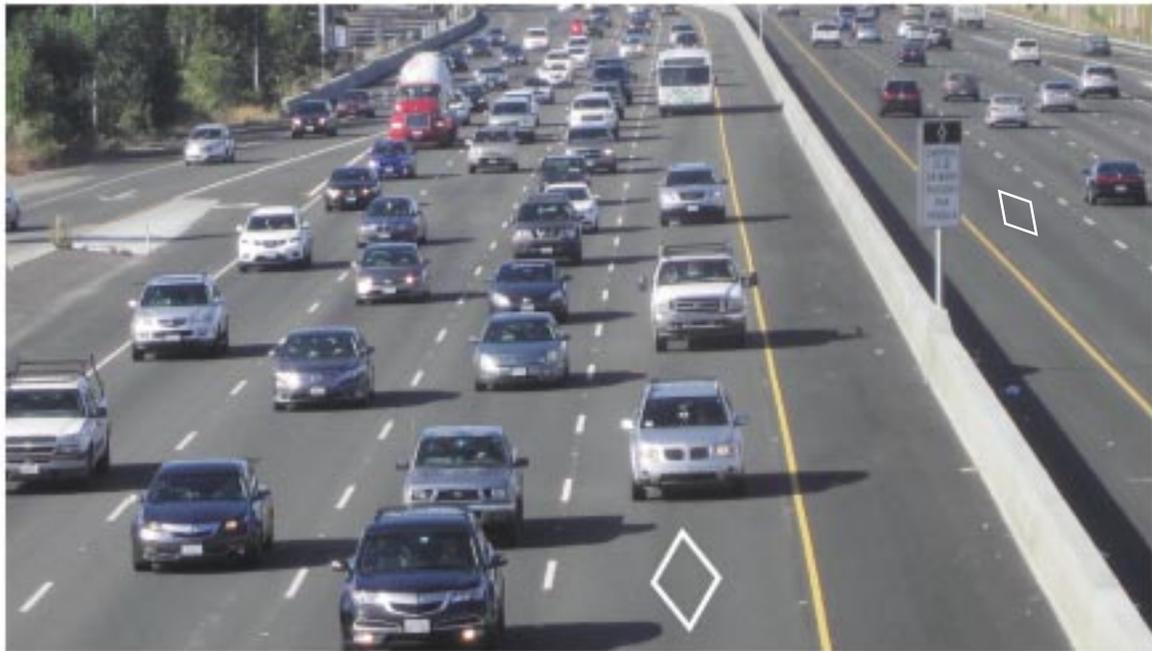


2013 Bay Area Managed Lanes



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 MANAGED LANE REPORT is prepared by the California Department of Transportation (Caltrans) District 4 Office of Highway Operations. Managed Lanes are lanes that are proactively managed in response to changing operating conditions in efforts to achieve improved efficiency and performance. This report contains information concerning High Occupancy Vehicle (HOV) lanes and Express Lanes or High Occupancy Toll (HOT) Lanes on the San Francisco Bay Area freeway system. Traffic performance data for mainline HOV lanes, Express Lanes and HOV toll gates are provided for calendar year 2013. 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 Managed lane monitoring report is to compile statistics and measurements of collected data.

Major changes in 2013:

- A new section of HOV lane on State Route 4 opened to traffic in Contra Costa County from Contra Loma Boulevard to Loveridge Road in the westbound direction on December 17, 2013. The limits of the HOV lane now extend from Contra Loma Boulevard to Port Chicago Highway, a distance of 11.1 miles.
- A new section of HOV lane on Interstate 880 opened to traffic in the northbound and southbound direction from US 101 to State Route 237 in Santa Clara County on June 22, 2013. The limits of the HOV lane now extend from Old Bayshore Highway to South of SR 238 in the northbound direction, a distance of 23.2 miles and from Marina Blvd. to US 101 in the southbound direction, a distance of 27.0 miles.

HOV Report Website:

This report is available at <http://www.dot.ca.gov/dist4/highwayops/hoindex.html>.

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

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HOV/EXPRESS LANE FACILITIES SUMMARIES

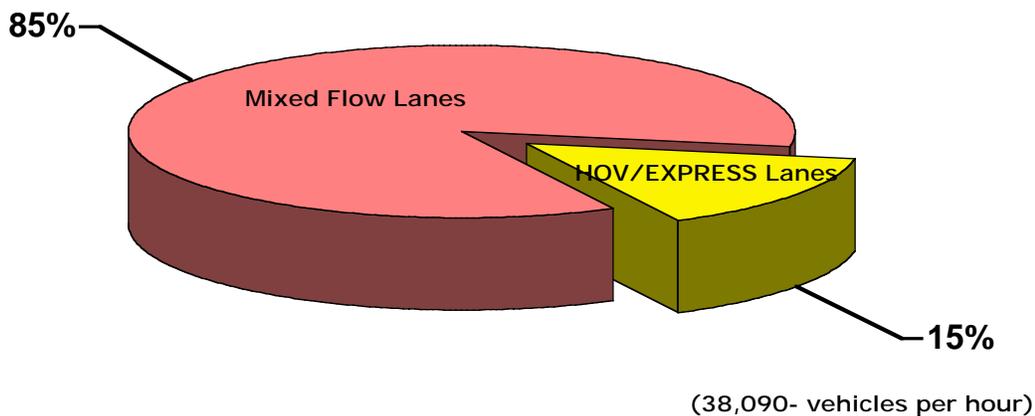
- **Comparison of HOV/Express Lanes vs. Mixed Flow Lanes**
 - **Existing Mainline HOV/Express Lanes**
 - **Metered On-Ramps with HOV Bypasses**
 - **Non-Metered HOV Lane On-Ramp**
 - **Mainline HOV/Express Lanes Under Construction**
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COMPARISON OF HOV/EXPRESS LANES VS. MIXED FLOW LANES (Peak-Hour)

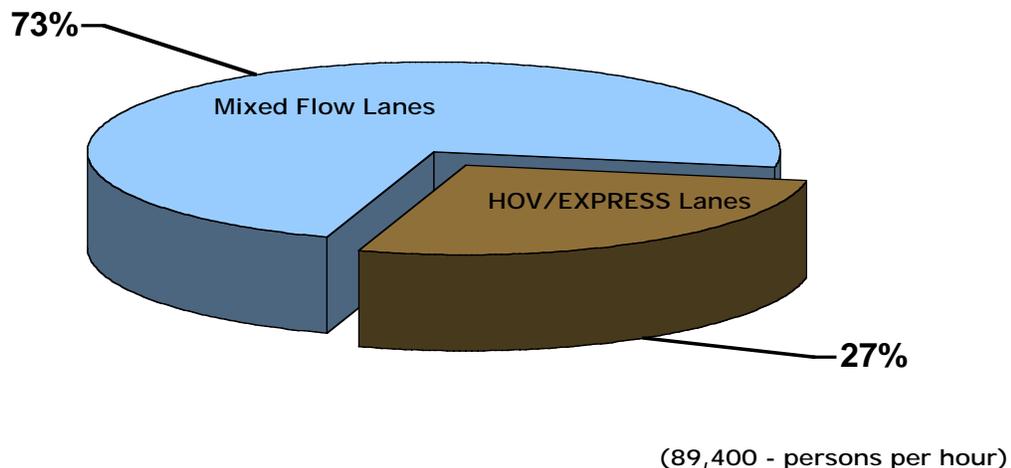
VEHICLES

(219,230 - vehicles per hour)



PEOPLE

(237,430 - 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.

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EXISTING MAINLINE HOV/EXPRESS 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- 10 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	Contra Loma Blvd to Port Chicago Hwy	11.1	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-580	W/B	Richmond -San Rafael Bridge Toll Plaza	0.1	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	Rowland Avenue to Richardson Bridge	15.8	2+	6:30-8:30 AM
	N/B	Richardson Bridge to Atherton Avenue	18.0	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 Route 101 I/C	6.4	2+	5- 9 AM 3-7 PM
	N/B	Old Bayshore Hwy to Alameda Co. Line	6.0	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	Windsor River Road to Old Redwood Highway	21.2	2+	7- 9 AM 3-6:30 PM
	N/B	Old Redwod Highway to Windsor River Road	21.4	2+	7- 9 AM 3-6:30 PM
TOTAL EXISTING LANE-MILES			457.6		

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

^ Express Lane

^^ Express Lane WB SR 237 btwn I-880 and N.1st St. EB SR 237

btwn Zanker Rd and I-880. Hours of Operations WB 5-10am and 3-7pm, EB 5-9am and 3-7pm

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
CC-4	EB	Willow Pass Rd/Avita Rd diag	24hrs	Yes	Sep 24, 2013	7 days/week
CC-4	EB	Bailey Road diag	24 hrs	Yes	Sep 24, 2013	7 days/week
CC-4	EB	Railroad Road diag	24 hrs	Yes	Sep 24, 2013	7 days/week
CC-4	EB	Port Chicago collector	24 hrs	Yes	Sep 24, 2013	7 days/week
CC-4	WB	SB Willow Pass Rd/San Marco diag	24 hrs	Yes	Sep 17, 2013	7 days/week
CC-4	WB	Bailey Road diag	24 hrs	Yes	Sep 17, 2013	7 days/week
CC-242	NB	WB Concord Ave/Market St diag	24 hrs	Yes	Sep 24, 2013	7 days/week
CC-242	NB	EB Concord Avenue loop	24 hrs	Yes	Sep 24, 2013	7 days/week
CC-242	SB	Concord Avenue loop	24 hrs	Yes	Sep 17, 2013	7 days/week
CC-242	SB	Solano Way/Grant St diag	24hrs	Yes	Sep 17, 2013	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 Rd. 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
SCL-237	WB	McCarthy Blvd diag	24 hrs	Yes	Jan 24, 2012	7 days/week
SCL-680	SB	S. Jackson Ave diag	24 hrs	Yes	Feb 12, 2013	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/EXPRESS LANES UNDER CONSTRUCTION

Estimated Opening	County Route	Location	Lane Miles	Min. HOV Occ.
2013	CC-4	Loveridge Rd. to Somersville Rd. (EB only)	3.0	2+
2013	CC-4	Somersville Rd. to Contra Loma Blvd. (EB only)	1.0	2+
2014	CC-4	Contra Loma Blvd. to 160	6.0	2+
2014	MRN-101	Atherton Ave. to South of Redwood Landfill Rd.	0.5	2+
2014	SCL-101	Shoreline Blvd. to Matadero Cr. (2nd HOVL)	5.4	2+
2015	ALA-580	West of Hacienda to Greenville Rd. (WB only)	10.3	2+
2015	ALA-580	El Carro Rd. to 1st St.(EB only, 2nd Express Ln.)	6.0	2+
2014	ALA-880	Marina Blvd. to Hegenberger Rd. (SB only)	2.9	2+

TOTAL LANE-MILES UNDER CONSTRUCTION 35.1

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DATA SUMMARIES

- **HOV/Express Lane Peak Hour Volumes**
 - **HOV/Express & Mixed-Flow Lane Peak Hour Comparisons**
 - **HOV Lane Peak Period Violation Rates**
 - **HOV/Express Lane Peak Hour Time Savings and Average Speeds**
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HOV/EXPRESS LANE PEAK HOUR VOLUMES

			A.M.	P.M.
			Peak Hr (veh)	Peak Hr (veh)
ALA-80	WB	Bay Bridge Toll Plaza	N/A	N/A
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	N/A
ALA-84	WB	I-880 to Dumbarton Bridge Toll Plaza	790	129
ALA-92	WB	Hesperian Blvd to San Mateo Bridge Toll Plaza	985	237
ALA-580	EB	Hacienda Dr. to N. Livermore Ave.	272	1521
		N. Livermore Ave to Greenville Rd	N/A	N/A
ALA-680	SB	Route 84 to ALA/SCL Co. Line ^	1061	402
ALA-880	SB	Marina Blvd to Whipple Road	1153	890
		Whipple Road to SCL County Line	N/A	782
	NB	SCL County Line to Whipple Road	459	1164
		Whipple Road to South of Rte 238 I/C	N/A	N/A
ALA-880	NB	16th St to SFOBB Toll Plaza	N/A	N/A
CC-04	WB	Contra Loma Blvd. to Port Chicago Hwy	N/A	**
	EB	Port Chicago Hwy to Railroad Ave.	**	947
CC-80	WB	Solano Co. Line to Route 4	N/A	N/A
		Route 4 to Alameda Co. Line	N/A	N/A
	EB	Alameda Co. Line to Route 4	N/A	N/A
		Route 4 to Cummings Skyway	N/A	N/A
CC-580	W/B	Richmond-San Rafael Bridge Toll Plaza	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	486
	NB	Route 242 to Marina Vista I/C	174	534
CC-680	SB	Rudgear Rd. to Alcosta Blvd.	1126	1042
	NB	Alcosta Blvd. to Livorna Rd.	852	1164
MRN-101	SB	Rowland Avenue to Mission Avenue	1330	**
		Mission Avenue to Richardson Bridge	627	**
	NB	Richardson Bridge to Mission Avenue	**	758
		Mission Avenue to Atherton Avenue	**	902
SCL-85	SB	Rte 101 (Mountain View) to Rte 280	N/A	958
		Rte 280 to Almaden Expwy	N/A	N/A
		Almaden Expwy to Rte 101 (So. San Jose)	N/A	1029
	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	N/A
		Route 280 I/C to Route 85 I/C	N/A	569
	NB	Route 85 I/C Jct to Route 280 I/C	N/A	N/A
		Route 280 I/C to Route 101 I/C	N/A	N/A

HOV/EXPRESS 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	454
		Bernal Rd to Cochrane Rd	N/A	746
	NB	Cochrane Road to Bernal Road	982	N/A
		Bernal Rd to 101/280/680 I/C	892	N/A
		101/280/680 I/C to Guadalupe Pkwy	1015	N/A
		Guadalupe Pkwy to Ellis St	770	N/A
		Ellis St to San Mateo Co. Line	N/A	N/A
SCL-237	WB	Rte 880/237Jct to Mathilda Ave^^	N/A	N/A
	EB	Mathilda Ave to Rte 880/237 Jct.^^	N/A	N/A
SCL-280	SB	Magdalena Ave to Leland Ave	N/A	N/A
	NB	Leland Ave to Magdalena Ave	916	N/A
SCL-680	SB	ALA/SCL Co. Line to Route 237 ^	N/A	157
SCL-880	SB	Alameda Co. Line to Route 101 I/C	481	N/A
	NB	Old Bayshore Hwy to Alameda Co. Line	N/A	746
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	N/A
SOL-80	WB	Airbase Parkway to Red Top Rd	417	311
	EB	Red Top Rd to Airbase Parkway	261	835
SON-101	SB	Windsor River Road to Route 12	386	751
		Route 12 to Wilfred Avenue	493	852
		Wilfred Avenue to Old Redwood Highway	489	601
	NB	Old Redwood Highway to Wilfred Avenue	361	800
		Wilfred Avenue to Route 12	682	987
		Route 12 to Windsor River Road	313	618

Notes:

N/A : Due to resource shortfall 2013 data is not available.

** HOVL not in operation during this Peak Period.

^ Express Lane

^^ Express Lane WB SR 237 btwn I-880 and N.1st St. EB SR 237

btwn Zanker Rd and I-880. Hours of Operations WB 5-10AM and 3-7PM, EB 5-9AM and 3-7PM

PEAK HOUR HOV/EXPRESS & 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	N/A	N/A	N/A	N/A	18	N/A
			PM	N/A	N/A	N/A	N/A	18	N/A
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	15%	85%	32%	68%	3	23%
			PM	11%	89%	27%	73%	3	24%
ALA-92	WB	Hesperian Blvd to San Mateo Bridge Toll Plaza	AM	19%	81%	35%	65%	3	22%
			PM	9%	91%	19%	81%	3	27%
ALA-580	EB	Hacienda Dr. to N. Livermore Ave.	AM	7%	93%	18%	82%	3	27%
			PM	17%	83%	30%	70%	3	23%
		N. Livermore Ave to Greenville 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
ALA-680	SB	Route 84 to ALA/SCL Co. Line^	AM	16%	84%	23%	77%	3	26%
			PM	9%	91%	12%	88%	3	29%
ALA-880	SB	Marina Blvd to Whipple Rd	AM	18%	82%	34%	66%	3	22%
			PM	15%	85%	26%	74%	3	25%
		Whipple Rd to Santa Clara Co. Line	AM	N/A	N/A	N/A	N/A	3	N/A
			PM	14%	86%	22%	78%	3	26%
	NB	Santa Clara Co. Line to Whipple Rd	AM	9%	91%	17%	83%	3	28%
			PM	20%	80%	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	N/A	N/A	N/A	N/A	3	N/A
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	Contra Loma Blvd to Port Chicago Hwy	AM	N/A	N/A	N/A	N/A	3	N/A
	EB	Port Chicago to Railroad Avenue	PM	13%	87%	22%	78%	3	26%
CC-80	WB	Solano Co. Line to Route 4	AM	N/A	N/A	N/A	N/A	3	N/A
			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	N/A	N/A	N/A	N/A	3	N/A
		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-580	WB	Richmond- San Rafael Bridge Toll Plaza	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	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	4%	96%	25%	75%	5	15%
	NB	Route 242 to Marina Vista I/C	AM	6%	94%	14%	86%	4	22%
			PM	13%	87%	23%	77%	4	19%
CC-680	SB	Rudgear Rd to Alcosta Blvd	AM	18%	82%	35%	65%	3	22%
			PM	16%	84%	32%	68%	3	23%
	NB	Alcosta Blvd to Livorna Rd	AM	15%	85%	29%	71%	3	24%
			PM	19%	81%	34%	66%	3	22%
MRN-101	SB	Rowland Ave to Mission Avenue	AM	18%	82%	34%	66%	3	22%
		Mission Avenue to Richardson Bridge	AM	13%	87%	32%	68%	3	23%
	NB	Richardson Bridge to Mission Avenue	PM	14%	86%	31%	69%	3	23%
		Mission Avenue to Atherton Ave.	PM	15%	85%	27%	73%	3	24%
SCL-85	SB	Rte 101 (Mtn View) to Rte 280	AM	N/A	N/A	N/A	N/A	2	N/A
			PM	21%	79%	36%	64%	2	32%
		Rte 280 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 101 (So. San Jose)	AM	N/A	N/A	N/A	N/A	2	N/A
			PM	26%	74%	41%	59%	2	29%
	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/EXPRESS & 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	N/A	N/A	N/A	N/A	2	N/A
		Route 280 I/C to Route 85 I/C	AM	N/A	N/A	N/A	N/A	2	N/A
			PM	14%	86%	23%	77%	2	39%
	NB	Route 85I/C 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	10%	90%	19%	81%	3	27%
		Bernal Rd to Cochrane Rd	AM	N/A	N/A	N/A	N/A	3	N/A
			PM	16%	84%	31%	69%	3	23%
	NB	Cochrane Rd to Bernal Road	AM	21%	79%	38%	62%	3	21%
			PM	N/A	N/A	N/A	N/A	3	N/A
		Bernal Rd to 101/280/680 I/C	AM	20%	80%	34%	66%	3	22%
			PM	N/A	N/A	N/A	N/A	3	N/A
		101/280/680 I/C to Guadalupe Pkwy	AM	15%	85%	27%	73%	3	24%
			PM	N/A	N/A	N/A	N/A	3	N/A
	Guadalupe Pkwy to Ellis St	AM	14%	86%	25%	75%	3	25%	
		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	N/A	N/A	N/A	N/A	2	N/A
			PM	N/A	N/A	N/A	N/A	2	N/A
	EB	Mathilda Ave to Rte 880/237 Jct ^^	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-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	18%	82%	31%	69%	3	23%
			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	4%	96%	9%	91%	3	30%
SCL-880	SB	Alameda Co. Line to Route 101 I/C	AM	10%	90%	20%	80%	3	27%
			PM	N/A	N/A	N/A	N/A	3	N/A
	NB	Old Bayshore Hwy to Alameda Co. Line	AM	N/A	N/A	N/A	N/A	3	N/A
			PM	20%	80%	33%	67%	3	22%
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/EXPRESS & 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	N/A	N/A	N/A	N/A	11	N/A
SOL-80	WB	East of Airbase Pkwy to Red Top Rd	AM	10%	90%	18%	82%	4	21%
			PM	9%	91%	16%	84%	4	21%
	EB	Red Top Rd to East of Airbase Pkwy	AM	6%	94%	14%	86%	4	22%
			PM	13%	87%	24%	76%	4	19%
SON-101	SB	Windsor River Rd to Route12	AM	13%	87%	22%	78%	2	39%
			PM	23%	77%	40%	60%	2	30%
		Route 12 to Wilfred Avenue	AM	13%	87%	21%	79%	2	39%
			PM	22%	78%	33%	67%	2	34%
	Wilfred Avenue to Old Redwood Hwy	AM	12%	88%	15%	85%	2	43%	
		PM	19%	81%	31%	69%	2	34%	
	NB	Old Redwood Hwy to Wilfred Avenue	AM	12%	88%	19%	81%	2	41%
			PM	20%	80%	36%	64%	2	32%
		Wilfred Avenue to Route 12	AM	19%	81%	34%	66%	2	33%
			PM	25%	75%	42%	58%	2	29%
Route 12 to Windsor Rd		AM	13%	87%	22%	78%	2	39%	
		PM	19%	81%	29%	71%	2	36%	

* Total in all 4 HOVL's combined.

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

N/A : Due to resource shortfall 2013 data is not available.

^^ Express Lane WB SR 237 btwn I-880 and N.1st St. EB SR 237
btwn Zanker Rd and I-880. Hours of Operations WB 5-10AM and 3-7PM, EB 5-9AM and 3-7PM

HOV LANE PEAK PERIOD VIOLATION RATE SUMMARY

			A.M.	P.M.
ALA-80	WB	Bay Bridge Toll Plaza	N/A	N/A
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	N/A
ALA-84	WB	I-880 to Dumbarton Bridge Toll Plaza	3.9%	1.9%
ALA-92	WB	Hesperian Blvd to San Mateo Bridge Toll Plaza	3.4%	1.6%
ALA-580	EB	Hacienda Dr. to N. Livermore Ave.	3.9%	0.3%
		N. Livermore Ave to Greenville Road	N/A	N/A
ALA-680	SB	Route 84 to SCL/ALA Co. Line^	N/A	N/A
ALA-880	SB	Marina Blvd to Whipple Road	6.3%	7.1%
		Whipple Road to Santa Clara Co. Line	N/A	6.4%
	NB	Santa Clara Co. Line to Whipple Road	7.1%	6.0%
		Whipple Road to South of Rte 238 I/C	N/A	N/A
ALA-880	NB	16th St to SFOBB Toll Plaza	N/A	N/A
CC-04	WB	Contra Loma Blvd. to Port Chicago Hwy.	N/A	**
	EB	Port Chicago Hwy to Railroad Ave	**	1.5%
CC-80	WB	Solano Co. Line to Route 4	N/A	N/A
		Route 4 to Alameda Co. Line	N/A	N/A
	EB	Alameda Co. Line to Rte 4	N/A	N/A
		Rte 4 to Cummings Skyway	N/A	N/A
CC-580	WB	Richmond-San Rafael Bridge Toll Plaza	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	0.9%
	NB	Route 242 to Marina Vista I/C	5.5%	2.3%
CC-680	SB	Rudgear Rd. to Alcosta Blvd.	2.5%	2.4%
	NB	Alcosta Blvd. to Livorna Rd.	6.3%	2.6%
MRN-101	SB	Rowland Avenue to Mission Avenue	0.8%	**
		Mission Avenue to Richardson Bridge	1.2%	**
	NB	Richardson Bridge to Mission Avenue	**	0.7%
		Mission Avenue to Atherton Avenue	**	0.5%
SCL-85	SB	Rte 101 (Mountain View) to Rte 280	N/A	1.6%
		Rte 280 to Almaden Expwy	N/A	N/A
		Almaden Expwy to Rte 101 (So. San Jose)	N/A	2.8%
	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	N/A
		Route 280 to Route 85 I/C	N/A	5.1%
	NB	Route 85 I/C 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	2.4%
		Bernal Rd to Cochrane Road	N/A	1.3%

HOV LANE PEAK PERIOD VIOLATION RATE SUMMARY

			A.M.	P.M.
	NB	Cochrane Rd to Bernal Rd	1.5%	N/A
		Bernal Rd to 101/280/680 I/C	1.7%	N/A
		101/280/680 I/C to Guadalupe Pkwy	1.6%	N/A
		Guadalupe Pkwy to Ellis St	0.5%	N/A
		Ellis St to San Mateo Co. Line	N/A	N/A
SCL-237	WB	880/237 Jct to Mathilda Ave ^{^ ^}	N/A	N/A
	EB	Mathilda Ave to Rte 880/237 Jct. ^{^ ^}	N/A	N/A
SCL-280	SB	Magdalena Ave to Leland Ave	N/A	N/A
	NB	Leland Ave to Magdalena Ave	1.1%	N/A
SCL-680	SB	SCL/ALA Co. Line to Route 237 [^]	N/A	N/A
SCL-880	SB	Alameda Co. Line to Route 101 I/C	1.2%	N/A
	NB	Old Bayshore Hwy to Alameda Co. Line	N/A	11.2%
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	N/A
SOL-80	WB	Airbase Pkwy to Red Top Rd	0.6%	1.4%
	EB	Red Top Rd to Airbase Pkwy	0.9%	0.4%
SON-101	SB	Windsor River Road to Route 12	1.8%	0.8%
		Route 12 to Wilfred Avenue	0.8%	0.4%
		Wilfred Avenue to Old Redwood Highway	0.7%	0.8%
	NB	Old Redwood Highway to Wilfred Avenue	1.1%	1.4%
		Wilfred Avenue to Route 12	1.7%	0.4%
		Route 12 to Windsor River Road	1.3%	0.8%

N/A: Due to Resource shortfall 2013 data is not available.

** HOV not in operation during this Peak Period

[^] Express Lane

^{^^} Express Lane WB SR 237 btwn I-880 and N.1st St. EB SR 237

btwn Zanker Rd and I-880. Hours of Operations WB 5-10AM and 3-7PM, EB 5-9AM and 3-7PM

HOV/EXPRESS LANE PEAK HOUR TIME SAVINGS AND AVERAGE SPEEDS

				Travel Time	Travel Time	HOV/Express	Avg. Speed	Avg. Speed
				(minutes)	(minutes)	Time Saving	(mph)	(mph)
				Mixed-Flow Lane	HOV/Express	(minutes)	Mixed-Flow Lane	HOV/Express
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	3	1	46	65
			PM	3	3	0	55	65
ALA-92	WB	Hesperian Blvd to San Mateo Bridge Toll Plaza	AM	6	3	3	29	63
			PM	3	3	0	56	65
ALA-580	EB	Hacienda Dr. to Greenville Rd	AM	10	10	0	61	61
			PM	14	11	3	45	58
ALA-680	SB	Route 84 to ALA/SCL Co. Line ^	AM	16	11	6	42	64
			PM	12	10	2	56	65
ALA-880	SB	Marina Blvd. to Whipple Road	AM	22	13	9	24	41
			PM	14	13	1	39	43
		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	13	15	29	62
		Whipple Road to South of Rte 238 I/C	AM	12	5	7	27	65
			PM	13	5	8	25	62
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	Contra Loma Blvd. 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	24	10	14	19	46
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-580	WB	Richmond-San Rafael 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
CC-680	NB	N/O Marina Vista I/C to Benicia Bridge Toll Plaza	AM	4	1	3	15	65
			PM	5	1	4	12	65
CC-680	SB	Marina Vista I/C to N/O North Main St	AM	14	9	5	34	53
			PM	7	7	0	63	65
	NB	Route 242 to Marina Vista	AM	4	4	0	64	65
			PM	6	4	1	48	62
CC-680	SB	Rudgear Rd to Alcosta Blvd*	AM	16	13	3	48	58
			PM	15	13	2	52	61
	NB	Alcosta Blvd to Livorna Rd	AM	21	11	10	34	65
			PM	22	14	8	32	51
MRN-101	SB	Rowland Ave. to Mission Ave.	AM	N/A	N/A	N/A	N/A	N/A
		Mission Ave. to Richardson Bridge	AM	9	7	2	43	55
	NB	Richardson Bridge to Mission Ave.	PM	20	14	6	22	31
		Mission Ave. to Atherton Ave.	PM	17	10	7	39	65

HOV/EXPRESS LANE PEAK HOUR TIME SAVINGS AND AVERAGE SPEEDS

			Travel Time		HOV/Express Time Saving (minutes)	Avg. Speed		
			(minutes)	(minutes)		(mph)	(mph)	
			Mixed-Flow Lane	HOV/Express		Mixed-Flow Lane	HOV/Express	
SCL-85	SB	Rte 101 (Mtn View) to Rte 280	AM	N/A	N/A	N/A	N/A	
			PM	N/A	N/A	N/A	N/A	
		Rte 280 to Almaden Expwy	AM	N/A	N/A	N/A	N/A	
			PM	N/A	N/A	N/A	N/A	
		Almaden Expwy to Rte 101 (So. San Jose)	AM	N/A	N/A	N/A	N/A	
			PM	N/A	N/A	N/A	N/A	
	NB	Rte 101 (So. San Jose) to Almaden Expwy	AM	N/A	N/A	N/A	N/A	
			PM	N/A	N/A	N/A	N/A	
		Almaden Expwy to Rte 280	AM	N/A	N/A	N/A	N/A	
			PM	N/A	N/A	N/A	N/A	
		Rte 280 to Rte 101 (Mtn View)	AM	N/A	N/A	N/A	N/A	
			PM	N/A	N/A	N/A	N/A	
SCL-87	SB	Route 101 I/C to Route 280 I/C	AM	N/A	N/A	N/A	N/A	
			PM	N/A	N/A	N/A	N/A	
		Route 280 I/C to Route 85 I/C	AM	N/A	N/A	N/A	N/A	
	PM		N/A	N/A	N/A	N/A		
	NB	Route 85 I/C to Route 280 I/C	AM	N/A	N/A	N/A	N/A	
			PM	N/A	N/A	N/A	N/A	
		Route 280 I/C to Route 101 I/C	AM	N/A	N/A	N/A	N/A	
	PM		N/A	N/A	N/A	N/A		
	SCL-101	SB	San Mateo Co. Line to Ellis St	AM	N/A	N/A	N/A	N/A
				PM	N/A	N/A	N/A	N/A
			Ellis St to Guadalupe Pkwy	AM	N/A	N/A	N/A	N/A
				PM	N/A	N/A	N/A	N/A
Guadalupe Pkwy to 101/280/680 I/C			AM	N/A	N/A	N/A	N/A	
			PM	N/A	N/A	N/A	N/A	
101/280/680 I/C to Bernal Rd		AM	N/A	N/A	N/A	N/A		
		PM	N/A	N/A	N/A	N/A		
NB		Bernal Rd to Cochrane Road	AM	N/A	N/A	N/A	N/A	
			PM	N/A	N/A	N/A	N/A	
		Cochrane Road to Bernal Road	AM	N/A	N/A	N/A	N/A	
			PM	N/A	N/A	N/A	N/A	
		Bernal Rd to 101/280/680 I/C	AM	N/A	N/A	N/A	N/A	
			PM	N/A	N/A	N/A	N/A	
101/280/680 I/C to Guadalupe Pkwy		AM	N/A	N/A	N/A	N/A		
		PM	N/A	N/A	N/A	N/A		
SCL-237		WB	McCarthy Blvd to Mathilda Ave^^	AM	N/A	N/A	N/A	N/A
				PM	N/A	N/A	N/A	N/A
	EB	Mathilda Ave to Rte 880/237 Jct.^^	AM	N/A	N/A	N/A	N/A	
			PM	N/A	N/A	N/A	N/A	
	SCL-280	SB	Magdalena Ave to Leland Ave	AM	N/A	N/A	N/A	N/A
				PM	N/A	N/A	N/A	N/A
NB		Leland Ave to Magdalena Ave	AM	N/A	N/A	N/A	N/A	
			PM	N/A	N/A	N/A	N/A	

HOV/EXPRESS LANE PEAK HOUR TIME SAVINGS AND AVERAGE SPEEDS

			Travel Time (minutes)	Travel Time (minutes)	HOV/Express Time Saving (minutes)	Avg. Speed (mph)	Avg. Speed (mph)
			Mixed-Flow Lane	HOV/Express		Mixed-Flow Lane	HOV/Express
SCL-680	SB	ALA/SCL Co. Line to Rte 237	AM	N/A	N/A	N/A	N/A
			PM	N/A	N/A	N/A	N/A
SCL-880	SB	Alameda Co. Line to Route 101 I/C	AM	N/A	N/A	N/A	N/A
			PM	N/A	N/A	N/A	N/A
	NB	Old Bayshore Hwy to ALA Co. Line	AM	N/A	N/A	N/A	N/A
			PM	N/A	N/A	N/A	N/A
SM-101	SB	Whipple Ave to Santa Clara Co. Line	AM	N/A	N/A	N/A	N/A
			PM	N/A	N/A	N/A	N/A
	NB	Santa Clara Co. Line to Whipple Ave	AM	N/A	N/A	N/A	N/A
			PM	N/A	N/A	N/A	N/A
SOL-80	WB	Route 29 to Contra Costa Co. Line	AM	N/A	N/A	N/A	N/A
			PM	N/A	N/A	N/A	N/A
	EB	Carquinez Bridge Toll Plaza	AM	N/A	N/A	N/A	N/A
			PM	N/A	N/A	N/A	N/A
SOL-80	WB	Airbase Pkwy. to Red Top Rd.	AM	8	8	0	65
			PM	8	8	0	65
	EB	Red Top Rd. to Airbase Pkwy.	AM	8	8	0	65
			PM	9	8	1	55
SON-101	SB	Windsor River Rd. to Rte 12	AM	13	9	4	45
			PM	23	9	14	25
		Rte 12 to Wilfred Ave.	AM	6	4	2	46
			PM	6	4	2	46
		Wilfred Avenue to Old Redwood Hwy	AM	7	7	0	65
			PM	7	7	0	65
	NB	Old Redwood Hwy to Wilfred Ave.	AM	7	7	0	65
			PM	7	7	0	65
		Wilfred Ave. to Rte 12	AM	11	5	6	28
			PM	10	5	5	31
		Rte12 to Windsor River Rd.	AM	9	8	1	61
			PM	10	8	2	55
Overall Average Speed						44.4	61.2

N/A: Due to resource shortfall 2013 data is not available

^ Express Lane

^^ Express Lane WB SR 237 btwn. I-880 and N. 1st St. EB SR 237

btwn. Zanker Rd. and I-880. Hours of Operations WB 5-10AM and 3-7PM, EB 5-9AM and 3-7PM

GENERAL FACILITY INFORMATION

- **Mainline HOV/Express Lanes**
 - **Toll Bridge HOV Bypass Lanes**
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MAINLINE HOV/EXPRESS 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:	<table border="0"> <tr> <td style="vertical-align: top;">Lane 1:</td> <td>Route 880 left side HOV ramp to metering signals Length = 0.4 mile</td> </tr> <tr> <td style="vertical-align: top;">Lane 2:</td> <td>Route 580 connector to metering signals Length = 1.1 miles</td> </tr> <tr> <td style="vertical-align: top;">Lane 21:</td> <td>Route 880 right side HOV ramp to metering signals Length = 0.6 mile</td> </tr> <tr> <td style="vertical-align: top;">Lane 22:</td> <td>HOV slip ramp to metering signals Length = 0.8 miles</td> </tr> </table>	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																												
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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</td> </tr> <tr> <td style="vertical-align: top;">Oct 12, 1981</td> <td>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</td> </tr> <tr> <td style="vertical-align: top;">Jul 18, 1983</td> <td>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</td> </tr> <tr> <td style="vertical-align: top;">Apr 22, 1986</td> <td>Mini toll plaza (lane 18, 19, 20) opened; right side HOV lanes designated as lanes 21 & 22</td> </tr> <tr> <td style="vertical-align: top;">Sep 7, 1988</td> <td>Hours of Operation were extended from 6-9 AM to 5-10 AM on September 7, 1988.</td> </tr> <tr> <td style="vertical-align: top;">Sep 7, 1988</td> <td>The HOVL violation fine increased in early 1989.</td> </tr> <tr> <td style="vertical-align: top;">Nov 3, 1989</td> <td>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</td> </tr> <tr> <td style="vertical-align: top;">Mar 1, 1992</td> <td>Motorcycles permitted</td> </tr> <tr> <td style="vertical-align: top;">Oct 1, 1995</td> <td>Two-seat vehicles with two occupants permitted</td> </tr> <tr> <td style="vertical-align: top;">Apr 8, 1997</td> <td>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</td> </tr> <tr> <td style="vertical-align: top;">Jul 23, 1997</td> <td>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</td> </tr> <tr> <td style="vertical-align: top;">Feb. 2, 1998</td> <td>PM Hours of operation changed to 3:00-7:00 PM</td> </tr> <tr> <td style="vertical-align: top;">May 16, 1998</td> <td>Route 880 left side HOV ramp opened; buses/carpools/motorcycles only, 5:00-10:00 AM, 3:00-7:00 PM, Mon-Fri</td> </tr> <tr> <td style="vertical-align: top;">Jul 1, 2000</td> <td>Inherently low-emission vehicles with DMV issued decals permitted.</td> </tr> <tr> <td style="vertical-align: top;">Jul 1, 2010</td> <td>HOVs charged \$2.50 toll and required to use designated toll booths or toll lanes.</td> </tr> </table>	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. 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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
	DATES:	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 July 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 - 7:00 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: Contra Loma Blvd 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:	Contra Loma Blvd (MP 26.8) to Port Chicago Highway (MPR 15.7) Length = 11.1 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. Dec 17, 2013 Extended:Contra Loma Blvd to Port Chicago Hwy
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-580 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

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: Atherton Avenue 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:	Rowland Blvd (MP20.5) to Richardson Bridge (MP 4.7) Length = 15.8 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 Jul 24, 2012 Extended; Rte 37 to Rowland Blvd
NORTHBOUND	HOURS:	4:30 - 7:00 PM, Monday thru Friday
	LIMITS:	Richardson Bridge (MP 3.9) Atherton Avenue(MP21.9) Length = 18.0 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 Aug 9, 2012 Extended; Rte 37 to Atherton Ave.

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-237: Rte 880 to Mathilda Ave

OCCUPANCY	Two or more persons per vehicle, motorcycles, inherently low-emission vehicles (ILEVs) with DMV issued decal.	
WESTBOUND	HOURS:	5:00 - 9:00 AM, 3:00 - 7:00 PM, Monday thru Friday 5:00-10:00AM, 3:00 -7:00PM, Monday thru Friday, Express Lane hours of operations
	LIMITS:	Jct. Rte 880/237 (MP 9.3) to east of Mathilda Ave (MP 3.2) Length = 6.1 miles
	DATES:	Oct 31, 1984 Opened; Rte 880 to Lawrence Expwy; right side HOVL Nov/Dec 1991 Extended; Lawrence Expwy to east of Mathilda Ave; right side HOVL May 1, 1995 Rte 237 upgraded to fwy; HOVL relocated to left lane; hours expanded to include the PM peak (3-7 PM) May 1, 2005 Opened direct HOV connectors SB 880/WB 237 March 20, 2012 I-880 to N.1st St. converted to Express Lane
EASTBOUND	HOURS:	5:00 - 9:00 AM, 3:00 - 7:00 PM, Monday thru Friday 5:00-9:00AM, 3:00 -7:00PM, Monday thru Friday, Express Lane hours of operations
	LIMITS:	Mathilda Ave (MP 2.8) to Jct Rte 880/237 (MP 9.3) Length = 6.5 miles
	DATES:	Oct 31, 1984 Opened; Lawrence Expwy to Rte 880; right side HOVL Nov/Dec 1991 Extended; Mathilda Ave to Rte 880 May 1, 1995 Rte 237 upgraded to fwy; HOVL relocated to left lane; hours expanded to include the AM peak (5-9 AM) Oct 2, 1996 Shortened; Mathilda Ave to 1.1 miles west of Rte 880 Apr. 29, 2005 Opened; Route 880/237 HOVL Direct Connector Mar 20, 2012 Zanker Road to I-880 converted to Express Lane

SCL-280: Magdalena Ave to Leland Ave

OCCUPANCY	Two or more persons per vehicle, motorcycles, inherently low-emission vehicles (ILEVs) with DMV issued decal.	
SOUTHBOUND	HOURS:	5:00 - 9:00 AM, 3:00 - 7:00 PM, Monday thru Friday
	LIMITS:	Magdalena Ave on-ramp (MP 14.0) to north of Meridian Ave (MP R4.2) Length = 10.5 miles
	DATES:	Dec 1, 1990 Opened; Magdalena Ave to north of Meridian Ave
NORTHBOUND	HOURS:	5:00 - 9:00 AM, 3:00 - 7:00 PM, Monday thru Friday
	LIMITS:	South of Leland Ave (MP L4.7) to Magdalena Ave off-ramp (MP 14.0) Length = 10.8 miles
	DATES:	Nov 21, 1990 Opened; south of Leland Ave to Magdalena Ave

SCL-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 Route 101 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:	Alameda County Line (MP 10.5) to Route 101 I/C (MP 4.1) Length = 6.4 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. June 22, 2013 Extended: betwn I-880/SR 237Jct to Route 101 I/C
NORTHBOUND	HOURS:	5:00 - 9:00 AM, 3:00 - 7:00 PM, Monday thru Friday
	LIMITS:	Old Bayshore Hwy (MP 4.5) to Alameda County Line (MP 10.5) Length = 6.0 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 June 22, 2013 Extended: Old Bayshore Hwy to I-880/SR237 Jct

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, 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: Windsor River Road 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:	Windsor River Road On-Ramp (MP 29.2) to Old Redwood Highway I/C(MP8.0) Length = 21.2 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 Dec 5, 2011 Opened segment btwn Rohnert Park and Old Redwood Highway Aug 30, 2012 Continuos HOV lane; new limit: Windsor River Road to Old Redwood Highway
NORTHBOUND	HOURS:	7:00 - 9:00 AM, 3:00 - 6:30 PM, Monday thru Friday
	LIMITS:	South of Old Redwood Highway(MP 7.2) to Windsor River Road (MP28.6) Length = 21.4 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 Dec 5, 2011 Opened segment btwn Old Redwood Highway to Copeland Creek Aug 29, 2012 Continuos HOV lane; new limit: Old Redwood Highway to Windsor River Road

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

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MAINLINE HOV/EXPRESS LANES

**VOLUME/PERSON DATA and
VIOLATION HISTORY**

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ALAMEDA-84

Route I-880 to Dumbarton Bridge Toll Plaza

Westbound - A.M.

Typical data for 2013 ⁽⁴⁾

VEHICLES	PEAK PERIOD ⁽³⁾ 6:00 - 9:00 AM		PEAK HOUR 7:00 - 8:00 AM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	84	14	26	9
Buses	48	4	14	0
Carpools ⁽¹⁾	1657	264	725	129
Vanpools	29	6	6	2
Single Occ.	0	11297	0	4252
Violators	74	—	19	—
TOTAL	1892	11585	790	4392

PERSONS	PEAK PERIOD ⁽³⁾ 6:00 - 9:00 AM		PEAK HOUR 7:00 - 8:00 AM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	84	14	26	9
Buses	1680	140	490	0
Carpools ⁽¹⁾	3405	545	1506	267
Vanpools	290	60	60	20
Single Occ.	0	11297	0	4252
Violators	74	—	19	—
TOTAL	5533	12056	2101	4548

RATES	PEAK PERIOD ⁽³⁾ 6:00 - 9:00 AM		PEAK HOUR 7:00 - 8:00 AM	
	HOV Lane occupancy rate	2.9 persons/veh		2.7 persons/veh
Mixed Flow occupancy rate	1.0 persons/veh		1.0 persons/veh	
Overall occupancy (incl. buses)	1.3 persons/veh		1.3 persons/veh	
Violation rate ⁽²⁾ (HOV Lane)	3.9 %		2.4 %	

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

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

(3) HOV lane in operation from 5:00 to 10:00 A.M.

(4) Observations conducted 10/30/13 at East of Dumbarton Bridge Toll Plaza.

ALAMEDA-84

Route I-880 to Dumbarton Bridge Toll Plaza

Westbound - P.M.

Typical data for 2013 ⁽⁴⁾

VEHICLES	PEAK PERIOD ⁽³⁾ 3:00 - 6:00 PM		PEAK HOUR 5:00 - 6:00 PM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	12	4	6	1
Buses	26	5	6	0
Carpools ⁽¹⁾	312	351	115	108
Vanpools	2	1	0	0
Single Occ.	0	2674	1	977
Violators	7	—	1	—
TOTAL	359	3035	129	1086

PERSONS	PEAK PERIOD ⁽³⁾ 3:00 - 6:00 PM		PEAK HOUR 5:00 - 6:00 PM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	12	4	6	1
Buses	910	175	210	0
Carpools ⁽¹⁾	639	722	234	219
Vanpools	20	10	0	0
Single Occ.	0	2674	0	977
Violators	7	—	1	—
TOTAL	1588	3585	451	1197

RATES	PEAK PERIOD ⁽³⁾ 3:00 - 6:00 PM		PEAK HOUR 5:00 - 6:00 PM	
	HOV Lane occupancy rate	4.4 persons/veh		3.5 persons/veh
Mixed Flow occupancy rate	1.2 persons/veh		1.1 persons/veh	
Overall occupancy (incl. buses)	1.5 persons/veh		1.4 persons/veh	
Violation rate ⁽²⁾ (HOV Lane)	1.9 %		0.8 %	

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

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

(3) HOV lane in operation from 3:00 to 6:00 P.M.

(4) Observations conducted 10/08/13 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	Wed Oct 30, 2013	6:00 - 9:00 AM	1892	3.9%
	Tue Jun 5, 2012	6:00 - 9:00 AM	1651	0.7%
	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%
P.M. PEAK	Tue Oct 8, 2013	3:00 - 6:00 PM	359	1.9%
	Tue Jun 5, 2012	3:00 - 6:00 PM	332	0.0%
	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%

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-92

Hesperian Boulevard to San Mateo Toll Plaza

Westbound - A.M.

Typical data for 2013 ⁽⁴⁾

VEHICLES	PEAK PERIOD ⁽³⁾ 6:00 - 9:00 AM		PEAK HOUR 7:00 - 8:00 AM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	60	0	17	0
Buses	20	0	9	0
Carpools ⁽¹⁾	2130	222	915	102
Vanpools	8	0	6	0
Single Occ.	—	11448	—	4014
Violators	77	—	38	—
TOTAL	2295	11670	985	4116

PERSONS	PEAK PERIOD ⁽³⁾ 6:00 - 9:00 AM		PEAK HOUR 7:00 - 8:00 AM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	60	0	17	0
Buses	700	0	315	0
Carpools ⁽¹⁾	4312	461	1856	217
Vanpools	80	0	60	0
Single Occ.	—	11448	—	4014
Violators	77	—	38	—
TOTAL	5229	11909	2286	4231

RATES	PEAK PERIOD ⁽³⁾ 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	1.0 persons/veh		1.0 persons/veh	
Overall occupancy (incl. buses)	1.2 persons/veh		1.3 persons/veh	
Violation rate ⁽²⁾ (HOV Lane)	3.4 %		3.9 %	

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

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

(3) HOV lane in operation from 5:00 to 10:00 A.M.

(4) Observations conducted 03/13/13 at E/O San Mateo Bridge Toll Plaza.

ALAMEDA-92

Hesperian Boulevard to San Mateo Bridge Toll Plaza

Westbound - P.M.

Typical data for 2013 ⁽⁴⁾

VEHICLES	PEAK PERIOD ⁽³⁾ 3:00 - 6:00 PM		PEAK HOUR 5:00 - 6:00 PM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	13	17	5	5
Buses	17	2	3	0
Carpools ⁽¹⁾	721	663	219	187
Vanpools	9	6	4	2
Single Occ.	—	5920	—	2168
Violators	12	—	6	—
TOTAL	772	6608	237	2362

PERSONS	PEAK PERIOD ⁽³⁾ 3:00 - 6:00 PM		PEAK HOUR 5:00 - 6:00 PM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	13	17	5	5
Buses	595	70	105	0
Carpools ⁽¹⁾	1529	1366	448	378
Vanpools	90	60	40	20
Single Occ.	—	5920	—	2168
Violators	12	—	6	—
TOTAL	2239	7433	604	2571

RATES	PEAK PERIOD ⁽³⁾ 3:00 - 6:00 PM		PEAK HOUR 5:00 - 6:00 PM	
	HOV Lane occupancy rate	2.9 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		1.2 persons/veh	
Violation rate ⁽²⁾ (HOV Lane)	1.6 %		2.5 %	

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

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

(3) HOV lane in operation from 3:00 to 6:00 P.M.

(4) Observations conducted 09/11/13 at E/O San Mateo Bridge Toll Plaza.

ALAMEDA-92

Hesperian Blvd. to San Mateo Bridge Toll Plaza

Violation History

Westbound

	DATE	PERIOD MONITORED	TOTAL HOVL VOLUME	VIOLATION RATE
A.M. PEAK	Wed Mar 13, 2013	6:00 - 9:00 AM	2295	3.4%
	Wed May 23, 2012	6:00 - 9:00 AM	2225	7.9%
	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%
P.M. PEAK	Wed Sep 11, 2013	3:00 - 6:00 PM	772	1.6%
	Tue May 22, 2012	3:00 - 6:00 PM	781	3.8%
	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%

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 Dr. to Livermore Ave.

Eastbound - A.M.

Typical data for 2013 ⁽⁴⁾

VEHICLES	PEAK PERIOD ⁽³⁾ 6:00 - 9:00 AM		PEAK HOUR 8:00 - 9:00 AM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	30	6	8	0
Buses	23	16	10	14
Carpools ⁽¹⁾	616	624	233	197
Vanpools	18	15	4	7
Single Occ.	0	9149	0	3392
Violators	28	—	17	—
TOTAL	715	9810	272	3610

PERSONS	PEAK PERIOD ⁽³⁾ 6:00 - 9:00 AM		PEAK HOUR 8:00 - 9:00 AM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	30	6	8	0
Buses	805	560	350	490
Carpools ⁽¹⁾	1422	1322	520	412
Vanpools	180	150	40	70
Single Occ.	0	9149	0	3392
Violators	28	—	17	—
TOTAL	2465	11187	935	4364

RATES	PEAK PERIOD ⁽³⁾ 6:00 - 9:00 AM		PEAK HOUR 8:00 - 9:00 AM	
	HOV Lane occupancy rate	3.4 persons/veh		3.4 persons/veh
Mixed Flow occupancy rate	1.1 persons/veh		1.2 persons/veh	
Overall occupancy (incl. buses)	1.3 persons/veh		1.4 persons/veh	
Violation rate ⁽²⁾ (HOV Lane)	3.9 %		6.3 %	

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

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

(3) HOV lane in operation from 5:00 to 10:00 A.M.

(4) Observations conducted 05/15/13 at Airway Blvd I/C.

ALAMEDA-580

Hacienda Dr. to Livermore Ave.

Eastbound - P.M.

Typical data for 2013 ⁽⁴⁾

VEHICLES	PEAK PERIOD ⁽³⁾ 3:00 - 6:00 PM		PEAK HOUR 4:00 - 5:00 PM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	116	46	44	28
Buses	11	12	4	6
Carpools ⁽¹⁾	3860	800	1455	236
Vanpools	54	36	16	9
Single Occ.	0	20455	0	7069
Violators	11	—	2	—
TOTAL	4052	21349	1521	7348

PERSONS	PEAK PERIOD ⁽³⁾ 3:00 - 6:00 PM		PEAK HOUR 4:00 - 5:00 PM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	116	46	44	28
Buses	385	420	140	210
Carpools ⁽¹⁾	8291	1752	3126	528
Vanpools	540	360	160	90
Single Occ.	0	20455	0	7069
Violators	11	—	2	—
TOTAL	9343	23033	3472	7925

RATES	PEAK PERIOD ⁽³⁾ 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 ⁽²⁾ (HOV Lane)	0.3 %		0.1 %	

NOTES: 1) Two or more persons per vehicle.

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

(3) HOV lane in operation from 3:00 to 6:00 P.M.

(4) Observations conducted 05/15/13 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	Wed May 15, 2013	6:00 - 9:00 AM	715	3.9%
	Wed Oct 10, 2012	6:00 - 9:00 AM	794	2.6%
	Year 2011	-	-	-
	Year 2010	-	-	-
P.M. PEAK	Wed May 15, 2013	3:00 - 6:00 PM	4052	0.3%
	Tue Oct 9, 2012	3:00 - 6:00 PM	3017	1.5%
	Tue Mar 22, 2011	3:00 - 6:00 PM	2533	0.4%
	Wed Nov 17, 2010	3:00 - 6:00 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.

ALAMEDA-680

Southbound - A.M.

(3)

Express - Lane

Typical data for 2013

Route 84 to ALA/CC Co. Line

VEHICLES	PEAK PERIOD ⁽²⁾ 6:00 - 9:00 AM		PEAK HOUR 7:00 - 8:00 AM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	128	27	43	18
Buses	19	9	6	3
Carpools ⁽¹⁾	1101	462	473	204
Vanpools	15	12	4	6
Single Occ.	1959	15855	535	5391
TOTAL	3222	16365	1061	5622

PERSONS	PEAK PERIOD ⁽²⁾ 6:00 - 9:00 AM		PEAK HOUR 7:00 - 8:00 AM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	128	27	43	18
Buses	665	315	210	105
Carpools ⁽¹⁾	2280	934	977	411
Vanpools	150	120	40	60
Single Occ.	1959	15855	535	5391
TOTAL	5182	17251	1805	5985

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	1.1 persons/veh		1.1 persons/veh	
Overall occupancy (incl. buses)	1.1 persons/veh		1.2 persons/veh	

- NOTES:** (1) HOV Carpools - Two or more persons per vehicle.
 (2) Express lane in operation from 5:00 am to 8:00 pm
 (3) Observations conducted 04/17/13 at Vargas Rd.

ALAMEDA-680

Southbound - P.M.

(3)

Express - Lane

Typical data for 2013

Route 84 to ALA/CC Co. Line

VEHICLES	PEAK PERIOD ⁽²⁾ 3:00 - 6:00 PM		PEAK HOUR 5:00 - 6:00 PM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	16	57	5	12
Buses	1	9	0	9
Carpools ⁽¹⁾	534	1779	266	567
Vanpools	0	39	0	9
Single Occ.	0	9504	0	3567
Violators	258	—	131	—
TOTAL	809	11388	402	4164

PERSONS	PEAK PERIOD ⁽²⁾ 3:00 - 6:00 PM		PEAK HOUR 5:00 - 6:00 PM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	16	57	5	12
Buses	35	315	0	315
Carpools ⁽¹⁾	1152	3733	574	1180
Vanpools	10	390	0	90
Single Occ.	0	9504	0	3567
Violators	258	—	131	—
TOTAL	1471	13999	710	5164

RATES	PEAK PERIOD ⁽²⁾ 3:00 - 6:00 PM		PEAK HOUR 5:00 - 6:00 PM	
	HOV Lane occupancy rate	1.8 persons/veh		1.8 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	

- NOTES:** (1) HOV Carpools - Two or more persons per vehicle.
 (2) Express lane in operation from 5:00 am to 8:00 pm
 (3) Observations conducted 04/16/13 at Vargas Rd.

ALAMEDA-680

Express - Lane

Violation History

Southbound

Route 84 to ALA/SCL Co. Line

	DATE	PERIOD MONITORED	TOTAL HOVL VOLUME	VIOLATION RATE
A.M. PEAK	Wed Apr 17, 2013	6:00 - 9:00 AM	3222	-
	Tue Sep 25, 2012	6:00 - 9:00 AM	2995	-
	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 Apr 16, 2013	3:00 - 6:00 PM	809	-
	Year 2012	-	-	-
	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) Data prior to 2011 is HOV lane Data only, which operated from 5:00 to 9:00AM and 3:00 to 7:00 PM

ALAMEDA-880

Marina Boulevard to Whipple Road

Southbound - A.M.

Typical data for 2013 ⁽⁴⁾

VEHICLES	PEAK PERIOD ⁽³⁾ 6:00 - 9:00 AM		PEAK HOUR 6:00 - 7:00 AM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	89	15	27	6
Buses	74	54	28	27
Carpools ⁽¹⁾	3190	339	1069	33
Vanpools	25	15	8	0
Single Occ.	—	13818	—	5364
Violators	229	—	21	—
TOTAL	3607	14241	1153	5430

PERSONS	PEAK PERIOD ⁽³⁾ 6:00 - 9:00 AM		PEAK HOUR 6:00 - 7:00 AM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	89	15	27	6
Buses	2590	1890	980	945
Carpools ⁽¹⁾	6457	695	2138	66
Vanpools	250	150	80	0
Single Occ.	—	13818	—	5364
Violators	229	—	21	—
TOTAL	9615	16568	3246	6381

RATES	PEAK PERIOD ⁽³⁾ 6:00 - 9:00 AM		PEAK HOUR 6:00 - 7:00 AM	
	HOV Lane occupancy rate	2.7 persons/veh		2.8 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 ⁽²⁾ (HOV Lane)	6.3 %		1.8 %	

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

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

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

(4) Observations conducted 03/27/13 at Tennyson Road I/C.

ALAMEDA-880

Marina Boulevard to Whipple Road

Southbound - P.M.

Typical data for 2013 ⁽⁴⁾

VEHICLES	PEAK PERIOD ⁽³⁾ 3:00 - 6:00 PM		PEAK HOUR 3:00 - 4:00 PM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	101	4	27	1
Buses	28	37	8	11
Carpools ⁽¹⁾	2661	846	793	388
Vanpools	15	8	6	4
Single Occ.	—	13746	—	4621
Violators	213	—	56	—
TOTAL	3018	14641	890	5025

PERSONS	PEAK PERIOD ⁽³⁾ 3:00 - 6:00 PM		PEAK HOUR 3:00 - 4:00 PM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	101	4	27	1
Buses	980	1295	280	385
Carpools ⁽¹⁾	5544	1776	1656	818
Vanpools	150	80	60	40
Single Occ.	—	13746	—	4621
Violators	213	—	56	—
TOTAL	6988	16901	2079	5865

RATES	PEAK PERIOD ⁽³⁾ 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	1.2 persons/veh		1.2 persons/veh	
Overall occupancy (incl. buses)	1.4 persons/veh		1.3 persons/veh	
Violation rate ⁽²⁾ (HOV Lane)	7.1 %		6.3 %	

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

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

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

(4) Observations conducted 09/24/13 at Tennyson Road I/C.

ALAMEDA-880

Marina Blvd. to Whipple Road

Violation History

Southbound

	DATE	PERIOD MONITORED	TOTAL HOVL VOLUME	VIOLATION RATE
A.M. PEAK	Wed Mar 27, 2013	6:00 - 9:00 AM	3607	6.3%
	Wed Sep 12, 2012	6:00 - 9:00 AM	3944	11.8%
	Year 2011	-	-	-
	Thu Mar 25, 2010	6:00 - 9:00 AM	2946	5.8%
	Wed Oct 21, 2009	6:00 - 9:00 AM	3133	5.9%
	Wed Apr 30, 2008	6:00 - 9:00 AM	2539	2.6%
	Thu Mar 22, 2007	6:00 - 9:00 AM	2923	3.9%
	Wed Oct 4, 2006	6:00 - 9:00 AM	2361	3.2%
	Wed Mar 30, 2005	6:00 - 9:00 AM	2278	2.9%
	Wed Nov 3, 2004	6:00 - 9:00 AM	2723	3.6%
	Tue Oct 7, 2003	6:00 - 9:00 AM	3049	3.7%
	Tue Jun 11, 2002	6:00 - 9:00 AM	3638	7.5%
P.M. PEAK	Tue Sep 24, 2013	3:00 - 6:00 PM	3018	7.1%
	Wed Sep 12, 2012	3:00 - 6:00 PM	3163	3.4%
	Year 2011	-	-	-
	Thu May 6, 2010	3:00 - 6:00 PM	3442	1.8%
	Thu Mar 26, 2009	3:00 - 6:00 PM	3132	1.2%
	Tue Oct 14, 2008	3:00 - 6:00 PM	3155	5.9%
	Thu Oct 11, 2007	3:00 - 6:00 PM	3010	1.8%
	Thu Sep 28, 2006	3:00 - 6:00 PM	2494	1.5%
	Tue Nov 8, 2005	3:00 - 6:00 PM	3053	2.0%
	Wed Dec 1, 2004	3:00 - 6:00 PM	3036	2.6%
	Wed Jun 4, 2003	3:00 - 6:00 PM	3708	6.0%
	Wed Jun 5, 2002	3:00 - 6:00 PM	3401	5.2%

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

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

ALAMEDA-880

Whipple Road to Santa Clara Co. Line

Southbound - P.M.

Typical data for 2013 ⁽⁴⁾

VEHICLES	PEAK PERIOD ⁽³⁾ 3:00 - 6:00 PM		PEAK HOUR 3:00 - 4:00 PM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	64	24	13	6
Buses	4	33	1	18
Carpools ⁽¹⁾	2065	786	688	324
Vanpools	13	21	8	15
Single Occ.	—	11727	—	4374
Violators	146	—	72	—
TOTAL	2292	12591	782	4737

PERSONS	PEAK PERIOD ⁽³⁾ 3:00 - 6:00 PM		PEAK HOUR 3:00 - 4:00 PM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	64	24	13	6
Buses	140	1155	35	630
Carpools ⁽¹⁾	4236	1641	1412	674
Vanpools	130	210	80	150
Single Occ.	—	11727	—	4374
Violators	146	—	72	—
TOTAL	4716	14757	1612	5834

RATES	PEAK PERIOD ⁽³⁾ 3:00 - 6:00 PM		PEAK HOUR 3:00 - 4:00 PM	
	HOV Lane occupancy rate	2.1 persons/veh		2.1 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 ⁽²⁾ (HOV Lane)	6.4 %		9.2 %	

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

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

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

(4) Observations conducted 04/09/13 at Mowwry 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	Year 2013	-	-	-
	Year 2012	-	-	-
	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%
P.M. PEAK	Tue Apr 9, 2013	3:00 - 6:00 PM	2292	6.4%
	Wed Oct 3, 2012	3:00 - 6:00 PM	2395	1.9%
	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%

- 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 2013 off-peak direction

ALAMEDA-880

Santa Clara Co. Line to Whipple Road

Northbound - A.M.

Typical data for 2013 ⁽⁴⁾

VEHICLES	PEAK PERIOD ⁽³⁾ 6:00 - 9:00 AM		PEAK HOUR 7:00 - 8:00 AM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	46	5	19	5
Buses	12	40	4	19
Carpools ⁽¹⁾	1043	331	396	192
Vanpools	16	12	5	4
Single Occ.	—	11511	—	4180
Violators	85	—	35	—
TOTAL	1202	11899	459	4400

PERSONS	PEAK PERIOD ⁽³⁾ 6:00 - 9:00 AM		PEAK HOUR 7:00 - 8:00 AM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	46	5	19	5
Buses	420	1400	140	665
Carpools ⁽¹⁾	2140	679	816	398
Vanpools	160	120	50	40
Single Occ.	—	11511	—	4180
Violators	85	—	35	—
TOTAL	2851	13715	1060	5288

RATES	PEAK PERIOD ⁽³⁾ 6:00 - 9:00 AM		PEAK HOUR 7:00 - 8:00 AM	
	HOV Lane occupancy rate	2.4 persons/veh		2.3 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 ⁽²⁾ (HOV Lane)	7.1 %		7.6 %	

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

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

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

(4) Observations conducted 11/06/13 at Mowry Ave. I/C.

ALAMEDA-880

Santa Clara Co. Line to Whipple Road

Northbound - P.M.

Typical data for 2013 ⁽⁴⁾

VEHICLES	PEAK PERIOD ⁽³⁾ 3:00 - 6:00 PM		PEAK HOUR 4:00 - 5:00 PM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	116	12	52	8
Buses	17	21	3	8
Carpools ⁽¹⁾	2608	471	1026	202
Vanpools	5	3	1	1
Single Occ.	—	13022	—	4347
Violators	175	—	82	—
TOTAL	2921	13529	1164	4566

PERSONS	PEAK PERIOD ⁽³⁾ 3:00 - 6:00 PM		PEAK HOUR 4:00 - 5:00 PM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	116	12	52	8
Buses	595	735	105	280
Carpools ⁽¹⁾	5338	968	2122	411
Vanpools	50	30	10	10
Single Occ.	—	13022	—	4347
Violators	175	—	82	—
TOTAL	6274	14767	2371	5056

RATES	PEAK PERIOD ⁽³⁾ 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)	1.3 persons/veh		1.3 persons/veh	
Violation rate ⁽²⁾ (HOV Lane)	6.0 %		7.0 %	

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

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

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

(4) Observations conducted 11/13/13 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	Wed Nov 6, 2013	6:00 - 9:00 AM	1202	7.1%
	Wed Oct 3, 2012	6:00 - 9:00 AM	1248	1.9%
	Year 2011	-	-	-
	Thu May 6, 2010	6:00 - 9:00 AM	1046	2.9%
	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%
	P.M. PEAK	Wed Nov 13, 2013	3:00 - 6:00 PM	2921
Tue Dec 18, 2012		3:00 - 6:00 PM	2741	3.3%
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%

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-4

Port Chicago to Railroad Avenue

Eastbound - P.M.

Typical data for 2013 ⁽⁴⁾

VEHICLES	PEAK PERIOD ⁽³⁾ 3:00 - 6:00 PM		PEAK HOUR 5:00 - 6:00 PM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	128	70	49	35
Buses	1	56	1	8
Carpools ⁽¹⁾	2644	1612	876	551
Vanpools	31	11	13	11
Single Occ.	0	15848	0	5667
Violators	42	—	8	—
TOTAL	2846	17597	947	6272

PERSONS	PEAK PERIOD ⁽³⁾ 3:00 - 6:00 PM		PEAK HOUR 5:00 - 6:00 PM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	128	70	49	35
Buses	35	1960	35	280
Carpools ⁽¹⁾	5506	3408	1807	1155
Vanpools	310	110	130	110
Single Occ.	0	15848	0	5667
Violators	42	—	8	—
TOTAL	6021	21396	2029	7247

RATES	PEAK PERIOD ⁽³⁾ 3:00 - 6:00 PM		PEAK HOUR 5:00 - 6:00 PM	
	HOV Lane occupancy rate	2.1 persons/veh		2.1 persons/veh
Mixed Flow occupancy rate	1.2 persons/veh		1.2 persons/veh	
Overall occupancy (incl. buses)	1.3 persons/veh		1.3 persons/veh	
Violation rate ⁽²⁾ (HOV Lane)	1.5 %		0.8 %	

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

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

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

(4) Observations conducted 05/29/13 at San Marcos I/C.

CONTRA COSTA-4

Port Chicago Highway to Railroad Ave.

Violation History

Eastbound

	DATE	PERIOD MONITORED	TOTAL HOVL VOLUME	VIOLATION RATE
P.M. PEAK	Wed May 29, 2013	3:00 - 6:00 PM	2846	1.5%
	Year 2012	-	-	-
	Year 2011	-	-	-
	Wed Jun 2, 2010	3:00 - 6:00 PM	2800	2.1%
	Wed May 13, 2009	3:00 - 6:00 PM	2729	2.5%
	Tue May 6, 2008	3:00 - 6:00 PM	2794	3.3%
	Tue Apr 17, 2007	3:00 - 6:00 PM	2964	2.5%
	Wed Sep 6, 2006	3:00 - 6:00 PM	2942	1.7%
	Thu Oct 20, 2005	3:00 - 6:00 PM	2524	3.8%
	Tue Dec 7, 2004	3:00 - 6:00 PM	2289	1.7%
	Wed May 14, 2003	3:00 - 6:00 PM	2292	1.9%
	Tue Mar 19, 2002	3:00 - 6:00 PM	2248	4.4%
	Tue Oct 30, 2001	3:00 - 6:00 PM	2011	4.0%

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

CONTRA COSTA-680

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

Southbound - P.M.

Typical data for 2013 ⁽⁴⁾

VEHICLES	PEAK PERIOD ⁽³⁾ 3:00 - 6:00 PM		PEAK HOUR 5:00 - 6:00 PM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	44	79	14	24
Buses	8	44	4	2
Carpools ⁽¹⁾	1166	4170	455	903
Vanpools	16	54	10	21
Single Occ.	0	27679	0	10173
Violators	11	—	3	—
TOTAL	1245	32026	486	11123

PERSONS	PEAK PERIOD ⁽³⁾ 3:00 - 6:00 PM		PEAK HOUR 5:00 - 6:00 PM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	44	79	14	24
Buses	280	1540	140	70
Carpools ⁽¹⁾	2517	6139	962	1858
Vanpools	160	540	100	210
Single Occ.	0	27679	0	10173
Violators	11	—	3	—
TOTAL	3012	35977	1219	12335

RATES	PEAK PERIOD ⁽³⁾ 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	2.4 persons/veh		2.5 persons/veh	
Mixed Flow occupancy rate	1.1 persons/veh		1.1 persons/veh	
Overall occupancy (incl. buses)	1.2 persons/veh		1.2 persons/veh	
Violation rate ⁽²⁾ (HOV Lane)	0.9 %		0.6 %	

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

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

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

(4) Observations conducted 10/23/13 at Truck Scale.

CONTRA COSTA-680

Route 242 to Marina Vista I/C.

Northbound - A.M.

Typical data for 2013 ⁽⁴⁾

VEHICLES	PEAK PERIOD ⁽³⁾ 6:00 - 9:00 AM		PEAK HOUR 8:00 - 9:00 AM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	24	20	8	5
Buses	10	7	4	3
Carpools ⁽¹⁾	443	248	144	166
Vanpools	6	4	2	4
Single Occ.	0	6892	0	2589
Violators	28	—	16	—
TOTAL	511	7171	174	2767

PERSONS	PEAK PERIOD ⁽³⁾ 6:00 - 9:00 AM		PEAK HOUR 8:00 - 9:00 AM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	24	20	8	5
Buses	350	245	140	105
Carpools ⁽¹⁾	936	510	302	338
Vanpools	60	40	20	40
Single Occ.	0	6892	0	2589
Violators	28	—	16	—
TOTAL	1398	7707	486	3077

RATES	PEAK PERIOD ⁽³⁾ 6:00 - 9:00 AM		PEAK HOUR 8:00 - 9:00 AM	
	HOV Lane occupancy rate	2.7 persons/veh		2.8 persons/veh
Mixed Flow occupancy rate	1.1 persons/veh		1.1 persons/veh	
Overall occupancy (incl. buses)	1.2 persons/veh		1.2 persons/veh	
Violation rate ⁽³⁾ (HOV Lane)	5.5 %		9.2 %	

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

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

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

(4) Observations conducted 10/22/13 at Pacheco Boulevard.

CONTRA COSTA-680

Route 242 to Marina Vista Boulevard

Northbound - P.M.

Typical data for 2013 ⁽⁴⁾

VEHICLES	PEAK PERIOD ⁽³⁾ 3:00 - 6:00 PM		PEAK HOUR 4:00 - 5:00 PM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	31	15	10	6
Buses	7	15	3	12
Carpools ⁽¹⁾	1421	885	504	306
Vanpools	18	12	9	9
Single Occ.	0	9825	0	3378
Violators	35	—	8	—
TOTAL	1512	10752	534	3711

PERSONS	PEAK PERIOD ⁽³⁾ 3:00 - 6:00 PM		PEAK HOUR 4:00 - 5:00 PM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	31	15	10	6
Buses	245	525	105	420
Carpools ⁽¹⁾	3098	1886	1118	675
Vanpools	180	120	90	90
Single Occ.	0	9825	0	3378
Violators	35	—	8	—
TOTAL	3589	12371	1331	4569

RATES	PEAK PERIOD ⁽³⁾ 3:00 - 6:00 PM		PEAK HOUR 4:00 - 5:00 PM	
	HOV Lane occupancy rate	2.4 persons/veh		2.5 persons/veh
Mixed Flow occupancy rate	1.2 persons/veh		1.2 persons/veh	
Overall occupancy (incl. buses)	1.3 persons/veh		1.4 persons/veh	
Violation rate ⁽²⁾ (HOV Lane)	2.3 %		1.5 %	

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

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

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

(4) Observations conducted 05/14/13 at Pacheco Boulevard.

CONTRA COSTA - 680

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

Violation History

Southbound

	DATE	PERIOD MONITORED	TOTAL HOVL VOLUME	VIOLATION RATE
A.M. PEAK	Year 2013	-	-	-
	Wed May 23, 2012	6:00 - 9:00 AM	2836	0.2%
	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	Wed Oct 23, 2013	3:00 - 6:00 PM	1245	0.9%
	Wed May 23, 2012	3:00 - 6:00 PM	1089	0.6%
	Thu Apr 14, 2011	3:00 - 6:00 PM	1176	8.2%
	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 6:00 to 9:00 AM.
(b) Evening period of operation from 3:00 to 7:00 PM.
(c) Data was not collected in 2013 off-peak direction

CONTRA COSTA - 680

Route 242 to Marina Vista I/C.

Violation History

Northbound

	DATE	PERIOD MONITORED	TOTAL HOVL VOLUME	VIOLATION RATE
A.M. PEAK	Tue Oct 22, 2013	6:00 - 9:00 AM	511	5.5%
	Wed Jun 6, 2012	6:00 - 9:00 AM	431	3.0%
	Wed Jun 6, 2012	6:00 - 9:00 AM	431	3.0%
	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	Tue May 14, 2013	3:00 - 6:00 PM	1512	2.3%
	Wed Jun 6, 2012	3:00 - 6:00 PM	1791	1.0%
	Wed Jun 6, 2012	3:00 - 6:00 PM	1791	1.0%
	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.

CONTRA COSTA-680

Rudgear Road to Alcosta Boulevard

Southbound - A.M.

Typical data for 2013 ⁽⁴⁾

VEHICLES	PEAK PERIOD ⁽³⁾ 6:00 - 9:00 AM		PEAK HOUR 7:00 - 8:00 AM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	102	5	38	3
Buses	46	34	14	0
Carpools ⁽¹⁾	3115	118	1034	51
Vanpools	46	4	17	0
Single Occ.	—	14862	—	5088
Violators	84	—	23	—
TOTAL	3393	15023	1126	5142

PERSONS	PEAK PERIOD ⁽³⁾ 6:00 - 9:00 AM		PEAK HOUR 7:00 - 8:00 AM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	102	5	38	3
Buses	1610	1190	490	0
Carpools ⁽¹⁾	6385	249	2125	102
Vanpools	460	40	170	0
Single Occ.	—	14862	—	5088
Violators	84	—	23	—
TOTAL	8641	16346	2846	5193

RATES	PEAK PERIOD ⁽³⁾ 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		1.0 persons/veh	
Overall occupancy (incl. buses)	1.4 persons/veh		1.3 persons/veh	
Violation rate ⁽²⁾ (HOV Lane)	2.5 %		2.0 %	

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

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

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

(4) Observations conducted 09/11/13 at StoneValley Road.

CONTRA COSTA-680

Rudgear Road to Alcosta Boulevard

Southbound - P.M.

Typical data for 2013 ⁽⁴⁾

VEHICLES	PEAK PERIOD ⁽³⁾ 3:00 - 6:00 PM		PEAK HOUR 5:00 - 6:00 PM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	55	4	26	2
Buses	23	11	8	2
Carpools ⁽¹⁾	2693	878	985	160
Vanpools	23	11	7	3
Single Occ.	—	13879	—	5124
Violators	68	—	16	—
TOTAL	2862	14783	1042	5291

PERSONS	PEAK PERIOD ⁽³⁾ 3:00 - 6:00 PM		PEAK HOUR 5:00 - 6:00 PM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	55	4	26	2
Buses	805	385	280	70
Carpools ⁽¹⁾	5865	1954	2179	354
Vanpools	230	110	70	30
Single Occ.	—	13879	—	5124
Violators	68	—	16	—
TOTAL	7023	16332	2571	5580

RATES	PEAK PERIOD ⁽³⁾ 3:00 - 6:00 PM		PEAK HOUR 5:00 - 6:00 PM	
	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)	1.3 persons/veh		1.3 persons/veh	
Violation rate ⁽²⁾ (HOV Lane)	2.4 %		1.5 %	

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

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

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

(4) Observations conducted 09/25/13 at Stone Valley Road.

CONTRA COSTA-680

Alcosta Boulevard to Livorna Road

Northbound - A.M.

Typical data for 2013 ⁽⁴⁾

VEHICLES	PEAK PERIOD ⁽³⁾ 6:00 - 9:00 AM		PEAK HOUR 7:00 - 8:00 AM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	37	13	16	2
Buses	29	13	10	2
Carpools ⁽¹⁾	1840	179	786	73
Vanpools	24	2	7	1
Single Occ.	-	11102	-	4945
Violators	129	—	33	—
TOTAL	2059	11309	852	5023

PERSONS	PEAK PERIOD ⁽³⁾ 6:00 - 9:00 AM		PEAK HOUR 7:00 - 8:00 AM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	37	13	16	2
Buses	1015	455	350	70
Carpools ⁽¹⁾	3895	377	1670	153
Vanpools	240	20	70	10
Single Occ.	-	11102	-	4945
Violators	129	—	33	—
TOTAL	5316	11967	2139	5180

RATES	PEAK PERIOD ⁽³⁾ 6:00 - 9:00 AM		PEAK HOUR 7:00 - 8:00 AM	
	HOV Lane occupancy rate	2.6 persons/veh		2.5 persons/veh
Mixed Flow occupancy rate	1.1 persons/veh		1.0 persons/veh	
Overall occupancy (incl. buses)	1.3 persons/veh		1.2 persons/veh	
Violation rate ⁽³⁾ (HOV Lane)	6.3 %		3.9 %	

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

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

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

(4) Observations conducted 10/08/13 at Stone Valley Road.

CONTRA COSTA-680

Alcosta Boulevard to Livorna Road

Northbound - P.M.

Typical data for 2013 ⁽⁴⁾

VEHICLES	PEAK PERIOD ⁽³⁾ 3:00 - 6:00 PM		PEAK HOUR 3:00 - 4:00 PM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	98	26	26	10
Buses	22	12	5	0
Carpools ⁽¹⁾	3596	394	1091	167
Vanpools	62	5	11	0
Single Occ.	-	13047	-	4778
Violators	100	—	31	—
TOTAL	3878	13484	1164	4955

PERSONS	PEAK PERIOD ⁽³⁾ 3:00 - 6:00 PM		PEAK HOUR 3:00 - 4:00 PM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	98	26	26	10
Buses	770	420	175	0
Carpools ⁽¹⁾	7650	823	2262	337
Vanpools	620	50	110	0
Single Occ.	-	13047	-	4778
Violators	100	—	31	—
TOTAL	9238	14366	2604	5125

RATES	PEAK PERIOD ⁽³⁾ 3:00 - 6:00 PM		PEAK HOUR 3:00 - 4:00 PM	
	HOV Lane occupancy rate	2.4 persons/veh		2.2 persons/veh
Mixed Flow occupancy rate	1.1 persons/veh		1.0 persons/veh	
Overall occupancy (incl. buses)	1.4 persons/veh		1.3 persons/veh	
Violation rate ⁽²⁾ (HOV Lane)	2.6 %		2.7 %	

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

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

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

(4) Observations conducted 10/08/13 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	Wed Sep 11, 2013	6:00 - 9:00 AM	3393	2.5%
	Thu May 17, 2012	6:00 - 9:00 AM	2979	1.6%
	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%
P.M. PEAK	Wed Sep 25, 2013	3:00 - 6:00 PM	2862	2.4%
	Thu May 17, 2012	3:00 - 6:00 PM	2976	0.7%
	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%

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

CONTRA COSTA-680

Violation History

Alcosta Boulevard to Livorna Road

Northbound

	DATE	PERIOD MONITORED	TOTAL HOVL VOLUME	VIOLATION RATE
A.M. PEAK	Tue Oct 8, 2013	6:00 - 9:00 AM	2059	6.3%
	Wed May 9, 2012	6:00 - 9:00 AM	1680	4.2%
	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%
P.M. PEAK	Tue Oct 8, 2013	3:00 - 6:00 PM	3878	2.6%
	Tue May 8, 2012	3:00 - 6:00 PM	3357	3.6%
	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%

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

MARIN-101

Rowland Avenue to Mission Avenue

Southbound - A.M.

Typical data for 2013 ⁽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	71	13	37	8
Buses	40	5	18	0
Carpools ⁽¹⁾	2373	755	1258	435
Vanpools	17	25	6	5
Single Occ. ⁽²⁾	—	11460	—	5633
Violators	19	—	11	—
TOTAL	2520	12258	1330	6081

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	71	13	37	8
Buses	1400	175	630	0
Carpools ⁽¹⁾	4873	1525	2592	875
Vanpools	170	250	60	50
Single Occ. ⁽²⁾	—	11460	—	5633
Violators	19	—	11	—
TOTAL	6533	13423	3330	6566

RATES	PEAK PERIOD ⁽⁴⁾ 6:30 - 8:30 AM		PEAK HOUR 7:30 - 8:30 AM	
	HOV Lane occupancy rate	2.6 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		1.3 persons/veh	
Violation rate ⁽³⁾ (HOV Lane)	0.8 %		0.3 %	

- NOTES:** (1) Two or more occupants per vehicle.
 (2) Mixed flow lanes only.
 (3) Violation rate = $\frac{\text{no. of violators in HOV lane} \times 100\%}{\text{Total no. of vehicles in HOV lane}}$
 (4) HOV lane in operation from 6:30 to 8:30 A.M.
 (5) Observations conducted 11/05/13 at Lincoln Avenue Interchange.

MARIN-101

Mission Avenue to Atherton Avenue

Northbound - P.M.

Typical data for 2013 ⁽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	78	15	37	5
Buses	41	60	11	20
Carpools ⁽¹⁾	2038	1155	841	465
Vanpools	11	5	6	0
Single Occ. ⁽²⁾	—	12330	—	4480
Violators	10	—	7	—
TOTAL	2178	13565	902	4970

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	78	15	37	5
Buses	1435	2100	385	700
Carpools ⁽¹⁾	4873	1525	1736	930
Vanpools	110	50	60	0
Single Occ. ⁽²⁾	—	11460	—	4480
Violators	19	—	7	—
TOTAL	6515	15150	2225	6115

RATES	PEAK PERIOD ⁽⁴⁾ 4:30 - 7:00 PM		PEAK HOUR 4:30 - 5:30 PM	
	HOV Lane occupancy rate	3.0 persons/veh		2.5 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)	0.5 %		0.3 %	

- NOTES:** (1) Two or more occupants per vehicle.
 (2) Mixed flow lanes only.
 (3) Violation rate = $\frac{\text{no. of violators in HOV lane} \times 100\%}{\text{Total no. of vehicles in HOV lane}}$
 (4) HOV lane in operation from 4:30 to 7:00 P.M.
 (5) Observations conducted 03/21/13 at M Freitas Truck Scale

MARIN-101

Atherton Avenue to Mission Avenue

Violation History

Southbound

	DATE	PERIOD MONITORED	TOTAL HOVL VOLUME	VIOLATION RATE
A.M. PEAK	Tue Nov 5, 2013	6:30 - 8:30 AM	2520	0.8%
	Wed May 9, 2012	6:30 - 8:30 AM	2233	1.1%
	Wed Jun 1, 2011	6:30 - 8:30 AM	2134	3.3%
	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 Atherton Avenue

Violation History

Northbound

	DATE	PERIOD MONITORED	TOTAL HOVL VOLUME	VIOLATION RATE
P.M. PEAK	Thu Mar 21, 2013	4:30 - 7:00 PM	2178	0.5%
	Thu May 3, 2012	4:30 - 7:00 PM	2252	1.2%
	Thu Jun 2, 2011	4:30 - 7:00 PM	2223	5.8%
	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.

MARIN-101

Mission Avenue to Richardson Bay Bridge

Southbound - A.M.

Typical data for 2013 ⁽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	53	13	27	5
Buses	52	62	27	15
Carpools ⁽¹⁾	1095	523	563	415
Vanpools	3	5	3	10
Single Occ. ⁽²⁾	—	8727	0	3855
Violators	14	—	7	—
TOTAL	1217	9330	627	4300

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	53	13	27	5
Buses	1820	2170	945	525
Carpools ⁽¹⁾	2234	1055	1158	835
Vanpools	30	50	30	100
Single Occ. ⁽²⁾	—	8727	—	3855
Violators	14	—	7	—
TOTAL	4151	12015	2167	5320

RATES	PEAK PERIOD ⁽⁴⁾ 6:30 - 8:30 AM		PEAK HOUR 7:30 - 8:30 AM	
	HOV Lane occupancy rate	3.4 persons/veh		3.5 persons/veh
Mixed Flow occupancy rate	1.3 persons/veh		1.2 persons/veh	
Overall occupancy (incl. buses)	1.5 persons/veh		1.5 persons/veh	
Violation rate ⁽³⁾ (HOV Lane)	1.2 %		0.3 %	

- NOTES:** (1) Two or more occupants per vehicle.
 (2) Mixed flow lanes only.
 (3) $\text{Violation rate} = \frac{\text{no. of violators in HOV lane} \times 100\%}{\text{Total no. of vehicles in HOV lane}}$
 (4) HOV lane in operation from 6:30 to 8:30 A.M.
 (5) Observations conducted 10/31/13 at Route 131/Tiburon Interchange.

MARIN-101

Richardson Bay Bridge to Mission Avenue.

Northbound - P.M.

Typical data for 2013 ⁽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	53	5	27	0
Buses	26	35	19	0
Carpools ⁽¹⁾	1711	255	699	255
Vanpools	26	0	4	0
Single Occ. ⁽²⁾	—	10285	0	4340
Violators	13	—	9	—
TOTAL	1829	10580	758	4595

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	53	5	27	0
Buses	910	1225	665	0
Carpools ⁽¹⁾	3446	540	1422	540
Vanpools	260	0	40	0
Single Occ. ⁽²⁾	—	10285	—	4340
Violators	19	—	9	—
TOTAL	4688	12055	2163	4880

RATES	PEAK PERIOD ⁽⁴⁾ 4:30 - 7:00 PM		PEAK HOUR 4:30 - 5:30 PM	
	HOV Lane occupancy rate	2.6 persons/veh		2.9 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)	0.7 %		0.4 %	

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

(2) Mixed flow lanes only.

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

(4) HOV lane in operation from 4:30 to 7:00 P.M.

(5) Observations conducted 11/07/13 at South of Route 580 Interchange.

MARIN-101

Mission Avenue to Richardson Bay Bridge

Violation History

Southbound

	DATE	PERIOD MONITORED	TOTAL HOVL VOLUME	VIOLATION RATE
A.M. PEAK	Thu Oct 31, 2013	6:30 - 8:30 AM	1217	1.2%
	Wed May 16, 2012	6:30 - 8:30 AM	1349	1.3%
	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

Violation History

Richardson Bay Bridge to Mission Avenue

Northbound

	DATE	PERIOD MONITORED	TOTAL HOVL VOLUME	VIOLATION RATE
P.M. PEAK	Thu Nov 7, 2013	4:30 - 7:00 PM	1829	0.7%
	Tue May 8, 2012	4:30 - 7:00 PM	1826	1.4%
	Thu May 26, 2011	4:30 - 7:00 PM	1276	1.5%
	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.

SANTA CLARA-85

Route 101(Mountain View) to Route 280

Southbound - P.M.

Typical data for 2013 ⁽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	145	0	36	0
Buses	19	19	11	9
Carpools ⁽¹⁾	2631	96	872	44
Vanpools	15	0	4	0
Single Occ. ⁽²⁾	—	9560	—	3558
Violators	47	—	35	—
TOTAL	2857	9675	958	3611

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	145	0	36	0
Buses	665	665	385	315
Carpools ⁽¹⁾	5354	227	1770	114
Vanpools	150	0	40	0
Single Occ. ⁽²⁾	—	9560	—	3558
Violators	47	—	35	—
TOTAL	6361	10452	2266	3987

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	2.2 persons/veh		2.4 persons/veh	
Mixed Flow occupancy rate	1.1 persons/veh		1.1 persons/veh	
Overall occupancy (incl. buses)	1.3 persons/veh		1.4 persons/veh	
Violation rate ⁽³⁾ (HOV Lane)	1.6 %		3.7 %	

- 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 3:00 to 7:00 P.M.
(5) Observations conducted 06/06/13 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 2013	-	-	-
	Year 2012	-	-	-
	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 Jun 6, 2013	3:00 - 6:00 PM	2857	1.6%
	Year 2012	-	-	-
	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 2013 off-peak direction

SANTA CLARA-85

Almaden Expressway to Route 101 (So. San Jose)

Southbound - P.M.

Typical data for 2013 ⁽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	80	16	33	2
Buses	13	6	5	0
Carpools ⁽¹⁾	2217	654	976	252
Vanpools	9	0	2	0
Single Occ. ⁽²⁾	—	7777	—	2644
Violators	68	—	13	—
TOTAL	2387	8453	1029	2898

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	80	16	33	2
Buses	455	210	175	0
Carpools ⁽¹⁾	4548	1394	1991	544
Vanpools	90	0	20	0
Single Occ. ⁽²⁾	—	7777	—	2644
Violators	68	—	13	—
TOTAL	5241	9397	2232	3190

RATES	PEAK PERIOD ⁽⁴⁾ 3:00 - 6:00 PM		PEAK HOUR 5:00 - 6:00 PM	
	HOV Lane occupancy rate	2.2 persons/veh		2.2 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)	2.8 %		1.3 %	

- NOTES:** (1) Two or more occupants per vehicle.
 (2) Mixed flow lanes only.
 (3) Violation rate = $\frac{\text{no. of violators in HOV lane} \times 100\%}{\text{Total no. of vehicles in HOV lane}}$
 (4) HOV lane in operation from 3:00 to 7:00 P.M.
 (5) Observations conducted 04/10/13 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 2013	-	-	-
	Year 2012	-	-	-
	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	Wed Apr 10, 2013	3:00 - 6:00 PM	2387	2.8%
	Year 2012	-	-	-
	Thu Jun 2, 2011	3:00 - 6:00 PM	1130	1.9%
	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 2013 for off-peak direction

SANTA CLARA-87

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

Southbound - P.M.

Typical data for 2013 ⁽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	53	14	28	14
Buses	12	6	3	2
Carpools ⁽¹⁾	1347	1376	515	490
Vanpools	1	0	0	0
Single Occ. ⁽²⁾	—	8450	—	3020
Violators	76	—	23	—
TOTAL	1489	9846	569	3526

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	53	14	28	14
Buses	420	210	105	70
Carpools ⁽¹⁾	2885	2948	1086	1059
Vanpools	10	0	0	0
Single Occ. ⁽²⁾	—	8450	—	3020
Violators	76	—	23	—
TOTAL	3444	11622	1242	4163

RATES	PEAK PERIOD ⁽⁴⁾ 3:00 - 6:00 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)	5.1 %		4.0 %	

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

(2) Mixed flow lanes only.

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

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

(5) Observations conducted 05/29/13 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 2013	-	-	-
	Year 2012	-	-	-
	Year 2011	-	-	-
	Year 2010	-	-	-
	Year 2009	-	-	-
	Year 2008	-	-	-
	Year 2007	-	-	-
P.M. PEAK	Wed May 29, 2013	3:00-6:00 PM	1489	5.1%
	Year 2012	-	-	-
	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 2013 for off-peak direction

SANTA CLARA-101

Guadalupe Parkway to Ellis Street

Northbound - A.M.

Typical data for 2013 ⁽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	130	13	55	1
Buses	17	3	6	3
Carpools ⁽¹⁾	2120	562	695	218
Vanpools	12	0	7	0
Single Occ. ⁽²⁾	—	12671	—	4630
Violators	11	—	7	—
TOTAL	2290	13249	770	4852

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	130	13	55	1
Buses	595	105	210	105
Carpools ⁽¹⁾	4326	1200	1414	451
Vanpools	120	0	70	0
Single Occ. ⁽²⁾	—	12671	—	4630
Violators	11	—	7	—
TOTAL	5182	13989	1756	5187

RATES	PEAK PERIOD ⁽⁴⁾ 6:00 - 9:00 AM		PEAK HOUR 8:00 - 9:00 AM	
	HOV Lane occupancy rate	2.3 persons/veh		2.3 persons/veh
Mixed Flow occupancy rate	1.1 persons/veh		1.1 persons/veh	
Overall occupancy (incl. buses)	1.2 persons/veh		1.2 persons/veh	
Violation rate ⁽³⁾ (HOV Lane)	0.5 %		0.9 %	

- NOTES:** (1) Two or more occupants per vehicle.
(2) Mixed flow lanes only.
(3) Violation rate = $\frac{\text{no. of violators in HOV lane} \times 100\%}{\text{Total no. of vehicles in HOV lane}}$
(4) HOV lane in operation from 5:00 to 9:00 A.M.
(5) Observations conducted 10/01/13 at the Fair Oaks I/C

SANTA CLARA-101

Violation History

Guadalupe Parkway to Ellis Street

Northbound

	DATE	PERIOD MONITORED	TOTAL HOVL VOLUME	VIOLATION RATE
A.M. PEAK	Tue Oct 1, 2013	6:00 - 9:00 AM	2290	0.5%
	Year 2012	-	-	-
	Year 2011	-	-	-
	Wed May 26, 2010	6:00 - 9:00 AM	1632	0.9%
	Thu Apr 2, 2009	6:00 - 9:00 AM	2218	2.8%
	Thu Dec 11, 2008	6:00 - 9:00 AM	1695	3.8%
	Thu Nov 15, 2007	6:00 - 9:00 AM	2371	0.9%
	Tue Nov 14, 2006	6:00 - 9:00 AM	1811	0.7%
	Wed Oct 26, 2005	7:00 - 9:00 AM	1221	0.4%
	Tue Nov 16, 2004	6:00 - 9:00 AM	1799	0.7%
	Wed May 7, 2003	6:00 - 9:00 AM	2142	0.6%
	Thu Apr 4, 2002	6:00 - 9:00 AM	1646	7.5%
	Wed Sep 26, 2001	6:00 - 9:00 AM	1607	0.8%
	Tue Apr 4, 2000	6:00 - 9:00 AM	1527	2.8%
P.M. PEAK	Year 2013	-	-	-
	Year 2012	-	-	-
	Year 2011	-	-	-
	Year 2010	-	-	-
	Year 2009	-	-	-
	Year 2008	-	-	-
	Year 2007	-	-	-
	Year 2006	-	-	-
	Year 2005	-	-	-
	Year 2004	-	-	-
	Year 2003	-	-	-
	Wed May 22, 2002	3:00 - 6:00 PM	1487	3.8%
	Wed May 10, 2000	3:00 - 6:00 PM	1684	0.3%

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 2013 for off-peak direction

SANTA CLARA-101

Route 280/680 I/C to Guadalupe Parkway

Northbound - A.M.

Typical data for 2013 ⁽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	67	12	32	12
Buses	13	6	4	3
Carpools ⁽¹⁾	3356	171	972	16
Vanpools	8	0	3	0
Single Occ. ⁽²⁾	—	15330	—	5802
Violators	55	—	4	—
TOTAL	3499	15519	1015	5833

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	67	12	32	12
Buses	455	210	140	105
Carpools ⁽¹⁾	6779	352	1957	32
Vanpools	80	0	30	0
Single Occ. ⁽²⁾	—	15330	—	5802
Violators	55	—	4	—
TOTAL	7436	15904	2163	5951

RATES	PEAK PERIOD ⁽⁴⁾ 6:00 - 9:00 AM		PEAK HOUR 6:00 - 7:00 AM	
	HOV Lane occupancy rate	2.1 persons/veh		2.1 persons/veh
Mixed Flow occupancy rate	1.0 persons/veh		1.0 persons/veh	
Overall occupancy (incl. buses)	1.2 persons/veh		1.2 persons/veh	
Violation rate ⁽³⁾ (HOV Lane)	1.6 %		0.4 %	

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

(2) Mixed flow lanes only.

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

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

(5) Observations conducted 11/20/13 at McKee Road I/C

SANTA CLARA-101

Route 280/680 I/C to Guadalupe Parkway

Violation History

Northbound

	DATE	PERIOD MONITORED	TOTAL HOVL VOLUME	VIOLATION RATE
A.M. PEAK	Wed Nov 20, 2013	6:00 - 9:00 AM	3499	1.6%
	Year 2012	-	-	-
	Year 2011	-	-	-
	Thu May 13, 2010	6:00 - 9:00 AM	3473	2.0%
	Thu Oct 22, 2009	6:00 - 9:00 AM	2947	0.3%
	Tue Oct 7, 2008	6:00 - 9:00 AM	3651	0.4%
	Tue Dec 11, 2007	6:00 - 9:00 AM	3914	0.1%
	Tue May 16, 2006	6:00 - 9:00 AM	3374	3.8%
	Wed Mar 30, 2005	6:00 - 9:00 AM	4026	6.8%
	Thu Dec 2, 2004	6:00 - 9:00 AM	3561	0.2%
	Thu Jun 12, 2003	6:00 - 9:00 AM	3794	2.6%
	Thu Apr 11, 2002	6:30 - 9:00 AM	3438	2.7%
	Thu May 11, 2000	6:00 - 9:00 AM	4839	2.4%
P.M. PEAK	Year 2013	-	-	-
	Year 2012	-	-	-
	Year 2011	-	-	-
	Year 2010	-	-	-
	Year 2009	-	-	-
	Year 2008	-	-	-
	Year 2007	-	-	-
	Year 2006	-	-	-
	Year 2005	-	-	-
	Year 2004	-	-	-
	Year 2003	-	-	-
	Thu May 23, 2002	3:00 - 6:00 PM	1264	1.6%
	Thu Apr 27, 2000	3:00 - 6:00 PM	1318	3.7%

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 2013 for off-peak direction

SANTA CLARA-101

Route 280/680 I/C to Bernal Road

Southbound - P.M.

Typical data for 2013 ⁽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	10	22	1
Buses	9	0	3	0
Carpools ⁽¹⁾	1395	551	426	205
Vanpools	6	7	1	0
Single Occ. ⁽²⁾	—	10830	—	3830
Violators	36	—	2	—
TOTAL	1501	11398	454	4036

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	10	22	1
Buses	315	0	105	0
Carpools ⁽¹⁾	2833	1167	862	432
Vanpools	60	70	10	0
Single Occ. ⁽²⁾	—	10830	—	3830
Violators	36	—	2	—
TOTAL	3299	12077	1001	4263

RATES	PEAK PERIOD ⁽⁴⁾ 3:00 - 6:00 PM		PEAK HOUR 5:00 - 6:00 PM	
	HOV Lane occupancy rate	2.2 persons/veh		2.2 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)	2.4 %		0.4 %	

- NOTES:** (1) Two or more occupants per vehicle.
 (2) Mixed flow lanes only.
 (3) $\text{Violation rate} = \frac{\text{no. of violators in HOV lane} \times 100\%}{\text{Total no. of vehicles in HOV lane}}$
 (4) HOV lane in operation from 3:00 to 7:00 P.M.
 (5) Observations conducted 05/23/13 at Hellyer Avenue I/C

SANTA CLARA-101

Route 280/680 I/C to Bernal Road

Violation History

Southbound

	DATE	PERIOD MONITORED	TOTAL HOVL VOLUME	VIOLATION RATE
A.M. PEAK	Year 2013	-	-	-
	Year 2012	-	-	-
	Year 2010	-	-	-
	Year 2009	-	-	-
	Year 2008	-	-	-
	Year 2007	-	-	-
	Year 2006	-	-	-
	Year 2005	-	-	-
	Year 2004	-	-	-
	Year 2003	-	-	-
	Thu Jun 6, 2002	6:00 - 9:00 AM	730	5.6%
	Thu Apr 19, 2001	6:00 - 9:00 AM	746	5.4%
	Wed Oct 4, 2000	7:00 - 9:00 AM	413	5.6%
P.M. PEAK	Thu May 23, 2013	3:00 - 6:00 PM	1501	2.4%
	Thu Dec 6, 2012	3:00 - 6:00 PM	1404	1.3%
	Thu Apr 29, 2010	3:00 - 6:00 PM	1799	4.7%
	Tue May 26, 2009	3:00 - 6:00 PM	1953	1.1%
	Thu May 29, 2008	3:00 - 6:00 PM	2088	0.6%
	Tue May 8, 2007	3:00 - 6:00 PM	1881	1.2%
	Wed May 3, 2006	3:00 - 6:00 PM	2127	3.3%
	Thu Mar 10, 2005	3:00 - 6:00 PM	2225	0.6%
	Tue Nov 23, 2004	3:00 - 5:30 PM	1747	0.3%
	Thu May 1, 2003	3:00 - 6:00 PM	2204	1.6%
	Tue Mar 19, 2002	3:00 - 6:00 PM	1496	2.0%
	Wed May 16, 2001	3:00 - 6:00 PM	1732	0.8%
	Tue Sep 19, 2000	3:00 - 6:00 PM	1898	0.7%

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 2013 for off-peak direction

SANTA CLARA-101

Bernal Road to Route 280/680 I/C

Northbound - A.M.

Typical data for 2013 ⁽⁵⁾

VEHICLES	PEAK PERIOD ⁽⁴⁾ 6:00 - 9:00 AM		PEAK HOUR 7:00 - 8:00 AM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	54	9	17	5
Buses	11	9	3	0
Carpools ⁽¹⁾	1945	123	858	10
Vanpools	3	0	1	0
Single Occ. ⁽²⁾	—	10113	—	3562
Violators	34	—	13	—
TOTAL	2047	10254	892	3577

PERSONS	PEAK PERIOD ⁽⁴⁾ 6:00 - 9:00 AM		PEAK HOUR 7:00 - 8:00 AM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	54	9	17	5
Buses	385	315	105	0
Carpools ⁽¹⁾	3945	266	1739	22
Vanpools	30	0	10	0
Single Occ. ⁽²⁾	—	10113	—	3562
Violators	34	—	13	—
TOTAL	4448	10703	1884	3589

RATES	PEAK PERIOD ⁽⁴⁾ 6:00 - 9:00 AM		PEAK HOUR 7:00 - 8:00 AM	
	HOV Lane occupancy rate	2.2 persons/veh		2.1 persons/veh
Mixed Flow occupancy rate	1.0 persons/veh		1.0 persons/veh	
Overall occupancy (incl. buses)	1.2 persons/veh		1.2 persons/veh	
Violation rate ⁽³⁾ (HOV Lane)	1.7 %		1.5 %	

- NOTES:** (1) Two or more occupants per vehicle.
 (2) Mixed flow lanes only.
 (3) Violation rate = $\frac{\text{no. of violators in HOV lane} \times 100\%}{\text{Total no. of vehicles in HOV lane}}$
 (4) HOV lane in operation from 5:00 to 9:00 A.M.
 (5) Observations conducted 10/24/13 at the Hellyer Avenue I/C

SANTA CLARA-101

Bernal Road to Route 280/680 I/C

Violation History

Northbound

	DATE	PERIOD MONITORED	TOTAL HOVL VOLUME	VIOLATION RATE
A.M. PEAK	Thu Oct 24, 2013	6:00 - 9:00 AM	2047	1.7%
	Year 2012	-	-	-
	Year 2011	-	-	-
	Tue May 11, 2010	6:00 - 9:00 AM	1899	0.7%
	Wed Apr 29, 2009	6:00 - 9:00 AM	1610	0.5%
	Wed Oct 15, 2008	6:00 - 9:00 AM	1658	0.4%
	Tue Apr 10, 2007	6:00 - 9:00 AM	1575	0.6%
	Tue Apr 18, 2006	6:00 - 9:00 AM	2019	2.2%
	Tue Apr 19, 2005	6:00 - 9:00 AM	2366	0.8%
	Tue Dec 14, 2004	6:00 - 9:00 AM	1668	1.3%
	Tue Jun 3, 2003	6:00 - 9:00 AM	2620	1.0%
	Thu May 16, 2002	6:00 - 9:00 AM	1859	2.7%
	Tue Apr 3, 2001	6:00 - 9:00 AM	2258	3.5%
Thu Nov 30, 2000	7:00 - 9:00 AM	1503	2.3%	
P.M. PEAK	Year 2013	-	-	-
	Year 2012	-	-	-
	Year 2011	-	-	-
	Year 2009	-	-	-
	Year 2008	-	-	-
	Year 2007	-	-	-
	Year 2006	-	-	-
	Year 2005	-	-	-
	Year 2004	-	-	-
	Year 2003	-	-	-
	Wed Mar 27, 2002	3:00 - 6:00 PM	1156	3.1%
	Tue May 15, 2001	3:00 - 6:00 PM	1155	5.4%
	Wed Apr 5, 2000	3:00 - 6:00 PM	1169	5.9%

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 2013 for off-peak direction

SANTA CLARA-101

Bernal Road to Cochrane Road

Southbound - P.M.

Typical data for 2013 ⁽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	3	24	0
Buses	16	3	11	1
Carpools ⁽¹⁾	2235	420	699	193
Vanpools	12	12	8	3
Single Occ. ⁽²⁾	—	10275	—	3768
Violators	30	—	4	—
TOTAL	2341	10713	746	3965

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	3	24	0
Buses	560	105	385	35
Carpools ⁽¹⁾	4517	870	1407	406
Vanpools	120	120	80	30
Single Occ. ⁽²⁾	—	10275	—	3768
Violators	30	—	4	—
TOTAL	5275	11373	1900	4239

RATES	PEAK PERIOD ⁽⁴⁾ 3:00 - 6:00 PM		PEAK HOUR 5:00 - 6:00 PM	
	HOV Lane occupancy rate	2.3 persons/veh		2.5 persons/veh
Mixed Flow occupancy rate	1.1 persons/veh		1.1 persons/veh	
Overall occupancy (incl. buses)	1.3 persons/veh		1.3 persons/veh	
Violation rate ⁽³⁾ (HOV Lane)	1.3 %		0.5 %	

- NOTES:** (1) Two or more occupants per vehicle.
 (2) Mixed flow lanes only.
 (3) Violation rate = $\frac{\text{no. of violators in HOV lane} \times 100\%}{\text{Total no. of vehicles in HOV lane}}$
 (4) HOV lane in operation from 3:00 to 7:00 P.M.
 (5) Observations conducted 04/17/13 at Coyote Creek Golf Drive I/C

SANTA CLARA-101

Bernal Road to Cochrane Road

Violation History

Southbound

	DATE	PERIOD MONITORED	TOTAL HOVL VOLUME	VIOLATION RATE
A.M. PEAK	Year 2013	-	-	-
	Year 2012	-	-	-
	Year 2011	-	-	-
	Year 2010	-	-	-
	Year 2009	-	-	-
	Year 2008	-	-	-
	Year 2007	-	-	-
	Year 2006	-	-	-
	Year 2005	-	-	-
	Year 2004	-	-	-
	Year 2003	-	-	-
P.M. PEAK	Wed Apr 17, 2013	3:00 - 6:00 PM	2341	1.3%
	Year 2012	-	-	-
	Year 2011	-	-	-
	Sat May 15, 2010	3:00 - 6:00 PM	2560	0.2%
	Thu Jun 11, 2009	3:00 - 6:00 PM	2388	1.3%
	Wed Oct 29, 2008	3:00 - 6:00 PM	2357	0.4%
	Tue May 15, 2007	3:00 - 6:00 PM	2177	0.4%
	Wed Apr 19, 2006	3:00 - 6:00 PM	1652	1.2%
	Tue Sep 13, 2005	3:00 - 6:00 PM	2102	0.1%
	Wed Nov 3, 2004	3:00 - 5:30 PM	1493	1.5%
	Wed May 21, 2003	3:00 - 6:00 PM	1775	1.1%

NOTES: (a) Morning period of operation from 5:00 to 9:00 AM.
(b) Evening period of operation from 3:00 to 7:00 PM.
(c) Data was not collected in 2013 for off-peak period

SANTA CLARA-101

Cochrane Road to Bernal Road

Northbound - A.M.

Typical data for 2013 ⁽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	81	36	34	8
Buses	23	6	9	2
Carpools ⁽¹⁾	2085	234	929	72
Vanpools	4	12	1	2
Single Occ. ⁽²⁾	—	10218	—	3568
Violators	34	—	9	—
TOTAL	2227	10506	982	3652

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	81	36	34	8
Buses	805	210	315	70
Carpools ⁽¹⁾	4295	508	1935	159
Vanpools	40	120	10	20
Single Occ. ⁽²⁾	—	10218	—	3568
Violators	34	—	9	—
TOTAL	5255	11092	2303	3825

RATES	PEAK PERIOD ⁽⁴⁾ 6:00 - 9:00 AM		PEAK HOUR 7:00 - 8:00 AM	
	HOV Lane occupancy rate	2.4 persons/veh		2.3 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)	1.5 %		0.9 %	

- NOTES:** (1) Two or more occupants per vehicle.
 (2) Mixed flow lanes only.
 (3) Violation rate = $\frac{\text{no. of violators in HOV lane} \times 100\%}{\text{Total no. of vehicles in HOV lane}}$
 (4) HOV lane in operation from 5:00 to 9:00 A.M.
 (5) Observations conducted 10/03/13 at Coyote Creek Golf Drive I/C

SANTA CLARA-101

Cochrane Road to Bernal Road

Violation History

Northbound

	DATE	PERIOD MONITORED	TOTAL HOVL VOLUME	VIOLATION RATE
A.M. PEAK	Thu Oct 3, 2013	6:00 - 9:00 AM	2227	1.5%
	Year 2012	-	-	-
	Year 2011	-	-	-
	Wed Jun 9, 2010	6:00 - 9:00 AM	2110	1.4%
	Thu Dec 10, 2009	6:00 - 9:00 AM	2058	0.7%
	Wed Jun 4, 2008	6:00 - 9:00 AM	2394	1.0%
	Thu Dec 6, 2007	6:00 - 9:00 AM	2099	0.3%
	Tue Dec 19, 2006	6:00 - 9:00 AM	2799	1.0%
	Wed Dec 14, 2005	6:00 - 9:00 AM	1827	1.4%
	Tue Nov 9, 2004	6:00 - 9:00 AM	2120	0.2%
Tue Oct 28, 2003	6:00 - 9:00 AM	1720	0.0%	
P.M. PEAK	Year 2013	-	-	-
	Year 2012	-	-	-
	Year 2011	-	-	-
	Year 2010	-	-	-
	Year 2009	-	-	-
	Year 2008	-	-	-
	Year 2007	-	-	-
	Year 2006	-	-	-
	Year 2005	-	-	-
	Year 2004	-	-	-
	Year 2003	-	-	-

NOTES: (a) Morning period of operation from 5:00 to 9:00 AM.
 (b) Evening period of operation from 3:00 to 7:00 PM.
 (c) Data was not collected in 2013 for off-peak direction

SANTA CLARA-280

Leland Avenue to Magdalena Avenue

Northbound - A.M.

Typical data for 2013 ⁽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	53	0	26	0
Buses	11	21	7	9
Carpools ⁽¹⁾	2018	87	869	1
Vanpools	7	0	1	0
Single Occ. ⁽²⁾	—	11250	—	4151
Violators	24	—	13	—
TOTAL	2113	11358	916	4161

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	53	0	26	0
Buses	385	735	245	315
Carpools ⁽¹⁾	4084	191	1759	2
Vanpools	70	0	10	0
Single Occ. ⁽²⁾	—	11250	—	4151
Violators	24	—	13	—
TOTAL	4616	12176	2053	4468

RATES	PEAK PERIOD ⁽⁴⁾ 6:00 - 9:00 AM		PEAK HOUR 8:00 - 9:00 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)	1.1 %		1.4 %	

- NOTES:** (1) Two or more occupants per vehicle.
 (2) Mixed flow lanes only.
 (3) Violation rate = $\frac{\text{no. of violators in HOV lane} \times 100\%}{\text{Total no. of vehicles in HOV lane}}$
 (4) HOV lane in operation from 5:00 to 9:00 A.M.
 (5) Observations conducted 11/14/13 at Wolfe Road I/C

SANTA CLARA-280

Leland Avenue to Magdalena Avenue

Violation History

Northbound

	DATE	PERIOD MONITORED	TOTAL HOVL VOLUME	VIOLATION RATE
A.M. PEAK	Thu Nov 14, 2013	6:00 - 9:00 AM	2113	1.1%
	Year 2012	-	-	-
	Year 2011	-	-	-
	Tue Jun 8, 2010	6:00 - 9:00 AM	1307	0.7%
	Thu Apr 23, 2009	6:00 - 9:00 AM	1559	0.5%
	Thu May 29, 2008	6:00 - 9:00 AM	1772	0.9%
	Thu Dec 5, 2007	6:00 - 9:00 AM	2105	0.7%
	Thu Dec 14, 2006	6:00 - 9:00 AM	1843	0.1%
	Tue Mar 8, 2005	6:00 - 9:00 AM	1602	0.8%
	Thu Oct 7, 2004	6:00 - 9:00 AM	2213	2.4%
	Thu Jun 5, 2003	6:00 - 9:00 AM	1558	7.4%
	Tue May 21, 2002	6:00 - 9:00 AM	1355	5.4%
	Tue Nov 6, 2001	6:00 - 9:00 AM	1253	1.6%
	Wed Mar 29, 2000	6:00 - 9:00 AM	2086	1.7%
P.M. PEAK	Year 2013	-	-	-
	Year 2012	-	-	-
	Year 2011	-	-	-
	Year 2010	-	-	-
	Year 2009	-	-	-
	Year 2008	-	-	-
	Year 2007	-	-	-
	Year 2006	-	-	-
	Year 2005	-	-	-
	Year 2004	-	-	-
	Year 2003	-	-	-
	Tue May 28, 2002	3:00 - 6:00 PM	1081	1.5%
	Wed Apr 4, 2001	3:00 - 6:00 PM	1160	0.9%
	Thu Apr 13, 2000	3:00 - 6:00 PM	1106	5.4%

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 2013 for off-peak direction

SANTA CLARA-680 EXPRESS LANE

Southbound - P.M.

Typical data for 2013 ⁽³⁾

Alameda Co. Line to Route 237 Calaveras Blvd.

VEHICLES	PEAK PERIOD ⁽²⁾ 3:00 - 6:00 PM		PEAK HOUR 4:00 - 5:00 PM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	17	9	4	4
Buses	11	9	3	4
Carpools ⁽¹⁾	503	729	133	266
Vanpools	2	0	2	0
Single Occ.	44	10773	15	3758
TOTAL	577	11520	157	4032

PERSONS	PEAK PERIOD ⁽²⁾ 3:00 - 6:00 PM		PEAK HOUR 4:00 - 5:00 PM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	17	9	4	4
Buses	385	315	105	140
Carpools ⁽¹⁾	1038	1511	279	552
Vanpools	20	0	20	0
Single Occ.	44	10773	15	3758
TOTAL	1504	12608	423	4454

RATES	PEAK PERIOD ⁽²⁾ 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	2.6 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	

- NOTES:** (1) Two or more occupants per vehicle.
 (2) Express Lane in operation from 5:00 A.M. to 8:00 P.M.
 (3) Observations conducted 04/24/13 at Jackson St I/C

SANTA CLARA-680

EXPRESS LANE

Alameda Co. Line to Route 237 Calaveras Blvd

Violation History

Southbound

	DATE	PERIOD MONITORED	TOTAL HOVL VOLUME	VIOLATION RATE
A.M. PEAK	Year 2013	-	-	-
	Year 2012	-	-	-
	Year 2011	-	-	-
	Year 2010	-	-	-
	Thu May 21, 2009	6:00-9:00 A.M	1203	4.1%
P.M. PEAK	Wed Apr 24, 2013	3:00-6:00 P.M	577	-
	Year 2012	-	-	-
	Year 2011	-	-	-
	Year 2010	-	-	-
	Thu Apr 23, 2009	3:00-6:00 P.M	815	1.0%

NOTES: (a) Express Lane hours of operation from 5:00 A.M. to 8:00 P.M.
(B) Data was not collected in 2013 for AM-peak direction
(C) Data prior to 2011 is HOV Lane data which operated from
5:00 to 9:00 AM and 3:00 to 7:00 PM

SANTA CLARA-880

Alameda Co. Line to US 101 I/C

Southbound - A.M.

Typical data for 2013 ⁽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	40	42	16	8
Buses	13	6	6	4
Carpools ⁽¹⁾	1215	507	454	228
Vanpools	0	6	0	4
Single Occ. ⁽²⁾	—	10515	—	3928
Violators	16	—	5	—
TOTAL	1284	11076	481	4172

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	40	42	16	8
Buses	455	210	210	140
Carpools ⁽¹⁾	2507	1159	940	533
Vanpools	0	60	0	40
Single Occ. ⁽²⁾	—	10515	—	3928
Violators	16	—	5	—
TOTAL	3018	11986	1171	4649

RATES	PEAK PERIOD ⁽⁴⁾ 6:00 - 9:00 AM		PEAK HOUR 7:00 - 8:00 AM	
	HOV Lane occupancy rate	2.4 persons/veh		2.4 persons/veh
Mixed Flow occupancy rate	1.1 persons/veh		1.1 persons/veh	
Overall occupancy (incl. buses)	1.2 persons/veh		1.3 persons/veh	
Violation rate ⁽³⁾ (HOV Lane)	1.2 %		1.0 %	

- NOTES:** (1) Two or more occupants per vehicle.
 (2) Mixed flow lanes only.
 (3) $\text{Violation rate} = \frac{\text{no. of violators in HOV lane} \times 100\%}{\text{Total no. of vehicles in HOV lane}}$
 (4) HOV lane in operation from 5:00 to 9:00 A.M.
 (5) Observations conducted 10/17/13 at Montague Expwy Off

SANTA CLARA-880

Alameda Co. Line to US 101 I/C

Violation History

Southbound

	DATE	PERIOD MONITORED	TOTAL HOVL VOLUME	VIOLATION RATE
A.M. PEAK	Thu Oct 17, 2013	6:00-9:00 A.M	1284	1.2%
P.M. PEAK	Year 2013	-	-	-

- 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 2013 for PM-peak direction

SANTA CLARA-880

Old Bayshore Hwy to Alameda Co. Line

Northbound - P.M.

Typical data for 2013 ⁽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	53	9	10	1
Buses	16	9	3	1
Carpools ⁽¹⁾	1764	264	686	107
Vanpools	4	0	0	0
Single Occ. ⁽²⁾	—	8733	—	2911
Violators	231	—	47	—
TOTAL	2068	9015	746	3020

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	53	9	10	1
Buses	560	315	105	35
Carpools ⁽¹⁾	3586	545	1411	215
Vanpools	40	0	0	0
Single Occ. ⁽²⁾	—	8733	—	2911
Violators	231	—	47	—
TOTAL	4470	9602	1573	3162

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	2.2 persons/veh		2.1 persons/veh	
Mixed Flow occupancy rate		1.1 persons/veh		1.0 persons/veh
Overall occupancy (incl. buses)	1.3 persons/veh		1.3 persons/veh	
Violation rate ⁽³⁾ (HOV Lane)	11.2 %		6.3 %	

- NOTES:** (1) Two or more occupants per vehicle.
 (2) Mixed flow lanes only.
 (3) Violation rate = $\frac{\text{no. of violators in HOV lane} \times 100\%}{\text{Total no. of vehicles in HOV lane}}$
 (4) HOV lane in operation from 3:00 to 7:00 P.M.
 (5) Observations conducted 10/09/13 at Montague Expwy Loop

SANTA CLARA-880

Old Bayshore Hwy to Alameda Co. Line

Violation History

Northbound

	DATE	PERIOD MONITORED	TOTAL HOVL VOLUME	VIOLATION RATE
A.M. PEAK	Year 2013	-	-	-
P.M. PEAK	Wed Oct 9, 2013	3:00-6:00 P.M	2068	11.2%

- 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 2013 for AM-peak direction

SOLANO-80

Airbase Parkway to Red Top Road

Westbound - A.M.

Typical data for 2013 ⁽⁵⁾

VEHICLES	PEAK PERIOD ⁽⁴⁾ 6:00 - 9:00 AM		PEAK HOUR 7:00 - 8:00 AM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	17	10	5	5
Buses	9	18	3	13
Carpools ⁽¹⁾	1137	600	405	300
Vanpools	10	11	4	8
Single Occ. ⁽²⁾	—	9923	—	3305
Violators	7	—	0	—
TOTAL	1180	10562	417	3631

PERSONS	PEAK PERIOD ⁽⁴⁾ 6:00 - 9:00 AM		PEAK HOUR 7:00 - 8:00 AM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	17	10	5	5
Buses	315	630	105	455
Carpools ⁽¹⁾	2320	1536	840	780
Vanpools	100	110	40	80
Single Occ. ⁽²⁾	—	9923	—	3305
Violators	7	—	0	—
TOTAL	2759	12209	990	4625

RATES	PEAK PERIOD ⁽⁴⁾ 6:00 - 9:00 AM		PEAK HOUR 7:00 - 8:00 AM	
	HOV Lane occupancy rate	2.3 persons/veh		2.4 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)	0.6 %		0.0 %	

- NOTES:** (1) Two or more occupants per vehicle.
(2) Mixed flow lanes only.
(3) Violation rate = $\frac{\text{no. of violators in HOV lane} \times 100\%}{\text{Total no. of vehicles in HOV lane}}$
(4) HOV lane in operation from 5:00 to 10:00 A.M.
(5) Observations conducted 11/21/13 at Green Valley Road Park&Ride

SOLANO-80

Airbase Parkway to Red Top Road

Westbound - P.M.

Typical data for 2013 ⁽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	20	58	5	15
Buses	10	38	3	13
Carpools ⁽¹⁾	812	1315	298	410
Vanpools	11	15	5	5
Single Occ. ⁽²⁾	—	7695	—	2645
Violators	12	—	—	—
TOTAL	865	9121	311	3088

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	20	58	5	15
Buses	350	1330	105	445
Carpools ⁽¹⁾	1722	2780	623	865
Vanpools	110	150	50	50
Single Occ. ⁽²⁾	—	7695	—	2645
Violators	12	—	—	—
TOTAL	2214	12013	783	4030

RATES	PEAK PERIOD ⁽⁴⁾ 3:00 - 6:00 PM		PEAK HOUR 5:00 - 6:00 PM	
	HOV Lane occupancy rate	2.6 persons/veh		2.5 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) 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 05/15/13 at Green Valley Road Park&Ride.

SOLANO-80

Red Top Road to Airbase Parkway

Eastbound - A.M.

Typical data for 2013 ⁽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	27	25	12	12
Buses	13	40	5	13
Carpools ⁽¹⁾	524	1160	234	428
Vanpools	16	5	10	5
Single Occ. ⁽²⁾	—	8358	—	3353
Violators	5	—	0	—
TOTAL	585	9588	261	3811

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	27	25	12	12
Buses	455	1400	175	455
Carpools ⁽¹⁾	1081	2445	485	915
Vanpools	160	50	100	50
Single Occ. ⁽²⁾	—	8358	—	3353
Violators	5	—	0	—
TOTAL	1728	12278	772	4785

RATES	PEAK PERIOD ⁽⁴⁾ 6:00 - 9:00 AM		PEAK HOUR 7:00 - 8:00 AM	
	HOV Lane occupancy rate	3.0 persons/veh		3.0 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)	0.9 %		0.0 %	

- NOTES:** (1) Two or more occupants per vehicle.
 (2) Mixed flow lanes only.
 (3) Violation rate = $\frac{\text{no. of violators in HOV lane} \times 100\%}{\text{Total no. of vehicles in HOV lane}}$
 (4) HOV lane in operation from 5:00 to 10:00 A.M.
 (5) Observations conducted 05/01/2013 at Abernathy Road Interchange.

SOLANO-80

Red Top Road to Airbase Parkway

Eastbound - P.M.

Typical data for 2013 ⁽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	92	33	41	16
Buses	8	18	2	0
Carpools ⁽¹⁾	2106	1598	771	533
Vanpools	63	58	21	8
Single Occ. ⁽²⁾	—	14778	—	5073
Violators	8	—	0	—
TOTAL	2277	16485	835	5630

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	92	33	41	16
Buses	280	630	70	0
Carpools ⁽¹⁾	4412	3374	1609	1109
Vanpools	630	580	210	80
Single Occ. ⁽²⁾	—	14778	—	5073
Violators	8	—	0	—
TOTAL	5422	19395	1930	6278

RATES	PEAK PERIOD ⁽⁴⁾ 3:00 - 6:00 PM		PEAK HOUR 4:00 - 5:00 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)	1.3 persons/veh		1.3 persons/veh	
Violation rate ⁽³⁾ (HOV Lane)	0.4 %		0.0 %	

- NOTES:** (1) Two or more occupants per vehicle.
 (2) Mixed flow lanes only.
 (3) Violation rate = $\frac{\text{no. of violators in HOV lane} \times 100\%}{\text{Total no. of vehicles in HOV lane}}$
 (4) HOV lane in operation from 3:00 to 7:00 P.M.
 (5) Observations conducted 05/09/13 at Abernathy Road Interchange.

SOLANO-80

Airbase Parkway to Red Top Road

Violation History

Westbound

	DATE	PERIOD MONITORED	TOTAL HOVL VOLUME	VIOLATION RATE
A.M. PEAK	Thu Nov 21, 2013	5:00 - 10:00 AM	1180	0.6%
	Wed Nov 7, 2012	5:00 - 10:00 AM	1216	1.1%
	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	Wed May 15, 2013	3:00 - 7:00 PM	865	1.4%
	Tue Oct 30, 2012	3:00 - 7:00 PM	983	1.6%
	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 1, 2013	5:00 - 10:00 AM	585	0.9%
	Wed Oct 17, 2012	5:00 - 10:00 AM	509	1.0%
	Wed May 25, 2011	5:00 - 10:00 AM	431	5.3%
	Thu Apr 15, 2010	5:00 - 10:00 AM	473	1.5%
P.M. PEAK	Thu May 9, 2013	3:00 - 7:00 PM	2277	0.4%
	Tue Oct 16, 2012	3:00 - 7:00 PM	1962	0.7%
	Tue May 24, 2011	3:00 - 7:00 PM	1492	3.0%
	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

Windsor River Road to Route 12

Southbound - A.M.

Typical data for 2013 ⁽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	32	7	11	3
Buses	3	16	3	10
Carpools ⁽¹⁾	692	255	366	153
Vanpools	1	3	1	0
Single Occ. ⁽²⁾	—	5107	—	2477
Violators	13	—	5	—
TOTAL	741	5388	386	2643

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	32	7	11	3
Buses	105	560	105	350
Carpools ⁽¹⁾	1476	535	782	320
Vanpools	10	30	10	0
Single Occ. ⁽²⁾	—	5107	—	2477
Violators	13	—	5	—
TOTAL	1636	6239	913	3150

RATES	PEAK PERIOD ⁽⁴⁾ 7:00 - 9:00 AM		PEAK HOUR 8:00 - 9:00 AM	
	HOV Lane occupancy rate	2.2 persons/veh		2.4 persons/veh
Mixed Flow occupancy rate	1.2 persons/veh		1.2 persons/veh	
Overall occupancy (incl. buses)	1.3 persons/veh		1.3 persons/veh	
Violation rate ⁽³⁾ (HOV Lane)	1.8 %		0.5 %	

- NOTES:** (1) Two or more occupants per vehicle.
 (2) Mixed flow lanes only.
 (3) Violation rate = $\frac{\text{no. of violators in HOV lane} \times 100\%}{\text{Total no. of vehicles in HOV lane}}$
 (4) HOV lane in operation from 7:00 to 9:00 A.M.
 (5) Observations conducted 05/14/13 at River Road Interchange.

SONOMA-101

Windsor River Road to Route 12

Southbound - P.M.

Typical data for 2013 ⁽⁵⁾

VEHICLES	PEAK PERIOD ⁽⁴⁾ 3:00 - 6:30 PM		PEAK HOUR 4:00 - 5:00 PM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	87	19	37	0
Buses	15	10	6	0
Carpools ⁽¹⁾	2020	790	706	153
Vanpools	5	4	2	0
Single Occ. ⁽²⁾	—	7297	—	2332
Violators	17	—	0	—
TOTAL	2144	8120	751	2485

PERSONS	PEAK PERIOD ⁽⁴⁾ 3:00 - 6:30 PM		PEAK HOUR 4:00 - 5:00 PM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	87	19	37	0
Buses	525	350	210	0
Carpools ⁽¹⁾	4207	1625	1459	310
Vanpools	50	40	20	0
Single Occ. ⁽²⁾	—	7297	—	2332
Violators	17	—	0	—
TOTAL	4886	9331	1726	2642

RATES	PEAK PERIOD ⁽⁴⁾ 3:00 - 6:30 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)	1.4 persons/veh		1.3 persons/veh	
Violation rate ⁽³⁾ (HOV Lane)	0.8 %		0.0 %	

- NOTES:** (1) Two or more occupants per vehicle.
(2) Mixed flow lanes only.
(3) Violation rate = $\frac{\text{no. of violators in HOV lane} \times 100\%}{\text{Total no. of vehicles in HOV lane}}$
(4) HOV lane in operation from 3:00 to 6:30 P.M.
(5) Observations conducted 05/02/13 at River Road Interchange.

SONOMA-101

Route 12 to Windsor River Road

Northbound - A.M.

Typical data for 2013 ⁽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	16	6	7	3
Buses	2	14	2	7
Carpools ⁽¹⁾	595	303	302	150
Vanpools	0	4	0	4
Single Occ. ⁽²⁾	—	4200	—	1922
Violators	8	—	2	—
TOTAL	621	4527	313	2086

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	16	6	7	3
Buses	70	490	70	245
Carpools ⁽¹⁾	1248	613	628	300
Vanpools	0	40	0	40
Single Occ. ⁽²⁾	—	4200	—	1922
Violators	8	—	2	—
TOTAL	1342	5349	707	2510

RATES	PEAK PERIOD ⁽⁴⁾ 7:00 - 9:00 AM		PEAK HOUR 8:00 - 9:00 AM	
	HOV Lane occupancy rate	2.2 persons/veh		2.3 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)	1.3 %		0.3 %	

- NOTES:** (1) Two or more occupants per vehicle.
 (2) Mixed flow lanes only.
 (3) Violation rate = $\frac{\text{no. of violators in HOV lane} \times 100\%}{\text{Total no. of vehicles in HOV lane}}$
 (4) HOV lane in operation from 7:00 to 9:00 A.M.
 (5) Observations conducted 05/16/13 at River Road Interchange.

SONOMA-101

Route 12 to Windsor River Road

Northbound - P.M.

Typical data for 2013 ⁽⁵⁾

VEHICLES	PEAK PERIOD ⁽⁴⁾ 3:00 - 6:30 PM		PEAK HOUR 4:00 - 5:00 PM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	54	7	13	3
Buses	7	13	1	7
Carpools ⁽¹⁾	2009	935	602	290
Vanpools	5	10	2	2
Single Occ. ⁽²⁾	—	7912	—	2400
Violators	17	—	0	—
TOTAL	2092	8877	618	2702

PERSONS	PEAK PERIOD ⁽⁴⁾ 3:00 - 6:30 PM		PEAK HOUR 4:00 - 5:00 PM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	54	7	13	3
Buses	245	455	35	245
Carpools ⁽¹⁾	4184	2015	1269	638
Vanpools	50	100	20	20
Single Occ. ⁽²⁾	—	7912	—	2400
Violators	17	—	0	—
TOTAL	4550	10489	1337	3306

RATES	PEAK PERIOD ⁽⁴⁾ 3:00 - 6:30 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		1.2 persons/veh		1.2 persons/veh
Overall occupancy (incl. buses)	1.4 persons/veh		1.4 persons/veh	
Violation rate ⁽³⁾ (HOV Lane)	0.8 %		0.0 %	

- NOTES:** (1) Two or more occupants per vehicle.
 (2) Mixed flow lanes only.
 (3) Violation rate = $\frac{\text{no. of violators in HOV lane} \times 100\%}{\text{Total no. of vehicles in HOV lane}}$
 (4) HOV lane in operation from 3:00 to 6:30 P.M.
 (5) Observations conducted 10/24/13 at River Road Interchange.

SONOMA-101

Windsor River road to Route 12

Violation History

Southbound

	DATE	PERIOD MONITORED	TOTAL HOVL VOLUME	VIOLATION RATE
A.M. PEAK	Tue May 14, 2013	7:00 - 9:00 AM	741	1.8%
	Wed May 30, 2012	7:00 - 9:00 AM	558	2.0%
	Wed May 11, 2011	7:00 - 9:00 AM	606	1.6%
	Tue Mar 23, 2010	7:00 - 9:00 AM	200	2.0%
P.M. PEAK	Thu May 2, 2013	3:00 - 6:30 PM	2144	0.8%
	Thu Oct 11, 2012	3:00 - 6:30 PM	2038	0.8%
	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 16, 2013	7:00 - 9:00 AM	621	1.3%
	Wed May 23, 2012	7:00 - 9:00 AM	607	1.8%
	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 Oct 24, 2013	3:00 - 6:30 PM	2092	0.8%
	Thu May 24, 2012	3:00 - 6:30 PM	2253	0.9%
	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 2013 ⁽⁵⁾

VEHICLES	PEAK PERIOD ⁽⁴⁾ 7:00 - 9:00 AM		PEAK HOUR 8:00 - 9:00 AM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	39	13	14	7
Buses	8	47	4	24
Carpools ⁽¹⁾	928	237	475	133
Vanpools	0	10	0	6
Single Occ. ⁽²⁾	—	6060	—	3087
Violators	8	—	0	—
TOTAL	983	6367	493	3257

PERSONS	PEAK PERIOD ⁽⁴⁾ 7:00 - 9:00 AM		PEAK HOUR 8:00 - 9:00 AM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	39	13	14	7
Buses	280	1645	140	840
Carpools ⁽¹⁾	1919	477	980	270
Vanpools	0	100	0	60
Single Occ. ⁽²⁾	—	6060	—	3087
Violators	8	—	0	—
TOTAL	2246	8295	1134	4264

RATES	PEAK PERIOD ⁽⁴⁾ 7:00 - 9:00 AM		PEAK HOUR 8:00 - 9:00 AM	
	HOV Lane occupancy rate	2.3 persons/veh		2.3 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)	0.8 %		0.0 %	

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

(2) Mixed flow lanes only.

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

(4) HOV lane in operation from 7:00 to 9:00 A.M.

(5) Observations conducted 05/08/13 at South of Hearn Avenue Interchange.

SONOMA-101

Route 12 to Wilfred Avenue

Southbound - P.M.

Typical data for 2013 ⁽⁵⁾

VEHICLES	PEAK PERIOD ⁽⁴⁾ 3:00 - 6:30 PM		PEAK HOUR 4:00 - 5:00 PM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	54	10	18	7
Buses	14	27	4	16
Carpools ⁽¹⁾	2489	643	828	202
Vanpools	6	7	2	0
Single Occ. ⁽²⁾	—	9158	—	2852
Violators	11	—	0	—
TOTAL	2574	9845	852	3077

PERSONS	PEAK PERIOD ⁽⁴⁾ 3:00 - 6:30 PM		PEAK HOUR 4:00 - 5:00 PM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	54	10	18	7
Buses	490	945	140	560
Carpools ⁽¹⁾	5086	1340	1706	428
Vanpools	60	70	20	0
Single Occ. ⁽²⁾	—	9158	—	2852
Violators	11	—	0	—
TOTAL	5701	11523	1884	3847

RATES	PEAK PERIOD ⁽⁴⁾ 3:00 - 6:30 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	1.2 persons/veh		1.3 persons/veh	
Overall occupancy (incl. buses)	1.4 persons/veh		1.5 persons/veh	
Violation rate ⁽³⁾ (HOV Lane)	0.4 %		0.0 %	

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

(2) Mixed flow lanes only.

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

(4) HOV lane in operation from 3:00 to 6:30 P.M.

(5) Observations conducted 11/14/13 at South of Hearn Avenue Interchange.

SONOMA-101

Wilfred Avenue to Route 12

Northbound - A.M.

Typical data for 2013 ⁽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	38	0	22	0
Buses	8	10	6	3
Carpools ⁽¹⁾	1138	200	645	92
Vanpools	5	0	2	0
Single Occ. ⁽²⁾	—	5472	—	2835
Violators	21	—	7	—
TOTAL	1210	5682	682	2930

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	38	0	22	0
Buses	280	350	210	105
Carpools ⁽¹⁾	2344	400	1324	184
Vanpools	50	0	20	0
Single Occ. ⁽²⁾	—	5472	—	2835
Violators	21	—	7	—
TOTAL	2733	6222	1583	3124

RATES	PEAK PERIOD ⁽⁴⁾ 7:00 - 9:00 AM		PEAK HOUR 8:00 - 9:00 AM	
	HOV Lane occupancy rate	2.3 persons/veh		2.3 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)	1.7 %		0.4 %	

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 7:00 to 9:00 A.M.

(5) Observations conducted 04/18/13 at South of Hearn Avenue Interchange.

SONOMA-101

Wifred Avenue to Route 12

Northbound - P.M.

Typical data for 2013 ⁽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	93	26	30	0
Buses	24	40	8	4
Carpools ⁽¹⁾	2750	320	945	78
Vanpools	11	10	4	0
Single Occ. ⁽²⁾	—	10187	—	2918
Violators	11	—	0	—
TOTAL	2889	10583	987	3000

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	93	26	30	0
Buses	840	1400	280	140
Carpools ⁽¹⁾	5639	640	1944	157
Vanpools	110	100	40	0
Single Occ. ⁽²⁾	—	10187	—	2918
Violators	11	—	0	—
TOTAL	6693	12353	2294	3215

RATES	PEAK PERIOD ⁽⁴⁾ 3:00 - 6:30 PM		PEAK HOUR 5:00 - 6:00 PM	
	HOV Lane occupancy rate	2.3 persons/veh		2.3 persons/veh
Mixed Flow occupancy rate	1.2 persons/veh		1.1 persons/veh	
Overall occupancy (incl. buses)	1.4 persons/veh		1.4 persons/veh	
Violation rate ⁽³⁾ (HOV Lane)	0.4 %		0.0 %	

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

(2) Mixed flow lanes only.

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

(4) HOV lane in operation from 3:00 to 6:30 P.M.

(5) Observations conducted 04/03/13 at South of Hearn Avenue Interchange.

SONOMA-101

Route 12 to Wilfred Avenue

Violation History

Southbound

	DATE	PERIOD MONITORED	TOTAL HOVL VOLUME	VIOLATION RATE
A.M. PEAK	Wed May 8, 2013	7:00 - 9:00 AM	983	0.8%
	Tue May 22, 2012	7:00 - 9:00 AM	775	2.2%
	Thu May 5, 2011	7:00 - 9:00 AM	686	6.1%
	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%
P.M. PEAK	Thu Nov 14, 2013	3:00 - 6:30 PM	2574	0.4%
	Tue May 15, 2012	3:00 - 6:30 PM	2434	1.1%
	Tue May 3, 2011	3:00 - 6:30 PM	2394	2.6%
	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 Apr 18, 2013	7:00 - 9:00 AM	1210	1.7%
	Thu May 17, 2012	7:00 - 9:00 AM	721	2.9%
	Thu May 5, 2011	7:00 - 9:00 AM	680	4.4%
	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%
P.M. PEAK	Wed Apr 3, 2013	3:00 - 6:30 PM	2889	0.4%
	Thu May 10, 2012	3:00 - 6:30 PM	1790	1.1%
	Thu Apr 14, 2011	3:00 - 6:30 PM	1948	3.0%
	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.

SONOMA-101

Wilfred Avenue to Old Redwood Highway

Southbound - A.M.

Typical data for 2013 ⁽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	48	3	26	3
Buses	8	10	2	0
Carpools ⁽¹⁾	907	4295	456	2262
Vanpools	3	3	1	0
Single Occ. ⁽²⁾	—	2661	—	1324
Violators	7	—	4	—
TOTAL	973	6972	489	3589

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	48	3	26	3
Buses	280	350	70	0
Carpools ⁽¹⁾	1862	8727	924	4593
Vanpools	30	30	10	0
Single Occ. ⁽²⁾	—	2661	—	1324
Violators	7	—	4	—
TOTAL	2227	11771	1034	5920

RATES	PEAK PERIOD ⁽⁴⁾ 7:00 - 9:00 AM		PEAK HOUR 7:00 - 8:00 AM	
	HOV Lane occupancy rate	2.3 persons/veh		2.1 persons/veh
Mixed Flow occupancy rate	1.7 persons/veh		1.6 persons/veh	
Overall occupancy (incl. buses)	1.8 persons/veh		1.7 persons/veh	
Violation rate ⁽³⁾ (HOV Lane)	0.7 %		0.4 %	

- 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 7:00 to 9:00 A.M.
 (5) Observations conducted 04/30/13 at South of Sierra Avenue.

SONOMA-101

Wilfred Avenue to Old Redwood Highway

Southbound - P.M.

Typical data for 2013 ⁽⁵⁾

VEHICLES	PEAK PERIOD ⁽⁴⁾ 3:00 - 6:30 PM		PEAK HOUR 4:00 - 5:00 PM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	47	28	19	5
Buses	13	13	3	2
Carpools ⁽¹⁾	1915	902	578	287
Vanpools	10	0	1	0
Single Occ. ⁽²⁾	—	7992	—	2297
Violators	16	—	0	—
TOTAL	2001	8935	601	2591

PERSONS	PEAK PERIOD ⁽⁴⁾ 3:00 - 6:30 PM		PEAK HOUR 4:00 - 5:00 PM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	47	28	19	5
Buses	455	455	105	70
Carpools ⁽¹⁾	3968	1855	1199	575
Vanpools	100	0	10	0
Single Occ. ⁽²⁾	—	7992	—	2297
Violators	16	—	0	—
TOTAL	4586	10330	1333	2947

RATES	PEAK PERIOD ⁽⁴⁾ 3:00 - 6:30 PM		PEAK HOUR 4:00 - 5:00 PM	
	HOV Lane occupancy rate	2.3 persons/veh		2.2 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 %		0.0 %	

- NOTES:** (1) Two or more occupants per vehicle.
 (2) Mixed flow lanes only.
 (3) Violation rate = $\frac{\text{no. of violators in HOV lane} \times 100\%}{\text{Total no. of vehicles in HOV lane}}$
 (4) HOV lane in operation from 3:00 to 6:30 P.M.
 (5) Observations conducted 04/25/13 at South of sierra avenue.

SONOMA-101

Old Redwood Highway to Wilfred Avenue

Northbound - A.M.

Typical data for 2013 ⁽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	25	7	12	7
Buses	0	10	0	10
Carpools ⁽¹⁾	609	218	345	110
Vanpools	3	0	1	0
Single Occ. ⁽²⁾	—	4868	—	2568
Violators	7	—	3	—
TOTAL	644	5103	361	2695

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	25	7	12	7
Buses	0	350	0	350
Carpools ⁽¹⁾	1233	443	700	223
Vanpools	30	0	10	0
Single Occ. ⁽²⁾	—	4868	—	2568
Violators	7	—	3	—
TOTAL	1295	5668	725	3148

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	1.1 persons/veh		1.2 persons/veh	
Overall occupancy (incl. buses)	1.2 persons/veh		1.3 persons/veh	
Violation rate ⁽³⁾ (HOV Lane)	1.1 %		0.4 %	

- 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 7:00 to 9:00 A.M.
 (5) Observations conducted 04/24/13 at south of seirra avenue.

SONOMA-101

Old Redwood highway to Wilfred Avenue

Northbound - P.M.

Typical data for 2013 ⁽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	103	14	37	4
Buses	27	42	11	10
Carpools ⁽¹⁾	2319	365	740	147
Vanpools	19	0	10	0
Single Occ. ⁽²⁾	—	9977	—	2983
Violators	34	—	2	—
TOTAL	2502	10398	800	3144

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	103	14	37	4
Buses	945	1470	385	350
Carpools ⁽¹⁾	4835	768	1560	303
Vanpools	190	0	100	0
Single Occ. ⁽²⁾	—	9977	—	2983
Violators	34	—	2	—
TOTAL	6107	12229	2084	3640

RATES	PEAK PERIOD ⁽⁴⁾ 3:00 - 6:30 PM		PEAK HOUR 5:00 - 6:00 PM	
	HOV Lane occupancy rate	2.4 persons/veh		2.6 persons/veh
Mixed Flow occupancy rate	1.2 persons/veh		1.2 persons/veh	
Overall occupancy (incl. buses)	1.4 persons/veh		1.5 persons/veh	
Violation rate ⁽³⁾ (HOV Lane)	1.4 %		0.1 %	

- 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 04/23/13 at South of Sierra avenue.

SONOMA-101

Wilfred Avenue to Old Redwood Highway

Violation History

Southbound

	DATE	PERIOD MONITORED	TOTAL HOVL VOLUME	VIOLATION RATE
A.M. PEAK	Tue Apr 30, 2013	7:00 - 9:00 AM	973	0.7%
	Thu Nov 1, 2012	7:00 - 9:00 AM	800	1.4%
	Wed Dec 14, 2011	7:00 - 9:00 AM	686	2.0%
P.M. PEAK	Thu Apr 25, 2013	3:00 - 6:30 PM	2001	0.8%
	Wed Apr 18, 2012	3:00 - 6:30 PM	1766	1.2%
	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

SONOMA-101

Old Redwood Highway to Wilfred Avenue

Violation History

Northbound

	DATE	PERIOD MONITORED	TOTAL HOVL VOLUME	VIOLATION RATE
A.M. PEAK	Wed Apr 24, 2013	7:00 - 9:00 AM	644	1.1%
	Wed May 2, 2012	7:00 - 9:00 AM	490	3.3%
	Year 2011	-	-	-
P.M. PEAK	Tue Apr 23, 2013	3:00 - 6:30 PM	2502	1.4%
	Thu Oct 18, 2012	3:00 - 6:30 PM	2135	1.5%
	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

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HOV TOLL GATES

VOLUME/PERSON DATA

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HOV TOLL GATE

Antioch Bridge Toll Plaza

CONTRA COSTA -160

Northbound A.M.

Typical data for 2013⁽³⁾

PEAK PERIOD⁽²⁾

6:00 to 9:00 A.M.

PEAK HOUR

7:00 to 8:00 A.M.

VEHICLES

Motorcycles	4	1
Buses	1	0
Vanpools	1	0
Carpools ⁽¹⁾	15	6
Total HOV	21	7
1 Occupancy	954	338
2 Occupancy	156	52
TOTAL	1131	397

PERSONS

Motorcycles	4	1
Buses	35	0
Vanpools	10	0
Carpools ⁽¹⁾	47	19
Total HOV	96	20
1 Occupancy	954	338
2 Occupancy	312	104
TOTAL	1362	462

RATES

HOV Occupancy Rate	4.5 persons/veh	2.8 persons/veh
Overall occupancy (incl. buses)	1.2 persons/veh	1.2 persons/veh

- NOTES:** (1) 3 or more occupants per vehicle & 2-seater vehicles w/2 occupants.
 (2) HOV operation hours 5:00 to 10:00 AM.
 (3) Observations conducted 11/17/13 at Toll Plaza