N/A
	EB	Alameda Co. Line to Rte 4	N/A	16.0%
		Rte 4 to Cummings Skyway	N/A	N/A
CC-680	NB	Benicia-Martinez Bridge Toll Plaza	N/A	N/A
CC-680	SB	Marina Vista to N/O North Main St.	N/A	5.4%
	NB	Route 242 to Marina Vista I/C	N/A	9.4%
CC-680	SB	Rudgear Rd. to Alcosta Blvd.	0.6%	7.5%
	NB	Alcosta Blvd. to Livorna Rd.	11.4%	2.9%
MRN-101	SB	Route 37 to Mission Avenue	0.3%	**
		Mission Avenue to Richardson Bridge	1.4%	**
	NB	Richardson Bridge to Mission Avenue	**	0.2%
		Mission Avenue to Route 37	**	1.0%
SCL-85	SB	Rte 101 (Mountain View) to Rte 280	N/A	2.0%
		Rte 280 to Almaden Expwy	N/A	1.4%
		Almaden Expwy to Rte 101 (So. San Jose)	N/A	1.9%
	NB	Rte 101 (So. San Jose) to Almaden Expwy	N/A	N/A
		Almaden Expwy to Rte 280	N/A	N/A
		Rte 280 to Rte 101 (Mountain View)	N/A	N/A
SCL-87	SB	Route 101 I/C to Route 280	N/A	2.2%
		Route 280 to Route 85/87 Jct	N/A	0.7%
	NB	Route 85/87 Jct to Route 280	N/A	N/A
		Route 280 to Route 101 I/C	N/A	N/A
SCL-101	SB	San Mateo Co. Line to Ellis St	N/A	N/A
		Ellis St to Guadalupe Pkwy	N/A	N/A
		Guadalupe Pkwy to 101/280/680 I/C	N/A	N/A
		101/280/680 I/C to Bernal Rd	N/A	N/A
		Bernal Rd to Cochrane Road	N/A	N/A

HOV LANE PEAK PERIOD VIOLATION RATE SUMMARY

			A.M.	P.M.
	NB	Cochrane Rd to Bernal Rd	N/A	N/A
		Bernal Rd to 101/280/680 I/C	N/A	N/A
		101/280/680 I/C to Guadalupe Pkwy	N/A	N/A
		Guadalupe Pkwy to Ellis St	N/A	N/A
		Ellis St to San Mateo Co. Line	N/A	N/A
SCL-237	WB	880/237 Jct to Mathilda Ave	2.2%	2.1%
	EB	Mathilda Ave to Rte 880/237 Jct.	2.1%	0.8%
SCL-280	SB	Magdalena Ave to Leland Ave	N/A	N/A
	NB	Leland Ave to Magdalena Ave	N/A	N/A
SCL-680	SB	SCL/ALA Co. Line to Route 237	N/A	N/A
SCL-880	SB	Alameda Co. Line to I 880/SR237 Jct	~	~
	NB	I 880/SR237 Jct to Alameda Co. Line	~	~
SM-101	SB	Whipple Ave to Santa Clara Co. Line	N/A	N/A
	NB	Santa Clara Co. Line to Whipple Ave	N/A	N/A
SOL-80	WB	Route 29 to Contra Costa Co. Line	N/A	N/A
	EB	Carquinez Bridge Toll Plaza	N/A	10.5%
SOL-80	WB	Airbase Pkwy to Red Top Rd	0.0%	1.2%
	EB	Red Top Rd to Airbase Pkwy	0.0%	0.4%
SON-101	SB	Rohnert Park Exp to Old Redwood Hwy	2.0%	N/A
	NB	Old Redwood Hwy to Rohnert Park Exp	N/A	1.5%
SON-101	SB	Windsor River Road to Route 12	1.7%	0.6%
		Route 12 to Wilfred Avenue	1.9%	0.8%
	NB	Wilfred Avenue to Route 12	0.6%	0.6%
		Route 12 to Windsor River Road	1.4%	0.2%

N/A: Due to Resource shortfall 2011 data is not available.

~ Data collection location not available within these limits.

** HOV not in operation during this Peak Period

^ Express Lane

HOV LANE PEAK HOUR TIME SAVINGS AND AVERAGE SPEEDS

				Travel Time (minutes)		HOVL	Avg. Speed (mph)	Avg. Speed (mph)
				Non-HOVL	HOVL	Time Saving (minutes)	Non-HOVL	HOVL
ALA-80	WB	Bay Bridge Toll Plaza	AM	N/A	N/A	N/A	N/A	N/A
			PM	N/A	N/A	N/A	N/A	N/A
ALA-80	WB	Contra Costa Co. Line to Powell St	AM	N/A	N/A	N/A	N/A	N/A
			PM	N/A	N/A	N/A	N/A	N/A
	EB	I 880 Viaduct to Contra Costa Co. Line	AM	N/A	N/A	N/A	N/A	N/A
			PM	N/A	N/A	N/A	N/A	N/A
ALA-80	WB	HOV FLYOVER RAMP	AM	N/A	N/A	N/A	N/A	N/A
			PM	N/A	N/A	N/A	N/A	N/A
ALA-84	WB	I-880 to Dumbarton Bridge Toll Plaza	AM	4	2	2	38	65
			PM	2	2	0	65	65
ALA-92	WB	Hesperian Blvd to San Mateo Bridge Toll Plaza	AM	6	2	4	26	65
			PM	3	2	1	54	65
ALA-580	EB	Hacienda Dr. to Greenville Rd	AM	10	10	0	65	65
			PM	14	10	4	47	65
ALA-680	SB	Route 84 to ALA/SCL Co. Line ^	AM	16	12	4	49	65
			PM	12	12	0	65	65
ALA-880	SB	Marina Blvd. to Whipple Road	AM	23	13	10	23	41
			PM	14	13	1	39	41
		Whipple Road to Santa Clara Co. Line	AM	25	12	13	32	65
			PM	15	12	3	53	65
	NB	Santa Clara Co. Line to Whipple Road	AM	15	12	3	54	65
			PM	28	12	16	29	65
		Whipple Road to South of Rte 238 I/C	AM	12	5	7	27	65
			PM	13	5	8	25	65
ALA-880	NB	16th St to SFOBB Toll Plaza	AM	N/A	N/A	N/A	N/A	N/A
			PM	N/A	N/A	N/A	N/A	N/A
CC-04	WB	Loveridge Rd. to Port Chicago Hwy	AM	N/A	N/A	N/A	N/A	N/A
	EB	Port Chicago Hwy to West of Railroad Ave.	PM	N/A	N/A	N/A	N/A	N/A
CC-80	WB	Solano Co. Line to Route 4	AM	N/A	N/A	N/A	N/A	N/A
			PM	N/A	N/A	N/A	N/A	N/A
		Route 4 to Alameda Co. Line	AM	N/A	N/A	N/A	N/A	N/A
			PM	N/A	N/A	N/A	N/A	N/A
	EB	Alameda Co. Line to Rte 4	AM	N/A	N/A	N/A	N/A	N/A
			PM	N/A	N/A	N/A	N/A	N/A
		Route 4 to Cummings Skyway	AM	N/A	N/A	N/A	N/A	N/A
			PM	N/A	N/A	N/A	N/A	N/A
CC-680	NB	N/O Marina Vista I/C to Benicia Bridge Toll Plaza	AM	4	1	3	8	65
			PM	5	1	4	7	65
CC-680	SB	Marina Vista I/C to N/O North Main St	AM	14	7	7	33	65
			PM	7	7	0	63	65
	NB	Route 242 to Marina Vista	AM	4	4	0	64	65
			PM	6	4	2	48	65
CC-680	SB	Rudgear Rd to Alcosta Blvd*	AM	14	10	4	48	65
			PM	12	10	2	53	65
	NB	Alcosta Blvd to Livorna Rd	AM	21	16	5	49	65
			PM	22	16	6	46	65
MRN-101	SB	Rte 37 to Mission Ave.	AM	24	12	12	19	38
		Mission Ave. to Richardson Bridge	AM	8	7	1	49	55
	NB	Richardson Bridge to Mission Ave.	PM	21	8	13	21	55
		Mission Ave. to Rte 37	PM	10	7	3	43	61

HOV LANE PEAK HOUR TIME SAVINGS AND AVERAGE SPEEDS

			Travel Time (minutes)		HOVL Time Saving (minutes)	Avg. Speed (mph)		
			Non-HOVL	HOVL		Non-HOVL	HOVL	
SCL-85	SB	Rte 101 (Mtn View) to Rte 280	AM	6	5	1	57	65
			PM	13	5	8	26	65
		Rte 280 to Almaden Expwy	AM	12	11	1	60	65
			PM	25	13	12	29	55
		Almaden Expwy to Rte 101 (So. San Jose)	AM	6	6	0	65	65
			PM	6	6	0	62	65
	NB	Rte 101 (So. San Jose) to Almaden Expwy	AM	15	6	9	25	65
			PM	6	6	0	60	65
		Almaden Expwy to Rte 280	AM	27	12	15	28	65
			PM	12	12	0	65	65
	Rte 280 to Rte 101 (Mtn View)	AM	21	5	16	16	65	
		PM	6	5	1	54	65	
SCL-87	SB	Route 101 I/C to Route 280 I/C	AM	5	5	0	65	65
			PM	15	5	10	19	55
		Route 280 I/C to Route 85/87 Jct	AM	4	4	0	65	65
			PM	8	4	4	35	65
	NB	Route 85/87 Jct to Route 280 I/C	AM	16	6	10	24	65
			PM	6	6	0	65	65
	Route 280 I/C to Route 101 I/C	AM	10	3	7	20	65	
		PM	3	3	0	65	65	
SCL-101	SB	San Mateo Co. Line to Ellis St	AM	5	5	0	60	65
			PM	9	6	3	35	51
		Ellis St to Guadalupe Pkwy	AM	6	6	0	65	65
			PM	18	6	12	23	65
		Guadalupe Pkwy to 101/280/680 I/C	AM	5	5	0	65	65
			PM	17	7	10	21	50
		101/280/680 I/C to Bernal Rd	AM	7	7	0	65	65
			PM	7	7	0	65	65
		Bernal Rd to Cochrane Road	AM	9	8	1	61	65
			PM	9	8	1	60	65
	NB	Cochrane Road to Bernal Road	AM	9	9	0	64	65
			PM	9	9	0	65	65
		Bernal Rd to 101/280/680 I/C	AM	12	8	4	41	65
			PM	8	8	0	65	65
		101/280/680 I/C to Guadalupe Pkwy	AM	14	11	3	22	28
			PM	5	5	0	65	65
		Guadalupe Pkwy to Ellis Street	AM	10	7	3	46	65
			PM	10	7	3	44	65
	Ellis to San Mateo Co. Line	AM	15	7	8	20	41	
		PM	17	6	11	18	50	
SCL-237	WB	McCarthy Blvd to Mathilda Ave	AM	15	6	9	24	65
			PM	9	6	3	40	65
	EB	Mathilda Ave to Rte 880/237 Jct.	AM	8	6	2	49	65
			PM	22	6	16	17	65
SCL-280	SB	Magdalena Ave to Leland Ave	AM	10	10	0	63	65
			PM	13	10	3	48	65
	NB	Leland Ave to Magdalena Ave	AM	22	10	12	30	65
			PM	11	10	1	59	65

HOV LANE PEAK HOUR TIME SAVINGS AND AVERAGE SPEEDS

				Travel Time (minutes) Non-HOVL	Travel Time (minutes) HOVL	HOVL Time Saving (minutes)	Avg. Speed (mph) Non-HOVL	Avg. Speed (mph) HOVL	
SCL-680	SB	ALA/SCL Co. Line to Rte 237	AM	3	2	1	47	65	
			PM	2	2	0	65	65	
SCL-880	SB	Alameda Co. Line to I-880/SR 237 Jct	AM	1	1	0	54	65	
			PM	1	1	0	65	65	
	NB	I-880/SR 237 Jct to Alameda Co. Line	AM	2	2	0	60	65	
			PM	5	2	3	21	65	
SM-101	SB	Whipple Ave to Santa Clara Co. Line	AM	18	6	12	23	65	
			PM	19	6	13	22	65	
	NB	Santa Clara Co. Line to Whipple Ave	AM	8	6	2	50	65	
			PM	9	6	3	46	65	
SOL-80	WB	Route 29 to Contra Costa Co. Line	AM	1	1	0	65	65	
			PM	1	1	0	65	65	
	EB	Carquinez Bridge Toll Plaza	AM	1	1	0	65	65	
			PM	1	1	0	65	65	
			AM	8	8	0	65	65	
			PM	8	8	0	65	65	
SON-101	SB	Rohnert Park Exp to Old Redwood Hwy	AM	6	6	0	55	55	
			PM	N/A	N/A	N/A	N/A	N/A	
	NB	Old Redwood Hwy to Rohnert Park Exp	AM	N/A	N/A	N/A	N/A	N/A	
			PM	6	6	0	55	55	
			AM	14	9	5	42	65	
			PM	17	9	8	34	65	
SON-101	SB	Windsor River Rd. to Rte 12	AM	5	4	1	48	65	
			PM	4	4	0	65	65	
	NB	Wilfred Ave. to Rte 12	AM	7	4	3	38	65	
			PM	8	4	4	33	65	
			Rte12 to Windsor River Rd.	AM	11	9	2	51	65
				PM	11	9	2	51	65
Overall Average Speed							46.1	62.7	

N/A: Due to resource shortfall 2011 data is not available

* Data was collected between Livorna Rd. and Alcosta Blvd. prior to the extension to Rudgear Rd.

^ Express Lane

GENERAL FACILITY INFORMATION

- **Mainline HOV Lanes**
 - **Toll Bridge HOV Bypass Lanes**
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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:	Lane 1:	Route 880 left side HOV ramp to metering signals Length = 0.4 mile
	Lane 2:	Route 580 connector to metering signals Length = 1.1 miles
	Lane 21:	Route 880 right side HOV ramp to metering signals Length = 0.6 mile
	Lane 22:	HOV slip ramp to metering signals Length = 0.8 miles
DATES:	Apr 17, 1970	Opened; Buses only
	Dec 8, 1971	Carpools permitted; min. occ. three persons per vehicle
	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
	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
	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
	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
	Apr 22, 1986	Mini toll plaza (lane 18, 19, 20) opened; right side HOV lanes designated as lanes 21 & 22
	Sep 7, 1988	Hours of Operation were extended from 6-9 AM to 5-10 AM on September 7, 1988.
	Sep 7, 1988	The HOVL violation fine increased in early 1989.
	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
	Mar 1, 1992	Motorcycles permitted
	Oct 1, 1995	Two-seat vehicles with two occupants permitted
	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
	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
	Feb. 2, 1998	PM Hours of operation changed to 3:00-7:00 PM
	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
	Jul 1, 2000	Inherently low-emission vehicles with DMV issued decals permitted.
	Jul 1, 2010	HOVs charged \$2.50 toll and required to use designated toll booths or toll lanes.

ALA-80: HOV FLYOVER

OCCUPANCY	Three or more persons per vehicle, motorcycles, 2 seaters 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 seaters 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: I-880 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: I-880 (MP 5.9) to west of Toll Plaza (MP 3.1) Length = 2.8 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
	Jul 31, 2008 Extended; I-880/SR 84 Jct to Newark Blvd.
	Jul 1, 2010 HOVs charged \$2.50 toll and required to use designated toll lane.

ALA-92: Hesperian Blvd to San Mateo 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:	Hesperian on-ramp (MP 5.6) to Toll Plaza (MP 2.8) Length = 2.8 miles
	DATES:	Oct 23, 1989 Opened; Clawiter Rd on-ramp to east of Toll Plaza Jan 1, 1992 Minimum occupancy reduced from three to two persons per vehicle Jan 15, 1992 Extended; Clawiter Rd on-ramp to west of Toll Plaza Jul 2, 2001 Extended and relocated; Hesperian Blvd. To West of Toll Plaza Jun 3, 2003 Speed changed from 55mph to 65 mph Jul 8, 2007 Lane #1 and #2 opened for HOVs during both AM and PM peak periods. July 1, 2010 HOVs charged \$2.50 toll and required to use designated toll booths.

ALA-580: Hacienda Dr. to Greenville Road

OCCUPANCY	Two or more persons per vehicle, motorcycles, inherently low-emission vehicles (ILEVs) with DMV issued decal.	
Eastbound	HOURS:	5:00 - 10:00 AM, 3:00 - 6:00 PM, Monday thru Friday
	LIMITS:	Hacienda Dr(MP19.05) to Greenville Road(MP 8.7) Length = 10.4 miles
	DATES:	Oct 2, 2009 Opened; N. Livermore Ave to Greenville Road Jul 19, 2010 Extended; Airway Blvd on-ramp to N Livermore Ave Nov 5, 2010 Extended; Hacienda Dr to Airway Blvd.

ALA-680: Route 84 to ALA/SCL Co. Line

OCCUPANCY	Two or more persons per vehicle, motorcycles, inherently low-emission vehicles (ILEVs) with DMV issued decal.	
SOUTHBOUND	HOURS:	5:00 - 8:00 PM, Monday thru Friday
	LIMITS:	Route 84 on-ramp (MP R11.5) to Route 237 Calaveras Blvd. On-ramp (MP 7.6) Length = 11.2 miles
	DATES:	Nov 26, 2002 Opened; Washington Blvd. On-ramp to Route 237 Calaveras Blvd. On-ramp Dec 5, 2002 Extended; Route 84 on-ramp to Route 237 Calaveras Blvd. On-ramp Sep 20, 2010 HOV Lane converted to Express Lane.

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:** 5:00 - 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
Sep 28, 2009 Hours of Operations changed to 5:00-9:00 A.M.

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 Solano County Line 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: Solano County Line (MP 14.1) to Alameda County Line (MP 0.0)
Length = 14.1 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
 Aug 31,2007 Extended; Cummings Skyway to Route 4
 Nov 17, 2007 Extended; Solano County Line to Cummings Skyway

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

LIMITS: Alameda County Line (MP 0.0) to Cummings Skyway (MP 12.9)
 Length = 12.9 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
 May 27, 2011 Extended; Route 4 to Cummings Skyway

CC-680: N/O Marina Vista to Benicia-Martinez 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.

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

LIMITS: Benicia-Martinez Bridge Toll Plaza (24.5) to North of Marina Vista(24.1)
 Length = 1.0 miles

DATES: Aug 26, 2007 Opened; Opened with new bridge; 1.0 mile long bypass lane #1
 from N/O Marina Vista to Toll Plaza
 Jul 1, 2010 HOVs charged \$2.50 toll and required to use designated toll booth or toll lane.

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: 5:00 - 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 16.3)
 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.
 Sep 28, 2009 Hours of Operations changed to 5:00-9:00 AM

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

LIMITS: Route 242 I/C (R18.7) to South of Marina Vista(24.1)
Length = 4.4 miles

DATES: Apr 28, 2005 Opened; Route 242 to South of Marina Vista.
Sep 28, 2009 Hours of Operations changed to 5:00-9:00 AM

CC-680: Rudgear Rd to Alcosta Blvd.

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: North of Rudgear Rd (MP 12.8) to north of
Alcosta Blvd on-ramp (MP R21.3)

Length = 12.9 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
Sep 28, 2009 Hours of Operations changed to 5:00-9:00 AM , 3:00-7:00 PM
Nov 10, 2011 Extended; Rudgear Rd. to Livorna Rd.

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

LIMITS: 0.4 miles south of Alcosta on-ramp (MP R0.0) to Livorna
on-ramp (MP R11.9)

Length = 11.9 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
Sep 28, 2009 Hours of Operations changed to 5:00-9:00 AM , 3:00-7:00 PM

MRN-101: Route 37 to Richardson Bridge

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: Route 37 (MP18.9) to Richardson Bridge (MP 4.8)
Length = 14.1 miles

DATES: Dec 23, 1974 Opened; buses only
Jun 16, 1976 Carpools permitted; min. occ. three persons per vehicle
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
Jul 17, 2006 Extended; Andersen Dr. to North of Greenbrae ped OC
Nov 13, 2008 Extended; Mission Ave. to Anderson Dr.
Feb 2, 2009 Continuous HOV Lane; New Limit; Rte 37 to Richardson Bridge

NORTHBOUND **HOURS:** 4:30 - 7:00 PM, Monday thru Friday

LIMITS: Richardson Bridge (MP 3.9) to South of Route 37 (MP18.3)
Length = 14.4 miles

DATES: Dec 20, 1974 Opened; buses only
Jun 15, 1976 Carpools permitted; min. occ. three persons per vehicle
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
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 Madera to Nellen Ave. UC
Apr 24, 2009 Continuous HOV Lane. New Limit; Richardson Bridge to Rte 37

SCL-85: Rte 101 (Mountain View) to Rte 101 (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 Rte 85 to Rte 101(San Jose)
May 26, 2006 Opened direct HOV Connector from Rte 101 to Rte 85(Mountain View)

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 (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 Rte 101 to Rte 85(San Jose)
May 26, 2006 Opened direct HOV Connector from Rte 85 to Rte 101(Mountain View)

SCL-87: Route 101 I/C to Route 85 I/C

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 Route 85 I/C Length = 9.6 miles
	DATES:	Dec 23, 2004 Opened; Rte 101 to Taylor Avenue Mar 16, 2007 New Section; Rte 280 to SR 85 Jul 26, 2007 Extended; Taylor Avenue to Route 280
NORTHBOUND	HOURS:	5:00 - 9:00 AM, 3:00 - 7:00 PM, Monday thru Friday
	LIMITS:	Route 85 I/C (MP0.0) to Route 101 I/C (MP9.2) Length = 9.2 miles
	DATES:	Apr 18, 2005 Opened; Taylor Avenue to Rte 101 Feb 4, 2007 New Section; SR 85 to Rte 280 May 24, 2007 Extended; Rte 280 to Taylor Avenue

SCL-101: San Mateo County Line to Cochrane Rd

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:	San Mateo County Line (MP 52.6) to 0.5 mile north of Cochrane Rd off-ramp (MP 18.4) Length = 34.2 miles
	DATES:	Nov 10, 1986 Opened; Lawrence Expwy to De La Cruz Blvd Aug 8, 1988 Extended; Ellis St to Lawrence Expwy Oct 10, 1988 Extended; N. Rengstorff Ave to Ellis St Dec 12, 1988 Extended; San Mateo Co. Line to N. Rengstorff Ave Jun 15, 1990 New section; Rte 101/280/680 I/C to north of Bernal Rd Jan 29, 1993 Extended; Rte 880 to Rte 101/280/680 I/C Apr 5, 1993 Extended; De La Cruz Blvd to Rte 880 Mar 19, 2003 Opened; Bernal Road to Cochrane Road
NORTHBOUND	HOURS:	5:00 - 9:00 AM, 3:00 - 7:00 PM, Monday thru Friday
	LIMITS:	Cochrane Rd on-ramp (MP 17.8) to San Mateo County Line (MP 52.6) Length = 34.8 miles
	DATES:	Nov 7, 1986 Opened; Guadalupe Pkwy to Great America Pkwy Oct 10, 1988 Extended; Great America Pkwy to N. Rengstorff Ave Dec 12, 1988 Extended; N. Rengstorff Ave to San Mateo Co. Line Jun 7, 1990 New section; Bernal Rd to Rte 101/280/680 I/C Feb 1, 1993 Extended; Rte 101/280/680 I/C to Old Oakland Rd Apr 5, 1993 Extended; Old Oakland Rd to Guadalupe Pkwy May 19, 2003 Opened; Cochrane Rd to Bernal Road

SCL-680: ALA/SCL County Line to Route 237 Calaveras Blvd.

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:	Alameda County Line (MP 9.9) to Route 237 Calaveras Blvd. On-ramp (MP M7.6) Length = 2.3 miles
	DATES:	Nov 26, 2002 Opened; Washington Blvd. On-ramp to Route 237 Calaveras Blvd. On-ramp Dec 5, 2002 Extended; Route 84 on-ramp to Route 237 Calaveras Blvd. On-ramp

SCL-880: Alameda County Line to I-880/SR 237 Junction

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:	Alameda County Line (MP 10.5) to Jct I-880/237 (MP 8.5) Length = 2.0 miles
	DATES:	May 1, 2005 Opened; S/O Dixon Landing to I-880/SR 237 Jct. August 11, 2007 Extended; Alameda County Line To S/O Dixon Landing Rd.
NORTHBOUND	HOURS:	5:00 - 9:00 AM, 3:00 - 7:00 PM, Monday thru Friday
	LIMITS:	I-880/237 Jct (MP 8.5) to Alameda County Line (MP 10.5) Length = 2.0 miles
	DATES:	Apr 22, 2005 Opened; I-880/SR 237 Jct to S/O Dixon Landing Rd. Nov 11, 2008 Extended; S/O Dixon Landing Rd. to Alameda County Line

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 6.9) to Santa Clara Co. Line (MP 0.0) Length = 6.9 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 = 6.6 miles
	DATES:	Jul 16, 1991 Opened

SOL-80: East of Airbase Parkway to Red Top Road

OCCUPANCY	Two or more persons per vehicle, motorcycles, 2-seat vehicles with 2 persons, inherently low-emission vehicles (ILEVs) with DMV issued decals.	
WESTBOUND	HOURS:	5:00 - 10:00 AM, 3:00 - 7:00 PM, Monday thru Friday
	LIMITS:	East of Airbase Parkway(MP19.93) to East of Red Top Road(MP11.85) Length = 8.1 mile
	DATE:	Oct 1, 2009 Opened
EASTBOUND	HOURS:	5:00 - 10:00 AM, 3:00 - 7:00 PM, Monday thru Friday
	LIMITS:	Red Top Road On Ramp(MP11.5) to East of Airbase Parkway(MP19.7) Length = 8.2 mile
	DATE:	Nov 4, 2009 Opened

SOL-80: Route 29 to Contra Costa County Line

OCCUPANCY	Three or more persons per vehicle, motorcycles, 2-seat vehicles with 2 persons, inherently low-emission vehicles (ILEVs) with DMV issued decals.	
WESTBOUND	HOURS:	5:00 - 10:00 AM, 3:00 - 7:00 PM, Monday thru Friday
	LIMITS:	Route 29 (MP 0.9) to Contra Costa County Line (MP 0.0) Length = 0.9 mile
	DATES:	Nov 17, 2007 Extended; Route 29 to Contra Costa County Line

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
		Aug 11, 2007 HOV Lane moved from toll booth #6 to toll booth #1
		Oct 29, 2007 HOV allowed in Booth # 11
		Jul 1, 2010 HOVs charged \$2.50 toll and required to use designated toll booths.

SON-101: Rohnert Park Expressway to Old Redwood Highway

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: Rohnert Park Exp. on-ramp (MP 13.7) to Old Redwood Hwy off-ramp (MP 8.0) Length = 5.7 miles
	DATES: Dec 5, 2011 Opened.
NORTHBOUND	HOURS: 7:00 - 9:00 AM, 3:00 - 6:30 PM, Monday thru Friday
	LIMITS: Old Redwood Hwy off-ramp (MP 7.7) to Copeland Creek (MP 13.5) Length = 5.8 miles
	DATES: Dec 5, 2011 Opened.

SON-101: Windsor River Road 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: Windsor River Road On-Ramp (MP 29.3) to Wilfred Avenue (MP15.5) Length = 13.8 miles
	DATES: Nov 4, 2002 Opened. Dec 11, 2003 Hours of Operation changed to 7-9 AM, 3-6:30 PM, MON - FRI Nov 10, 2008 Extended; Steele Lane to Route 12 Dec 7, 2009 Extended; Windsor River Rd to Steele Lane
NORTHBOUND	HOURS: 7:00 - 9:00 AM, 3:00 - 6:30 PM, Monday thru Friday
	LIMITS: Wilfred Avenue(MP 15.4) to South of Windsor River Road (MP29.0) Length = 13.6 miles
	DATES: Nov 4, 2002 Opened. Dec 11, 2003 Hours of Operation changed to 7-9 AM, 3-6:30 PM, MON - FRI Nov 10, 2008 Extended; Route 12 to Steele Lane Dec 6, 2009 Extended; Steele Lane to Windsor River Rd

TOLL BRIDGE HOV BYPASS LANES

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	
HOV TOLL BOOTH	Antioch	#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
	Jul 1, 2010	HOVs charged \$2.50 toll and required to use designated toll booth

Benicia-Martinez 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 - 7:00 PM, Monday thru Friday	
HOV TOLL BOOTH/LANE	Benicia Br.	Left side bypass lane and Toll Booth #3
DATES	See information in Mainline HOV Lane Section	

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	
HOV TOLL BOOTH	#1	
DATES	Oct. 23, 1989	Toll-free passage in designated booth only;
	Oct 1, 1995	Two-seat vehicles with two occupants permitted
	Oct 16, 2007	HOV allowed moved from booth #4 to booth #3
	Oct 29, 2007	HOV allowed in Booth #6
	Jul 1, 2010	HOVs charged \$2.50 toll and required to use designated toll booth

TOLL BRIDGE HOV BYPASS LANES

Dumbarton Bridge

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
HOV TOLL LANE	Left side bypass lane
DATES	See information in Mainline HOV Lane section

San Mateo-Hayward Bridge

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
HOV TOLL BOOTHS	#1 and #2
DATES	See information in Mainline HOV Lane section

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
HOV TOLL BOOTHS/LANES	#1, #2 and two right side bypass lanes
DATES	See information in Ala-80 Mainline HOV Lane section

TOLL BRIDGE HOV BYPASS LANES

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
HOV TOLL BOOTHS	#1, #6
DATES	See information in Sol-80 Mainline HOV lane section

MAINLINE HOV LANES

VOLUME/PERSON DATA and VIOLATION HISTORY

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ALAMEDA-80

San Francisco-Oakland Bay Bridge Toll Plaza

Westbound - A.M.

Typical data for 2011

(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	456	—	102	—
Buses ⁽⁴⁾	228	—	80	—
Carpools ⁽¹⁾	5258	—	2006	—
2 - seaters ⁽²⁾	1458	—	562	—
Hybrid	992	---	314	---
Vanpools	152	—	32	—
Violators	971	—	366	—
TOTAL	9515	20748 ⁽⁷⁾	3462	4335

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	456	—	102	—
Buses ⁽⁴⁾	7980	—	2800	—
Carpools ⁽¹⁾	16300	—	6219	—
2 - seaters ⁽²⁾	2916	—	1124	—
Hybrid	992	---	314	---
Vanpools	1520	—	320	—
Violators	1409	—	536	—
TOTAL	31573	23860 ⁽⁷⁾	11415	4985

RATES	PEAK PERIOD ⁽⁵⁾ 6:00 - 10:00 AM		PEAK HOUR 7:00 - 8:00 AM	
	HOV Lane Occupancy Rate	3.3 persons/veh	3.3 persons/veh	3.3 persons/veh
	Mixed Flow Occupancy Rate ⁽⁷⁾	1.2 persons/veh	1.2 persons/veh	1.2 persons/veh
Violation rate (HOV Lane) ⁽³⁾	10.2 %	10.6 %	10.6 %	

- 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) Assumed AM bus occupancy = 35 persons/vehicle.
(5) HOV lanes in operation from 5:00 to 10:00 AM.
(6) Observations conducted 5/12/11 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 2011

(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	180	—	58	—
Buses ⁽⁴⁾	314	—	104	—
Carpools ⁽¹⁾	866	—	274	—
2 - seaters ⁽²⁾	214	—	64	—
Hybrid	300	---	84	---
Vanpools	22	—	10	—
Violators	208	—	56	—
TOTAL	2104	25070 ⁽⁷⁾	650	7231

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	180	—	58	—
Buses ⁽⁴⁾	5024	—	1664	—
Carpools ⁽¹⁾	2685	—	849	—
2 - seaters ⁽²⁾	428	—	128	—
Hybrid	300	---	84	---
Vanpools	220	—	80	—
Violators	304	—	76	—
TOTAL	9141	30084 ⁽⁷⁾	2939	8677

RATES	PEAK PERIOD ⁽⁵⁾ 3:00 - 7:00 PM		PEAK HOUR 5:00 - 6:00 P.M.	
	HOV Lane Occupancy Rate	4.3 persons/veh		4.5 persons/veh
Mixed Flow Occupancy Rate ⁽⁷⁾	1.2 persons/veh		1.2 persons/veh	
Violation rate ⁽³⁾ (HOV Lane)	9.9 %		8.6 %	

- 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) Assumed PM bus occupancy = 16 persons/vehicle.
 (5) HOV lanes in operation from 3:00 to 7:00 P.M.
 (6) Observations conducted 5/3/11 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.	Thu May 12, 2011	9515	10.2%	13.3%	7.1%	---	11.5%	10.6%	8.8%	9.9%
PEAK	Thu May 13, 2010	11004	13.2%	10.9%	15.5%	---	20.5%	12.5%	10.1%	9.8%
	Tue Dec 1, 2009	10677	11.7%	8.7%	14.8%	---	12.0%	12.8%	9.9%	12.0%
	Wed May 28, 2008	10851	9.0%	6.7%	11.3%	---	13.8%	7.8%	6.0%	7.9%
	Tue May 22, 2007	11427	6.5%	8.0%	4.9%	---	10.0%	6.9%	4.0%	5.2%
	Wed May 31, 2006	10394	9.7%	10.3%	9.1%	---	18.4%	6.8%	6.0%	5.9%
	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%
							3 - 4 PM	4 - 5 PM	5 - 6 PM	6 - 7 PM
P.M.	Tue May 3, 2011	2104	9.9%	9.3%	9.6%		15.7%	8.6%	8.5%	7.7%
PEAK	Thu May 13, 2010	3438	13.2%	14.7%	11.8%		18.6%	13.0%	11.3%	10.6%
	Tue Sep 29, 2009	3336	10.8%	17.0%	4.1%		13.9%	8.9%	10.4%	10.3%
	Thu May 1, 2008	3330	9.9%	7.8%	12.4%		11.8%	9.4%	9.6%	8.9%
	Wed May 23, 2007	3541	7.8%	5.9%	10.4%		9.4%	7.0%	7.3%	7.9%
	Thu Oct 19, 2006	3645	14.9%	11.0%	19.0%		15.2%	14.8%	14.3%	15.5%
	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%	0.101

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 - P.M.

Typical data for 2011 ⁽⁵⁾

VEHICLES	PEAK PERIOD ⁽⁴⁾ 3:00 - 7:00 PM		PEAK HOUR 5:00 - 6:00 PM	
	HOV Lane	SOV Lane	HOV Lane	SOV Lane
Motorcycles	18	—	7	—
Buses	112	—	26	—
Carpool ⁽¹⁾	466	—	127	—
2 - seaters ⁽²⁾	97	—	31	—
Hybrid	118	—	42	—
Vanpools	22	—	8	—
Violators	137	—	33	—
TOTAL	970	N/A	274	N/A

PERSONS	PEAK PERIOD ⁽⁴⁾ 3:00 - 7:00 PM		PEAK HOUR 5:00 - 6:00 PM	
	HOV Lane	SOV Lane	HOV Lane	SOV Lane
Motorcycles	18	—	7	—
Buses	1792	—	416	—
Carpool ⁽¹⁾	1445	—	394	—
2 - seaters ⁽²⁾	194	—	62	—
Hybrid	118	—	42	—
Vanpools	176	—	64	—
Violators	204	—	46	—
TOTAL	3947	N/A	1031	N/A

RATES	PEAK PERIOD ⁽⁴⁾ 3:00 - 7:00 PM		PEAK HOUR 5:00 - 6:00 PM	
	HOV Lane	SOV Lane	HOV Lane	SOV Lane
HOV Lane occupancy rate	4.1 persons/veh		3.8 persons/veh	
Violation rate ⁽³⁾ (HOV Lane)	14.1 %		12.0 %	

- 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 3:00 to 7:00 PM.
 (5) Observations conducted 5/18/11 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	Year 2011	-	-	-
	Year 2010	-	-	-
	Tue Jun 9, 2009	6:00 - 10:00 AM	4588	13.7%
	Thu Oct 9, 2008	6:00 - 10:00 AM	4461	7.2%
	Thu May 24, 2007	6:00 - 10:00 AM	4328	11.3%
	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%
	P.M. PEAK	Wed May 18, 2011	3:00 - 7:00 PM	970
Thu May 13, 2010		3:00 - 7:00 PM	1645	19.5%
Wed Sep 30, 2009		3:00 - 7:00 PM	1589	11.5%
Wed Oct 8, 2008		3:00 - 7:00 PM	1367	13.6%
Thu Sep 27, 2007		3:00 - 7:00 PM	1490	10.9%
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%

- 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 2011 off-peak direction

ALAMEDA-84

Route I-880 to Dumbarton Bridge Toll Plaza

Westbound - P.M.

Typical data for 2011 ⁽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	5	4	1	1
Buses	18	3	4	1
Carpools ⁽¹⁾	243	228	103	49
Vanpools	9	6	4	3
Hybrid/Single Occ. ⁽²⁾	—	2718	—	1008
Violators	18	—	7	—
TOTAL	293	2959	119	1062

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	5	4	1	1
Buses	630	105	140	35
Carpools ⁽¹⁾	510	482	218	106
Vanpools	90	60	40	30
Hybrid/Single Occ. ⁽²⁾	—	2718	—	1008
Violators	18	18	18	18
TOTAL	1253	3387	417	1198

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	4.3 persons/veh		3.5 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)	6.1 %		5.9 %	

- NOTES:** (1) Two or more persons per vehicle.
 (2) Hybrid HOV lane only/Single Occupancy mixed flow lanes only.
 (3) Violation rate = $\frac{\text{no. of violators in HOV lane} \times 100\%}{\text{Total no. of vehicles in HOV lane}}$
 Hybrids (Yellow Sticker) are included in the Violation Rate
 (4) HOV lane in operation from 3:00 to 6:00 P.M.
 (5) Observations conducted 11/29/11 at East of Dumbarton Bridge Toll Plaza.

ALAMEDA-84

I-880 to Dumbarton Bridge Toll Plaza

Violation History

Westbound

	DATE	PERIOD MONITORED	TOTAL HOVL VOLUME	VIOLATION RATE
A.M. PEAK	Year 2011	-	-	-
	Wed Mar 24, 2010	6:00 - 9:00 AM	2790	0.4%
	Thu Apr 30, 2009	6:00 - 9:00 AM	2741	0.0%
	Thu Oct 23, 2008	6:00 - 9:00 AM	3465	0.0%
	Wed Nov 7, 2007	6:00 - 9:00 AM	3114	0.8%
	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%
P.M. PEAK	Tue Nov 29, 2011	3:00 - 6:00 PM	293	6.1%
	Wed Mar 24, 2010	3:00 - 6:00 PM	888	0.8%
	Thu Apr 30, 2009	3:00 - 6:00 PM	1052	0.5%
	Thu May 1, 2008	3:00 - 6:00 PM	1045	1.1%
	Wed Apr 4, 2007	3:00 - 6:00 PM	1148	3.7%
	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%

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 2011 for off-peak direction

ALAMEDA-92

Hesperian Boulevard to San Mateo Bridge Toll Plaza

Westbound - A.M.

Typical data for 2011 ⁽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	34	6	8	0
Buses	7	0	2	0
Carpools ⁽¹⁾	1971	474	888	234
Vanpools	18	0	9	0
Hybrid/Single Occ. ⁽²⁾	—	10182	—	3825
Violators	50	—	26	—
TOTAL	2080	10662	933	4059

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	34	6	8	0
Buses	245	0	70	0
Carpools ⁽¹⁾	4066	1054	1857	518
Vanpools	180	0	90	0
Hybrid/Single Occ. ⁽²⁾	—	10182	—	3825
Violators	50	—	7	—
TOTAL	4575	11242	2032	4343

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)	1.2 persons/veh		1.3 persons/veh	
Violation rate ⁽³⁾ (HOV Lane)	2.4 %		2.8 %	

- NOTES:** (1) Two or more persons per vehicle.
 (2) Hybrid HOV lane only/Single Occupancy mixed flow lanes only.
 (3) Violation rate = $\frac{\text{no. of violators in HOV lane} \times 100\%}{\text{Total no. of vehicles in HOV lane}}$
 Hybrids (Yellow Sticker) are included in the Violation Rate
 (4) HOV lane in operation from 5:00 to 10:00 A.M.
 (5) Observations conducted 11/30/11 at E/O San Mateo Bridge Toll Plaza

ALAMEDA-92

Hesperian Boulevard to San Mateo Bridge Toll Plaza

Westbound - P.M.

Typical data for 2011 ⁽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	15	3	9	1
Buses	8	3	3	0
Carpools ⁽¹⁾	775	508	324	163
Vanpools	8	21	3	2
Hybrid/Single Occ. ⁽²⁾	—	5716	—	2082
Violators	11	—	5	—
TOTAL	817	6251	344	2248

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	15	3	9	1
Buses	280	105	105	0
Carpools ⁽¹⁾	1791	1064	706	345
Vanpools	80	210	30	20
Single Occ. ⁽²⁾	—	5716	—	2082
Violators	11	—	5	—
TOTAL	2177	7098	855	2448

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	2.7 persons/veh		2.5 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 %		1.5 %	

- NOTES:** (1) Two or more persons per vehicle.
 (2) Hybrid HOV lane only/Single Occupancy mixed flow lanes only.
 (3) Violation rate = $\frac{\text{no. of violators in HOV lane} \times 100\%}{\text{Total no. of vehicles in HOV lane}}$
 Hybrids (Yellow Sticker) are included in the Violation Rate
 (4) HOV lane in operation from 3:00 to 6:00 P.M.
 (5) Observations conducted 11/29/11 at E/O 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 Nov 30, 2011	6:00 - 9:00 AM	2080	2.4%
	Tue Apr 27, 2010	6:00 - 9:00 AM	2234	0.3%
	Wed May 6, 2009	6:00 - 9:00 AM	2524	1.0%
	Thu Nov 20, 2008	6:00 - 9:00 AM	2799	0.0%
	Thu Mar 15, 2007	6:00 - 9:00 AM	2747	1.6%
	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%
P.M. PEAK	Tue Nov 29, 2011	3:00 - 6:00 PM	817	1.3%
	Tue Apr 27, 2010	3:00 - 6:00 PM	1135	0.9%
	Tue Apr 21, 2009	3:00 - 6:00 PM	1384	1.5%
	Thu May 15, 2008	3:00 - 6:00 PM	1479	1.0%
	Thu Mar 15, 2007	3:00 - 6:00 PM	1602	0.7%
	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	-	-	-
	Wed Apr 9, 2003	3:00 - 6:00 PM	1240	1.5%
	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%

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.

ALAMEDA-580

Hacienda Drive to Livermore Avenue

Eastbound - P.M.

Typical data for 2011 ⁽⁵⁾

VEHICLES	PEAK PERIOD ⁽⁴⁾ 3:00 - 6:00 PM		PEAK HOUR 3:00 - 4:00 PM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	26	8	6	2
Buses	10	13	5	6
Carpools ⁽¹⁾	2410	1803	739	681
Vanpools	26	11	10	6
Hybrid/Single Occ. ⁽²⁾	51	19438	20	6498
Violators	10	—	4	—
TOTAL	2533	21273	784	7193

PERSONS	PEAK PERIOD ⁽⁴⁾ 3:00 - 6:00 PM		PEAK HOUR 3:00 - 4:00 PM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	26	8	6	2
Buses	350	455	175	210
Carpools ⁽¹⁾	5222	3976	1651	1525
Vanpools	260	110	100	60
Hybrid/Single Occ. ⁽²⁾	51	19438	20	6498
Violators	10	—	4	—
TOTAL	5919	23987	1956	8295

RATES	PEAK PERIOD ⁽⁴⁾ 3:00 - 6:00 PM		PEAK HOUR 3:00 - 4:00 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	1.1 persons/veh		1.2 persons/veh	
Overall occupancy (incl. buses)	1.3 persons/veh		1.3 persons/veh	
Violation rate ⁽³⁾ (HOV Lane)	0.4 %		0.5 %	

- NOTES:** (1) Two or more persons per vehicle.
 (2) Hybrid HOV lane only/Single and two 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 3/22/11 at Airway Blvd I/C.

ALAMEDA-580

Violation History

Hacienda Dr. to Livermore Ave.

Eastbound

	DATE	PERIOD MONITORED	TOTAL HOVL VOLUME	VIOLATION RATE
A.M. PEAK	Year 2011	-	-	-
	Year 2010	-	-	-
P.M. PEAK	Tue Mar 22, 2011	3:00 - 7:00 PM	2533	0.4%
	Wed Nov 17, 2010	3:00 - 7:00 PM	2043	1.2%

- 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 2011 for off-peak direction

ALAMEDA-580

Livermore Avenue to W/O Greenville

Eastbound - P.M.

Typical data for 2011 ⁽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	88	11	34	2
Buses	11	16	4	0
Carpools ⁽¹⁾	1830	490	661	151
Vanpools	26	46	10	14
Hybrid/Single Occ. ⁽²⁾	33	10213	9	3401
Violators	39	—	3	—
TOTAL	2027	10776	721	3568

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	88	11	34	2
Buses	385	560	140	0
Carpools ⁽¹⁾	3790	1036	1365	322
Vanpools	260	460	100	140
Hybrid/Single Occ. ⁽²⁾	33	10213	9	3401
Violators	39	—	3	—
TOTAL	4595	12280	1651	3865

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		2.3 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)	3.6 %		1.7 %	

- NOTES:** (1) Two or more persons per vehicle.
 (2) Hybrid HOV lane only/Single and two Occupancy mixed flow lanes only.
 (3) Violation rate = $\frac{\text{no. of violators in HOV lane} \times 100\%}{\text{Total no. of vehicles in HOV lane}}$
 Hybrids (Yellow Sticker) are included in the Violation Rate
 (4) HOV lane in operation from 6:00 to 9:00 A.M.
 (5) Observations conducted 09/28/11 at Airway Blvd I/C.

ALAMEDA-580

Livermore I/C to W/O Greenville Rd.

Violation History

Eastbound

	DATE	PERIOD MONITORED	TOTAL HOVL VOLUME	VIOLATION RATE
A.M. PEAK	Year 2011	-	-	-
	Thu May 27, 2010	6:00 - 9:00 AM	2765	3.4%
	Thu Oct 1, 2009	6:00 - 9:00 AM	-	0.0%
P.M. PEAK	Wed Sep 28, 2011	3:00 - 7:00 PM	2027	3.6%
	Tue Mar 9, 2010	3:00 - 7:00 PM	1665	3.0%
	Tue Oct 6, 2009	3:00 - 7:00 PM	1616	3.3%

- 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 2011 for off-peak period

ALAMEDA-680

Southbound - A.M.

(3)

Express Lane

Route 84 to ALA/CC Co. Line

Typical data for 2011

VEHICLES	PEAK PERIOD ⁽²⁾ 6:00 - 9:00 AM		PEAK HOUR 7:00 - 8:00 AM	
	Express Lane	Mixed Flow Lanes	Express Lane	Mixed Flow Lanes
Motorcycles	111	24	36	12
Buses	11	15	6	3
Carpools ⁽¹⁾	917	459	423	249
Vanpools	8	0	5	0
Hybrid/Single Occ. ⁽²⁾	1513	20133	497	7026
	—	—	—	—
TOTAL	2560	20631	967	7290

PERSONS	PEAK PERIOD ⁽²⁾ 6:00 - 9:00 AM		PEAK HOUR 7:00 - 8:00 AM	
	Express Lane	Mixed Flow Lanes	Express Lane	Mixed Flow Lanes
Motorcycles	111	24	36	12
Buses	385	525	210	105
Carpools ⁽¹⁾	1896	944	872	515
Vanpools	80	0	50	0
Hybrid/Single Occ. ⁽²⁾	1513	20133	497	7026
	—	—	—	—
TOTAL	3985	21626	1665	7658

RATES	PEAK PERIOD ⁽²⁾ 6:00 - 9:00 AM		PEAK HOUR 7:00 - 8:00 AM	
	HOV Lane occupancy rate	1.6 persons/veh		1.7 persons/veh
Mixed Flow occupancy rate	1.0 persons/veh		1.1 persons/veh	
Overall occupancy (incl. buses)	1.1 persons/veh		1.1 persons/veh	

- NOTES:** (1) Two or more persons per vehicle.
 (2) Express lane in operation from 5am to 8pm
 (5) Observations conducted 03/30/11 at Vargas Road I/C.

ALAMEDA-680

Southbound - P.M.

(3)

Express Lane

Route 84 to ALA/SCL Co. Line

Typical data for 2011

PEAK PERIOD ⁽²⁾

3:00 - 6:00 PM

PEAK HOUR

5:00 - 6:00 PM

VEHICLES	PEAK PERIOD ⁽²⁾ 3:00 - 6:00 PM		PEAK HOUR	
	Express Lane	Mixed Flow Lanes	Express Lane	Mixed Flow Lanes
Motorcycles	22	39	10	9
Buses	1	24	0	12
Carpools ⁽¹⁾	371	1587	162	516
Vanpools	5	15	1	6
Hybrid/Single Occ. ⁽²⁾	117	7662	63	2787
	—	—	—	—
TOTAL	516	9327	236	3330

PERSONS	PEAK PERIOD ⁽²⁾ 3:00 - 6:00 PM		PEAK HOUR	
	Express Lane	Mixed Flow Lanes	Express Lane	Mixed Flow Lanes
Motorcycles	22	39	10	9
Buses	35	840	0	420
Carpools ⁽¹⁾	794	3372	346	1091
Vanpools	50	150	10	60
Hybrid/Single Occ. ⁽²⁾	117	7662	63	2787
	—	—	—	—
TOTAL	1018	12063	429	4367

RATES	PEAK PERIOD ⁽²⁾ 3:00 - 6:00 PM		PEAK HOUR	
	HOV Lane occupancy rate	2.0 persons/veh		1.8 persons/veh
Mixed Flow occupancy rate	1.3 persons/veh		1.3 persons/veh	
Overall occupancy (incl. buses)	1.3 persons/veh		1.3 persons/veh	

- NOTES:** (1) Two or more persons per vehicle.
 (2) Express lane in operation from 5:00am to 8:00pm
 (3) Observations conducted 09/27/11 at Vargas Road I/C.

ALAMEDA - 680

Express Lane

Route 84 to ALA/SCL Co. Line

Violation History

Southbound

	DATE	PERIOD MONITORED	TOTAL HOVL VOLUME	VIOLATION RATE
A.M. PEAK	Wed Mar 30, 2011	6:00 - 9:00 AM	2560	-
	Thu Apr 29, 2010	6:00 - 9:00 AM	2172	0.6%
	Thu Nov 12, 2009	6:00 - 9:00 AM	3143	0.3%
	Wed Oct 22, 2008	6:00 - 9:00 AM	2549	1.5%
	Wed Sep 19, 2007	6:00 - 9:00 AM	2454	3.3%
	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 27, 2011	3:00 - 6:00 PM	516	-
	Thu Apr 29, 2010	3:00 - 6:00 PM	1595	3.9%
	Tue May 12, 2009	3:00 - 6:00 PM	980	5.7%
	Tue Dec 9, 2008	3:00 - 6:00 PM	1052	2.6%
	Tue Jun 5, 2007	3:00 - 6:00 PM	1481	3.5%
	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) Express Lane hours of operation from 5:00 AM to 8:00 PM.
(c) Data was not collected in 2011 for the Express Lane.
(d) Data prior to 2011 is HOV Lane Data which operated from 5:00 to 9:00 AM and 3:00 to 7:00 PM

ALAMEDA-880

Whipple Road to South of Route 238

Northbound - P.M.

Typical data for 2011 ⁽⁵⁾

VEHICLES	PEAK PERIOD ⁽⁴⁾ 3:00 - 6:00 PM		PEAK HOUR 3:00 - 4:00 PM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	121	3	30	0
Buses	41	6	7	3
Carpools ⁽¹⁾	2978	855	993	357
Vanpools	25	33	6	15
Hybrid/Single Occ. ⁽²⁾	—	9576	—	3435
Violators	107	—	54	—
TOTAL	3272	10473	1090	3810

PERSONS	PEAK PERIOD ⁽⁴⁾ 3:00 - 6:00 PM		PEAK HOUR 3:00 - 4:00 PM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	121	3	30	0
Buses	1435	210	245	105
Carpools ⁽¹⁾	6078	1799	2037	757
Vanpools	250	330	60	150
Hybrid/Single Occ. ⁽²⁾	—	9576	—	3435
Violators	107	—	54	—
TOTAL	7991	11918	2426	4447

RATES	PEAK PERIOD ⁽⁴⁾ 3:00 - 6:00 PM		PEAK HOUR 3:00 - 4:00 PM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
HOV Lane occupancy rate	2.4 persons/veh		2.2 persons/veh	
Mixed Flow occupancy rate	1.1 persons/veh		1.2 persons/veh	
Overall occupancy (incl. buses)	1.4 persons/veh		1.4 persons/veh	
Violation rate ⁽³⁾ (HOV Lane)	3.3 %		5.0 %	

- NOTES:** (1) Two or more persons per vehicle.
(2) Hybrid HOV lane only/Single and two Occupancy mixed flow lanes only.
(3) $\text{Violation rate} = \frac{\text{no. of violators in HOV lane} \times 100\%}{\text{Total no. of vehicles in HOV lane}}$
Hybrids (Yellow Sticker) are included in the Violation Rate
(4) HOV lane in operation from 5:00 to 9:00 A.M.
(5) Observations conducted 10/19/11 at Tennyson Road I/C

ALAMEDA-880

Whipple Road to South of Route 238

Violation History

Northbound

	DATE	PERIOD MONITORED	TOTAL HOVL VOLUME	VIOLATION RATE
A.M. PEAK	Year 2011	-	-	-
	Wed May 12, 2010	6:00 - 9:00 AM	2426	1.7%
	Wed May 13, 2009	6:00 - 9:00 AM	2833	1.1%
	Wed May 7, 2008	6:00 - 9:00 AM	2563	2.2%
	Wed Oct 3, 2007	6:00 - 9:00 AM	2485	0.3%
	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%
P.M. PEAK	Wed Oct 19, 2011	3:00 - 6:00 PM	3272	3.3%
	Tue May 11, 2010	3:00 - 6:00 PM	2879	1.6%
	Wed Jun 10, 2009	3:00 - 6:00 PM	3964	3.3%
	Tue Dec 2, 2008	3:00 - 6:00 PM	3522	1.7%
	Wed Sep 26, 2007	3:00 - 6:00 PM	3563	1.5%
	Tue Oct 24, 2006	3:00 - 6:00 PM	3203	1.1%
	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%

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 2011 for off-peak direction

ALAMEDA-880

Whipple Road to Santa Clara Co. Line

Southbound - A.M.

Typical data for 2011 ⁽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	83	2	37	0
Buses	27	24	10	7
Carpools ⁽¹⁾	2295	215	876	101
Vanpools	13	46	0	24
Hybrid/Single Occ. ⁽²⁾	159	10912	32	3788
Violators	59	—	22	—
TOTAL	2636	11199	977	3920

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	83	2	37	0
Buses	945	840	350	245
Carpools ⁽¹⁾	4757	474	1848	224
Vanpools	130	460	0	240
Hybrid/Single Occ. ⁽²⁾	159	10912	32	3788
Violators	59	—	22	—
TOTAL	6133	12688	2289	4497

RATES	PEAK PERIOD ⁽⁴⁾ 6:00 - 9:00 AM		PEAK HOUR 7:00 - 8:00 AM	
	HOV Lane occupancy rate	2.3 persons/veh		2.3 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)	8.3 %		5.5 %	

- NOTES:** (1) Two or more persons per vehicle.
 (2) Hybrid HOV lane only/Single and two Occupancy mixed flow lanes only.
 (3) Violation rate = $\frac{\text{no. of violators in HOV lane} \times 100\%}{\text{Total no. of vehicles in HOV lane}}$
 Hybrids (Yellow Sticker) are included in the Violation Rate
 (4) HOV lane in operation from 5:00 to 9:00 A.M.
 (5) Observations conducted 11/16/11 at Mowry Ave. I/C.

ALAMEDA-880

Whipple Road to Santa Clara Co. Line

Southbound - P.M.

Typical data for 2011 ⁽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	49	15	22	12
Buses	4	3	2	0
Carpools ⁽¹⁾	1846	558	734	222
Vanpools	14	6	6	3
Hybrid/Single Occ. ⁽²⁾	—	12807	—	4446
Violators	36	—	4	—
TOTAL	1949	13389	768	4683

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	49	15	22	12
Buses	140	105	70	0
Carpools ⁽¹⁾	3775	1166	1510	464
Vanpools	140	60	60	30
Hybrid/Single Occ. ⁽²⁾	—	12807	—	4446
Violators	36	—	4	—
TOTAL	4140	14153	1666	4952

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)	1.2 persons/veh		1.2 persons/veh	
Violation rate ⁽³⁾ (HOV Lane)	1.8 %		0.5 %	

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

ALAMEDA-880

Whipple Road to Santa Clara Co. Line

Violation History

Southbound

	DATE	PERIOD MONITORED	TOTAL HOVL VOLUME	VIOLATION RATE
A.M. PEAK	Wed Nov 16, 2011	6:00 - 9:00 AM	2636	8.3%
	Wed May 26, 2010	6:00 - 9:00 AM	2240	1.2%
	Thu Mar 19, 2009	6:00 - 9:00 AM	2185	0.0%
	Wed Oct 8, 2008	6:00 - 9:00 AM	2538	0.2%
	Wed Nov 14, 2007	6:00 - 9:00 AM	2736	3.5%
	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%
P.M. PEAK	Tue Nov 15, 2011	3:00 - 6:00 PM	1949	1.8%
	Tue May 4, 2010	3:00 - 6:00 PM	2104	3.7%
	Wed Oct 21, 2009	3:00 - 6:00 PM	3063	0.3%
	Tue Oct 7, 2008	3:00 - 6:00 PM	2283	2.0%
	Wed May 16, 2007	3:00 - 6:00 PM	2567	2.1%
	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%

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

Santa Clara Co. Line to Whipple Road

Northbound - P.M.

Typical data for 2011 ⁽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	28	34	12
Buses	13	11	4	3
Carpools ⁽¹⁾	2199	711	768	287
Vanpools	8	14	5	1
Hybrid/Single Occ. ⁽²⁾	—	9422	—	3231
Violators	50	—	9	—
TOTAL	2346	10186	820	3534

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	28	34	12
Buses	455	385	140	105
Carpools ⁽¹⁾	4529	1496	1600	610
Vanpools	80	140	50	10
Hybrid/Single Occ. ⁽²⁾	—	9422	—	3231
Violators	50	—	9	—
TOTAL	5190	11471	1833	3968

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)	2.1 %		1.1 %	

- NOTES:** (1) Two or more persons per vehicle.
 (2) Hybrid HOV lane only/Single and two Occupancy mixed flow lanes only.
 (3) Violation rate = $\frac{\text{no. of violators in HOV lane} \times 100\%}{\text{Total no. of vehicles in HOV lane}}$
 Hybrids (Yellow Sticker) are included in the Violation Rate
 (4) HOV lane in operation from 5:00 to 9:00 A.M.
 (5) Observations conducted 11/16/11 at Mowry Ave. I/C.

ALAMEDA-880

Santa Clara Co. Line to Whipple Road

Violation History

Northbound

	DATE	PERIOD MONITORED	TOTAL HOVL VOLUME	VIOLATION RATE
A.M. PEAK	Year 2011	-	-	-
	Wed Jun 10, 2009	6:00 - 9:00 AM	1056	2.4%
	Wed Apr 16, 2008	6:00 - 9:00 AM	1086	1.8%
	Thu Apr 12, 2007	6:00 - 9:00 AM	1218	0.9%
	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%
P.M. PEAK	Wed Nov 16, 2011	3:00 - 6:00 PM	2346	2.1%
	Wed May 5, 2010	3:00 - 6:00 PM	2040	6.4%
	Wed May 6, 2009	3:00 - 6:00 PM	2587	1.9%
	Wed Nov 19, 2008	3:00 - 6:00 PM	2551	0.6%
	Thu Oct 18, 2007	3:00 - 6:00 PM	2702	2.3%
	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%

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 2011 for off-peak direction

CONTRA COSTA-80

Solano County Line to Route 4

Westbound - A.M.

Typical data for 2011 ⁽⁵⁾

VEHICLES	PEAK PERIOD ⁽⁴⁾ 7:00 - 10:00 AM		PEAK HOUR 7:00 - 8:00 AM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	45	15	18	8
Buses	26	8	11	4
Carpools ⁽¹⁾	942	262	529	94
Hybrid ⁽⁶⁾	34	0	21	0
Vanpools	2	4	1	4
1 and 2 Occ. ⁽²⁾	—	7965	—	3576
Violators	120	—	49	—
TOTAL	1169	8254	629	3686

PERSONS	PEAK PERIOD ⁽⁴⁾ 7:00 - 10:00 AM		PEAK HOUR 7:00 - 8:00 AM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	45	15	18	8
Buses	910	280	385	140
Carpools ⁽¹⁾	2682	734	1511	258
Hybrid ⁽⁶⁾	34	0	21	0
Vanpools	20	40	10	40
1 and 2 Occ. ⁽²⁾	—	8805	—	3921
Violators	139	—	58	—
TOTAL	3830	9874	2003	4367

RATES	PEAK PERIOD ⁽⁴⁾ 7:00 - 10:00 AM		PEAK HOUR 7:00 - 8:00 AM	
	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		1.5 persons/veh	
Violation rate ⁽³⁾ (HOV Lane)	13.2 %		11.1 %	

- 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 11/10/11 east of Cummings Skyway Interchange.
 (6) Hybrids (Yellow Sticker) are included in the Violation Rate

CONTRA COSTA-80

Solano County Line to Route 4

Violation History

Westbound

	DATE	PERIOD MONITORED	TOTAL HOVL VOLUME	VIOLATION RATE
A.M. PEAK	Thu Nov 10, 2011	6:00 - 10:00 AM	1169	13.2%
	Tue May 11, 2010	6:00 - 10:00 AM	1979	7.1%
	Wed May 20, 2009	6:00 - 10:00 AM	2228	6.9%
	Thu Nov 6, 2008	6:00 - 10:00 AM	2244	9.9%
P.M. PEAK	Year 2011	-	-	-
	Year 2010	-	-	-
	Year 2009	-	-	-
	Year 2008	-	-	-

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 2011 for off-peak direction

CONTRA COSTA-80

Alameda County Line to Route 4

Eastbound - P.M.

Typical data for 2011

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	85	24	21	6
Buses	122	16	38	0
Carpools ⁽¹⁾	3099	658	892	190
Hybrid	303	35	99	8
Vanpools	103	26	19	15
1 and 2 Occ. ⁽²⁾	—	19991	—	5178
Violators	709	—	171	—
TOTAL	4421	20750	1240	5397

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	85	24	21	6
Buses	4270	560	1330	0
Carpools ⁽¹⁾	8924	1898	2568	550
Hybrid	303	35	99	8
Vanpools	1030	260	190	150
1 and 2 Occ. ⁽²⁾	—	23152	—	6003
Violators	1035	—	258	—
TOTAL	15647	25929	4466	6717

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	3.5 persons/veh		3.6 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)	16.0 %		13.8 %	

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 4/13/11 east of Hilltop Drive Interchange.

CONTRA COSTA-80

Alameda County Line to Route 4

Violation History

Eastbound

	DATE	PERIOD MONITORED	TOTAL HOVL VOLUME	VIOLATION RATE
A.M. PEAK	Year 2011	-	-	-
	Year 2010	-	-	-
	Year 2009	-	-	-
	Year 2008	-	-	-
	Year 2007	-	-	-
	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%
	P.M. PEAK	Wed Apr 13, 2011	3:00 - 7:00 PM	4421
Wed May 12, 2010		3:00 - 7:00 PM	5045	10.0%
Tue Sep 22, 2009		3:00 - 7:00 PM	3613	9.4%
Thu Oct 9, 2008		3:00 - 7:00 PM	4323	2.5%
Tue Apr 24, 2007		3:00 - 7:00 PM	3653	2.0%
Tue May 2, 2006		3:00 - 7:00 PM	4580	6.7%
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%

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 2011 off-peak direction

CONTRA COSTA-680

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

Southbound - P.M.

Typical data for 2011 ⁽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	27	65	5	25
Buses	3	31	2	4
Carpools ⁽¹⁾	1047	3177	409	1019
Vanpools	3	8	1	4
Hybrid/Single Occ. ⁽²⁾	32	16361	14	5781
Violators	64	—	1	—
TOTAL	1176	19642	432	6833

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	27	65	5	25
Buses	105	1085	70	140
Carpools ⁽¹⁾	2181	5312	864	2194
Vanpools	30	80	10	40
Hybrid/Single Occ. ⁽²⁾	32	16361	14	5781
Violators	64	—	1	—
TOTAL	2439	22903	964	8180

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		1.2 persons/veh	
Overall occupancy (incl. buses)	1.2 persons/veh		1.3 persons/veh	
Violation rate ⁽³⁾ (HOV Lane)	5.4 %		0.2 %	

- NOTES:** (1) Two or more persons per vehicle.
 (2) Hybrid HOV lane only/Single and two 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 04/14/11 at Truck Scale.

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	Year 2011	-	-	-
	Wed May 19, 2010	6:00 - 9:00 AM	3466	1.2%
	Year 2009	-	-	-
	Thu Nov 13, 2008	6:00 - 9:00 AM	2598	1.8%
	Wed Mar 28, 2007	6:00 - 9:00 AM	2959	1.5%
	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	Thu Apr 14, 2011	3:00 - 6:00 PM	1176	5.4%
	Wed May 19, 2010	3:00 - 6:00 PM	925	4.9%
	Wed May 20, 2009	3:00 - 6:00 PM	1328	0.8%
	Wed Nov 12, 2008	3:00 - 6:00 PM	1325	1.1%
	Wed Mar 28, 2007	3:00 - 6:00 PM	1378	1.5%
	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 5:00 to 9:00 AM.
(b) Evening period of operation from 3:00 to 7:00 PM.
(c) Data was collected in 2011 for off-peak direction

CONTRA COSTA-680

Route 242 to Marina Vista I/C.

Northbound - P.M.

Typical data for 2011 ⁽⁵⁾

VEHICLES	PEAK PERIOD ⁽⁴⁾ 3:00 - 6:00 PM		PEAK HOUR 3:00 - 4:00 PM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	43	33	13	9
Buses	9	0	5	0
Carpools ⁽¹⁾	1151	1056	321	366
Vanpools	19	39	5	27
Hybrid/Single Occ. ⁽²⁾	—	7533	—	2940
Violators	127	—	66	—
TOTAL	1349	8661	410	3342

PERSONS	PEAK PERIOD ⁽⁴⁾ 3:00 - 6:00 PM		PEAK HOUR 3:00 - 4:00 PM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	43	33	13	9
Buses	315	0	175	0
Carpools ⁽¹⁾	2445	2294	681	808
Vanpools	190	390	50	270
Hybrid/Single Occ. ⁽²⁾	—	7533	—	2940
Violators	127	—	66	—
TOTAL	3120	10250	985	4027

RATES	PEAK PERIOD ⁽⁴⁾ 3:00 - 6:00 PM		PEAK HOUR 3:00 - 4:00 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	1.2 persons/veh		1.2 persons/veh	
Overall occupancy (incl. buses)	1.3 persons/veh		1.3 persons/veh	
Violation rate ⁽³⁾ (HOV Lane)	9.4 %		16.1 %	

- NOTES:** (1) Two or more persons per vehicle.
 (2) Hybrid HOV lane only/Single and two Occupancy mixed flow lanes only.
 (3) Violation rate = $\frac{\text{no. of violators in HOV lane} \times 100\%}{\text{Total no. of vehicles in HOV lane}}$
 Hybrids (Yellow Sticker) are included in the Violation Rate
 (4) HOV lane in operation from 3:00 to 7:00 P.M.
 (5) Observations conducted 10/12/11 at Pacheco Boulevard

CONTRA COSTA - 680

Route 242 to Marina Vista I/C.

Violation History

Northbound

	DATE	PERIOD MONITORED	TOTAL HOVL VOLUME	VIOLATION RATE
A.M. PEAK	Year 2011	-	-	-
	Thu Apr 15, 2010	6:00 - 9:00 AM	542	10.7%
	Thu Mar 12, 2009	6:00 - 9:00 AM	522	0.0%
	Wed Nov 12, 2008	6:00 - 9:00 AM	698	1.3%
	Wed Sep 5, 2007	6:00 - 9:00 AM	479	5.8%
	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	Wed Oct 12, 2011	3:00 - 6:00 PM	1349	9.4%
	Wed Apr 14, 2010	3:00 - 6:00 PM	1481	5.4%
	Thu May 21, 2009	3:00 - 6:00 PM	2949	1.6%
	Thu Nov 13, 2008	3:00 - 6:00 PM	1701	2.4%
	Tue Oct 30, 2007	3:00 - 6:00 PM	1636	7.3%
	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 5:00 to 9:00 AM.
(b) Evening period of operation from 3:00 to 7:00 PM.
(b) Data was not collected in 2011 for off-peak direction

CONTRA COSTA-680

Rudgear Road to Alcosta Boulevard

Southbound - A.M.

Typical data for 2011 ⁽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	61	1	23	0
Buses	31	29	11	12
Carpools ⁽¹⁾	2743	423	1128	160
Vanpools	44	3	18	0
Hybrid/Single Occ. ⁽²⁾	—	12025	—	4400
Violators	18	—	3	—
TOTAL	2897	12481	1183	4572

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	61	1	23	0
Buses	1085	1015	385	420
Carpools ⁽¹⁾	5618	888	2333	339
Vanpools	440	30	180	0
Hybrid/Single Occ. ⁽²⁾	—	12025	—	4400
Violators	18	—	3	—
TOTAL	7222	13959	2924	5159

RATES	PEAK PERIOD ⁽⁴⁾ 6:00 - 9:00 AM		PEAK HOUR 7:00 - 8:00 AM	
	HOV Lane occupancy rate	2.5 persons/veh		2.5 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)	0.6 %		0.3 %	

- NOTES:** (1) Two or more persons per vehicle.
 (2) Hybrid HOV lane only/Single and two Occupancy mixed flow lanes only.
 (3) Violation rate = $\frac{\text{no. of violators in HOV lane} \times 100\%}{\text{Total no. of vehicles in HOV lane}}$
 Hybrid (Yellow Sticker) are included in the Violation Rate
 (4) HOV lane in operation from 5:00 to 9:00 A.M.
 (5) Observations conducted 11/17/11 at Stone Valley Road.

CONTRA COSTA-680

Rudgear Road to Alcosta Boulevard

Southbound - P.M.

Typical data for 2011 ⁽⁵⁾

VEHICLES	PEAK PERIOD ⁽⁴⁾ 3:00 - 6:00 PM		PEAK HOUR 3:00 - 4:00 PM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	45	6	11	5
Buses	20	10	4	7
Carpools ⁽¹⁾	2117	1015	661	540
Vanpools	8	32	1	16
Hybrid/Single Occ. ⁽²⁾	4	12664	4	4392
Violators	174	—	78	—
TOTAL	2368	13727	759	4960

PERSONS	PEAK PERIOD ⁽⁴⁾ 3:00 - 6:00 PM		PEAK HOUR 3:00 - 4:00 PM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	45	6	11	5
Buses	700	350	140	245
Carpools ⁽¹⁾	4444	2173	1376	1150
Vanpools	80	320	10	160
Hybrid/Single Occ. ⁽²⁾	4	12664	4	4392
Violators	174	—	78	—
TOTAL	5447	15513	1619	5952

RATES	PEAK PERIOD ⁽⁴⁾ 3:00 - 6:00 PM		PEAK HOUR 3:00 - 4:00 PM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
HOV Lane occupancy rate	2.3 persons/veh		2.1 persons/veh	
Mixed Flow occupancy rate		1.1 persons/veh		1.2 persons/veh
Overall occupancy (incl. buses)	1.3 persons/veh		1.3 persons/veh	
Violation rate ⁽³⁾ (HOV Lane)	7.5 %		10.8 %	

- NOTES:** (1) Two or more persons per vehicle.
 (2) Hybrid HOV lane only/Single and two Occupancy mixed flow lanes only.
 (3) Violation rate = $\frac{\text{no. of violators in HOV lane} \times 100\%}{\text{Total no. of vehicles in HOV lane}}$
 Hybrid (Yellow Sticker) are included in the Violation Rate
 (4) HOV lane in operation from 3:00 to 7:00 P.M.
 (5) Observations conducted 10/11/11 at Stone Valley Road.

CONTRA COSTA-680

Alcosta Boulevard to Livorna Road

Northbound - A.M.

Typical data for 2011 ⁽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	43	5	18	1
Buses	37	11	7	3
Carpools ⁽¹⁾	1226	167	667	84
Vanpools	10	15	3	4
Hybrid/Single Occ. ⁽²⁾	2	12594	2	4762
Violators	168	—	62	—
TOTAL	1486	12792	759	4854

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	43	5	18	1
Buses	1295	385	245	105
Carpools ⁽¹⁾	2653	363	1439	178
Vanpools	100	150	30	40
Hybrid/Single Occ. ⁽²⁾	2	12594	2	4762
Violators	168	—	62	—
TOTAL	4261	13497	1796	5086

RATES	PEAK PERIOD ⁽⁴⁾ 6:00 - 9:00 AM		PEAK HOUR 7:00 - 8:00 AM	
	HOV Lane occupancy rate	2.9 persons/veh		2.4 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)	11.4 %		8.4 %	

- NOTES:** (1) Two or more persons per vehicle.
 (2) Hybrid HOV lane only/Single and two Occupancy mixed flow lanes only.
 (3) Violation rate = $\frac{\text{no. of violators in HOV lane} \times 100\%}{\text{Total no. of vehicles in HOV lane}}$
 Hybrid (Yellow Sticker) are included in the Violation Rate
 (4) HOV lane in operation from 5:00 to 9:00 A.M.
 (5) Observations conducted 12/12/11 at Stone Valley Road.

CONTRA COSTA-680

Alcosta Boulevard to Livorna Road

Northbound - P.M.

Typical data for 2011 ⁽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	28	3	7	3
Buses	30	3	8	0
Carpools ⁽¹⁾	2755	564	1047	204
Vanpools	47	18	31	0
Hybrid/Single Occ. ⁽²⁾	6	12855	2	4314
Violators	80	—	12	—
TOTAL	2946	13443	1107	4521

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	28	3	7	3
Buses	1050	105	280	0
Carpools ⁽¹⁾	5813	1148	2229	421
Vanpools	470	180	310	0
Hybrid/Single Occ. ⁽²⁾	6	12855	2	4314
Violators	80	—	12	—
TOTAL	7447	14291	2840	4738

RATES	PEAK PERIOD ⁽⁴⁾ 3:00 - 6:00 PM		PEAK HOUR 4:00 - 5:00 PM	
	HOV Lane occupancy rate	2.5 persons/veh		2.6 persons/veh
Mixed Flow occupancy rate	1.1 persons/veh		1.0 persons/veh	
Overall occupancy (incl. buses)	1.3 persons/veh		1.3 persons/veh	
Violation rate ⁽³⁾ (HOV Lane)	2.9 %		1.3 %	

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

(2) Hybrid HOV lane only/Single and two Occupancy mixed flow lanes only.

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

Hybrids (Yellow Sticker) are included in the Violation Rate

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

(5) Observations conducted 10/04/11 at Stone Valley Road

CONTRA COSTA-680

Violation History

Rudgear Road to Alcosta Boulevard

Southbound

	DATE	PERIOD MONITORED	TOTAL HOVL VOLUME	VIOLATION RATE
A.M. PEAK	Thu Nov 17, 2011	6:00 - 9:00 AM	2897	0.6%
	Wed Apr 21, 2010	6:00 - 9:00 AM	2068	3.7%
	Wed Oct 7, 2009	6:00 - 9:00 AM	2317	4.7%
	Tue Dec 9, 2008	6:00 - 9:00 AM	2384	0.6%
	Thu Oct 4, 2007	6:00 - 9:00 AM	2838	2.2%
	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%
P.M. PEAK	Tue Oct 11, 2011	3:00 - 6:00 PM	2368	7.5%
	Wed Apr 28, 2010	3:00 - 6:00 PM	2126	1.4%
	Tue May 19, 2009	3:00 - 6:00 PM	2226	2.0%
	Wed Nov 5, 2008	3:00 - 6:00 PM	2277	0.8%
	Thu Oct 25, 2007	3:00 - 6:00 PM	2889	3.4%
	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%

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.

CONTRA COSTA-680

Violation History

Alcosta Boulevard to Livorna Road

Northbound

	DATE	PERIOD MONITORED	TOTAL HOVL VOLUME	VIOLATION RATE
A.M. PEAK	Mon Dec 12, 2011	6:00 - 9:00 AM	1486	11.4%
	Thu Apr 22, 2010	6:00 - 9:00 AM	2049	1.7%
	Wed Mar 11, 2009	6:00 - 9:00 AM	2231	0.3%
	Wed Apr 9, 2008	6:00 - 9:00 AM	1656	0.4%
	Thu Mar 8, 2007	6:00 - 9:00 AM	1847	3.9%
	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%
P.M. PEAK	Tue Oct 4, 2011	3:00 - 6:00 PM	2946	2.9%
	Thu Apr 22, 2010	3:00 - 6:00 PM	2701	2.0%
	Thu May 14, 2009	3:00 - 6:00 PM	2792	1.4%
	Tue May 20, 2008	3:00 - 6:00 PM	3700	1.1%
	Tue Sep 11, 2007	3:00 - 6:00 PM	3759	2.2%
	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%

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.

MARIN-101

Mission Road to Richardson Bay Bridge

Southbound - A.M.

Typical data for 2011 ⁽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	44	0	27	0
Buses	60	38	32	25
Carpools ⁽¹⁾	1417	440	757	288
Vanpools	12	0	6	0
Single Occ. ⁽²⁾	—	5052	—	2419
Violators	21	—	7	—
TOTAL	1554	5530	829	2732

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	44	0	27	0
Buses	2100	1330	1120	875
Carpools ⁽¹⁾	2871	1018	1546	686
Vanpools	120	0	60	0
Single Occ. ⁽²⁾	—	5052	—	2419
Violators	21	—	7	—
TOTAL	5156	7400	2760	3980

RATES	PEAK PERIOD ⁽⁴⁾ 6:30 - 8:30 AM		PEAK HOUR 7:30 - 8:30 AM	
	HOV Lane occupancy rate	3.3 persons/veh		3.3 persons/veh
Mixed Flow occupancy rate	1.3 persons/veh		1.5 persons/veh	
Overall occupancy (incl. buses)	1.8 persons/veh		1.9 persons/veh	
Violation rate ⁽³⁾ (HOV Lane)	1.4 %		0.8 %	

- NOTES:** (1) Two or more occupants per vehicle.
 (2) Hybrid HOV Lane only/Single Occupancy mixed flow lanes only.
 (3) Violation rate = $\frac{\text{no. of violators in HOV lane} \times 100\%}{\text{Total no. of vehicles in HOV lane}}$
 Hybrids (Yellow Sticker) are included in the Violation Rate
 (4) HOV lane in operation from 6:30 to 8:30 A.M.
 (5) Observations conducted 10/19/11 at Route 131/E. Blithdale Ave I/C.

MARIN-101

Richardson Bay Bridge to Mission Road

Northbound - P.M.

Typical data for 2011 ⁽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	90	0	45	0
Buses	77	68	38	31
Carpools ⁽¹⁾	2793	681	1137	258
Vanpools	16	18	2	18
Hybrid/Single Occ. ⁽²⁾	145	12069	49	4927
Violators	5	—	5	—
TOTAL	3126	12836	1276	5234

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	90	0	45	0
Buses	2695	2380	1330	1085
Carpools ⁽¹⁾	5735	1468	2339	572
Vanpools	160	180	20	180
Hybrid/Single Occ. ⁽²⁾	145	12069	49	4927
Violators	5	—	5	—
TOTAL	8830	16097	3788	6764

RATES	PEAK PERIOD ⁽⁴⁾ 4:30 - 7:00 PM		PEAK HOUR 4:30 - 5:30 PM	
	HOV Lane occupancy rate	2.8 persons/veh		3.0 persons/veh
Mixed Flow occupancy rate	1.3 persons/veh		1.3 persons/veh	
Overall occupancy (incl. buses)	1.6 persons/veh		1.6 persons/veh	
Violation rate ⁽³⁾ (HOV Lane)	0.2 %		0.4 %	

- NOTES:** (1) Two or more occupants per vehicle.
(2) Hybrid HOV Lane only/Single Occupancy mixed flow lanes only.
(3) Violation rate = $\frac{\text{no. of violators in HOV lane}}{\text{Total no. of vehicles in HOV lane}} \times 100\%$
(4) HOV lane in operation from 4:30 to 7:00 P.M.
(5) Observations conducted 05/26/11 at Route 131, E Blithdale Ave I/C.

MARIN-101

Mission Avenue to Richardson Bay Bridge

Violation History

Southbound

	DATE	PERIOD MONITORED	TOTAL HOVL VOLUME	VIOLATION RATE
A.M. PEAK	Wed Oct 19, 2011	6:30 - 8:30 AM	1554	1.4%
	Wed Apr 14, 2010	6:30 - 8:30 AM	743	2.0%
	Tue June 2, 2009	6:30 - 8:30 AM	1132	2.1%
	Wed Oct 15, 2008	6:30 - 8:30 AM	1104	1.6%
	Wed Sep 19, 2007	6:30 - 8:30 AM	1159	1.5%
	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%

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

Richardson Bay Bridge to Mission Avenue

Violation History

Northbound

	DATE	PERIOD MONITORED	TOTAL HOVL VOLUME	VIOLATION RATE
P.M. PEAK	Thu May 26, 2011	4:30 - 7:00 PM	3126	0.2%
	Thu Apr 15, 2010	4:30 - 7:00 PM	1325	1.6%
	Thu Sep 24, 2009	4:30 - 7:00 PM	1848	1.1%
	Wed Oct 15, 2008	4:30 - 7:00 PM	1262	1.4%
	Wed Oct 3, 2007	4:30 - 7:00 PM	2545	1.2%
	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%

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 Mission Road

Southbound - A.M.

Typical data for 2011 ⁽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	30	6	13	0
Buses	29	31	16	6
Carpools ⁽¹⁾	1997	667	1091	265
Vanpools	7	0	0	0
Hybrid/Single Occ. ⁽²⁾	65	10189	54	5024
Violators	6	—	0	—
TOTAL	2134	10893	1174	5295

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	30	6	13	0
Buses	1015	1085	560	210
Carpools ⁽¹⁾	4085	1341	2229	530
Vanpools	70	0	0	0
Hybrid/Single Occ. ⁽²⁾	65	10189	54	5024
Violators	6	—	0	—
TOTAL	5271	12621	2856	5764

RATES	PEAK PERIOD ⁽⁴⁾ 6:30 - 8:30 AM		PEAK HOUR 6:30 - 7:30 AM	
	HOV Lane occupancy rate	2.4 persons/veh		2.4 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)	0.3 %		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 6:30 to 8:30 A.M.
 (5) Observations conducted 06/01/11 at Alameda Del Prado Drive I/C.

MARIN-101

Mission Road to Route 37

Northbound - P.M.

Typical data for 2011 ⁽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	63	18	23	12
Buses	41	61	17	12
Carpools ⁽¹⁾	1978	1120	900	432
Vanpools	11	18	5	6
Hybrid/Single Occ. ⁽²⁾	107	15122	43	6419
Violators	23	—	13	—
TOTAL	2223	16339	1001	6881

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	63	18	23	12
Buses	1435	2135	595	420
Carpools ⁽¹⁾	4048	2405	1837	933
Vanpools	110	180	50	60
Hybrid/Single Occ. ⁽²⁾	107	15122	43	6419
Violators	23	—	13	—
TOTAL	5786	19860	2561	7844

RATES	PEAK PERIOD ⁽⁴⁾ 4:30 - 7:00 PM		PEAK HOUR 4:30 - 5:30 PM	
	HOV Lane occupancy rate	2.6 persons/veh		2.6 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)	1.0 %		1.3 %	

- 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 4:30 to 7:00 P.M.
 (5) Observations conducted 06/02/11 at Manuel Freitas Truck scale.

MARIN-101

Route 37 to Mission Avenue

Violation History

Southbound

	DATE	PERIOD MONITORED	TOTAL HOVL VOLUME	VIOLATION RATE
A.M. PEAK	Wed Jun 1, 2011	6:30 - 8:30 AM	2134	0.3%
	Tue Apr 13, 2010	6:30 - 8:30 AM	1441	1.3%
	Thu mar 12, 2009	6:30 - 8:30 AM	1225	1.5%
	Thu Oct 9, 2008	6:30 - 8:30 AM	1749	2.0%
	Thu Sep 13, 2007	6:30 - 8:30 AM	2141	1.1%
	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%

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

Mission Avenue to Route 37

Violation History

Northbound

	DATE	PERIOD MONITORED	TOTAL HOVL VOLUME	VIOLATION RATE
P.M. PEAK	Thu Jun 2, 2011	4:30 - 7:00 PM	2223	1.0%
	Tue Apr 13, 2010	4:30 - 7:00 PM	1617	1.2%
	Thu Oct 1, 2009	4:30 - 7:00 PM	2219	1.3%
	Thu Apr 3, 2008	4:30 - 7:00 PM	1724	0.9%
	Thu Sep 13, 2007	4:30 - 7:00 PM	1874	1.1%
	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%

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

Route101(Mountain View) to Route 280

Southbound - P.M.

Typical data for 2011 ⁽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	129	2	32	0
Buses	23	2	7	0
Carpools ⁽¹⁾	2042	302	778	100
Vanpools	4	0	2	0
Hybrid/Single Occ. ⁽²⁾	257	6978	87	2488
Violators	49	—	5	—
TOTAL	2504	7284	914	2588

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	129	2	32	0
Buses	805	70	245	0
Carpools ⁽¹⁾	4248	615	1621	204
Vanpools	40	0	20	0
Hybrid/Single Occ. ⁽²⁾	257	6978	87	2488
Violators	49	—	5	—
TOTAL	5528	7665	2013	2692

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		1.0 persons/veh	
Overall occupancy (incl. buses)	1.3 persons/veh		1.3 persons/veh	
Violation rate ⁽³⁾ (HOV Lane)	2.0 %		0.5 %	

- NOTES:** (1) Two or more occupants per vehicle.
 (2) Hybrid HOV Lane only/Single Occupancy mixed flow lanes only.
 (3) Violation rate = $\frac{\text{no. of violators in HOV lane}}{\text{Total no. of vehicles in HOV lane}} \times 100\%$
 (4) HOV lane in operation from 3:00 to 7:00 P.M.
 (5) Observations conducted 04/14/11 at Fremont Avenue I/C.

SANTA CLARA-85

Route 101 (Mountain View) to Route 280

Violation History

Southbound

	DATE	PERIOD MONITORED	TOTAL HOVL VOLUME	VIOLATION RATE
A.M. PEAK	Year 2011	-	-	-
	Year 2010	-	-	-
	Year 2009	-	-	-
	Year 2008	-	-	-
	Year 2007	-	-	-
	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%

P.M. PEAK	Thu Apr 14, 2011	3:00 - 6:00 PM	2504	2.0%
	Wed Mar 10, 2010	3:00 - 6:00 PM	2349	2.3%
	Thu Apr 30, 2009	3:00 - 6:00 PM	2409	1.9%
	Tue Sep 30, 2008	3:00 - 6:00 PM	2853	2.7%
	Wed Dec 12, 2007	3:00 - 6:00 PM	2947	4.0%
	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%

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 2011 off-peak direction

SANTA CLARA-85

Route 280 to Almaden Expressway

Southbound - P.M.

Typical data for 2011 ⁽⁵⁾

VEHICLES	PEAK PERIOD ⁽⁴⁾ 3:00 - 6:00 PM		PEAK HOUR 3:00 - 4:00 PM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	46	10	10	2
Buses	19	10	6	2
Carpools ⁽¹⁾	2249	1244	681	554
Vanpools	46	10	10	0
Hybrid/Single Occ. ⁽²⁾	188	13506	27	4528
Violators	36	—	27	—
TOTAL	2584	14780	761	5086

PERSONS	PEAK PERIOD ⁽⁴⁾ 3:00 - 6:00 PM		PEAK HOUR 3:00 - 4:00 PM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	46	10	10	2
Buses	665	350	210	70
Carpools ⁽¹⁾	4609	2754	1388	1242
Vanpools	460	100	100	0
Hybrid/Single Occ. ⁽²⁾	188	13506	27	4528
Violators	36	—	27	—
TOTAL	6004	16720	1762	5842

RATES	PEAK PERIOD ⁽⁴⁾ 3:00 - 6:00 PM		PEAK HOUR 3:00 - 4:00 PM	
	HOV Lane occupancy rate	2.3 persons/veh		2.3 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)	1.4 %		3.5 %	

- 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 06/01/11 at Winchester Boulevard 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 2011	-	-	-
	Year 2010	-	-	-
	Year 2009	-	-	-
	Year 2008	-	-	-
	Year 2007	-	-	-
	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%
	P.M. PEAK	Wed Jun 1, 2011	3:00 - 6:00 PM	2584
Wed May 26, 2010		3:00 - 6:00 PM	2207	2.4%
Wed Apr 1, 2009		3:00 - 6:00 PM	2998	1.2%
Tue Apr 22, 2008		3:00 - 6:00 PM	3226	4.0%
Tue Dec 4, 2007		3:00 - 6:00 PM	3259	1.1%
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%

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 2011 for off-peak direction

SANTA CLARA-85

Almaden Expressway to Route 101(So. San Jose)

Southbound - P.M.

Typical data for 2011 ⁽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	48	30	16	12
Buses	8	2	0	0
Carpools ⁽¹⁾	1016	1564	318	462
Vanpools	2	24	1	6
Hybrid/Single Occ. ⁽²⁾	35	12206	14	4338
Violators	21	—	4	—
TOTAL	1130	13826	353	4818

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	48	30	16	12
Buses	280	70	0	0
Carpools ⁽¹⁾	2074	3476	645	1030
Vanpools	20	240	10	60
Hybrid/Single Occ. ⁽²⁾	35	12206	14	4338
Violators	21	—	4	—
TOTAL	2478	16022	689	5440

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	1.2 persons/veh		1.1 persons/veh	
Overall occupancy (incl. buses)	1.2 persons/veh		1.2 persons/veh	
Violation rate ⁽³⁾ (HOV Lane)	1.9 %		1.1 %	

- 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 3:00 to 7:00 P.M.
 (5) Observations conducted 06/02/11 at Blossom Hill Road I/C.

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 2011	-	-	-
	Year 2010	-	-	-
	Year 2009	-	-	-
	Year 2008	-	-	-
	Year 2007	-	-	-
	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%
	P.M. PEAK	Thu Jun 2, 2011	3:00 - 6:00 PM	1130
Tue May 18, 2010		3:00 - 6:00 PM	1839	1.5%
Wed Mar 25, 2009		3:00 - 6:00 PM	2081	0.8%
Thu May 1, 2008		3:00 - 6:00 PM	2606	1.2%
Wed Mar 21, 2007		3:00 - 6:00 PM	2005	3.2%
Thu Apr 20, 2006		3:00 - 6:00 PM	1547	3.4%
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%

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 2011 for off-peak direction

SANTA CLARA-87

Route 101 I/C to Route 280 I/C

Southbound - P.M.

Typical data for 2011 ⁽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	90	4	23	2
Buses	5	0	0	0
Carpools ⁽¹⁾	1024	678	278	216
Vanpools	4	4	1	0
Hybrid/Single Occ. ⁽²⁾	52	10450	11	3768
Violators	27	—	7	—
TOTAL	1202	11136	320	3986

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	90	4	23	2
Buses	175	0	0	0
Carpools ⁽¹⁾	2165	1576	596	511
Vanpools	40	40	10	0
Hybrid/Single Occ. ⁽²⁾	52	10450	11	3768
Violators	27	—	7	—
TOTAL	2549	12070	647	4281

RATES	PEAK PERIOD ⁽⁴⁾ 3:00 - 6:00 PM		PEAK HOUR 4:00 - 5:00 PM	
	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		1.1 persons/veh	
Violation rate ⁽³⁾ (HOV Lane)	2.2 %		2.2 %	

- 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 06/07/11 at Taylor Avenue I/C.

SANTA CLARA-87

Rte 101 I/C to Route 280 I/C

Violation History

Southbound

	DATE	PERIOD MONITORED	TOTAL HOVL VOLUME	VIOLATION RATE
A.M. PEAK	Year 2011	-	-	-
	Year 2010	-	-	-
	Year 2009	-	-	-
	Year 2008	-	-	-
	Year 2007	-	-	-

P.M. PEAK	Tue Jun 7, 2011	3:00-6:00 PM	1202	2.2%
	Thu May 27, 2010	3:00-6:00 PM	1438	3.9%
	Thu Mar 19, 2009	3:00-6:00 PM	1392	2.5%
	Wed Apr 9, 2008	3:00-6:00 PM	1496	2.9%
	Wed Oct 3, 2007	3:00-6:00 PM	1373	0.8%

- 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 2011 for off-peak direction

SANTA CLARA-87

Route 280 I/C to Route 85 I/C

Southbound - P.M.

Typical data for 2011 ⁽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	63	84	29	34
Buses	7	12	1	2
Carpools ⁽¹⁾	869	2786	388	886
Vanpools	2	6	2	2
Hybrid/Single Occ. ⁽²⁾	15	11680	7	3984
Violators	7	—	0	—
TOTAL	963	14568	427	4908

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	63	84	29	34
Buses	245	420	35	70
Carpools ⁽¹⁾	1845	6516	817	2078
Vanpools	20	60	20	20
Hybrid/Single Occ. ⁽²⁾	15	11680	7	3984
Violators	7	—	0	—
TOTAL	2195	18760	908	6186

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		2.1 persons/veh	
Mixed Flow occupancy rate	1.3 persons/veh		1.3 persons/veh	
Overall occupancy (incl. buses)	1.3 persons/veh		1.3 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 3:00 to 7:00 P.M.
 (5) Observations conducted 06/09/11 at Curtner Avenue I/C.

SANTA CLARA-87

Route 280 I/C to Jct Rte 85 I/C

Violation History

Southbound

	DATE	PERIOD MONITORED	TOTAL HOVL VOLUME	VIOLATION RATE
A.M. PEAK	Year 2011	-	-	-
	Year 2010	-	-	-
	Year 2009	-	-	-
	Year 2008	-	-	-
	Year 2007	-	-	-
P.M. PEAK	Thu Jun 9, 2011	3:00-6:00 PM	963	0.7%
	Thu Jun 3, 2010	3:00-6:00 PM	1687	7.8%
	Wed May 13, 2009	3:00-6:00 PM	1541	1.5%
	Thu Oct 16, 2008	3:00-6:00 PM	1433	3.8%
	Wed June 13, 2007	3:00-6:00 PM	1326	5.2%

- 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 2011 for off-peak direction

SANTA CLARA-237

Route 880/237 I/C to Mathilda Avenue

Westbound - A.M.

Typical data for 2011 ⁽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	110	10	37	0
Buses	15	12	6	6
Carpools ⁽¹⁾	1667	302	515	26
Vanpools	2	4	0	2
Hybrid/Single Occ. ⁽²⁾	12	15194	3	5518
Violators	29	—	4	—
TOTAL	1835	15522	565	5552

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	110	10	37	0
Buses	525	420	210	210
Carpools ⁽¹⁾	3362	655	1033	59
Vanpools	20	40	0	20
Hybrid/Single Occ. ⁽²⁾	12	15194	3	5518
Violators	29	—	4	—
TOTAL	4058	16319	1287	5807

RATES	PEAK PERIOD ⁽⁴⁾ 6:00 - 9:00 AM		PEAK HOUR 6:00 - 7:00 AM	
	HOV Lane occupancy rate	2.2 persons/veh		2.3 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)	2.2 %		1.2 %	

- NOTES:** (1) Two or more occupants per vehicle.
 (2) Hybrid HOV Lane only/Single Occupancy mixed flow lanes only.
 (3) Violation rate = $\frac{\text{no. of violators in HOV lane} \times 100\%}{\text{Total no. of vehicles in HOV lane}}$
 Hybrids (Yellow Sticker) are included in the Violation Rate
 (4) HOV lane in operation from 3:00 to 7:00 P.M.
 (5) Observations conducted 09/28/11 at Zanker Road I/C.

SANTA CLARA-237

Route 880/237 to Mathilda Avenue

Westbound - P.M.

Typical data for 2011 ⁽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	55	20	27	12
Buses	6	8	3	0
Carpools ⁽¹⁾	791	822	361	170
Vanpools	4	2	1	2
Hybrid/Single Occ. ⁽²⁾	7	11992	3	4370
Violators	11	—	3	—
TOTAL	874	12844	398	4554

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	55	20	27	12
Buses	210	280	105	0
Carpools ⁽¹⁾	1646	1816	748	377
Vanpools	40	20	10	20
Hybrid/Single Occ. ⁽²⁾	7	11992	3	4370
Violators	11	—	3	—
TOTAL	1969	14128	896	4779

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		2.3 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)	2.1 %		1.5 %	

- NOTES:** (1) Two or more occupants per vehicle.
 (2) Hybrid HOV lane only/Single Occupancy mixed flow lanes only.
 (3) Violation rate = $\frac{\text{no. of violators in HOV lane} \times 100\%}{\text{Total no. of vehicles in HOV lane}}$
 Hybrids (Yellow Sticker) are included in the Violation Rate
 (4) HOV lane in operation from 3:00 to 7:00 P.M.
 (5) Observations conducted 10/18/11 at the Zanker Road I/C.

SANTA CLARA-237

Mathilda Avenue to Route 880/237

Eastbound - A.M.

Typical data for 2011 ⁽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	32	28	15	12
Buses	7	16	4	10
Carpools ⁽¹⁾	428	440	158	156
Vanpools	2	14	2	8
Hybrid/Single Occ. ⁽²⁾	4	10098	2	4700
Violators	6	—	3	—
TOTAL	479	10596	184	4886

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	32	28	15	12
Buses	245	560	140	350
Carpools ⁽¹⁾	864	948	319	338
Vanpools	20	140	20	80
Hybrid/Single Occ. ⁽²⁾	4	10098	2	4700
Violators	6	—	3	—
TOTAL	1171	11774	499	5480

RATES	PEAK PERIOD ⁽⁴⁾ 6:00 - 9:00 AM		PEAK HOUR 8:00 - 9:00 AM	
	HOV Lane occupancy rate	2.4 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		1.2 persons/veh	
Violation rate ⁽³⁾ (HOV Lane)	2.1 %		2.7 %	

- NOTES:** (1) Two or more occupants per vehicle.
 (2) Hybrid HOV Lane only/Single Occupancy mixed flow lanes only.
 (3) Violation rate = $\frac{\text{no. of violators in HOV lane} \times 100\%}{\text{Total no. of vehicles in HOV lane}}$
 Hybrid (Yellow Sticker) are included in the Violation Rate
 (4) HOV lane in operation from 5:00 to 9:00 A.M.
 (5) Observations conducted 10/20/11 at Zanker Road I/C.

SANTA CLARA-237

Mathilda Avenue to Route 880/237

Eastbound - P.M.

Typical data for 2011 ⁽⁵⁾

VEHICLES	PEAK PERIOD ⁽⁴⁾ 3:00 - 6:00 PM		PEAK HOUR 3:00 - 4:00 PM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	97	8	16	0
Buses	23	0	2	0
Carpools ⁽¹⁾	1663	696	557	264
Vanpools	8	8	1	2
Hybrid/Single Occ. ⁽²⁾	—	13132	—	4526
Violators	14	—	3	—
TOTAL	1805	13844	579	4792

PERSONS	PEAK PERIOD ⁽⁴⁾ 3:00 - 6:00 PM		PEAK HOUR 3:00 - 4:00 PM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	97	8	16	0
Buses	805	0	70	0
Carpools ⁽¹⁾	3444	1506	1164	576
Vanpools	80	80	10	20
Hybrid/Single Occ. ⁽²⁾	—	13132	—	4526
Violators	14	—	3	—
TOTAL	4440	14726	1263	5122

RATES	PEAK PERIOD ⁽⁴⁾ 3:00 - 6:00 PM		PEAK HOUR 3:00 - 4:00 PM	
	HOV Lane occupancy rate	2.5 persons/veh		2.2 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)	0.8 %		0.5 %	

- NOTES:** (1) Two or more occupants per vehicle.
 (2) Hybrid HOV Lane only/Single Occupancy mixed flow lanes only.
 (3) Violation rate = $\frac{\text{no. of violators in HOV lane} \times 100\%}{\text{Total no. of vehicles in HOV lane}}$
 Hybrid (Yellow Sticker) are included in the Violation Rate
 (4) HOV lane in operation from 3:00 to 7:00 P.M.
 (5) Observations conducted 10/12/11 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 Sep 28, 2011	6:00 - 9:00 AM	1835	2.2%
	Thu Jun 10, 2010	6:00 - 9:00 AM	2019	1.3%
	Tue Sep 22, 2009	6:00 - 9:00 AM	2383	2.9%
	Wed Dec 17, 2008	6:00 - 9:00 AM	2046	0.6%
	Tue Sep 18, 2007	6:00 - 9:00 AM	2092	0.1%
	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%
P.M. PEAK	Tue Oct 18, 2011	3:00 - 6:00 PM	874	2.1%
	Tue Mar 9, 2010	3:00 - 6:00 PM	626	0.0%
	Thu Oct 1, 2009	3:00 - 6:00 PM	1099	1.2%
	Wed May 28, 2008	3:00 - 6:00 PM	1072	0.6%
	Tue Jun 12, 2007	3:00 - 6:00 PM	1641	8.2%
	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%

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	Thu Oct 20, 2011	6:00 - 9:00 AM	479	2.1%
	Year 2010	-	-	-
	Year 2009	-	-	-
	Year 2008	-	-	-
	Thu Nov 29, 2007	6:00 - 9:00 AM	741	0.4%
	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%
	P.M. PEAK	Wed Oct 12, 2011	3:00 - 6:00 PM	1805
Wed Mar 10, 2010		3:00 - 6:00 PM	1974	2.0%
Wed Jun 3, 2009		3:00 - 6:00 PM	1775	1.4%
Wed Apr 2, 2008		3:00 - 6:00 PM	1670	1.0%
Wed May 23, 2007		3:00 - 6:00 PM	2433	0.1%
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%

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 FRANCISCO-80 HOV RAMP

Sterling Street on-ramp to SFOBB

Eastbound-P.M. Typical data for 2011 ⁽⁵⁾

PEAK PERIOD ⁽⁴⁾ 3:30 - 7:00 PM

PEAK HOUR 5:00 - 6:00 PM

VEHICLES

	HOV Lane	SOV Lane	HOV Lane	SOV Lane
Motorcycles	123	—	39	—
Buses	19	—	7	—
Carpool ⁽¹⁾	1761	—	579	—
2 - seaters ⁽²⁾	577	—	184	—
Hybrid	348	—	103	—
Vanpools	79	—	25	—
Trucks	52	—	15	—
Violators	751	—	171	—
TOTAL	3710	N/A	1123	N/A

PERSONS

	HOV Lane	SOV Lane	HOV Lane	SOV Lane
Motorcycles	123	—	39	—
Buses	665	—	245	—
Carpool ⁽¹⁾	5459	—	1795	—
2 - seaters ⁽²⁾	1154	—	368	—
Hybrid	348	—	103	—
Vanpools	790	—	250	—
Trucks	52	—	15	—
Violators	1078	—	263	—
TOTAL	9669	N/A	3078	N/A

RATES

HOV Lane occupancy rate	2.6 persons/veh	2.7 persons/veh
Violation rate ⁽³⁾ (HOV Lane)	20.2 %	15.2 %

- 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 4/6/11 at the Sterling Street on-ramp

SAN FRANCISCO-80 HOV RAMP

Sterling Street On-Ramp to SFOBB

Violation History Eastbound

	DATE	PERIOD MONITORED	TOTAL HOVL VOLUME	VIOLATION RATE
P.M. PEAK	Wed Apr 6, 2011	3:30 - 7:00 PM	3710	20.2%
	Sun May 23, 2010	3:30 - 7:00 PM	3218	21.5%
	Tue Mar 17, 2009	3:30 - 7:00 PM	3108	23.6%
	Wed Oct 1, 2008	3:30 - 7:00 PM	3161	23.5%
	Thu Sep 20, 2007	3:30 - 7:00 PM	3223	10.6%
	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%

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

SOLANO-80

Carquinez Bridge Toll Plaza

Eastbound - P.M.

Typical data for 2011

(6)

PEAK PERIOD ⁽⁵⁾

3:00 to 7:00 P.M.

PEAK HOUR

5:00 to 6:00 P.M.

VEHICLES	PEAK PERIOD ⁽⁵⁾		PEAK HOUR	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	119	—	37	—
Buses ⁽⁴⁾	24	—	6	—
Carpools ⁽¹⁾	1164	—	370	—
2 - seaters ⁽²⁾	374	—	102	—
Hybrid	182	—	55	—
Vanpools	125	—	39	—
Violators (HOV only)	234	—	66	—
TOTAL	2222	14148 ⁽⁷⁾	675	3528

PERSONS	PEAK PERIOD ⁽⁵⁾		PEAK HOUR	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	119	—	37	—
Buses ⁽⁴⁾	840	—	210	—
Carpools ⁽¹⁾	3608	—	1147	—
2 - seaters ⁽²⁾	748	—	204	—
Hybrid	182	—	55	—
Vanpools	1250	—	390	—
Violators (HOV only)	370	—	106	—
TOTAL	7117	15563 ⁽⁷⁾	2149	3881

RATES	PEAK PERIOD ⁽⁵⁾		PEAK HOUR	
	HOV Lane occupancy rate	3.2 persons/veh		3.2 persons/veh
Mixed Flow Occupancy Rate ⁽⁷⁾	1.1 persons/veh		1.1 persons/veh	
Violation rate (HOV Lane) ⁽³⁾	10.5 %		9.8 %	

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) Assumed PM bus occupancy = 35 persons/vehicle.

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

(6) Observations conducted 3/29/11 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 2011	-	-	-
	Year 2010	-	-	-
	Year 2009	-	-	-
	Year 2008	-	-	-
	Year 2007	-	-	-
	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%
	P.M. PEAK	Tue Mar 29, 2011	3:00 - 7:00 PM	2222
Tue Mar 23, 2010		3:00 - 7:00 PM	3180	6.5%
Wed Mar 18, 2009		3:00 - 7:00 PM	3465	12.9%
Wed Apr 2, 2008		3:00 - 7:00 PM	3459	13.4%
Tue Sep 18, 2007		3:00 - 7:00 PM	3452	10.1%
Thu Sep 14, 2006		3:00 - 7:00 PM	3285	11.0%
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%

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 2011 for off-peak direction

SOLANO-80

Airbase Parkway to Red Top Road

Westbound - A.M.

Typical data for 2011 ⁽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	22	8	10	3
Buses	9	15	3	0
Carpools ⁽¹⁾	975	349	377	101
Vanpools	5	3	2	0
Hybrid/Single Occ. ⁽²⁾	—	7656	—	2908
Violators	0	—	0	—
TOTAL	1011	8031	392	3012

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	22	8	10	3
Buses	315	525	105	0
Carpools ⁽¹⁾	1981	712	771	208
Vanpools	50	30	20	0
Hybrid/Single Occ. ⁽²⁾	—	7656	—	2908
Violators	0	—	0	—
TOTAL	2368	8931	906	3119

RATES	PEAK PERIOD ⁽⁴⁾ 6:00 - 9:00 AM		PEAK HOUR 7:00 - 8:00 AM	
	HOV Lane occupancy rate	2.3 persons/veh		2.3 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)	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 = $\frac{\text{no. of violators in HOV lane} \times 100\%}{\text{Total no. of vehicles in HOV lane}}$
 Hybrids (Yellow Sticker) are included in the Violation Rate
 (4) HOV lane in operation from 6:00 to 9:00 A.M.
 (5) Observations conducted 11/09/11 at Green Valley Rd Park&Ride.

SOLANO-80

Airbase Parkway to Red Top Road

Westbound - P.M.

Typical data for 2011 ⁽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	21	35	6	10
Buses	16	60	3	15
Carpools ⁽¹⁾	865	981	288	403
Vanpools	11	0	5	0
Hybrid/Single Occ. ⁽²⁾	—	6079	—	2011
Violators	11	—	1	—
TOTAL	924	7155	303	2439

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	21	35	6	10
Buses	560	2100	105	525
Carpools ⁽¹⁾	1806	2089	601	855
Vanpools	110	0	50	0
Hybrid/Single Occ. ⁽²⁾	—	6079	—	2011
Violators	11	—	1	—
TOTAL	2508	10303	763	3401

RATES	PEAK PERIOD ⁽⁴⁾ 3:00 - 6:00 PM		PEAK HOUR 4:00 - 5:00 PM	
	HOV Lane occupancy rate	2.7 persons/veh		2.5 persons/veh
Mixed Flow occupancy rate	1.4 persons/veh		1.4 persons/veh	
Overall occupancy (incl. buses)	1.6 persons/veh		1.5 persons/veh	
Violation rate ⁽³⁾ (HOV Lane)	1.2 %		0.3 %	

- NOTES:** (1) Two or more occupants per vehicle.
 (2) Hybrid HOV Lane only/Single Occupancy mixed flow lanes only.
 (3) Violation rate = $\frac{\text{no. of violators in HOV lane} \times 100\%}{\text{Total no. of vehicles in HOV lane}}$
 Hybrids (Yellow Sticker) are included in the Violation Rate
 (4) HOV lane in operation from 3:00 to 7:00 P.M.
 (5) Observations conducted 10/27/11 at Green Valley Rd Park&Ride

SOLANO-80

Red Top Road to Airbase Parkway

Eastbound - A.M.

Typical data for 2011 ⁽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	9	28	4	8
Buses	19	5	14	5
Carpools ⁽¹⁾	367	313	130	160
Vanpools	13	5	5	0
Hybrid/Single Occ. ⁽²⁾	23	6118	9	2418
Violators	0	—	0	—
TOTAL	431	6469	162	2591

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	9	28	4	8
Buses	665	175	490	175
Carpools ⁽¹⁾	744	641	266	331
Vanpools	130	50	50	0
Hybrid/Single Occ. ⁽²⁾	23	6118	9	2418
Violators	0	—	0	—
TOTAL	1571	7012	819	2932

RATES	PEAK PERIOD ⁽⁴⁾ 6:00 - 9:00 AM		PEAK HOUR 8:00 - 9:00 AM	
	HOV Lane occupancy rate	3.6 persons/veh		5.1 persons/veh
Mixed Flow occupancy rate	1.1 persons/veh		1.1 persons/veh	
Overall occupancy (incl. buses)	1.2 persons/veh		1.4 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 6:00 to 9:00 A.M.
 (5) Observations conducted 05/25/11 at Abernathy Road I/C.

SOLANO-80

Red Top Road to Airbase Parkway

Eastbound - P.M.

Typical data for 2011 ⁽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	79	28	24	5
Buses	8	23	1	8
Carpools ⁽¹⁾	1328	775	368	402
Vanpools	32	20	11	3
Hybrid/Single Occ. ⁽²⁾	39	10397	15	3503
Violators	6	—	0	—
TOTAL	1492	11243	419	3921

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	79	28	24	5
Buses	280	805	35	280
Carpools ⁽¹⁾	2717	1638	758	844
Vanpools	320	200	110	30
Hybrid/Single Occ. ⁽²⁾	39	10397	15	3503
Violators	6	—	0	—
TOTAL	3441	13068	942	4662

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	1.2 persons/veh		1.2 persons/veh	
Overall occupancy (incl. buses)	1.3 persons/veh		1.3 persons/veh	
Violation rate ⁽³⁾ (HOV Lane)	0.4 %		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 05/24/11 at Abernathy Road I/C.

SOLANO-80

Airbase Parkway to Red Top Road

Violation History

Westbound

	DATE	PERIOD MONITORED	TOTAL HOVL VOLUME	VIOLATION RATE
A.M. PEAK	Wed Nov 9, 2011	5:00 - 10:00 AM	1011	0.0%
	Thu Apr 22, 2010	5:00 - 10:00 AM	892	2.9%
P.M. PEAK	Thu Oct 27, 2011	3:00 - 7:00 PM	924	1.2%
	Wed Apr 28, 2010	3:00 - 7:00 PM	750	3.2%

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.

SOLANO-80

Red Top Road to Airbase Parkway

Violation History

Eastbound

	DATE	PERIOD MONITORED	TOTAL HOVL VOLUME	VIOLATION RATE
A.M. PEAK	Wed May 25, 2011	5:00 - 10:00 AM	431	0.0%
	Thu Apr 15, 2010	5:00 - 10:00 AM	473	1.5%
P.M. PEAK	Tue May 24, 2011	3:00 - 7:00 PM	1492	0.4%
	Wed Apr 21, 2010	3:00 - 7:00 PM	1487	1.0%

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.

SONOMA-101

Rohnert Park Expressway to Old Redwood Highway

Southbound - A.M.

Typical data for 2011 ⁽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	18	8	7	4
Buses	4	16	3	12
Carpools ⁽¹⁾	648	621	333	307
Vanpools	2	24	2	8
Single Occ. ⁽²⁾	—	6172	—	3305
Violators	14	—	6	—
TOTAL	686	6841	351	3636

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	18	8	7	4
Buses	140	560	105	420
Carpools ⁽¹⁾	1352	1363	694	665
Vanpools	20	240	20	80
Single Occ. ⁽²⁾	—	6172	—	3305
Violators	14	—	6	—
TOTAL	1544	8343	832	4474

RATES	PEAK PERIOD ⁽⁴⁾ 7:00 - 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	1.2 persons/veh		1.2 persons/veh	
Overall occupancy (incl. buses)	1.3 persons/veh		1.3 persons/veh	
Violation rate ⁽³⁾ (HOV Lane)	2.0 %		1.7 %	

- 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 7:00 to 9:00 A.M.
 (5) Observations conducted 12/14/11 at Truck Check Brake Area.

SONOMA-101

Old Redwood Highway to Rohnert Park Expressway

Northbound - P.M.

Typical data for 2011 ⁽⁵⁾

VEHICLES	PEAK PERIOD ⁽⁴⁾ 3:00 - 6:30 PM		PEAK HOUR 3:00 - 4:00 PM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	23	0	8	0
Buses	21	16	5	4
Carpools ⁽¹⁾	1887	1162	568	605
Vanpools	11	28	7	12
Single Occ. ⁽²⁾	—	11701	—	3244
Violators	30	—	21	—
TOTAL	1972	12907	609	3865

PERSONS	PEAK PERIOD ⁽⁴⁾ 3:00 - 6:30 PM		PEAK HOUR 3:00 - 4:00 PM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	23	0	8	0
Buses	735	560	175	140
Carpools ⁽¹⁾	3864	2658	1195	1386
Vanpools	110	280	70	120
Single Occ. ⁽²⁾	—	11701	—	3244
Violators	30	—	21	—
TOTAL	4762	15199	1469	4890

RATES	PEAK PERIOD ⁽⁴⁾ 3:00 - 6:30 PM		PEAK HOUR 3:00 - 4:00 PM	
	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		1.3 persons/veh
Overall occupancy (incl. buses)	1.3 persons/veh		1.4 persons/veh	
Violation rate ⁽³⁾ (HOV Lane)	1.5 %		3.4 %	

- 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 3:00 to 6:30 P.M.
 (5) Observations conducted 12/15/11 at South of Sierra Ave.

SONOMA-101

Rohnert Park Expressway to Old Redwood Highway

Violation History

Southbound

	DATE	PERIOD MONITORED	TOTAL HOVL VOLUME	VIOLATION RATE
A.M. PEAK	Wed Dec 14, 2011	7:00 - 9:00 AM	686	2.0%
P.M. PEAK	Year 2011	-	-	-

- 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.
(c) Data was not collected in 2011 for off-peak direction

SONOMA-101

Old Redwood Highway to Rohnert Park Expressway

Violation History

Northbound

	DATE	PERIOD MONITORED	TOTAL HOVL VOLUME	VIOLATION RATE
A.M. PEAK	Year 2011	-	-	-
P.M. PEAK	Thu Dec 15, 2011	3:00 - 6:30 PM	1972	1.5%

- 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.
(c) Data was not collected in 2011 for off-peak direction

SONOMA-101

Windsor River Road to Route 12

Southbound - A.M.

Typical data for 2011 ⁽⁵⁾

VEHICLES	PEAK PERIOD ⁽⁴⁾ 7:00 - 9:00 AM		PEAK HOUR 7:00 - 8:00 AM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	21	8	11	8
Buses	10	25	5	17
Carpools ⁽¹⁾	549	202	274	152
Vanpools	2	8	2	8
Hybrid/Single Occ. ⁽²⁾	14	5337	7	2607
Violators	10	—	8	—
TOTAL	606	5580	307	2792

PERSONS	PEAK PERIOD ⁽⁴⁾ 7:00 - 9:00 AM		PEAK HOUR 7:00 - 8:00 AM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	21	8	11	8
Buses	350	875	175	595
Carpools ⁽¹⁾	1122	422	561	317
Vanpools	20	80	20	80
Hybrid/Single Occ. ⁽²⁾	14	5337	7	2607
Violators	10	—	8	—
TOTAL	1537	6722	782	3607

RATES	PEAK PERIOD ⁽⁴⁾ 7:00 - 9:00 AM		PEAK HOUR 7:00 - 8:00 AM	
	HOV Lane occupancy rate	2.5 persons/veh		2.5 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)	1.7 %		2.6 %	

- 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 7:00 to 9:00 A.M.
 (5) Observations conducted 05/11/11 at River Road I/C

SONOMA-101

Windsor River Road to Route 12

Southbound - P.M.

Typical data for 2011 ⁽⁵⁾

VEHICLES	PEAK PERIOD ⁽⁴⁾ 3:00 - 6:30 PM		PEAK HOUR 3:00 - 4:00 PM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	73	28	26	4
Buses	19	22	4	4
Carpools ⁽¹⁾	1515	394	434	74
Vanpools	6	0	1	0
Hybrid/Single Occ. ⁽²⁾	25	9263	6	2999
Violators	10	—	10	—
TOTAL	1648	9707	481	3081

PERSONS	PEAK PERIOD ⁽⁴⁾ 3:00 - 6:30 PM		PEAK HOUR 3:00 - 4:00 PM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	73	28	26	4
Buses	665	770	140	140
Carpools ⁽¹⁾	3157	819	913	157
Vanpools	60	0	10	0
Hybrid/Single Occ. ⁽²⁾	25	9263	6	2999
Violators	10	—	10	—
TOTAL	3990	10880	1105	3300

RATES	PEAK PERIOD ⁽⁴⁾ 3:00 - 6:30 PM		PEAK HOUR 3:00 - 4:00 PM	
	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)	1.3 persons/veh		1.2 persons/veh	
Violation rate ⁽³⁾ (HOV Lane)	0.6 %		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 3:00 to 6:30 P.M.
 (5) Observations conducted 05/10/11 at River Road I/C.

SONOMA-101

Route 12 to Windsor River Road

Northbound - A.M.

Typical data for 2011 ⁽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	35	29	18	17
Buses	0	44	0	22
Carpools ⁽¹⁾	584	314	331	143
Vanpools	4	10	3	0
Hybrid/Single Occ. ⁽²⁾	18	5573	11	2810
Violators	9	—	0	—
TOTAL	650	5970	363	2992

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	35	29	18	17
Buses	0	1540	0	770
Carpools ⁽¹⁾	1212	641	696	295
Vanpools	40	100	30	0
Hybrid/Single Occ. ⁽²⁾	18	5573	11	2810
Violators	9	—	0	—
TOTAL	1314	7883	755	3892

RATES	PEAK PERIOD ⁽⁴⁾ 7:00 - 9:00 AM		PEAK HOUR 8:00 - 9:00 AM	
	HOV Lane occupancy rate	2.0 persons/veh		2.1 persons/veh
Mixed Flow occupancy rate	1.3 persons/veh		1.3 persons/veh	
Overall occupancy (incl. buses)	1.4 persons/veh		1.4 persons/veh	
Violation rate ⁽³⁾ (HOV Lane)	1.4 %		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 7:00 to 9:00 A.M.
 (5) Observations conducted 05/12/11 at Mendocino Ave./Kaiser Hosp. Parking Lot

SONOMA-101

Route 12 to Windsor River Road

Northbound - P.M.

Typical data for 2011 ⁽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	74	22	27	0
Buses	14	38	4	14
Carpools ⁽¹⁾	1561	582	484	136
Vanpools	4	0	0	0
Hybrid/Single Occ. ⁽²⁾	33	11346	11	3680
Violators	4	—	0	—
TOTAL	1690	11988	526	3830

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	74	22	27	0
Buses	490	1330	140	490
Carpools ⁽¹⁾	3218	1210	993	287
Vanpools	40	0	0	0
Hybrid/Single Occ. ⁽²⁾	33	11346	11	3680
Violators	4	—	0	—
TOTAL	3859	13908	1171	4457

RATES	PEAK PERIOD ⁽⁴⁾ 3:00 - 6:30 PM		PEAK HOUR 5:00 - 6:00 PM	
	HOV Lane occupancy rate	2.3 persons/veh		2.2 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)	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 3:00 to 6:30 P.M.
 (5) Observations conducted 05/12/11 at Mendocino Ave./Kaiser Hosp. Parking L

SONOMA-101

Windsor River Road to Route 12

Violation History

Southbound

	DATE	PERIOD MONITORED	TOTAL HOVL VOLUME	VIOLATION RATE
A.M. PEAK	Wed May 11, 2011	7:00 - 9:00 AM	606	1.7%
	Tue Mar 23, 2010	7:00 - 9:00 AM	200	2.0%

P.M. PEAK	Tue May 10, 2011	3:00 - 6:30 PM	1648	0.6%
	Thu Mar 18, 2010	3:00 - 6:30 PM	488	1.4%

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.

SONOMA-101

Route 12 to Windsor River Road

Violation History

Northbound

	DATE	PERIOD MONITORED	TOTAL HOVL VOLUME	VIOLATION RATE
A.M. PEAK	Thu May 12, 2011	7:00 - 9:00 AM	650	1.4%
	Thu Mar 18, 2010	7:00 - 9:00 AM	412	1.2%
P.M. PEAK	Thu May 12, 2011	3:00 - 6:30 PM	1690	0.2%
	Wed Mar 17, 2010	3:00 - 6:30 PM	1336	1.7%

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.

SONOMA-101

Route 12 to Wilfred Avenue

Southbound - A.M.

Typical data for 2011 ⁽⁵⁾

VEHICLES	PEAK PERIOD ⁽⁴⁾ 7:00 - 9:00 AM		PEAK HOUR 7:00 - 8:00 AM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	50	10	30	6
Buses	7	16	4	12
Carpools ⁽¹⁾	585	263	300	144
Vanpools	2	10	1	6
Hybrid/Single Occ. ⁽²⁾	29	6726	17	3700
Violators	13	—	5	—
TOTAL	686	7025	357	3868

PERSONS	PEAK PERIOD ⁽⁴⁾ 7:00 - 9:00 AM		PEAK HOUR 7:00 - 8:00 AM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	50	10	30	6
Buses	245	560	140	420
Carpools ⁽¹⁾	1210	535	623	292
Vanpools	20	100	10	60
Hybrid/Single Occ. ⁽²⁾	29	6726	17	3700
Violators	13	—	5	—
TOTAL	1567	7931	825	4478

RATES	PEAK PERIOD ⁽⁴⁾ 7:00 - 9:00 AM		PEAK HOUR 7:00 - 8:00 AM	
	HOV Lane occupancy rate	2.3 persons/veh		2.3 persons/veh
Mixed Flow occupancy rate	1.1 persons/veh		1.2 persons/veh	
Overall occupancy (incl. buses)	1.2 persons/veh		1.3 persons/veh	
Violation rate ⁽³⁾ (HOV Lane)	1.9 %		1.4 %	

- 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 7:00 to 9:00 A.M.
 (5) Observations conducted 05/05/11 at South of Hearn Avenue I/C.

SONOMA-101

Route 12 to Wilfred Ave

Southbound - P.M.

Typical data for 2011 ⁽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	109	12	35	4
Buses	25	29	5	2
Carpools ⁽¹⁾	2193	839	617	248
Vanpools	5	8	5	0
Hybrid/Single Occ. ⁽²⁾	42	11018	8	3257
Violators	20	—	1	—
TOTAL	2394	11906	671	3511

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	109	12	35	4
Buses	875	1015	175	70
Carpools ⁽¹⁾	4548	1747	1284	505
Vanpools	50	80	50	0
Hybrid/Single Occ. ⁽²⁾	42	11018	8	3257
Violators	20	—	1	—
TOTAL	5644	13872	1553	3836

RATES	PEAK PERIOD ⁽⁴⁾ 3:00 - 6:30 PM		PEAK HOUR 5:00 - 6:00 PM	
	HOV Lane occupancy rate	2.4 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)	0.8 %		0.1 %	

- 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 3:00 to 6:30 P.M.
 (5) Observations conducted 05/03/11 at South of Hearn Avenue I/C

SONOMA-101

Wilfred Avenue to Route 12

Northbound - A.M.

Typical data for 2011 ⁽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	47	12	19	8
Buses	1	10	0	0
Carpools ⁽¹⁾	597	528	304	282
Vanpools	5	14	2	8
Hybrid/Single Occ. ⁽²⁾	26	5656	17	3054
Violators	4	—	0	—
TOTAL	680	6220	342	3352

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	47	12	19	8
Buses	35	350	0	0
Carpools ⁽¹⁾	1241	1060	627	564
Vanpools	50	140	20	80
Hybrid/Single Occ. ⁽²⁾	26	5656	17	3054
Violators	4	—	0	—
TOTAL	1403	7218	683	3706

RATES	PEAK PERIOD ⁽⁴⁾ 7:00 - 9:00 AM		PEAK HOUR 8:00 - 9:00 AM	
	HOV Lane occupancy rate	2.0 persons/veh		2.0 persons/veh
Mixed Flow occupancy rate	1.2 persons/veh		1.1 persons/veh	
Overall occupancy (incl. buses)	1.2 persons/veh		1.2 persons/veh	
Violation rate ⁽³⁾ (HOV Lane)	0.6 %		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 7:00 to 9:00 A.M.
 (5) Observations conducted 05/05/11 at North of Todd Road I/C.

SONOMA-101

Wilfred Ave to Route 12

Northbound - P.M.

Typical data for 2011 ⁽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	75	32	21	10
Buses	15	16	5	8
Carpools ⁽¹⁾	1784	1025	612	200
Vanpools	15	14	5	0
Hybrid/Single Occ. ⁽²⁾	47	11753	21	3696
Violators	12	—	1	—
TOTAL	1948	12840	665	3914

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	75	32	21	10
Buses	525	560	175	280
Carpools ⁽¹⁾	3669	2114	1260	440
Vanpools	150	140	50	0
Hybrid/Single Occ. ⁽²⁾	47	11753	21	3696
Violators	12	—	1	—
TOTAL	4478	14599	1528	4426

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	2.3 persons/veh		2.3 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)	0.6 %		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 6:30 P.M.
 (5) Observations conducted 04/14/11 at North of Todd Road I/C.

SONOMA-101

Route 12 to Wilfred Avenue

Violation History

Southbound

	DATE	PERIOD MONITORED	TOTAL HOVL VOLUME	VIOLATION RATE
A.M. PEAK	Thu May 5, 2011	7:00 - 9:00 AM	686	1.9%
	Thu Apr 29, 2010	7:00 - 9:00 AM	549	4.2%
	Thu May 7, 2009	7:00 - 9:00 AM	687	4.4%
	Tue Apr 29, 2008	7:00 - 9:00 AM	699	4.1%
	Thu Mar 22, 2007	7:00 - 9:00 AM	781	4.4%
	Wed Oct 18, 2006	7:00 - 9:00 AM	705	4.7%
	Thu Mar 10, 2005	7:00 - 9:00 AM	1023	3.8%
	Thu Oct 7, 2004	7:00 - 9:00 AM	772	2.2%
	Thu Apr 10, 2003	6:30 - 9:30 AM	997	4.8%
	Tue Dec 10, 2002	6:30 - 9:30 AM	951	5.8%
P.M. PEAK	Tue May 3, 2011	3:00 - 6:30 PM	2394	0.8%
	Thu Apr 22, 2010	3:00 - 6:30 PM	2442	0.9%
	Wed Apr 29, 2009	3:00 - 6:30 PM	2563	1.0%
	Wed Apr 16, 2008	3:00 - 6:30 PM	2276	2.2%
	Thu Sep 27, 2007	3:00 - 6:30 PM	2223	2.7%
	Thu Apr 27, 2006	3:00 - 6:30 PM	2277	3.6%
	Wed Mar 9, 2005	3:00 - 6:30 PM	1967	3.9%
	Thu Oct 28, 2004	3:00 - 6:30 PM	2809	1.2%

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.

SONOMA-101

Wilfred Avenue to Route 12

Violation History

Northbound

	DATE	PERIOD MONITORED	TOTAL HOVL VOLUME	VIOLATION RATE
A.M. PEAK	Thu May 5, 2011	7:00 - 9:00 AM	680	0.6%
	Tue May 4, 2010	7:00 - 9:00 AM	628	4.3%
	Thu May 28, 2009	7:00 - 9:00 AM	702	4.0%
	Thu Oct 16, 2008	7:00 - 9:00 AM	790	3.3%
	Wed Mar 28, 2007	7:00 - 9:00 AM	918	3.5%
	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 14, 2011	3:00 - 6:30 PM	1948	0.6%
	Tue Mar 23, 2010	3:00 - 6:30 PM	1670	1.5%
	Thu Mar 26, 2009	3:00 - 6:30 PM	1988	1.2%
	Thu Oct 16, 2008	3:00 - 6:30 PM	1766	1.0%
	Tue Mar 27, 2007	3:00 - 6:30 PM	1982	1.4%
	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%

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.