

2012 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 2012. 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 2012:

- A new section of HOV lane on U.S. 101 opened to traffic in Marin County from Route 37 to Atherton Avenue in the northbound direction on August 9, 2012 and from Rowland Avenue to Route 37 in the Southbound direction on July 24, 2012. The limits of the HOV lane now extend from Richardson Bridge to Atherton Avenue, a distance of 18.4 miles.
- A new section of HOV lane on U.S. 101 from Rohnert Park Expressway to Wilfred Avenue in Sonoma County opened to traffic in the northbound direction on August 29, 2012 and in the southbound direction on August 30, 2012. The limits of the HOV lane now extend from Old Redwood Highway to Windsor River Road, a distance of 21.4 miles.
- A portion of the HOV lane on State Route 237 from Interstate 880 to North First Street in the westbound direction and from Zanker Road to Interstate 880 in the eastbound direction in Santa Clara County was converted into an Express lane on March 20, 2012. The I-880/SR 237 HOV direct connector ramps were also converted into Express lanes. The hours of operations were extended from 5:00 – 9:00 AM to 5:00 – 10:00 AM within the Express lane limits on westbound State Route 237. The Express lane allows single occupancy vehicles (SOVs) access for a fee while 2+ HOVs still have access free of charge.

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

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Department of Transportation
 District 4
 Office of Highway Operations

Managed Lanes in the Bay Area

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**
-

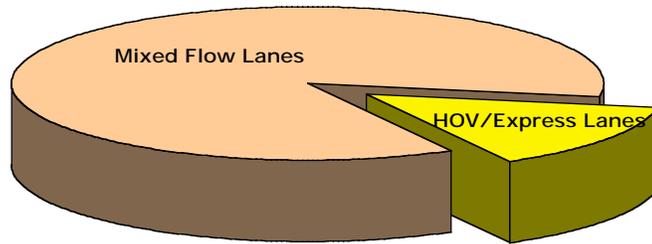
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COMPARISON OF HOV/EXPRESS LANES VS. MIXED FLOW LANES (Peak-Hour)

VEHICLES

(223,770 - vehicles per hour)

86%—



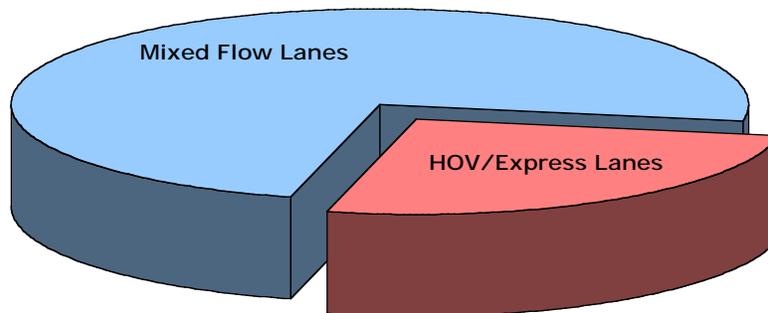
— **14%**

(36,960 - vehicles per hour)

PEOPLE

(258,720 - persons per hour)

74%—



— **26%**

(91,140 - 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	Loveridge Road to Port Chicago Hwy	8.7	2+	5- 9 AM
	E/B	Port Chicago Hwy to Railroad Ave.	7.3	2+	3-7 PM
CC-80	W/B	Solano Co. Line to Alameda Co. Line	14.1	3+	5-10 AM 3-7 PM
	E/B	Alameda Co. Line to Cummings Skyway	12.9	3+	5-10 AM 3-7 PM
CC-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 I-880/SR 237 Junction	2.0	2+	5- 9 AM 3-7 PM
	N/B	I-880/SR 237 Junction to Alameda Co. Line	2.0	2+	5- 9 AM 3-7 PM
SM-101	S/B	Whipple Ave to Santa Clara Co. Line	6.7	2+	5- 9 AM 3-7 PM
	N/B	Santa Clara Co. Line to Whipple Ave	6.9	2+	5- 9 AM 3-7 PM
SOL-80	W/B	Route 29 to Contra Costa Co. Line	0.9	3+	5-10 AM 3-7 PM
	E/B	Carquinez Bridge Toll Plaza	0.1	3+	5-10 AM 3-7 PM
SOL-80	W/B	East of Airbase Parkway to Red Top Rd	8.1	2+	5-10 AM 3-7 PM
	E/B	Red Top Rd to East of Airbase Parkway	8.2	2+	5-10 AM 3-7 PM
SON-101	S/B	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			446.8		

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
SCL-17	NB	Camden Ave diag	24 hrs	Yes	May 11, 2007	7 days/week

METERED ON-RAMPS with HOV BYPASS LANES

Route	Dir	Ramp	Hours	HOVL metered?	HOVL Date opened	Notes
SCL-85	NB	SB Rte 101 connector	5-9am & 3-7pm	Yes	Sep 20, 2004	Monday - Friday
SCL-85	NB	SB Rte 87 connector	5-9am & 3-7pm	Yes	Jul 8, 2003	Monday - Friday
SCL-85	NB	Bernal Rd Loop	24 hrs	Yes	Sep 20, 2004	7 days/week
SCL-85	NB	Bernal Rd diag	24 hrs	Yes	Aug 26, 1994	7 days/week
SCL-85	NB	Great Oaks Blvd diag	24 hrs	Yes	Aug 19, 1994	7 days/week
SCL-85	NB	Cottle Rd diag	24 hrs	Yes	Aug 19, 1994	7 days/week
SCL-85	NB	Blossom Hill Rd loop	24 hrs	Yes	Aug 19, 1994	7 days/week
SCL-85	NB	Santa Teresa Blvd loop	24 hrs	Yes	Oct 19, 1994	7 days/week
SCL-85	NB	Almaden Expwy loop	24 hrs	Yes	Mar 19, 1999	7 days/week
SCL-85	NB	Bascom Ave diag	24 hrs	Yes	Oct 19, 1994	7 days/week
SCL-85	NB	Winchester Blvd diag	24 hrs	Yes	Nov 14, 1994	7 days/week
SCL-85	NB	Saratoga Ave diag	24 hrs	Yes	Oct 20, 1994	7 days/week
SCL-85	SB	Almaden Expwy diag	24 hrs	Yes	Oct. 19, 1994	7 days/week
SCL-85	SB	Bascom Ave diag	24 hrs	Yes	Oct. 19, 1994	7 days/week
SCL-85	SB	Camden Ave diag	24 hrs	Yes	Apr 4, 1995	7 days/week
SCL-85	SB	Stevens Creek diag	24 hrs	Yes	Oct 19, 1994	7 days/week
SCL-87	NB	Rte 85 SB Connector	24 hrs	Yes	Jan 13, 2009	7 days/week
SCL-87	NB	Curtner Ave diag	24 hrs	Yes	Mar 16, 2007	7 days/week
SCL-87	NB	Almaden Expwy diag	24 hrs	Yes	May 11, 2007	7 days/week
SCL-87	NB	Lelong St diag	24 hrs	Yes	May 11, 2007	7 days/week
SCL-87	NB	Park Avenue diag	24 hrs	Yes	Jan 13, 2009	7 days/week
SCL-87	NB	Julian St diag	24 hrs	Yes	Jan 13, 2009	7 days/week
SCL-87	NB	Taylor St. diag	24 hrs	Yes	Jan 13, 2009	7 days/week
SCL-87	NB	Skyport Blvd diag	24 hrs	Yes	Jan 13, 2009	7 days/week
SCL-87	SB	Auzerias Ave/Delma St diag	24 hrs	Yes	Apr 7, 2009	7 days/week
SCL-87	SB	EB Julian St diag	24 hrs	Yes	Apr 7, 2009	7 days/week
SCL-87	SB	Taylor St. diag	24 hrs	Yes	Apr 7, 2009	7 days/week
SCL-87	SB	Skyport Blvd diag	24 hrs	Yes	Apr 7, 2009	7 days/week

METERED ON-RAMPS with HOV BYPASS LANES

Route	Dir	Ramp	Hours	HOVL metered?	HOVL Date opened	Notes
SCL-101	NB	Bernal Rd diagonal	24 hrs	Yes	Aug 1, 2005	7 days/week
SCL-101	NB	Blossom Hill diag	24 hrs	Yes	Jun 23, 1992	7 days/week
SCL-101	NB	Capitol Expwy diag	24 hrs	Yes	Jul 11, 1997	7 days/week
SCL-101	NB	SB Rte 680 connector	5:30-9am	Yes	Sep 2, 1982	Monday - Friday
SCL-101	NB	Guadalupe Pkwy connector	5:30-9am	Yes	Feb 12, 1980	Monday - Friday
SCL-101	NB	Trimble Rd diag	24 hrs	Yes	Nov 1, 1991	7 days/week
SCL-101	NB	San Tomas Expwy loop	5:30-9am	Yes	Feb 12, 1980	Monday - Friday
SCL-101	NB	Montague Expwy diag	24 hrs	Yes	Feb 12, 1980	7 days/week
SCL-101	NB	Lawrence Expwy (nb) loop	24 hrs	Yes	Mar 8, 1999	7 days/week
SCL-101	NB	Lawrence Expwy (sb)diag	24 hrs	Yes	Mar 8, 1999	7 days/week
SCL-101	SB	Bernal Rd diagonal	24 hrs	Yes	Aug 1, 2005	7 days/week
SCL-101	SB	Blossom Hill diag	24 hrs	Yes	Jun 23, 1992	7 days/week
SCL-101	SB	Capitol Expwy diag	24 hrs	Yes	Jul 11, 1997	7 days/week
SCL-101	SB	SB Rte 680 connector	5:30-9am	Yes	Sep 2, 1982	Monday - Friday
SCL-101	SB	Guadalupe Pkwy connector	5:30-9am	Yes	Feb 12, 1980	Monday - Friday
SCL-101	SB	Trimble Rd diag	24 hrs	Yes	Nov 1, 1991	7 days/week
SCL-101	SB	San Tomas Expwy loop	5:30-9am	Yes	Feb 12, 1980	Monday - Friday
SCL-101	SB	Montague Expwy diag	24 hrs	Yes	Feb 12, 1980	7 days/week
SCL-101	SB	Lawrence Expwy (nb) loop	24 hrs	Yes	Mar 8, 1999	7 days/week
SCL-101	SB	Lawrence Expwy (sb)diag	24 hrs	Yes	Mar 8, 1999	7 days/week
SCL-101	SB	De La Cruz Blvd. Diag	24 hrs	Yes	Nov 9, 2009	7 days/week
SCL-101	SB	Trimble Rd loop	24 hrs	Yes	Nov 9, 2009	7 days/week
SCL-101	SB	Montague Expwy diag	24 hrs	Yes	Nov 9, 2009	7 days/week
SCL-101	SB	Montague Expwy loop	24 hrs	Yes	Nov 9, 2009	7 days/week
SCL-101	SB	Bowers Ave Diag.	24 hrs	Yes	Nov 9, 2009	7 days/week
SCL-101	SB	Great America Pkwy Loop	24 hrs	Yes	Nov 9, 2009	7 days/week
SCL-101	SB	Lawrence Expwy Diag	24 hrs	Yes	Nov 9, 2009	7 days/week
SCL-101	SB	Lawrence Expwy Loop	24 hrs	Yes	Nov 9, 2009	7 days/week
SCL-101	SB	Fair Oaks Ave. Diag	24 hrs	Yes	Nov 9, 2009	7 days/week
SCL-101	SB	Fair Oaks Ave. Loop	24 hrs	Yes	Nov 9, 2009	7 days/week
SCL-101	SB	Mathilda Ave. Diag	24 hrs	Yes	Nov 9, 2009	7 days/week
SCL-101	SB	Mathilda Ave. Loop	24 hrs	Yes	Nov 9, 2009	7 days/week
SCL-101	SB	Ellis Street Diag	24 hrs	Yes	Nov 9, 2009	7 days/week
SCL-101	SB	Moffet Blvd. Diag	24 hrs	Yes	Nov 9, 2009	7 days/week
SCL-101	SB	Shoreline Blvd. Diag	24 hrs	Yes	Nov 9, 2009	7 days/week
SCL-101	SB	Rengstorff Ave. Diag	24 hrs	Yes	Nov 9, 2009	7 days/week
SCL-101	SB	Oregon Xpwy. Diag	24 hrs	Yes	Nov 9, 2009	7 days/week
SCL-101	SB	Embarcadero Ro. Loop	24 hrs	Yes	Nov 9, 2009	7 days/week
SCL-237	EB	Lawrence Expwy diag	24 hrs	Yes	Aug. 14, 1998	7 days/week
SCL-237	EB	Great America Pkwy diag	24 hrs	Yes	Sep 24, 1996	7 days/week
SCL-237	EB	N. First Street diag	24 hrs	Yes	Sep 24, 1996	7 days/week
SCL-237	EB	Zanker Rd diag	24 hrs	Yes	Sep 24, 1996	7 days/week
SCL-237	WB	McCarthy Blvd diag	24 hrs	Yes	Jan 24, 2012	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.	4.2	2+
2013	CC-4	Somersville Rd. to Contra Loma Blvd.	2.0	2+
2014	CC-4	Contra Loma Blvd. to 160	6.0	2+
2014	SCL-101	Shoreline Blvd. to Matadero Cr. (2 nd 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, 2 nd Express Ln.)	6.0	2+
2014	ALA-880	Marina Blvd. to Hegenberger Rd. (SB only)	2.9	2+
2013	SCL-880	Route 237 to US 101	8.6	2+

TOTAL LANE-MILES UNDER CONSTRUCTION 45.4

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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	2688	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	685	104
ALA-92	WB	Hesperian Blvd to San Mateo Bridge Toll Plaza	928	268
ALA-580	EB	Hacienda Dr. to N. Livermore Ave.	187	1077
		N. Livermore Ave to Greenville Rd	N/A	N/A
ALA-680	SB	Route 84 to ALA/SCL Co. Line ^	1106	N/A
ALA-880	SB	Marina Blvd to Whipple Road	1086	890
		Whipple Road to SCL County Line	N/A	802
	NB	SCL County Line to Whipple Road	437	732
		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	Loveridge Road to Port Chicago Hwy	N/A	**
	EB	Port Chicago Hwy to Railroad Ave.	**	N/A
CC-80	WB	Solano Co. Line to Route 4	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	127
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	1149	395
	NB	Route 242 to Marina Vista I/C	143	683
CC-680	SB	Rudgear Rd. to Alcosta Blvd.	1193	1136
	NB	Alcosta Blvd. to Livorna Rd.	637	927
MRN-101	SB	Rowland Avenue to Mission Avenue	1255	**
		Mission Avenue to Richardson Bridge	733	**
	NB	Richardson Bridge to Mission Avenue	**	931
		Mission Avenue to Atherton Avenue	**	954
SCL-85	SB	Rte 101 (Mountain View) to Rte 280	N/A	N/A
		Rte 280 to Almaden Expwy	N/A	607
		Almaden Expwy to Rte 101 (So. San Jose)	N/A	N/A
	NB	Rte 101 (So. San Jose) to Almaden Expwy	N/A	N/A
		Almaden Expwy to Rte 280	863	N/A
		Rte 280 to Rte 101 (Mountain View)	759	N/A
SCL-87	SB	Route 101 I/C to Route 280 I/C	N/A	786
		Route 280 I/C to Route 85/87 Jct	N/A	N/A
	NB	Route 85/87 Jct to Route 280 I/C	N/A	N/A
		Route 280 I/C to Route 101 I/C	300	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	640
		Ellis St to Guadalupe Pkwy	N/A	1118
		Guadalupe Pkwy to 101/280/680 I/C	N/A	736
		101/280/680 I/C to Bernal Rd	N/A	364
		Bernal Rd to Cochrane Rd	N/A	N/A
	NB	Cochrane Road to Bernal Road	N/A	N/A
		Bernal Rd to 101/280/680 I/C	N/A	N/A
		101/280/680 I/C to Guadalupe Pkwy	N/A	N/A
		Guadalupe Pkwy to Ellis St	N/A	N/A
		Ellis St to San Mateo Co. Line	N/A	N/A
SCL-237	WB	Rte 880/237Jct to Mathilda Ave^^	637	N/A
	EB	Mathilda Ave to Rte 880/237 Jct.^^	N/A	463
SCL-280	SB	Magdalena Ave to Leland Ave	N/A	697
	NB	Leland Ave to Magdalena Ave	N/A	N/A
SCL-680	SB	ALA/SCL Co. Line to Route 237 ^	N/A	N/A
SCL-880	SB	Alameda Co. Line to I 880/SR237 Junction	~	~
	NB	I 880/SR237 Junction to Alameda Co. Line	~	~
SM-101	SB	Whipple Ave to Santa Clara Co. Line	N/A	709
	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	581
SOL-80	WB	Airbase Parkway to Red Top Rd	511	327
	EB	Red Top Rd to Airbase Parkway	163	737
SON-101	SB	Windsor River Road to Route 12	295	618
		Route 12 to Wilfred Avenue	416	780
		Wilfred Avenue to Old Redwood Highway	468	521
	NB	Old Redwood Highway to Wilfred Avenue	267	608
		Wilfred Avenue to Route 12	376	544
		Route 12 to Windsor River Road	363	573

Notes:

N/A : Due to resource shortfall 2012 data is not available.

** HOVL not in operation during this Peak Period.

~ Data collection location not available within these limits

^ 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 & MIXED-FLOW LANE COMPARISONS

			% of all vehicles		% of all Persons				
			in HOV/Express	in Mixed-Flow Lanes	in HOV/Express	in Mixed-Flow Lanes	Number of Mixed-Flow Lanes	in Mixed-Flow Lanes (Avg per Lane)	
ALA-80	WB	Bay Bridge Toll Plaza	AM	31%	69%	58%	42%	18	2%
			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	16%	84%	32%	68%	3	23%
			PM	9%	91%	26%	74%	3	25%
ALA-92	WB	Hesperian Blvd to San Mateo Bridge Toll Plaza	AM	18%	82%	30%	70%	3	23%
			PM	11%	89%	21%	79%	3	26%
ALA-580	EB	Hacienda Dr. to N. Livermore Ave.	AM	5%	95%	12%	88%	3	29%
			PM	15%	85%	25%	75%	3	25%
		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	N/A	N/A	N/A	N/A	3	N/A
ALA-880	SB	Marina Blvd to Whipple Rd	AM	17%	83%	33%	67%	3	22%
			PM	14%	86%	24%	76%	3	25%
	Whipple Rd to Santa Clara Co. Line	AM	N/A	N/A	N/A	N/A	3	N/A	
		PM	16%	84%	26%	74%	3	25%	
	NB	Santa Clara Co. Line to Whipple Rd	AM	10%	90%	20%	80%	3	27%
			PM	13%	87%	21%	79%	3	26%
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	Loveridge Road to Port Chicago Hwy	AM	N/A	N/A	N/A	N/A	3	N/A
	EB	Port Chicago to Railroad Avenue	PM	N/A	N/A	N/A	N/A	3	N/A
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	6%	94%	11%	89%	11	13%
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	18%	82%	30%	70%	5	14%
			PM	8%	92%	14%	86%	5	17%
	NB	Route 242 to Marina Vista I/C	AM	5%	95%	14%	86%	4	22%
			PM	15%	85%	28%	72%	4	18%
CC-680	SB	Rudgear Rd to Alcosta Blvd	AM	18%	82%	33%	67%	3	22%
			PM	19%	81%	34%	66%	3	22%
	NB	Alcosta Blvd to Livorna Rd	AM	11%	89%	24%	76%	3	25%
			PM	15%	85%	23%	77%	3	26%
MRN-101	SB	Rowland Ave to Mission Avenue	AM	20%	80%	35%	65%	3	22%
			AM	13%	87%	24%	76%	3	25%
	NB	Richardson Bridge to Mission Avenue	PM	13%	87%	32%	68%	3	23%
			PM	13%	87%	24%	76%	3	25%
SCL-85	SB	Rte 101 (Mtn View) to Rte 280	AM	N/A	N/A	N/A	N/A	2	N/A
			PM	N/A	N/A	N/A	N/A	2	N/A
	Rte 280 to Almaden Expwy	AM	N/A	N/A	N/A	N/A	2	N/A	
		PM	16%	84%	28%	72%	2	36%	
	Almaden Expwy to Rte 101 (So. San Jose)	AM	N/A	N/A	N/A	N/A	2	N/A	
		PM	N/A	N/A	N/A	N/A	2	N/A	
	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	18%	82%	30%	70%	2	35%
			PM	N/A	N/A	N/A	N/A	2	N/A
Rte 280 to Rte 101 (Mtn View)	AM	18%	82%	32%	68%	2	34%		
	PM	N/A	N/A	N/A	N/A	2	N/A		

PEAK HOUR HOV/EXPRESS & MIXED-FLOW LANE COMPARISONS

			% of all vehicles		% of all Persons				
			in HOV/Express	in Mixed-Flow Lanes	in HOV/Express	in Mixed-Flow Lanes	Number of Mixed-Flow Lanes	in Mixed-Flow Lanes (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	24%	76%	41%	59%	2	30%
	NB	Route 280 I/C to Route 85/87 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
		Route 85/87 Jct to Route 280 I/C	AM	N/A	N/A	N/A	N/A	2	N/A
			PM	N/A	N/A	N/A	N/A	2	N/A
	Route 280 I/C to Route 101 I/C	AM	8%	92%	13%	87%	2	43%	
		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	13%	87%	23%	77%	3	26%
		Ellis St to Guadalupe Pkwy	AM	N/A	N/A	N/A	N/A	3	N/A
			PM	22%	78%	38%	62%	3	21%
		Guadalupe Pkwy to 101/280/680 I/C	AM	N/A	N/A	N/A	N/A	3	N/A
			PM	14%	86%	24%	76%	3	25%
		101/280/680 I/C to Bernal Rd	AM	N/A	N/A	N/A	N/A	3	N/A
			PM	8%	92%	14%	86%	3	29%
		Bernal Rd to Cochrane Rd	AM	N/A	N/A	N/A	N/A	3	N/A
			PM	N/A	N/A	N/A	N/A	3	N/A
	NB	Cochrane Rd to Bernal Road	AM	N/A	N/A	N/A	N/A	3	N/A
			PM	N/A	N/A	N/A	N/A	3	N/A
		Bernal Rd to 101/280/680 I/C	AM	N/A	N/A	N/A	N/A	3	N/A
			PM	N/A	N/A	N/A	N/A	3	N/A
		101/280/680 I/C to Guadalupe Pkwy	AM	N/A	N/A	N/A	N/A	3	N/A
			PM	N/A	N/A	N/A	N/A	3	N/A
		Guadalupe Pkwy to Ellis St	AM	N/A	N/A	N/A	N/A	3	N/A
			PM	N/A	N/A	N/A	N/A	3	N/A
		Ellis St to San Mateo Co. Line	AM	N/A	N/A	N/A	N/A	3	N/A
			PM	N/A	N/A	N/A	N/A	3	N/A
SCL-237	WB	880/237 Jct to Mathilda Ave ^^	AM	22%	78%	40%	60%	2	30%
			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	21%	79%	32%	68%	2	34%
SCL-280	SB	Magdalena Ave to Leland Ave	AM	N/A	N/A	N/A	N/A	3	N/A
			PM	12%	88%	24%	76%	3	25%
	NB	Leland Ave to Magdalena Ave	AM	N/A	N/A	N/A	N/A	3	N/A
			PM	N/A	N/A	N/A	N/A	3	N/A
SCL-680	SB	SCL/ALA Co. Line to Route 237	AM	N/A	N/A	N/A	N/A	3	N/A
			PM	N/A	N/A	N/A	N/A	3	N/A
SCL-880	SB	Alameda Co. Line to I 880/SR237 Jct	AM	~	~	~	~	3	~
			PM	~	~	~	~	3	~
	NB	I 880/SR237 Jct to Alameda Co. Line	AM	~	~	~	~	3	~
			PM	~	~	~	~	3	~
SM-101	SB	Whipple Ave to Santa Clara Co. Line	AM	N/A	N/A	N/A	N/A	3	N/A
			PM	15%	85%	31%	69%	3	23%
	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 & MIXED-FLOW LANE COMPARISONS

				% of all vehicles		% of all Persons			
				in HOV/Express	in Mixed-Flow Lanes	in HOV/Express	in Mixed-Flow Lanes	Number of Mixed-Flow Lanes	in Mixed-Flow Lanes (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	14%	86%	34%	66%	11	6%
SOL-80	WB	East of Airbase Pkwy to Red Top Rd	AM	9%	91%	15%	85%	4	21%
			PM	7%	93%	10%	90%	4	23%
	EB	Red Top Rd to East of Airbase Pkwy	AM	4%	96%	9%	91%	4	23%
			PM	11%	89%	20%	80%	4	20%
SON-101	SB	Windsor River Rd to Route12	AM	10%	90%	17%	83%	2	42%
			PM	15%	85%	26%	74%	2	37%
		Route 12 to Wilfred Avenue	AM	9%	91%	15%	85%	2	43%
			PM	17%	83%	28%	72%	2	36%
	Wilfred Avenue to Old Redwood Hwy	AM	11%	89%	21%	79%	2	40%	
		PM	15%	85%	25%	75%	2	37%	
	NB	Old Redwood Hwy to Wilfred Avenue	AM	9%	91%	16%	84%	2	42%
			PM	14%	86%	23%	77%	2	38%
		Wilfred Avenue to Route 12	AM	9%	91%	16%	84%	2	42%
			PM	12%	88%	23%	77%	2	39%
Route 12 to Windsor Rd		AM	11%	89%	17%	83%	2	42%	
		PM	13%	87%	21%	79%	2	39%	

* Total in all 4 HOVL's combined.

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

~ Data collection location not available within these limits.

N/A : Due to resource shortfall 2012 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	13.5%	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	0.7%	0.0%
ALA-92	WB	Hesperian Blvd to San Mateo Bridge Toll Plaza	7.9%	3.8%
ALA-580	EB	Hacienda Dr. to N. Livermore Ave.	2.6%	1.5%
		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	11.8%	3.4%
		Whipple Road to Santa Clara Co. Line	N/A	1.9%
	NB	Santa Clara Co. Line to Whipple Road	1.9%	3.3%
		Whipple Road to South of Rte 238 I/C	N/A	3.3%
ALA-880	NB	16th St to SFOBB Toll Plaza	N/A	N/A
CC-04	WB	Loveridge Road to Port Chicago Hwy.	N/A	**
	EB	Port Chicago Hwy to Railroad Ave	**	N/A
CC-80	WB	Solano Co. Line to Route 4	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	50.3%
CC-680	NB	Benicia-Martinez Bridge Toll Plaza	N/A	N/A
CC-680	SB	Marina Vista to N/O North Main St.	0.2%	0.6%
	NB	Route 242 to Marina Vista I/C	3.0%	1.0%
CC-680	SB	Rudgear Rd. to Alcosta Blvd.	1.6%	0.7%
	NB	Alcosta Blvd. to Livorna Rd.	4.2%	3.6%
MRN-101	SB	Rowland Avenue to Mission Avenue	1.1%	**
		Mission Avenue to Richardson Bridge	1.3%	**
	NB	Richardson Bridge to Mission Avenue	**	1.4%
		Mission Avenue to Atherton Avenue	**	1.2%
SCL-85	SB	Rte 101 (Mountain View) to Rte 280	N/A	N/A
		Rte 280 to Almaden Expwy	N/A	1.3%
		Almaden Expwy to Rte 101 (So. San Jose)	N/A	N/A
	NB	Rte 101 (So. San Jose) to Almaden Expwy	N/A	N/A
		Almaden Expwy to Rte 280	2.3%	N/A
		Rte 280 to Rte 101 (Mountain View)	8.0%	N/A
SCL-87	SB	Route 101 I/C to Route 280	N/A	1.3%
		Route 280 to Route 85/87 Jct	N/A	N/A
	NB	Route 85/87 Jct to Route 280	N/A	N/A
		Route 280 to Route 101 I/C	3.9%	N/A
SCL-101	SB	San Mateo Co. Line to Ellis St	N/A	0.8%
		Ellis St to Guadalupe Pkwy	N/A	0.6%
		Guadalupe Pkwy to 101/280/680 I/C	N/A	1.0%
		101/280/680 I/C to Bernal Rd	N/A	1.3%
		Bernal Rd to Cochrane Road	N/A	N/A

HOV LANE PEAK PERIOD VIOLATION RATE SUMMARY

			A.M.	P.M.
	NB	Cochrane Rd to Bernal Rd	N/A	N/A
		Bernal Rd to 101/280/680 I/C	N/A	N/A
		101/280/680 I/C to Guadalupe Pkwy	N/A	N/A
		Guadalupe Pkwy to Ellis St	N/A	N/A
		Ellis St to San Mateo Co. Line	N/A	N/A
SCL-237	WB	880/237 Jct to Mathilda Ave^ ^	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	0.7%
	NB	Leland Ave to Magdalena Ave	N/A	N/A
SCL-680	SB	SCL/ALA Co. Line to Route 237	N/A	N/A
SCL-880	SB	Alameda Co. Line to I 880/SR237 Jct	~	~
	NB	I 880/SR237 Jct to Alameda Co. Line	~	~
SM-101	SB	Whipple Ave to Santa Clara Co. Line	N/A	3.2%
	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	16.5%
SOL-80	WB	Airbase Pkwy to Red Top Rd	1.1%	1.6%
	EB	Red Top Rd to Airbase Pkwy	1.0%	0.7%
SON-101	SB	Windsor River Road to Route 12	2.0%	0.8%
		Route 12 to Wilfred Avenue	2.2%	1.1%
		Wilfred Avenue to Old Redwood Highway	1.4%	1.2%
	NB	Old Redwood Highway to Wilfred Avenue	3.3%	1.5%
		Wilfred Avenue to Route 12	2.9%	1.1%
		Route 12 to Windsor River Road	1.8%	0.9%

N/A: Due to Resource shortfall 2012 data is not available.

~ Data collection location not available within these limits.

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

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
SCL-85	SB	Rte 101 (Mtn View) to Rte 280	AM	6	5	1	57	65
			PM	13	5	8	26	65
		Rte 280 to Almaden Expwy	AM	12	11	1	60	65
			PM	27	13	14	27	55
		Almaden Expwy to Rte 101 (So. San Jose)	AM	6	6	0	65	65
			PM	6	6	0	62	65
	NB	Rte 101 (So. San Jose) to Almaden Expwy	AM	15	6	9	25	65
			PM	6	6	0	60	65
		Almaden Expwy to Rte 280	AM	25	12	14	30	65
			PM	12	12	0	65	65
		Rte 280 to Rte 101 (Mtn View)	AM	19	5	14	17	65
			PM	6	5	1	54	65
SCL-87	SB	Route 101 I/C to Route 280 I/C	AM	5	5	0	65	65
			PM	16	5	11	18	55
		Route 280 I/C to Route 85/87 Jct	AM	5	4	1	57	65
			PM	15	4	11	19	65
	NB	Route 85/87 Jct to Route 280 I/C	AM	14	6	8	27	65
			PM	8	6	2	47	65
	Route 280 I/C to Route 101 I/C	AM	23	3	20	9	65	
		PM	4	3	1	50	65	
SCL-101	SB	San Mateo Co. Line to Ellis St	AM	8	5	3	38	65
			PM	10	6	4	31	51
		Ellis St to Guadalupe Pkwy	AM	7	6	1	59	65
			PM	23	6	17	18	65
		Guadalupe Pkwy to 101/280/680 I/C	AM	5	5	0	65	65
			PM	23	7	16	15	50
		101/280/680 I/C to Bernal Rd	AM	7	7	0	65	65
			PM	7	7	0	65	65
		Bernal Rd to Cochrane Road	AM	9	8	1	61	65
			PM	9	8	1	60	65
	NB	Cochrane Road to Bernal Road	AM	9	9	0	64	65
			PM	9	9	0	65	65
		Bernal Rd to 101/280/680 I/C	AM	12	8	4	41	65
			PM	8	8	0	65	65
		101/280/680 I/C to Guadalupe Pkwy	AM	16	7	9	19	43
			PM	5	5	0	65	65
		Guadalupe Pkwy to Ellis Street	AM	12	7	5	36	65
			PM	15	7	8	29	65
	Ellis to San Mateo Co. Line	AM	16	7	9	19	41	
		PM	19	6	13	16	50	
SCL-237	WB	McCarthy Blvd to Mathilda Ave^^	AM	15	6	9	24	65
			PM	9	6	3	40	65
	EB	Mathilda Ave to Rte 880/237 Jct.^^	AM	7	6	1	56	65
			PM	22	6	16	17	65
SCL-280	SB	Magdalena Ave to Leland Ave	AM	10	10	0	63	65
			PM	13	10	3	48	65
	NB	Leland Ave to Magdalena Ave	AM	21	10	11	31	65
			PM	11	10	1	59	65

HOV/EXPRESS LANE PEAK HOUR TIME SAVINGS AND AVERAGE SPEEDS

				Travel Time (minutes) Mixed-Flow Lane	Travel Time (minutes) HOV/Express	HOV/Express Time Saving (minutes)	Avg. Speed (mph) Mixed-Flow Lane	Avg. Speed (mph) HOV/Express
SCL-680	SB	ALA/SCL Co. Line to Rte 237	AM	3	2	1	47	65
			PM	2	2	0	65	65
SCL-880	SB	Alameda Co. Line to I-880/SR 237 Jct	AM	1	1	0	54	65
			PM	1	1	0	65	65
	NB	I-880/SR 237 Jct to Alameda Co. Line	AM	2	2	0	60	65
			PM	5	2	3	21	65
SM-101	SB	Whipple Ave to Santa Clara Co. Line	AM	15	6	9	28	65
			PM	10	6	4	41	65
	NB	Santa Clara Co. Line to Whipple Ave	AM	8	6	2	50	65
			PM	9	6	3	46	65
SOL-80	WB	Route 29 to Contra Costa Co. Line	AM	1	1	0	65	65
			PM	1	1	0	65	65
	EB	Carquinez Bridge Toll Plaza	AM	1	1	0	65	65
			PM	1	1	0	65	65
SOL-80	WB	Airbase Pkwy. to Red Top Rd.	AM	8	8	0	65	65
			PM	8	8	0	65	65
	EB	Red Top Rd. to Airbase Pkwy.	AM	8	8	0	65	65
			PM	8	8	0	65	65
SON-101	SB	Windsor River Rd. to Rte 12	AM	12	9	3	49	65
			PM	18	9	9	32	65
		Rte 12 to Wilfred Ave.	AM	5	4	1	56	65
			PM	6	4	2	46	65
		Wilfred Avenue to Old Redwood Hwy	AM	8	8	0	55	55
			PM	8	8	0	55	55
	NB	Old Redwood Hwy to Wilfred Ave.	AM	8	8	0	55	55
			PM	8	8	0	55	55
		Wilfred Ave. to Rte 12	AM	11	5	6	28	65
			PM	11	5	6	28	65
		Rte12 to Windsor River Rd.	AM	9	8	1	61	65
			PM	9	8	1	61	65
Overall Average Speed							45.8	63.1

N/A: Due to resource shortfall 2012 data is not available

^ Express Lane

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

GENERAL FACILITY INFORMATION

- **Mainline HOV/Express Lanes**
 - **Toll Bridge HOV Bypass Lanes**
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MAINLINE HOV LANES

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

OCCUPANCY	Three or more persons per vehicle, motorcycles, 2-seat vehicles with 2 persons, inherently low-emission vehicles (ILEVs) with DMV issued decal.																																					
WESTBOUND	HOURS:	5:00 - 10:00 AM, 3:00 - 7:00 PM, Monday thru Friday																																				
	LIMITS:	<table border="0"> <tr> <td style="padding-right: 10px;">Lane 1:</td> <td>Route 880 left side HOV ramp to metering signals Length = 0.4 mile</td> </tr> <tr> <td>Lane 2:</td> <td>Route 580 connector to metering signals Length = 1.1 miles</td> </tr> <tr> <td>Lane 21:</td> <td>Route 880 right side HOV ramp to metering signals Length = 0.6 mile</td> </tr> <tr> <td>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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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: Marina Blvd 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:	Marina Blvd. (MP 22.7) to Santa Clara County Line (MP 0.0) Length = 22.5 miles
DATES:	Sep 22, 1991	Opened; A-Street to north of Tennyson
	Nov 6, 1991	Extended; Tennyson to Industrial Pkwy
	Jun 26, 1992	Extended; Rte 238 to A-Street
	Nov 18, 1993	Extended; Industrial Pkwy to Whipple Rd
	Dec 1994	Hours of operation changed from 5-10 AM and 3-6 PM to 5-9 AM, 3-7 PM respectively
	Mar 17, 1995	Extended; Marina Blvd to Rte 238
	Jun 15, 1998	Extended; Whipple Rd. to Alvarado/ Fremont Blvd.
	Oct 23, 1998	Extended; Alvarado/Fremont Blvd. to Mowry Ave.
	Dec 11, 1998	Extended; Mowry Ave. to Mission Blvd. (Rte 262)
	Aug 11, 2007	Extended; S/O Mission Blvd. (Rte 262) to Santa Clara County Line
	Nov 17, 2008	Extended; Mission Blvd. (Rte 262) to S/O Mission Blvd. (Rte 262)
NORTHBOUND	HOURS:	5:00 - 9:00 AM, 3:00 - 7:00 PM, Monday thru Friday
	LIMITS:	Santa Clara County Line (MP 0.0) to one mile south of Rte 238 (MP 19.3) Length = 19.1 miles
DATES:	Sep 19, 1991	Opened; north of Tennyson to A-Street
	Nov 8, 1991	Extended; Industrial Pkwy to Tennyson
	Jun 26, 1992	Extended; A-Street to Rte 238
	Dec 3, 1993	Extended; Whipple Rd to Industrial Pkwy
	Dec 1994	Hours of operation changed from 5-10 AM and 3-6 PM to 5-9 AM, 3-7 PM respectively
	Sep 23, 1996	Shortened; Whipple Rd to one mile south of Rte 238
	Jun 15, 1998	Extended; Alvarado/Fremont Blvd. to Whipple Rd.
	Oct 30, 1998	Extended; Mowry Ave. to Alvarado/Fremont Blvd.
	Nov 30, 1998	Extended; Mission Blvd. (Rte 262) to Mowry Ave.
	Nov 11, 2008	Extended; Santa Clara County Line to Mission Blvd. (Rte 262)

ALA-880: 16th Street to SFOBB Toll Plaza

OCCUPANCY	Three or more persons per vehicle, motorcycles, 2-seat vehicles with 2 persons, inherently low-emission vehicles (ILEVs) with DMV issued decal.	
NORTHBOUND	HOURS:	5:00 - 10:00 AM, 3:00 - 7:00 PM, Monday thru Friday
	LIMITS:	16th Street to NB Rte 880/WB Rte 80 Jct Length = 1.4 miles
DATES:	May 16, 1998	Opened; 16th Street to left HOV ramp at SFOBB Toll Plaza

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

OCCUPANCY	Three or more persons per vehicle, motorcycles, 2-seat vehicles with 2 persons, inherently low-emission vehicles (ILEVs) with DMV issued decal.
NORTHBOUND	HOURS: 5:00 - 10:00 AM, 3:00 - 7:00 PM, Monday thru Friday
LIMITS:	West Grand Ave.(MP R34.7) to EB Rte 80 HOV Lane Merge (MP R35.8) Length = 1.1 miles
DATES:	Nov 12, 2003 Opened; West Grand Ave to EB Rte 80 HOV Lane Merge

CC-4: Loveridge Rd. to Port Chicago Highway

OCCUPANCY	Two or more persons per vehicle, motorcycles, inherently low-emission vehicles (ILEVs) with DMV issued decal.
WESTBOUND	HOURS: 5:00 - 9:00 AM, Monday thru Friday
LIMITS:	Loveridge Rd. (MP 24.4) to Port Chicago Highway (MPR 15.7) Length = 8.7 miles
DATES:	May 1, 2000 Opened; Bay Point to Port Chicago Highway; 6-9 AM, Mon-Fri May 5, 2000 Extended: Bailey Road to Port Chicago Highway Jul 23, 2001 Extended: West of Railroad Ave. to Port Chicago Highway Jul 24, 2006 Extended: Loveridge Rd. to Port Chicago Highway Sep 28, 2009 Hours of Operations changed to 5:00-9:00 A.M.
EASTBOUND	HOURS: 3:00 - 7:00 PM, Monday thru Friday
LIMITS:	Port Chicago Highway (MPR 16.2) to Railroad Ave. (MPR23.5) Length = 7.3 miles
DATES:	Aug 6, 2001 Opened; Port Chicago Highway to West of Railroad Ave. Jul 24, 2006 Extended: Port Chicago Highway to Railroad Ave.

CC-80 Solano County Line to Alameda County Line

OCCUPANCY	Three or more persons per vehicle, motorcycles, 2-seat vehicles with 2 persons, inherently low-emission vehicles (ILEVs) with DMV issued decal.
WESTBOUND	HOURS: 5:00 - 10:00 AM, 3:00 - 7:00 PM, Monday thru Friday
LIMITS:	Solano County Line (MP 14.1) to Alameda County Line (MP 0.0) Length = 14.1 miles
DATES:	Mar 5, 1997 Opened; Pinole Valley Rd to Cutting Blvd; 5-10 AM, Mon-Fri Apr 18, 1997 2-seat vehicles with 2 persons permitted to use HOVL May 3, 1997 Extended: Cutting Blvd to Central Ave Sep 20, 1997 Extended; Route 4 to Pinole Valley Rd Feb 2, 1998 Extended; Central Ave to Alameda County Line; Hours of operation changed to 5:00 AM-7:00 PM, Mon-Fri Aug 3, 1998 Hours of operation changed to 5-10 AM, 3-7 PM, Mon-Fri Aug 31,2007 Extended; Cummings Skyway to Route 4 Nov 17, 2007 Extended; Solano County Line to Cummings Skyway

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

LIMITS: Alameda County Line (MP 0.0) to Cummings Skyway (MP 12.9)
Length = 12.9 miles

DATES: Feb 12, 1997 Opened; San Pablo Dam Rd to Pinole Valley Rd; 3-7 PM, Mon-Fri
Feb 13, 1997 Extended; Cutting Blvd to San Pablo Dam Rd
Apr 18, 1997 2-seat vehicles with 2 persons permitted to use HOVL
May 3, 1997 Extended; Central Ave to Cutting Blvd
Aug 30, 1997 Extended; Pinole Valley Rd to Route 4
Feb 2, 1998 Hours of operation changed to 5:00 AM-7:00 PM, Mon-Fri
Aug 3, 1998 Hours of operation changed to 5-10 AM, 3-7 PM, Mon-Fri
Extended; Central Ave to Alameda County Line
May 27, 2011 Extended; Route 4 to Cummings Skyway

CC-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 #1
BOOTH

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 I-880/SR 237 Junction

OCCUPANCY	Two or more persons per vehicle, motorcycles, inherently low-emission vehicles (ILEVs) with DMV issued decal.	
SOUTHBOUND	HOURS:	5:00 - 9:00 AM, 3:00 - 7:00 PM, Monday thru Friday
	LIMITS:	Alameda County Line (MP 10.5) to Jct I-880/237 (MP 8.5) Length = 2.0 miles
	DATES:	May 1, 2005 Opened; S/O Dixon Landing to I-880/SR 237 Jct. August 11, 2007 Extended; Alameda County Line To S/O Dixon Landing Rd.
NORTHBOUND	HOURS:	5:00 - 9:00 AM, 3:00 - 7:00 PM, Monday thru Friday
	LIMITS:	I-880/237 Jct (MP 8.5) to Alameda County Line (MP 10.5) Length = 2.0 miles
	DATES:	Apr 22, 2005 Opened; I-880/SR 237 Jct to S/O Dixon Landing Rd. Nov 11, 2008 Extended; S/O Dixon Landing Rd. to Alameda County Line

SM-101: Whipple Ave to Santa Clara County Line

OCCUPANCY	Two or more persons per vehicle, motorcycles, inherently low-emission vehicles (ILEVs) with DMV issued decal.	
SOUTHBOUND	HOURS:	5:00 - 9:00 AM, 3:00 - 7:00 PM, Monday thru Friday
	LIMITS:	Whipple Ave (MP 6.9) to Santa Clara Co. Line (MP 0.0) Length = 6.9 miles
	DATES:	Jul 18, 1991 Opened
NORTHBOUND	HOURS:	5:00 - 9:00 AM, 3:00 - 7:00 PM, Monday thru Friday
	LIMITS:	Santa Clara Co. Line (MP 0.0) to Whipple Ave (MP 6.6) Length = 6.6 miles
	DATES:	Jul 16, 1991 Opened

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

OCCUPANCY	Two or more persons per vehicle, motorcycles, 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-80

Westbound - A.M.

San Francisco-Oakland Bay Bridge Toll Plaza

Typical data for 2012

(6)

VEHICLES	PEAK PERIOD ⁽⁵⁾ 6:00 - 10:00 AM		PEAK HOUR 7:00 - 8:00 AM	
	HOV Lanes	Mixed Flow Lanes	HOV Lanes	Mixed Flow Lanes
Motorcycles	490	—	117	—
Buses ⁽⁴⁾	234	—	67	—
Carpools ⁽¹⁾	4918	—	1686	—
2 - seaters ⁽²⁾	1321	—	452	—
Vanpools	103	—	24	—
Violators	1103	—	342	—
TOTAL	8169	25572 ⁽⁷⁾	2688	5852

PERSONS	PEAK PERIOD ⁽⁵⁾ 6:00 - 10:00 AM		PEAK HOUR 7:00 - 8:00 AM	
	HOV Lanes	Mixed Flow Lanes	HOV Lanes	Mixed Flow Lanes
Motorcycles	490	—	117	—
Buses ⁽⁴⁾	8190	—	2345	—
Carpools ⁽¹⁾	15246	—	5227	—
2 - seaters ⁽²⁾	2642	—	904	—
Vanpools	1030	—	240	—
Violators	1508	—	463	—
TOTAL	29106	29408 ⁽⁷⁾	9296	6730

RATES	PEAK PERIOD ⁽⁵⁾ 6:00 - 10:00 AM		PEAK HOUR 7:00 - 8:00 AM	
	HOV Lane Occupancy Rate	3.6 persons/veh		3.5 persons/veh
Mixed Flow Occupancy Rate ⁽⁷⁾	1.2 persons/veh		1.2 persons/veh	
Violation rate (HOV Lane) ⁽³⁾	13.5 %		12.7 %	

- NOTES:** (1) 3 or more persons per vehicle.
 (2) 2 - seater vehicles with 2 persons.
 (3) $\text{Violation rate} = \frac{\text{no. of violators in HOV lane} \times 100\%}{\text{Total no. of vehicles in HOV lane}}$
 (4) Assumed AM bus occupancy = 35 persons/vehicle.
 (5) HOV lanes in operation from 5:00 to 10:00 AM.
 (6) Observations conducted 6/6/12 at the SFOBB Toll Plaza.
 (7) Data from Toll Plaza Vehicle Registration Report.

ALAMEDA-80

San Francisco-Oakland Bay Bridge

Violation History

Westbound

	DATE	TOTAL HOVL VOLUME	VIOLATION RATE	By Lane		By Time				
				Lanes 1 & 2	Lanes 21&22	5 - 6 AM	6 - 7 AM	7 - 8 AM	8 - 9 AM	9 - 10 AM
A.M.	Wed Jun 6, 2012	8169	13.5%	16.4%	10.7%	---	19.5%	12.7%	9.4%	13.1%
PEAK	Thu May 13, 2010	11004	13.2%	10.9%	15.5%	---	20.5%	12.5%	10.1%	9.8%
	Tue Dec 1, 2009	10677	11.7%	8.7%	14.8%	---	12.0%	12.8%	9.9%	12.0%
	Wed May 28, 2008	10851	9.0%	6.7%	11.3%	---	13.8%	7.8%	6.0%	7.9%
	Tue May 22, 2007	11427	6.5%	8.0%	4.9%	---	10.0%	6.9%	4.0%	5.2%
	Wed May 31, 2006	10394	9.7%	10.3%	9.1%	---	18.4%	6.8%	6.0%	5.9%
	Tue Nov 15, 2005	10261	9.9%	8.7%	11.2%	---	13.3%	8.1%	5.8%	16.1%
	Wed Nov 3, 2004	10917	10.0%	8.2%	11.7%	21.4%	12.5%	7.9%	6.3%	9.0%
	Wed May 28, 2003	10803	8.2%	7.4%	9.0%	15.5%	8.4%	7.0%	6.1%	9.6%
	Thu May 9, 2002	11481	9.5%	4.9%	13.8%	22.4%	12.0%	7.5%	3.8%	10.5%
	Wed May 23, 2001	13100	10.0%	7.2%	12.8%	22.3%	12.2%	5.8%	6.9%	10.4%
	Thu Nov 9, 2000	12991	14.7%	8.9%	19.9%	37.8%	16.9%	10.4%	6.4%	14.3%
							3 - 4 PM	4 - 5 PM	5 - 6 PM	6 - 7 PM
P.M.	Year 2012	-	-	-	-	-	-	-	-	-
PEAK	Thu May 13, 2010	3438	13.2%	14.7%	11.8%		18.6%	13.0%	11.3%	10.6%
	Tue Sep 29, 2009	3336	10.8%	17.0%	4.1%		13.9%	8.9%	10.4%	10.3%
	Thu May 1, 2008	3330	9.9%	7.8%	12.4%		11.8%	9.4%	9.6%	8.9%
	Wed May 23, 2007	3541	7.8%	5.9%	10.4%		9.4%	7.0%	7.3%	7.9%
	Thu Oct 19, 2006	3645	14.9%	11.0%	19.0%		15.2%	14.8%	14.3%	15.5%
	Tue Oct 25, 2005	3106	16.3%	18.5%	13.5%		20.2%	13.5%	13.9%	18.5%
	Thu Oct 28, 2004	3290	9.1%	10.6%	7.0%		10.9%	7.9%	8.1%	9.6%
	Tue May 27, 2003	3891	14.7%	17.2%	11.8%		24.4%	11.7%	9.3%	15.7%
	Wed Sep 18, 2002	3327	11.7%	12.7%	15.0%		16.5%	11.6%	10.9%	15.8%
	Wed Oct 3, 2001	3602	9.8%	10.6%	8.8%		12.6%	7.6%	9.3%	10.10%

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

ALAMEDA-84

Route I-880 to Dumbarton Bridge Toll Plaza

Westbound - A.M.

Typical data for 2012 ⁽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	57	24	19	9
Buses	34	0	11	0
Carpools ⁽¹⁾	1537	267	650	93
Vanpools	11	0	2	0
Single Occ.	0	10146	0	3483
Violators	12	—	3	—
TOTAL	1651	10437	685	3585

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	57	24	19	9
Buses	1190	0	385	0
Carpools ⁽¹⁾	3195	567	1350	203
Vanpools	110	0	20	0
Single Occ.	0	10146	0	3483
Violators	12	—	3	—
TOTAL	4564	10737	1777	3695

RATES	PEAK PERIOD ⁽³⁾ 6:00 - 9:00 AM		PEAK HOUR 7:00 - 8:00 AM	
	HOV Lane occupancy rate	2.8 persons/veh		2.6 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)	0.7 %		0.4 %	

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 06/05/12 at East of Dumbarton Bridge Toll Plaza.

ALAMEDA-84

Route I-880 to Dumbarton Bridge Toll Plaza

Westbound - P.M.

Typical data for 2012 ⁽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	8	15	2	0
Buses	18	0	6	0
Carpools ⁽¹⁾	304	363	94	114
Vanpools	2	9	2	0
Single Occ.	0	2574	0	951
Violators	0	—	0	—
TOTAL	332	2961	104	1065

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	8	15	2	0
Buses	630	0	210	0
Carpools ⁽¹⁾	641	776	197	251
Vanpools	20	90	20	0
Single Occ.	0	2574	0	951
Violators	0	—	0	—
TOTAL	1299	3455	429	1202

RATES	PEAK PERIOD ⁽³⁾ 3:00 - 6:00 PM		PEAK HOUR 5:00 - 6:00 PM	
	HOV Lane occupancy rate	3.9 persons/veh		4.1 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 ⁽²⁾ (HOV Lane)	0.0 %		0.0 %	

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 6:00 P.M.

(4) Observations conducted 06/05/12 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	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%
	Tue Apr 10, 2001	6:00 - 10:00 AM	4480	3.1%
	Thu Oct 19, 2000	6:00 - 9:00 AM	4106	3.5%
P.M. PEAK	Tue 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%
	Tue Mar 20, 2001	3:00 - 6:00 PM	919	2.2%
	Thu Oct 19, 2000	3:00 - 6:00 PM	849	3.1%

NOTES: (a) Morning period of operation from 5:00 to 10:00 AM.
(b) Evening period of operation from 3:00 to 6:00 PM.

ALAMEDA-92

Hesperian Blvd. to San Mateo Bridge Toll Plaza

Westbound - A.M.

Typical data for 2012 ⁽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	63	6	13	3
Buses	12	6	1	3
Carpools ⁽¹⁾	1960	336	841	132
Vanpools	15	0	6	0
Single Occ.	0	11769	0	4050
Violators	175	—	67	—
TOTAL	2225	12117	928	4188

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	63	6	13	3
Buses	420	210	35	105
Carpools ⁽¹⁾	4081	682	1756	271
Vanpools	150	0	60	0
Single Occ.	0	11769	0	4050
Violators	175	—	67	—
TOTAL	4889	12667	1931	4429

RATES	PEAK PERIOD ⁽³⁾ 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		1.1 persons/veh	
Overall occupancy (incl. buses)	1.2 persons/veh		1.2 persons/veh	
Violation rate ⁽²⁾ (HOV Lane)	7.9 %		7.2 %	

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 10:00 A.M.

(4) Observations conducted 05/23/12 at E/O San Mateo Bridge Toll Plaza.

ALAMEDA-92

Hesperian Blvd. to San Mateo Bridge Toll Plaza

Westbound - P.M.

Typical data for 2012⁽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	18	3	3	3
Buses	9	9	2	3
Carpools ⁽¹⁾	713	372	252	117
Vanpools	11	15	3	3
Single Occ.	0	5559	0	2001
Violators	30	—	8	—
TOTAL	781	5958	268	2127

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	18	3	3	3
Buses	315	315	70	105
Carpools ⁽¹⁾	1510	797	525	247
Vanpools	110	150	30	30
Single Occ.	0	5559	0	2001
Violators	30	—	8	—
TOTAL	1983	6824	636	2386

RATES	PEAK PERIOD ⁽³⁾ 3:00 - 6:00 PM		PEAK HOUR 4:00 - 5:00 PM	
	HOV Lane occupancy rate	2.5 persons/veh		2.4 persons/veh
Mixed Flow occupancy rate	1.1 persons/veh		1.1 persons/veh	
Overall occupancy (incl. buses)	1.3 persons/veh		1.3 persons/veh	
Violation rate ⁽²⁾ (HOV Lane)	3.8 %		3.0 %	

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 6:00 P.M.

(4) Observations conducted 05/22/12 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 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%
	Thu Sep 20, 2001	6:00 - 9:00 AM	2075	8.1%
	Tue Oct 24, 2000	6:00 - 9:00 AM	2480	8.2%
P.M. PEAK	Tue 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%
	Wed Oct 3, 2001	3:00 - 6:00 PM	1177	5.4%
	Thu Apr 13, 2000	3:00 - 6:00 PM	1243	1.4%

NOTES: (a) Morning period of operation from 5:00 to 10:00 AM.
(b) Evening period of operation from 3:00 to 6:00 PM.

ALAMEDA-580

Hacienda Dr. to Livermore Ave.

Eastbound - A.M.

Typical data for 2012 ⁽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	26	8	5
Buses	14	53	7	27
Carpools ⁽¹⁾	721	343	161	212
Vanpools	14	16	3	5
Single Occ.	0	8697	0	3379
Violators	21	—	8	—
TOTAL	794	9135	187	3628

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	26	8	5
Buses	490	1855	245	945
Carpools ⁽¹⁾	1497	708	356	435
Vanpools	140	160	30	50
Single Occ.	0	8697	0	3379
Violators	21	—	8	—
TOTAL	2172	11446	647	4814

RATES	PEAK PERIOD ⁽³⁾ 6:00 - 9:00 AM		PEAK HOUR 8:00 - 9:00 AM	
	HOV Lane occupancy rate	2.7 persons/veh		3.5 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 ⁽²⁾ (HOV Lane)	2.6 %		4.3 %	

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 10/10/12 at Airway Blvd I/C.

ALAMEDA-580

Hacienda Dr. to Livermore Ave.

Eastbound - P.M.

Typical data for 2012 ⁽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	114	63	29	16
Buses	10	37	4	21
Carpools ⁽¹⁾	2805	552	1006	284
Vanpools	44	15	19	15
Single Occ.	0	16124	0	5867
Violators	44	—	19	—
TOTAL	3017	16791	1077	6203

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	114	63	29	16
Buses	350	1295	140	735
Carpools ⁽¹⁾	5799	1179	2082	598
Vanpools	440	150	190	150
Single Occ.	0	16124	0	5867
Violators	44	—	19	—
TOTAL	6747	18811	2460	7366

RATES	PEAK PERIOD ⁽³⁾ 3:00 - 6:00 PM		PEAK HOUR 3:00 - 4:00 PM	
	HOV Lane occupancy rate	2.2 persons/veh		2.3 persons/veh
Mixed Flow occupancy rate	1.1 persons/veh		1.2 persons/veh	
Overall occupancy (incl. buses)	1.3 persons/veh		1.3 persons/veh	
Violation rate ⁽²⁾ (HOV Lane)	1.5 %		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 3:00 to 7:00 P.M.

(4) Observations conducted 10/09/12 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 Oct 10, 2012	6:00 - 9:00 AM	794	2.6%
	Year 2011	-	-	-
	Year 2010	-	-	-
P.M. PEAK	Tue Oct 9, 2012	3:00 - 7:00 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 2012

Route 84 to ALA/SCL 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	127	18	44	15
Buses	14	3	7	0
Carpools ⁽¹⁾	676	216	368	69
Vanpools	0	0	0	0
Single Occ.	2178	15729	687	5640
TOTAL	2995	15966	1106	5724

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	127	18	44	15
Buses	490	105	245	0
Carpools ⁽¹⁾	1383	475	749	151
Vanpools	0	0	0	0
Single Occ.	2178	15729	987	5640
TOTAL	4178	16327	1725	5806

RATES	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
HOV Lane occupancy rate	1.4 persons/veh		1.6 persons/veh	
Mixed Flow occupancy rate		1.0 persons/veh		1.0 persons/veh
Overall occupancy (incl. buses)	1.1 persons/veh		1.1 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 09/25/12 at Vargas Rd.

ALAMEDA-680

Express - HOV Lane

Route 84 to ALA/SCL Co. Line

Violation History

Southbound

	DATE	PERIOD MONITORED	TOTAL HOVL VOLUME	VIOLATION RATE
A.M. PEAK	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	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) Morning period of operation from 5:00 to 9:00 AM.
(b) Evening period of operation from 3:00 to 7:00 PM.
(c) Data was not collected in 2004 for off-peak direction

ALAMEDA-880

Marina Blvd. to Whipple Road

Southbound - A.M.

Typical data for 2012 ⁽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	145	3	44	0
Buses	72	48	30	27
Carpools ⁽¹⁾	3240	219	940	0
Vanpools	21	9	5	0
Single Occ.	0	13464	0	5421
Violators	466	—	67	—
TOTAL	3944	13743	1086	5448

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	145	3	44	0
Buses	2520	1680	1050	945
Carpools ⁽¹⁾	6609	448	1898	0
Vanpools	210	90	50	0
Single Occ.	0	13464	0	5421
Violators	466	—	67	—
TOTAL	9950	15685	3109	6366

RATES	PEAK PERIOD ⁽³⁾ 6:00 - 9:00 AM		PEAK HOUR 6:00 - 7:00 AM	
	HOV Lane occupancy rate	2.5 persons/veh		2.9 persons/veh
Mixed Flow occupancy rate	1.1 persons/veh		1.2 persons/veh	
Overall occupancy (incl. buses)	1.4 persons/veh		1.5 persons/veh	
Violation rate ⁽²⁾ (HOV Lane)	11.8 %		6.2 %	

- 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 09/12/12 at Tennyson Road I/C.

ALAMEDA-880

Marina Blvd. to Whipple Road

Southbound - P.M.

Typical data for 2012 ⁽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	85	0	16	0
Buses	11	27	2	9
Carpools ⁽¹⁾	2950	1119	818	480
Vanpools	10	0	5	0
Single Occ.	0	12924	0	4818
Violators	107	—	49	—
TOTAL	3163	14070	890	5307

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	85	0	16	0
Buses	385	945	70	315
Carpools ⁽¹⁾	6089	2330	1702	993
Vanpools	100	0	50	0
Single Occ.	0	12924	0	4818
Violators	107	—	49	—
TOTAL	6766	16199	1887	6126

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 ⁽³⁾ (HOV Lane)	3.4 %		5.5 %	

- 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 09/12/12 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 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%
	Wed Mar 21, 2001	6:00 - 9:00 AM	3971	5.2%
	Tue May 9, 2000	6:00 - 9:00 AM	3661	4.6%
P.M. PEAK	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%
	Thu Apr 26, 2001	3:00 - 6:00 PM	3134	3.9%
	Tue May 9, 2000	3:00 - 6:00 PM	2484	5.6%

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

ALAMEDA-880

Whipple Road to Santa Clara Co. Line

Southbound - P.M.

Typical data for 2012 ⁽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	77	18	21	6
Buses	6	24	1	21
Carpools ⁽¹⁾	2229	636	730	267
Vanpools	38	0	14	0
Single Occ.	0	11580	0	4011
Violators	45	—	36	—
TOTAL	2395	12258	802	4305

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	77	18	21	6
Buses	210	840	35	735
Carpools ⁽¹⁾	4942	1308	1634	541
Vanpools	380	0	140	0
Single Occ.	0	11580	0	4011
Violators	45	—	36	—
TOTAL	5654	13746	1866	5293

RATES	PEAK PERIOD ⁽³⁾ 3:00 - 6:00 PM		PEAK HOUR 3:00 - 4:00 PM	
	HOV Lane occupancy rate	2.4 persons/veh		2.3 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)	1.9 %		4.5 %	

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 10/03/12 at Mowry Ave. I/c.

ALAMEDA-880

Whipple Road to Santa Clara Co. Line

Violation History

Southbound

	DATE	PERIOD MONITORED	TOTAL HOVL VOLUME	VIOLATION RATE
A.M. PEAK	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%
	Tue Mar 27, 2001	6:00 - 9:00 AM	3423	4.8%
P.M. PEAK	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%
	Wed Oct 17, 2001	3:00 - 6:00 PM	2157	3.8%

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

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

ALAMEDA-880

Santa Clara Co. Line to Whipple Rd

Northbound - A.M.

Typical data for 2012 ⁽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	58	33	30	21
Buses	9	66	8	9
Carpools ⁽¹⁾	1146	324	384	177
Vanpools	11	18	5	3
Single Occ.	0	10479	0	3855
Violators	24	—	10	—
TOTAL	1248	10920	437	4065

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	58	33	30	21
Buses	315	2310	280	315
Carpools ⁽¹⁾	2332	661	790	361
Vanpools	110	180	50	30
Single Occ.	0	10479	0	3855
Violators	24	—	10	—
TOTAL	2839	13663	1160	4582

RATES	PEAK PERIOD ⁽³⁾ 6:00 - 9:00 AM		PEAK HOUR 7:00 - 8:00 AM	
	HOV Lane occupancy rate	2.3 persons/veh		2.7 persons/veh
Mixed Flow occupancy rate	1.3 persons/veh		1.1 persons/veh	
Overall occupancy (incl. buses)	1.4 persons/veh		1.3 persons/veh	
Violation rate ⁽²⁾ (HOV Lane)	1.9 %		2.3 %	

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 9:00 A.M.

(4) Observations conducted 10/03/12 at Mowry Ave I/C.

ALAMEDA-880

Santa Clara Co. Line to Whipple Rd.

Northbound - P.M.

Typical data for 2012 ⁽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	111	27	13	3
Buses	19	24	3	15
Carpools ⁽¹⁾	2512	774	667	285
Vanpools	8	6	3	0
Single Occ.	0	12912	0	4674
Violators	91	—	46	—
TOTAL	2741	13743	732	4977

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	111	27	13	3
Buses	665	840	105	525
Carpools ⁽¹⁾	5162	1604	1380	593
Vanpools	80	60	30	0
Single Occ.	0	12912	0	4674
Violators	91	—	46	—
TOTAL	6109	15443	1574	5795

RATES	PEAK PERIOD ⁽³⁾ 3:00 - 6:00 PM		PEAK HOUR 3:00 - 4:00 PM	
	HOV Lane occupancy rate	2.2 persons/veh		2.2 persons/veh
Mixed Flow occupancy rate	1.1 persons/veh		1.2 persons/veh	
Overall occupancy (incl. buses)	1.3 persons/veh		1.3 persons/veh	
Violation rate ⁽²⁾ (HOV Lane)	3.3 %		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 12/18/12 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 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%
	Thu Nov 1, 2001	6:00 - 9:00 AM	856	9.7%
P.M. PEAK	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%
	Thu Jun 7, 2001	3:00 - 6:00 PM	2755	3.9%

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.

CONTRA COSTA-580

Richmond-San Rafael Bridge Toll Plaza

Westbound - P.M.

Typical data for 2012

(6)

PEAK PERIOD ⁽⁵⁾

3:00 to 7:00 P.M.

PEAK HOUR

4:00 to 5:00 P.M.

VEHICLES

	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	38	—	15	—
Buses ⁽⁴⁾	2	—	0	—
Carpools ⁽¹⁾	123	—	43	—
2 - seaters ⁽²⁾	18	—	7	—
Vanpools	14	—	5	—
Violators (HOV only)	197	—	57	—
TOTAL	392	8259 ⁽⁷⁾	127	2171

PERSONS

	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	38	—	15	—
Buses ⁽⁴⁾	70	—	0	—
Carpools ⁽¹⁾	381	—	133	—
2 - seaters ⁽²⁾	36	—	14	—
Vanpools	140	—	50	—
Violators (HOV only)	275	—	81	—
TOTAL	940	9085 ⁽⁷⁾	293	2388

RATES

HOV Lane occupancy rate	2.4 persons/veh	2.3 persons/veh
Mixed Flow Occupancy Rate ⁽⁷⁾	1.1 persons/veh	1.1 persons/veh
Violation rate (HOV Lane) ⁽³⁾	50.3 %	44.9 %

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

(2) 2 - seater vehicles with 2 persons.

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

(4) Assumed PM bus occupancy = 35 persons/vehicle.

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

(6) Observations conducted 4/18/12 at the Richmond-San Rafael Bridge Toll Plaza.

(7) Data from Toll Plaza vehicle Registration Report.

CONTRA COSTA-580

Richmond-San Rafael Bridge Toll Plaza

Violation History

Eastbound

	DATE	PERIOD MONITORED	TOTAL HOVL VOLUME	VIOLATION RATE
A.M. PEAK	Year 2012	-	-	-

P.M. PEAK	Wed Apr 18, 2012	3:00 - 7:00 PM	392	50.3%
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NOTES: (a) Morning period of operation from 5:00 to 10:00 AM
(b) Evening period of operation from 3:00 to 7:00 PM.
(c) Data was not collected in 2012 for off-peak direction

CONTRA COSTA-680

Marina Vista to N/O North Main St.

Southbound - A.M.

Typical data for 2012 ⁽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	122	64	45	17
Buses	11	80	6	12
Carpools ⁽¹⁾	2655	1249	1082	356
Vanpools	41	18	10	4
Single Occ.	0	13942	0	4874
Violators	7	—	6	—
TOTAL	2836	15353	1149	5263

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	122	64	45	17
Buses	385	2800	210	420
Carpools ⁽¹⁾	5550	2680	2241	758
Vanpools	410	180	100	40
Single Occ.	0	13942	0	4874
Violators	7	—	6	—
TOTAL	6474	19666	2602	6109

RATES	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
HOV Lane occupancy rate	2.3 persons/veh		2.3 persons/veh	
Mixed Flow occupancy rate	1.3 persons/veh		1.2 persons/veh	
Overall occupancy (incl. buses)	1.4 persons/veh		1.4 persons/veh	
Violation rate ⁽²⁾ (HOV Lane)	0.2 %		0.5 %	

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 5:00 to 9:00 A.M.

(4) Observations conducted 05/23/12 at Truck Scale.

CONTRA COSTA-680

Marina Vista to N/O North Main St.

Southbound - P.M.

Typical data for 2012 ⁽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	56	59	27	27
Buses	15	26	4	6
Carpools ⁽¹⁾	1002	1560	361	608
Vanpools	9	24	3	16
Single Occ.	0	11734	0	4144
Violators	7	—	0	—
TOTAL	1089	13403	395	4801

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	56	59	27	27
Buses	525	910	140	210
Carpools ⁽¹⁾	2158	3251	777	1272
Vanpools	90	240	30	160
Single Occ.	0	11734	0	4144
Violators	7	—	0	—
TOTAL	2836	16194	974	5813

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	2.6 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		1.3 persons/veh	
Violation rate ⁽²⁾ (HOV Lane)	0.6 %		0.0 %	

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 05/23/12 at Truck Scale.

CONTRA COSTA-680

Route 242 to Marina Vista

Northbound - A.M.

Typical data for 2012 ⁽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	16	33	3	3
Buses	8	3	5	0
Carpools ⁽¹⁾	388	525	128	222
Vanpools	6	12	5	6
Single Occ.	0	6969	0	2655
Violators	13	—	2	—
TOTAL	431	7542	143	2886

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	16	33	3	3
Buses	280	105	175	0
Carpools ⁽¹⁾	864	1166	273	480
Vanpools	60	120	50	60
Single Occ.	0	6969	0	2655
Violators	13	—	2	—
TOTAL	1233	8393	503	3198

RATES	PEAK PERIOD ⁽³⁾ 6:00 - 9:00 AM		PEAK HOUR 7:00 - 8:00 AM	
	HOV Lane occupancy rate	2.9 persons/veh		3.5 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)	3.0 %		1.4 %	

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 9:00 A.M.

(4) Observations conducted 06/06/12 at Pacheco Blvd.

CONTRA COSTA-680

Route 242 to Marina Vista

Northbound - P.M.

Typical data for 2012 ⁽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	71	15	20	0
Buses	14	6	6	6
Carpools ⁽¹⁾	1668	837	640	300
Vanpools	20	3	12	3
Single Occ.	0	9294	0	3495
Violators	18	—	5	—
TOTAL	1791	10155	683	3804

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	71	15	20	0
Buses	490	210	210	210
Carpools ⁽¹⁾	3567	1750	1353	630
Vanpools	200	30	120	30
Single Occ.	0	9294	0	3495
Violators	18	—	5	—
TOTAL	4346	11299	1708	4365

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	1.1 persons/veh		1.1 persons/veh	
Overall occupancy (incl. buses)	1.3 persons/veh		1.4 persons/veh	
Violation rate ⁽²⁾ (HOV Lane)	1.0 %		0.7 %	

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 06/06/12 at Pacheco Blvd.

CONTRA COSTA - 680

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

Violation History

Southbound

	DATE	PERIOD MONITORED	TOTAL HOVL VOLUME	VIOLATION RATE
A.M. PEAK	Wed 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 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 5:00 to 9:00 AM.

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

CONTRA COSTA - 680

Route 242 to Marina Vista I/C.

Violation History

Northbound

	DATE	PERIOD MONITORED	TOTAL HOVL VOLUME	VIOLATION RATE
A.M. PEAK	Wed 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	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 Rd. to Alcosta Blvd.

Southbound - A.M.

Typical data for 2012 ⁽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	95	0	32	0
Buses	45	48	16	27
Carpools ⁽¹⁾	2740	198	1111	78
Vanpools	50	15	15	0
Single Occ.	0	14400	0	5310
Violators	49	—	19	—
TOTAL	2979	14661	1193	5415

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	95	0	32	0
Buses	1575	1680	560	945
Carpools ⁽¹⁾	5854	419	2386	169
Vanpools	500	150	150	0
Single Occ.	0	14400	0	5310
Violators	49	—	19	—
TOTAL	8073	16649	3147	6424

RATES	PEAK PERIOD ⁽³⁾ 6:00 - 9:00 AM		PEAK HOUR 7:00 - 8:00 AM	
	HOV Lane occupancy rate	2.7 persons/veh		2.6 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 ⁽²⁾ (HOV Lane)	1.6 %		1.6 %	

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 05/17/12 at Stone Valley Rd.

CONTRA COSTA-680

Rudgear Rd. to Alcosta Blvd.

Southbound - P.M.

Typical data for 2012 ⁽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	67	9	32	6
Buses	26	12	10	12
Carpools ⁽¹⁾	2842	858	1083	282
Vanpools	19	18	7	6
Single Occ.	0	13386	0	4467
Violators	22	—	4	—
TOTAL	2976	14283	1136	4773

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	67	9	32	6
Buses	910	420	350	420
Carpools ⁽¹⁾	6219	1848	2377	600
Vanpools	190	180	70	60
Single Occ.	0	13386	0	4467
Violators	22	—	4	—
TOTAL	7408	15843	2833	5553

RATES	PEAK PERIOD ⁽³⁾ 3:00 - 6:00 PM		PEAK HOUR 4:00 - 5:00 PM	
	HOV Lane occupancy rate	2.5 persons/veh		2.5 persons/veh
Mixed Flow occupancy rate	1.1 persons/veh		1.2 persons/veh	
Overall occupancy (incl. buses)	1.3 persons/veh		1.4 persons/veh	
Violation rate ⁽²⁾ (HOV Lane)	0.7 %		0.4 %	

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 3:00 to 7:00 P.M.

(4) Observations conducted 05/17/12 at Stone Valley Rd..

CONTRA COSTA-680

Alcosta Boulevard to Livorna Road

Northbound - A.M.

Typical data for 2012 ⁽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	47	3	15	0
Buses	26	6	7	3
Carpools ⁽¹⁾	1527	213	583	78
Vanpools	10	0	4	0
Single Occ.	0	12840	0	4947
Violators	70	—	28	—
TOTAL	1680	13062	637	5028

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	47	3	15	0
Buses	910	210	245	105
Carpools ⁽¹⁾	3333	443	1275	156
Vanpools	100	0	40	0
Single Occ.	0	12840	0	4947
Violators	70	—	28	—
TOTAL	4460	13496	1603	5208

RATES	PEAK PERIOD ⁽³⁾ 6:00 - 9:00 AM		PEAK HOUR 7:00 - 8:00 AM	
	HOV Lane occupancy rate	2.7 persons/veh		2.5 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 ⁽²⁾ (HOV Lane)	4.2 %		4.4 %	

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 9:00 A.M.

(4) Observations conducted 05/09/12 at Stone Valley Rd. I/C.

CONTRA COSTA-680

Alcosta Boulevard to Livorna Road

Northbound - P.M.

Typical data for 2012 ⁽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	93	30	17	3
Buses	25	36	2	33
Carpools ⁽¹⁾	3068	624	871	282
Vanpools	49	21	9	18
Single Occ.	0	13548	0	4872
Violators	122	—	28	—
TOTAL	3357	14259	927	5208

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	93	30	17	3
Buses	875	1260	70	1155
Carpools ⁽¹⁾	6477	1324	1838	590
Vanpools	490	210	90	180
Single Occ.	0	13548	0	4872
Violators	122	—	28	—
TOTAL	8057	16372	2043	6800

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		1.3 persons/veh	
Overall occupancy (incl. buses)	1.4 persons/veh		1.4 persons/veh	
Violation rate ⁽²⁾ (HOV Lane)	3.6 %		3.0 %	

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 05/08/12 at Stone Valley Rd. I/C..

CONTRA COSTA-680

Violation History

Rudgear Road to Alcosta Boulevard

Southbound

	DATE	PERIOD MONITORED	TOTAL HOVL VOLUME	VIOLATION RATE
A.M. PEAK	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%
	Thu Mar 15, 2001	6:00 - 9:00 AM	2609	5.3%
	Thu Apr 6, 2000	6:00 - 9:00 AM	2258	2.8%
P.M. PEAK	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%
	Wed May 9, 2001	3:00 - 6:00 PM	1831	8.5%
	Tue Dec 12, 2000	3:00 - 6:00 PM	1337	4.3%

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

CONTRA COSTA-680

Violation History

Alcosta Boulevard to Livorna Road

Northbound

	DATE	PERIOD MONITORED	TOTAL HOVL VOLUME	VIOLATION RATE
A.M. PEAK	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%
	Tue Sep 25, 2001	6:00 - 9:00 AM	1681	3.0%
	Thu Nov 2, 2000	6:00 - 9:00 AM	1263	7.0%
P.M. PEAK	Tue 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%
	Tue May 8, 2001	3:00 - 6:00 PM	3742	5.0%
	Wed Oct 4, 2000	3:00 - 6:00 PM	4165	3.6%

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

MARIN-101

Rowland to Mission Road

Southbound - A.M.

Typical data for 2012 ⁽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	90	30	49	0
Buses	26	24	13	12
Carpools ⁽¹⁾	2084	125	1159	50
Vanpools	9	6	2	6
Single Occ. ⁽²⁾	—	9802	—	4913
Violators	24	—	2	—
TOTAL	2233	9987	1225	4981

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	90	30	49	0
Buses	910	840	455	420
Carpools ⁽¹⁾	4323	250	2398	100
Vanpools	90	60	20	60
Single Occ. ⁽²⁾	—	9802	—	4913
Violators	24	—	2	—
TOTAL	5437	10982	2924	5493

RATES	PEAK PERIOD ⁽⁴⁾ 6:30 - 8:30 AM		PEAK HOUR 7:30 - 8:30 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)	1.3 persons/veh		1.4 persons/veh	
Violation rate ⁽³⁾ (HOV Lane)	1.1 %		0.2 %	

- 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 05/09/12 at Alameda Del Prado Drive I/C.

MARIN-101

Mission Road to Atherton Avenue

Northbound - P.M.

Typical data for 2012 ⁽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	37	18	14	6
Buses	39	31	18	19
Carpools ⁽¹⁾	2138	2198	915	776
Vanpools	12	6	7	0
Single Occ. ⁽²⁾	—	13829	—	5797
Violators	26	—	0	—
TOTAL	2252	16082	954	6598

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	37	18	14	6
Buses	1365	1085	630	665
Carpools ⁽¹⁾	4384	4701	1872	1636
Vanpools	120	60	70	0
Single Occ. ⁽²⁾	—	13829	—	5797
Violators	26	—	0	—
TOTAL	5932	19693	2586	8104

RATES	PEAK PERIOD ⁽⁴⁾ 4:30 - 7:00 PM		PEAK HOUR 4:30 - 5:30 PM	
	HOV Lane occupancy rate	2.6 persons/veh		2.7 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)	1.2 %		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 4:30 to 7:00 P.M.
 (5) Observations conducted 05/03/12 at Manuel Freitas Truck Scale.

MARIN-101

Rowland Ave to Mission Avenue

Violation History

Southbound

	DATE	PERIOD MONITORED	TOTAL HOVL VOLUME	VIOLATION RATE
A.M. PEAK	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 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 Road to Richardson Bay Bridge

Southbound - A.M.

Typical data for 2012 ⁽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	51	31	28	12
Buses	49	119	25	63
Carpools ⁽¹⁾	1225	495	677	282
Vanpools	6	0	1	0
Single Occ. ⁽²⁾	—	8256	—	4423
Violators	18	—	2	—
TOTAL	1349	8901	733	4780

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	51	31	28	12
Buses	1715	4165	875	2205
Carpools ⁽¹⁾	2537	990	1405	564
Vanpools	60	0	10	0
Single Occ. ⁽²⁾	—	8256	—	4423
Violators	18	—	2	—
TOTAL	4381	13442	2320	7204

RATES	PEAK PERIOD ⁽⁴⁾ 6:30 - 8:30 AM		PEAK HOUR 7:30 - 8:30 AM	
	HOV Lane occupancy rate	3.2 persons/veh		3.2 persons/veh
Mixed Flow occupancy rate	1.5 persons/veh		1.5 persons/veh	
Overall occupancy (incl. buses)	1.7 persons/veh		1.7 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 6:30 to 8:30 A.M.
 (5) Observations conducted 05/16/12 at Rte 131/Tiburon Blvd I/C.

MARIN-101

Richardson Bay Bridge to Mission Road

Northbound - P.M.

Typical data for 2012 ⁽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	70	24	30	0
Buses	68	24	37	12
Carpools ⁽¹⁾	1650	615	859	243
Vanpools	13	6	5	6
Single Occ. ⁽²⁾	—	13217	—	5715
Violators	25	—	0	—
TOTAL	1826	13886	931	5976

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	70	24	30	0
Buses	2380	840	1295	420
Carpools ⁽¹⁾	3432	1230	1794	486
Vanpools	130	60	50	60
Single Occ. ⁽²⁾	—	13217	—	5715
Violators	25	—	0	—
TOTAL	6037	15371	3169	6681

RATES	PEAK PERIOD ⁽⁴⁾ 4:30 - 7:00 PM		PEAK HOUR 4:30 - 5:30 PM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
HOV Lane occupancy rate	3.3 persons/veh		3.4 persons/veh	
Mixed Flow occupancy rate	1.1 persons/veh		1.1 persons/veh	
Overall occupancy (incl. buses)	1.4 persons/veh		1.4 persons/veh	
Violation rate ⁽³⁾ (HOV Lane)	1.4 %		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 4:30 to 7:00 P.M.
 (5) Observations conducted 05/08/12 at Route 131 Interchange.

MARIN-101

Violation History

Mission Avenue to Richardson Bay Bridge

Southbound

	DATE	PERIOD MONITORED	TOTAL HOVL VOLUME	VIOLATION RATE
A.M. PEAK	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	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 280 to Route 101 (Mountain View)

Northbound - A.M.

Typical data for 2012 ⁽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	138	2	55	2
Buses	21	2	6	2
Carpools ⁽¹⁾	1726	96	662	62
Vanpools	13	0	5	0
Single Occ. ⁽²⁾	—	8688	—	3466
Violators	164	—	31	—
TOTAL	2062	8788	759	3532

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	138	2	55	2
Buses	735	70	210	70
Carpools ⁽¹⁾	3518	196	1339	126
Vanpools	130	0	50	0
Single Occ. ⁽²⁾	—	8688	—	3466
Violators	164	—	31	—
TOTAL	4685	8956	1685	3664

RATES	PEAK PERIOD ⁽⁴⁾ 6:00 - 9:00 AM		PEAK HOUR 7:00 - 8:00 AM	
	HOV Lane occupancy rate	2.3 persons/veh		2.2 persons/veh
Mixed Flow occupancy rate	1.0 persons/veh		1.0 persons/veh	
Overall occupancy (incl. buses)	1.3 persons/veh		1.2 persons/veh	
Violation rate ⁽³⁾ (HOV Lane)	8.0 %		4.1 %	

- 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 10/16/12 at Fremont Avenue I/C

SANTA CLARA-85

Route 280 to Route 101 (Mountain View)

Violation History

Northbound

	DATE	PERIOD MONITORED	TOTAL HOVL VOLUME	VIOLATION RATE
A.M. PEAK	Tue Oct 16, 2012	6:00 - 9:00 AM	2062	8.0%
	Thu Apr 15, 2010	6:00 - 9:00 AM	1643	1.6%
	Tue May 12, 2009	6:00 - 9:00 AM	2527	1.8%
	Wed Dec 10, 2008	6:00 - 9:00 AM	2168	2.0%
	Tue Apr 17, 2007	6:00 - 9:00 AM	2722	0.0%
	Wed Oct 11, 2006	6:00 - 9:00 AM	2501	0.7%
	Tue Oct 18, 2005	6:00 - 9:00 AM	1703	3.0%
	Wed Nov 3, 2004	6:00 - 9:00 AM	2132	0.7%
	Wed Oct 29, 2003	6:00 - 9:00 AM	1151	0.8%
	Tue Oct 8, 2002	7:00 - 9:00 AM	1435	1.5%
	Tue Apr 10, 2001	6:00 - 9:00 AM	2471	1.8%
	Tue Oct 17, 2000	7:00 - 9:00 AM	2188	10.1%
P.M. PEAK	Year 2012	-	-	-
	Year 2010	-	-	-
	Year 2009	-	-	-
	Year 2008	-	-	-
	Year 2007	-	-	-
	Year 2006	-	-	-
	Year 2005	-	-	-
	Year 2004	-	-	-
	Year 2003	-	-	-
	Thu Oct 31, 2002	3:00 - 5:30 PM	761	2.2%
	Wed Oct 10, 2001	3:00 - 6:00 PM	1124	0.4%
	Thu May 4, 2000	3:00 - 6:00 PM	940	2.1%

- 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 2012 for off-peak direction

SANTA CLARA-85

Route 280 to Almaden Expressway

Southbound - P.M.

Typical data for 2012 ⁽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	81	18	18	2
Buses	15	2	2	0
Carpools ⁽¹⁾	2101	464	569	210
Vanpools	3	0	0	0
Single Occ. ⁽²⁾	—	8366	—	2938
Violators	30	—	18	—
TOTAL	2230	8850	607	3150

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	81	18	18	2
Buses	525	70	70	0
Carpools ⁽¹⁾	4353	943	1212	431
Vanpools	30	0	0	0
Single Occ. ⁽²⁾	—	8366	—	2938
Violators	30	—	18	—
TOTAL	5019	9397	1318	3371

RATES	PEAK PERIOD ⁽⁴⁾ 3:00 - 6:00 PM		PEAK HOUR 3:00 - 4:00 PM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
HOV Lane occupancy rate	2.3 persons/veh		2.2 persons/veh	
Mixed Flow occupancy rate	1.1 persons/veh		1.1 persons/veh	
Overall occupancy (incl. buses)	1.3 persons/veh		1.2 persons/veh	
Violation rate ⁽³⁾ (HOV Lane)	1.3 %		3.0 %	

- 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 3:00 to 7:00 P.M.
 (5) Observations conducted 11/14/12 at Winchester Blvd.

SANTA CLARA-85

Almaden Expressway to Route 280

Northbound - A.M.

Typical data for 2012 ⁽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	111	14	36	2
Buses	14	2	4	0
Carpools ⁽¹⁾	1811	542	788	202
Vanpools	3	38	2	12
Single Occ. ⁽²⁾	—	10928	—	3786
Violators	46	—	33	—
TOTAL	1985	11524	863	4002

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	111	14	36	2
Buses	490	70	140	0
Carpools ⁽¹⁾	3706	1253	1607	472
Vanpools	30	380	20	120
Single Occ. ⁽²⁾	—	10928	—	3786
Violators	46	—	33	—
TOTAL	4383	12645	1836	4380

RATES	PEAK PERIOD ⁽⁴⁾ 6:00 - 9:00 AM		PEAK HOUR 8:00 - 9:00 AM	
	HOV Lane occupancy rate	2.2 persons/veh		2.1 persons/veh
Mixed Flow occupancy rate	1.1 persons/veh		1.1 persons/veh	
Overall occupancy (incl. buses)	1.3 persons/veh		1.3 persons/veh	
Violation rate ⁽³⁾ (HOV Lane)	2.3 %		3.8 %	

- 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 05/23/12 at Union Avenue I/C

SANTA CLARA-85

Route 280 to Almaden Expressway

Violation History

Southbound

	DATE	PERIOD MONITORED	TOTAL HOVL VOLUME	VIOLATION RATE
A.M. PEAK	Year 2012	-	-	-
	Year 2010	-	-	-
	Year 2009	-	-	-
	Year 2008	-	-	-
	Year 2007	-	-	-
	Year 2006	-	-	-
	Year 2005	-	-	-
	Year 2004	-	-	-
	Year 2003	-	-	-
	Wed May 1, 2002	6:00 - 9:00 AM	256	9.0%
	Tue Apr 17, 2001	6:00 - 9:00 AM	341	5.9%
	Tue May 2, 2000	6:00 - 9:00 AM	363	1.7%
	P.M. PEAK	Wed Nov 14, 2012	3:00 - 6:00 PM	2230
Wed May 26, 2010		3:00 - 6:00 PM	2207	2.4%
Wed Apr 1, 2009		3:00 - 6:00 PM	2998	1.2%
Tue Apr 22, 2008		3:00 - 6:00 PM	3226	4.0%
Tue Dec 4, 2007		3:00 - 6:00 PM	3259	1.1%
Tue May 16, 2006		3:00 - 6:00 PM	2429	0.2%
Thu Oct 13, 2005		3:00 - 6:00 PM	2311	0.9%
Wed Oct 6, 2004		3:00 - 6:00 PM	2288	0.5%
Wed Oct 22, 2003		3:00 - 6:00 PM	2151	2.3%
Wed Mar 13, 2002		3:00 - 6:00 PM	2866	3.4%
Thu Apr 5, 2001		3:00 - 6:00 PM	2798	0.5%
Tue Apr 18, 2000		3:00 - 6:00 PM	3056	0.5%

NOTES: (a) Morning period of operation from 5:00 to 9:00 AM.
(b) Evening period of operation from 3:00 to 7:00 PM.
(c) Data was not collected in 2012 for off-peak direction

SANTA CLARA-85

Almaden Expressway to Route 280

Violation History

Northbound

	DATE	PERIOD MONITORED	TOTAL HOVL VOLUME	VIOLATION RATE
A.M. PEAK	Wed May 23, 2012	6:00 - 9:00 AM	1985	2.3%
	Tue Apr 27, 2010	6:00 - 9:00 AM	1743	2.6%
	Wed Mar 25, 2009	6:00 - 9:00 AM	2721	2.5%
	Thu May 1, 2008	6:00 - 9:00 AM	2421	1.1%
	Thu Nov 1, 2007	6:00 - 9:00 AM	2564	2.5%
	Wed Sep 27, 2006	6:00 - 9:00 AM	3298	1.2%
	Thu Oct 6, 2005	6:00 - 9:00 AM	2418	0.4%
	Thu Oct 28, 2004	7:00 - 9:00 AM	1813	0.4%
	Wed Oct 22, 2003	7:00 - 9:00 AM	2012	0.0%
	Wed Mar 27, 2002	6:00 - 9:00 AM	2572	4.6%
	Tues Oct 16, 2001	6:00 - 9:00 AM	3298	6.4%
	Wed Jun 7, 2000	6:00 - 9:00 AM	3555	9.9%
P.M. PEAK	Year 2012	-	-	-
	Year 2010	-	-	-
	Year 2009	-	-	-
	Year 2008	-	-	-
	Year 2007	-	-	-
	Year 2006	-	-	-
	Year 2005	-	-	-
	Year 2004	-	-	-
	Year 2003	-	-	-
	Thu Apr 4, 2002	3:00 - 6:00 PM	1068	7.5%
	Tue Jun 12, 2001	3:00 - 6:00 PM	985	8.9%
	Tue Oct 17, 2000	3:00 - 6:00 PM	642	3.6%

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 2012 for off-peak direction

SANTA CLARA-87

Route 101 I/C to Route 280 I/C

Southbound - P.M.

Typical data for 2012 ⁽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	64	2	21	0
Buses	9	6	4	0
Carpools ⁽¹⁾	1391	134	759	30
Vanpools	1	6	0	0
Single Occ. ⁽²⁾	—	7340	—	2418
Violators	20	—	2	—
TOTAL	1485	7488	786	2448

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	64	2	21	0
Buses	315	210	140	0
Carpools ⁽¹⁾	2834	283	1529	62
Vanpools	10	60	0	0
Single Occ. ⁽²⁾	—	7340	—	2418
Violators	20	—	2	—
TOTAL	3243	7895	1692	2480

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		1.0 persons/veh	
Overall occupancy (incl. buses)	1.2 persons/veh		1.3 persons/veh	
Violation rate ⁽³⁾ (HOV Lane)	1.3 %		0.3 %	

- NOTES:** (1) Two or more 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 11/27/12 at Taylor Avenue I/C

SANTA CLARA-87

Route 280 I/C to Route 101 I/C

Northbound - A.M.

Typical data for 2012 ⁽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	92	16	17	4
Buses	5	18	0	6
Carpools ⁽¹⁾	805	368	282	92
Vanpools	3	24	0	2
Single Occ. ⁽²⁾	—	9800	—	3456
Violators	37	—	1	—
TOTAL	942	10226	300	3560

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	92	16	17	4
Buses	175	630	0	210
Carpools ⁽¹⁾	1642	804	577	206
Vanpools	30	240	0	20
Single Occ. ⁽²⁾	—	9800	—	3456
Violators	37	—	1	—
TOTAL	1976	11490	595	3896

RATES	PEAK PERIOD ⁽⁴⁾ 6:00 - 9:00 AM		PEAK HOUR 7:00 - 8:00 AM	
	HOV Lane occupancy rate	2.1 persons/veh		2.0 persons/veh
Mixed Flow occupancy rate	1.1 persons/veh		1.1 persons/veh	
Overall occupancy (incl. buses)	1.2 persons/veh		1.2 persons/veh	
Violation rate ⁽³⁾ (HOV Lane)	3.9 %		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 5:00 to 9:00 A.M.
 (5) Observations conducted 04/19/12 at Taylor Avenue I/C

SANTA CLARA-87

Rte 101 I/C to Route 280 I/C

Violation History

Southbound

	DATE	PERIOD MONITORED	TOTAL HOVL VOLUME	VIOLATION RATE
A.M. PEAK	Year 2012	-	-	-
	Year 2011	-	-	-
	Year 2010	-	-	-
	Year 2009	-	-	-
	Year 2008	-	-	-
	Year 2007	-	-	-

P.M. PEAK	Tue Nov 27, 2012	3:00-6:00 PM	1485	1.3%
	Tue Jun 7, 2011	3:00-6:00 PM	1202	6.6%
	Thu May 27, 2010	3:00-6:00 PM	1438	3.9%
	Thu Mar 19, 2009	3:00-6:00 PM	1392	2.5%
	Wed Apr 9, 2008	3:00-6:00 PM	1496	2.9%
	Wed Oct 3, 2007	3:00-6:00 PM	1373	0.8%

- NOTES:** (a) Morning period of operation from 5:00 to 9:00 AM.
(b) Evening period of operation from 3:00 to 7:00 PM.
(c) Data was not collected in 2012 for off-peak direction

SANTA CLARA-87

Route 280 I/C to Route 101 I/C

Violation History

Northbound

	DATE	PERIOD MONITORED	TOTAL HOVL VOLUME	VIOLATION RATE
A.M. PEAK	Thu Apr 19, 2012	6:00 - 9:00 AM	942	3.9%
	Wed Apr 14, 2010	6:00 - 9:00 AM	1701	0.4%
	Thu Sep 24, 2009	6:00 - 9:00 AM	1786	0.4%
	Thu Nov 13, 2008	6:00 - 9:00 AM	1256	6.4%
	Tue Sep 25, 2007	6:00 - 9:00 AM	1048	7.6%
	Thu Sep 21, 2006	6:00 - 9:00 AM	532	1.7%
	Tue Nov 8, 2005	6:00 - 9:00 AM	494	3.2%

P.M. PEAK	Year 2012	-	-	-
	Year 2010	-	-	-
	Year 2009	-	-	-
	Year 2008	-	-	-
	Year 2007	-	-	-
	Year 2006	-	-	-
	Year 2005	-	-	-

- NOTES:** (a) Morning period of operation from 5:00 to 9:00 AM.
(b) Evening period of operation from 3:00 to 7:00 PM.
(c) Data was not collected in 2012 for off-peak direction

SANTA CLARA-101

SM/SCL County Line to Ellis Street

Southbound - P.M.

Typical data for 2012 ⁽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	31	5	9	1
Buses	18	9	3	2
Carpools ⁽¹⁾	1871	743	609	320
Vanpools	18	15	4	8
Single Occ. ⁽²⁾	—	10417	—	3867
Violators	15	—	15	—
TOTAL	1953	11189	640	4198

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	31	5	9	1
Buses	630	315	105	70
Carpools ⁽¹⁾	3859	1691	1257	732
Vanpools	180	150	40	80
Single Occ. ⁽²⁾	—	10417	—	3867
Violators	15	—	15	—
TOTAL	4715	12578	1426	4750

RATES	PEAK PERIOD ⁽⁴⁾ 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		1.1 persons/veh	
Overall occupancy (incl. buses)	1.3 persons/veh		1.3 persons/veh	
Violation rate ⁽³⁾ (HOV Lane)	0.8 %		2.3 %	

- 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 04/26/12 at San Antonio Road

SANTA CLARA-101

SM/SCL County Line to Ellis Street

Violation History

Southbound

	DATE	PERIOD MONITORED	TOTAL HOVL VOLUME	VIOLATION RATE
A.M. PEAK	Year 2012	-	-	-
	Wed Jun 2, 2010	6:00 - 9:00 AM	1904	1.5%
	Tue Apr 21, 2009	6:00 - 9:00 AM	2073	4.0%
	Thu Jun 5, 2008	6:00 - 9:00 AM	1747	0.7%
	Wed Nov 14, 2007	6:00 - 9:00 AM	1702	1.9%
	Tue Dec 5, 2006	6:00 - 9:00 AM	1352	0.7%
	Thu Sep 15, 2005	6:00 - 9:00 AM	1654	0.5%
	Wed Nov 17, 2004	6:00 - 9:00 AM	1762	0.3%
	Thu Oct 30, 2003	6:00 - 9:00 AM	1970	6.6%
	Wed May 15, 2002	6:00 - 9:00 AM	1949	6.6%
	Wed Mar 21, 2001	6:00 - 9:00 AM	2710	0.8%
	Wed Sep 13, 2000	6:00 - 9:00 AM	2823	10.5%
P.M. PEAK	Thu Apr 26, 2012	3:00 - 6:00 PM	1953	0.8%
	Wed Apr 14, 2010	3:00 - 6:00 PM	4233	3.1%
	Wed Apr 22, 2009	3:00 - 6:00 PM	2957	0.5%
	Tue Nov 18, 2008	3:00 - 6:00 PM	3698	3.1%
	Wed Apr 4, 2007	3:00 - 6:00 PM	2763	0.3%
	Wed Apr 26, 2006	3:00 - 6:00 PM	2509	3.1%
	Wed Mar 30, 2005	3:00 - 6:00 PM	3001	3.6%
	Wed Oct 27, 2004	3:00 - 6:00 PM	2420	0.3%
	Tue Oct 28, 2003	3:00 - 5:45 PM	2608	1.4%
	Tue May 14, 2002	3:00 - 6:00 PM	2119	0.7%
	Wed Oct 24, 2001	3:00 - 6:00 PM	2935	4.4%
	Thu Mar 30, 2000	3:00 - 6:00 PM	3199	3.4%

NOTES: (a) Morning period of operation from 5:00 to 9:00 AM.
(b) Evening period of operation from 3:00 to 7:00 PM.
(c) Data was not collected in 2012 for off-peak direction

SANTA CLARA-101

Ellis Street to Guadalupe Parkway

Southbound - P.M.

Typical data for 2012 ⁽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	123	9	33	1
Buses	15	6	3	3
Carpools ⁽¹⁾	3065	417	1065	151
Vanpools	49	0	16	0
Single Occ. ⁽²⁾	—	10887	—	3742
Violators	21	—	1	—
TOTAL	3273	11319	1118	3897

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	123	9	33	1
Buses	525	210	105	105
Carpools ⁽¹⁾	6342	880	2202	320
Vanpools	490	0	160	0
Single Occ. ⁽²⁾	—	10887	—	3742
Violators	21	—	1	—
TOTAL	7501	11986	2501	4168

RATES	PEAK PERIOD ⁽⁴⁾ 3:00 - 6:00 PM		PEAK HOUR 3:00 - 4:00 PM	
	HOV Lane occupancy rate	2.3 persons/veh		2.2 persons/veh
Mixed Flow occupancy rate	1.1 persons/veh		1.1 persons/veh	
Overall occupancy (incl. buses)	1.3 persons/veh		1.3 persons/veh	
Violation rate ⁽³⁾ (HOV Lane)	0.6 %		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 7:00 P.M.
 (5) Observations conducted 11/01/12 at San Tomas Expressway

SANTA CLARA-101

Ellis Street to Guadalupe Parkway

Violation History

Southbound

	DATE	PERIOD MONITORED	TOTAL HOVL VOLUME	VIOLATION RATE
A.M. PEAK	Year 2012	-	-	-
	Year 2010	-	-	-
	Year 2009	-	-	-
	Year 2008	-	-	-
	Year 2007	-	-	-
	Year 2006	-	-	-
	Year 2005	-	-	-
	Year 2004	-	-	-
	Year 2003	-	-	-
	Tue Dec 3, 2002	6:00 - 9:00 AM	668	2.2%
	Tue Jun 5, 2001	6:00 - 9:00 AM	765	2.1%
	Thu Apr 20, 2000	6:00 - 9:00 AM	916	3.8%
P.M. PEAK	Thu Nov 1, 2012	3:00 - 6:00 PM	3273	0.6%
	Thu May 13, 2010	3:00 - 6:00 PM	3407	0.6%
	Wed Mar 11, 2009	4:00 - 6:00 PM	2117	0.2%
	Thu Oct 9, 2008	3:00 - 6:00 PM	2779	0.2%
	Thu Nov 15, 2007	3:00 - 6:00 PM	3266	0.2%
	Tue Apr 18, 2006	3:00 - 6:00 PM	2779	0.3%
	Wed Apr 27, 2005	3:00 - 6:00 PM	2964	0.3%
	Tue Nov 16, 2004	3:00 - 5:30 PM	2190	0.4%
	Thu May 29, 2003	3:00 - 6:00 PM	3454	3.6%
	Thu Apr 11, 2002	3:00 - 6:00 PM	2912	1.2%
	Thu Mar 29, 2001	3:00 - 6:00 PM	3903	3.1%
	Wed Nov 15, 2000	3:00 - 5:30 PM	3077	2.7%

- 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 2012 for off-peak direction

SANTA CLARA-101

Guadalupe Parkway to Route 280/680

Southbound - P.M.

Typical data for 2012 ⁽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	111	24	44	4
Buses	3	8	3	6
Carpools ⁽¹⁾	2281	665	686	150
Vanpools	0	4	0	0
Single Occ. ⁽²⁾	—	11741	—	4215
Violators	24	—	3	—
TOTAL	2419	12442	736	4375

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	111	24	44	4
Buses	105	280	105	210
Carpools ⁽¹⁾	4629	1439	1391	332
Vanpools	0	40	0	0
Single Occ. ⁽²⁾	—	11741	—	4215
Violators	24	—	3	—
TOTAL	4869	13524	1543	4761

RATES	PEAK PERIOD ⁽⁴⁾ 3:00 - 6:00 PM		PEAK HOUR 5:00 - 6:00 PM	
	HOV Lane occupancy rate	2.0 persons/veh		2.1 persons/veh
Mixed Flow occupancy rate	1.1 persons/veh		1.1 persons/veh	
Overall occupancy (incl. buses)	1.2 persons/veh		1.2 persons/veh	
Violation rate ⁽³⁾ (HOV Lane)	1.0 %		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 3:00 to 7:00 P.M.
 (5) Observations conducted 05/17/12 at McKee Road I/C

SANTA CLARA-101

Guadalupe Parkway to Route 280/680 I/C

Violation History

Southbound

	DATE	PERIOD MONITORED	TOTAL HOVL VOLUME	VIOLATION RATE
A.M. PEAK	Year 2012	-	-	-
	Year 2010	-	-	-
	Year 2009	-	-	-
	Year 2008	-	-	-
	Year 2007	-	-	-
	Year 2006	-	-	-
	Year 2005	-	-	-
	Year 2004	-	-	-
	Year 2003	-	-	-
	Thu May 30, 2002	6:00 - 9:00 AM	339	3.5%
	Thu Oct 18, 2001	6:00 - 9:00 AM	495	3.0%
	Thu Jun 8, 2000	6:00 - 9:00 AM	485	11.8%
	P.M. PEAK	Thu May 17, 2012	3:00 - 6:00 PM	2419
Thu Mar 18, 2010		3:00 - 6:00 PM	2419	1.0%
Wed Mar 18, 2009		3:00 - 6:00 PM	2659	1.1%
Thu Nov 6, 2008		3:00 - 6:00 PM	3464	1.7%
Thu Dec 13, 2007		3:00 - 6:00 PM	3098	0.4%
Tue May 9, 2006		3:00 - 6:00 PM	2216	0.1%
Wed Sep 21, 2005		3:00 - 6:00 PM	2452	0.2%
Tue Nov 9, 2004		3:00 - 5:30 PM	1947	0.7%
Thu Apr 3, 2003		3:00 - 6:00 PM	1860	0.5%
Thu Jun 13, 2002		3:00 - 6:00 PM	2342	1.3%
Tue Mar 27, 2001		3:00 - 6:00 PM	2840	2.6%
Thu May 11, 2000		3:00 - 6:00 PM	3049	1.7%

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 2012 for off-peak direction

SANTA CLARA-101

Route 280/680 I/C to Bernal Road

Southbound - P.M.

Typical data for 2012 ⁽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	23	15	4	3
Buses	4	6	0	1
Carpools ⁽¹⁾	1353	171	359	41
Vanpools	6	9	0	0
Single Occ. ⁽²⁾	—	11934	—	4306
Violators	18	—	1	—
TOTAL	1404	12135	364	4351

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	23	15	4	3
Buses	140	210	0	35
Carpools ⁽¹⁾	2732	359	721	83
Vanpools	60	90	0	0
Single Occ. ⁽²⁾	—	11934	—	4306
Violators	18	—	1	—
TOTAL	2973	12608	726	4427

RATES	PEAK PERIOD ⁽⁴⁾ 3:00 - 6:00 PM		PEAK HOUR 5:00 - 6:00 PM	
	HOV Lane occupancy rate	2.1 persons/veh		2.0 persons/veh
Mixed Flow occupancy rate	1.0 persons/veh		1.0 persons/veh	
Overall occupancy (incl. buses)	1.2 persons/veh		1.1 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 3:00 to 7:00 P.M.
(5) Observations conducted 12/06/12 at the Hellyer Avenue I/C

SANTA CLARA-101

Route 280/680 I/C to Bernal Road

Violation History

Southbound

	DATE	PERIOD MONITORED	TOTAL HOVL VOLUME	VIOLATION RATE	
A.M. PEAK	Year 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 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 2012 for off-peak direction

SANTA CLARA-237

Westbound - A.M.

(3)

Express Lane (I-880 to N. 1st St)

Route 880/237 to Mathilda Avenue

Typical data for 2012

VEHICLES	PEAK PERIOD ⁽⁴⁾ 6:00 - 9:00 AM		PEAK HOUR 8:00 - 9:00 AM	
	Express Lane	Mixed Flow Lanes	Express Lane	Mixed Flow Lanes
Motorcycles	128	4	40	0
Buses	19	22	10	0
Carpools ⁽¹⁾	1434	60	515	24
Vanpools	5	0	3	0
Single Occ.	191	6332	69	2274
TOTAL	1777	6418	637	2298

PERSONS	PEAK PERIOD ⁽⁴⁾ 6:00 - 9:00 AM		PEAK HOUR 8:00 - 9:00 AM	
	Express Lane	Mixed Flow Lanes	Express Lane	Mixed Flow Lanes
Motorcycles	128	4	40	0
Buses	665	770	350	0
Carpools ⁽¹⁾	2954	120	1066	48
Vanpools	50	0	30	0
Single Occ.	191	6332	69	2274
TOTAL	3988	7226	1555	2322

RATES	PEAK PERIOD ⁽⁴⁾ 6:00 - 9:00 AM		PEAK HOUR 8:00 - 9:00 AM	
	Express Lane	Mixed Flow Lanes	Express Lane	Mixed Flow Lanes
HOV Lane occupancy rate	2.2 persons/veh		2.4 persons/veh	
Mixed Flow occupancy rate	1.1 persons/veh		1.0 persons/veh	
Overall occupancy (incl. buses)	1.4 persons/veh		1.3 persons/veh	

- NOTES:** (1) Two or more occupants per vehicle.
 (2) Express Lane in operation from 5:00 to 10:00A.M.
 (3) Observations conducted 05/10/12 at the Zanker Road I/C

SANTA CLARA-237

Eastbound - P.M.

(3)

Express Lane (Zanker Rd to I-880)

Mathilda Avenue to Route 880/237

Typical data for 2012

VEHICLES	PEAK PERIOD ⁽⁴⁾ 3:00 - 6:00 PM		PEAK HOUR 3:00 - 4:00 PM	
	Express Lane	Mixed Flow Lanes	Express Lane	Mixed Flow Lanes
Motorcycles	66	10	21	4
Buses	16	2	2	0
Carpools ⁽¹⁾	1282	68	311	30
Vanpools	3	0	0	0
Single Occ.	259	4840	129	1756
TOTAL	1626	4920	463	1790

PERSONS	PEAK PERIOD ⁽⁴⁾ 3:00 - 6:00 PM		PEAK HOUR 3:00 - 4:00 PM	
	Express Lane	Mixed Flow Lanes	Express Lane	Mixed Flow Lanes
Motorcycles	66	10	21	4
Buses	560	70	70	0
Carpools ⁽¹⁾	2638	138	645	62
Vanpools	30	0	0	0
Single Occ.	259	4840	129	1756
TOTAL	3553	5058	865	1822

RATES	PEAK PERIOD ⁽⁴⁾ 3:00 - 6:00 PM		PEAK HOUR 3:00 - 4:00 PM	
	HOV Lane occupancy rate	2.2 persons/veh		1.9 persons/veh
Mixed Flow occupancy rate	1.0 persons/veh		1.0 persons/veh	
Overall occupancy (incl. buses)	1.3 persons/veh		1.2 persons/veh	

- NOTES:** (1) Two or more occupants per vehicle.
 (2) Express Lane in operation from 3:00 to 7:00 P.M.
 (3) Observations conducted 05/2/12 at the Zanker Road I/C

SANTA CLARA-237

Violation History

Express Lane (I-880 to N.1st St.)

Route 880/237 I/C to Mathilda Avenue

Westbound

	DATE	PERIOD MONITORED	TOTAL HOVL VOLUME	VIOLATION RATE
A.M. PEAK	Thu May 10, 2012	6:00 - 9:00 AM	1777	-
	Wed Sep 28, 2011	6:00 - 9:00 AM	1835	2.2%
	Thu Jun 10, 2010	6:00 - 9:00 AM	2019	1.3%
	Tue Sep 22, 2009	6:00 - 9:00 AM	2383	2.9%
	Wed Dec 17, 2008	6:00 - 9:00 AM	2046	0.6%
	Tue Sep 18, 2007	6:00 - 9:00 AM	2092	0.1%
	Wed Apr 26, 2006	6:00 - 9:00 AM	1631	0.3%
	Wed Nov 2, 2005	6:00 - 9:00 AM	1666	3.1%
	Thu Nov 18, 2004	6:00 - 9:00 AM	1407	0.9%
	Thu May 29, 2003	6:00 - 9:00 AM	1644	0.0%
	Thu May 2, 2002	6:00 - 9:00 AM	1577	3.7%
	Thu May 3, 2001	6:00 - 9:00 AM	1916	5.3%
	Wed Nov 15, 2000	6:00 - 9:00 AM	2055	2.7%
P.M. PEAK	Year 2012	-	-	-
	Tue Oct 18, 2011	3:00 - 6:00 PM	874	2.1%
	Tue Mar 9, 2010	3:00 - 6:00 PM	626	0.0%
	Thu Oct 1, 2009	3:00 - 6:00 PM	1099	1.2%
	Wed May 28, 2008	3:00 - 6:00 PM	1072	0.6%
	Tue Jun 12, 2007	3:00 - 6:00 PM	1641	8.2%
	Tue Mar 28, 2006	3:00 - 6:00 PM	1008	4.3%
	Tue Oct 25, 2005	3:00 - 6:00 PM	908	2.1%
	Thu Dec 9, 2004	3:00 - 5:15 PM	493	10.8%
	Thu Oct 9, 2003	3:00 - 6:00 PM	698	5.6%
	Wed May 15, 2002	3:00 - 6:00 PM	773	2.2%
	Wed May 30, 2001	3:00 - 6:00 PM	1102	3.1%
	Wed Sep 13, 2000	3:00 - 6:00 PM	1155	2.5%

NOTES: (a) Data was not collected in 2012 for off-peak direction
(b) Data prior to 2012 is HOV lane data which operated from 5:00-9:00AM and 3:00-7:00PM

SANTA CLARA-237

Violation History

Express Lane (Zanker Rd to I-880)

Mathilda Avenue to Route 880/237 I/C

Eastbound

	DATE	PERIOD MONITORED	TOTAL HOVL VOLUME	VIOLATION RATE
A.M. PEAK	Year 2012	-	-	-
	Thu Oct 20, 2011	6:00 - 9:00 AM	479	2.1%
	Year 2010	-	-	-
	Year 2009	-	-	-
	Year 2008	-	-	-
	Thu Nov 29, 2007	6:00 - 9:00 AM	741	0.4%
	Tue May 9, 2006	6:00 - 9:00 AM	710	11.1%
	Year 2005	-	-	-
	Year 2004	-	-	-
	Year 2003	-	-	-
	Thu Oct 31, 2002	7:00 - 9:00 AM	561	12.1%
	Thu Mar 29, 2001	6:00 - 9:00 AM	759	15.0%
	Thu May 25, 2000	6:00 - 9:00 AM	536	5.8%
	P.M. PEAK	Wed May 2, 2012	3:00 - 6:00 PM	1626
Wed Oct 12, 2011		3:00 - 6:00 PM	1805	0.8%
Wed Mar 10, 2010		3:00 - 6:00 PM	1974	2.0%
Wed Jun 3, 2009		3:00 - 6:00 PM	1775	1.4%
Wed Apr 2, 2008		3:00 - 6:00 PM	1670	1.0%
Wed May 23, 2007		3:00 - 6:00 PM	2433	0.1%
Thu May 11, 2006		3:00 - 6:00 PM	1671	4.2%
Thu Oct 6, 2005		3:00 - 6:00 PM	1746	13.3%
Wed Dec 1, 2004		3:00 - 5:00 PM	1324	0.8%
Tue Oct 14, 2003		3:00 - 6:00 PM	1296	0.9%
Wed May 1, 2002		3:00 - 6:00 PM	1396	1.9%
Thu May 3, 2001		3:00 - 6:00 PM	1255	2.1%
Tue Mar 21, 2000		4:00 - 7:00 PM	2181	0.4%

NOTES: (a) Data was not collected in 2012 for off-peak direction

(b) Data prior to 2012 is HOV Lane data which operated from 5:00 - 9:00AM and 3:00 - 7:00PM

SANTA CLARA-280

Magdalena Avenue to Leland Avenue

Southbound - P.M.

Typical data for 2012 ⁽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	15	0	6	0
Buses	10	4	4	0
Carpools ⁽¹⁾	2227	225	682	8
Vanpools	10	3	4	2
Single Occ. ⁽²⁾	—	14109	—	5002
Violators	16	—	1	—
TOTAL	2278	14341	697	5012

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	15	0	6	0
Buses	350	140	140	0
Carpools ⁽¹⁾	4484	453	1370	18
Vanpools	100	30	40	20
Single Occ. ⁽²⁾	—	14109	—	5002
Violators	16	—	1	—
TOTAL	4965	14732	1557	5040

RATES	PEAK PERIOD ⁽⁴⁾ 3:00 - 6:00 PM		PEAK HOUR 4:00 - 5:00 PM	
	HOV Lane occupancy rate	2.2 persons/veh		2.2 persons/veh
Mixed Flow occupancy rate	1.0 persons/veh		1.0 persons/veh	
Overall occupancy (incl. buses)	1.2 persons/veh		1.2 persons/veh	
Violation rate ⁽³⁾ (HOV Lane)	0.7 %		0.1 %	

- 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 11/29/12 at the Wolfe Road I/C

SANTA CLARA-280

Magdalena Avenue to Leland Avenue

Violation History

Southbound

	DATE	PERIOD MONITORED	TOTAL HOVL VOLUME	VIOLATION RATE	
A.M. PEAK	Year 2012	-	-	-	
	Year 2010	-	-	-	
	Year 2009	-	-	-	
	Year 2008	-	-	-	
	Year 2007	-	-	-	
	Year 2006	-	-	-	
	Year 2005	-	-	-	
	Year 2004	-	-	-	
	Year 2003	-	-	-	
		Thu Apr 18, 2002	6:30 - 9:00 AM	372	4.6%
	Thu Apr 5, 2001	6:00 - 9:00 AM	524	2.7%	
	Thu Apr 13, 2000	6:00 - 9:00 AM	474	9.3%	
P.M. PEAK		Thu Nov 29, 2012	3:00 - 6:00 PM	2278	0.7%
		Tue Apr 20, 2010	3:00 - 6:00 PM	1237	0.0%
		Thu Nov 12, 2009	3:00 - 6:00 PM	2309	0.5%
		Thu Dec 4, 2008	3:00 - 6:00 PM	2606	2.0%
		Tue Apr 10, 2007	3:00 - 6:00 PM	2404	0.0%
		Thu Apr 27, 2006	3:00 - 6:00 PM	1569	3.5%
		Tue Dec 13, 2005	3:00 - 6:00 PM	2469	0.0%
		Tue Nov 2, 2004	3:00 - 5:30 PM	1817	2.3%
		Thu Jun 12, 2003	3:00 - 5:30 PM	1756	1.0%
		Thu Sep 19, 2002	3:00 - 6:00 PM	1933	0.6%
		Thu Oct 11, 2001	3:00 - 6:00 PM	2221	1.0%
		Wed Oct 11, 2000	3:00 - 6:00 PM	2325	5.0%

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 2012 for off-peak direction

SAN FRANCISCO-80

HOV RAMP

Sterling Street on-ramp to SFOBB

Eastbound-P.M.

Typical data for 2012 ⁽⁵⁾

PEAK PERIOD ⁽⁴⁾

3:30 - 7:00 PM

PEAK HOUR

5:00 - 6:00 PM

VEHICLES

	HOV Lane	SOV Lane	HOV Lane	SOV Lane
Motorcycles	105	—	32	—
Buses	14	—	5	—
Carpool ⁽¹⁾	1238	—	520	—
2 - seaters ⁽²⁾	348	—	129	—
Vanpools	73	—	17	—
Trucks	60	—	17	—
Violators	890	—	215	—
TOTAL	2728	N/A	935	N/A

PERSONS

	HOV Lane	SOV Lane	HOV Lane	SOV Lane
Motorcycles	105	—	32	—
Buses	490	—	175	—
Carpool ⁽¹⁾	3838	—	1612	—
2 - seaters ⁽²⁾	696	—	258	—
Vanpools	730	—	170	—
Trucks	60	—	17	—
Violators	1173	—	333	—
TOTAL	7092	N/A	2597	N/A

RATES

HOV Lane occupancy rate	2.6 persons/veh	2.8 persons/veh
Violation rate ⁽³⁾ (HOV Lane)	32.6 %	23.0 %

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

(2) 2 - seater vehicles with 2 persons.

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

(4) HOV lane in operation from 3:30 to 7:00 PM.

(5) Observations conducted 2/22/12 at the Sterling Street on-ramp

SAN FRANCISCO-80 HOV RAMP

Sterling Street On-Ramp to SFOBB

Violation History Eastbound

	DATE	PERIOD MONITORED	TOTAL HOVL VOLUME	VIOLATION RATE
P.M. PEAK	Wed Feb 22, 2012	3:30 - 7:00 PM	2728	32.6%
	Sun May 23, 2010	3:30 - 7:00 PM	3218	21.5%
	Tue Mar 17, 2009	3:30 - 7:00 PM	3108	23.6%
	Wed Oct 1, 2008	3:30 - 7:00 PM	3161	23.5%
	Thu Sep 20, 2007	3:30 - 7:00 PM	3223	10.6%
	Tue Sep 12, 2006	3:30 - 7:00 PM	3411	23.0%
	Tue Mar 8, 2005	3:30 - 7:00 PM	3391	24.4%
	Tue Oct 12, 2004	3:30 - 7:00 PM	3161	20.2%
	Wed Apr 30, 2003	3:30 - 7:00 PM	2185	22.6%
	Tue Sep 17, 2002	3:30 - 7:00 PM	2713	15.1%
	Wed Oct 10, 2001	3:30 - 7:00 PM	3133	10.4%
	Thu Oct 19, 2000	3:30 - 7:00 PM	3327	6.5%

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

SAN MATEO-101

Whipple Avenue to SM/SCL County Line

Southbound - P.M.

Typical data for 2012 ⁽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	61	135	17	12
Buses	28	0	12	0
Carpools ⁽¹⁾	1627	594	673	188
Vanpools	11	1	5	0
Single Occ. ⁽²⁾	—	9714	—	3784
Violators	58	—	2	—
TOTAL	1785	10444	709	3984

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	61	135	17	12
Buses	980	0	420	0
Carpools ⁽¹⁾	3372	1218	1361	376
Vanpools	110	10	50	0
Single Occ. ⁽²⁾	—	9714	—	3784
Violators	58	—	2	—
TOTAL	4581	11077	1850	4172

RATES	PEAK PERIOD ⁽⁴⁾ 3:00 - 6:00 PM		PEAK HOUR 5:00 - 6:00 PM	
	HOV Lane occupancy rate	2.6 persons/veh		2.6 persons/veh
Mixed Flow occupancy rate	1.1 persons/veh		1.0 persons/veh	
Overall occupancy (incl. buses)	1.3 persons/veh		1.3 persons/veh	
Violation rate ⁽³⁾ (HOV Lane)	3.2 %		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 3:00 to 7:00 P.M.
 (5) Observations conducted 11/07/12 at Woodside Road I/C

SAN MATEO-101

Whipple Avenue to the SM/SCL County Line

Violation History

Southbound

	DATE	PERIOD MONITORED	TOTAL HOVL VOLUME	VIOLATION RATE
A.M. PEAK	Year 2012	-	-	-
	Thu Jun 3, 2010	6:00 - 9:00 AM	1435	5.7%
	Thu May 14, 2009	6:00 - 9:00 AM	1547	0.8%
	Tue Apr 15, 2008	6:00 - 9:00 AM	1322	1.4%
	Thu Dec 13, 2007	6:00 - 9:00 AM	1972	0.6%
	Wed May 31, 2006	6:00 - 9:00 AM	1238	0.8%
	Thu Mar 10, 2005	6:00 - 9:00 AM	1177	1.4%
	Wed Dec 15, 2004	7:00 - 9:00 AM	1355	0.1%
	Wed Apr 9, 2003	6:00 - 9:00 AM	1701	0.6%
	Tue Mar 26, 2002	6:00 - 9:00 AM	1549	3.5%
	Thu Mar 22, 2001	6:00 - 9:00 AM	1746	2.2%
	Tue Apr 25, 2000	6:00 - 9:00 AM	1849	7.0%
P.M. PEAK	Wed Nov 7, 2012	3:00 - 6:00 PM	1785	3.2%
	Wed Mar 24, 2010	3:00 - 6:00 PM	1784	1.3%
	Thu Oct 22, 2009	3:00 - 6:00 PM	2177	8.5%
	Thu Oct 2, 2008	3:00 - 6:00 PM	2788	0.8%
	Thu May 24, 2007	3:00 - 6:00 PM	2070	3.8%
	Tue Jun 13, 2006	3:00 - 6:00 PM	1754	0.5%
	Wed Sep 28, 2005	3:00 - 6:00 PM	1568	1.5%
	Tue Oct 26, 2004	3:00 - 6:00 PM	1296	1.5%
	Wed May 14, 2003	3:00 - 6:00 PM	1488	2.5%
	Wed Oct 2, 2002	3:00 - 6:00 PM	1895	3.2%
	Thu Nov 8, 2001	3:00 - 5:30 PM	1685	7.0%
	Thu Oct 12, 2000	3:00 - 6:00 PM	2245	3.3%

- 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 2012 for off-peak direction

SOLANO-80

Carquinez Bridge Toll Plaza

Eastbound - P.M.

Typical data for 2012

(6)

PEAK PERIOD ⁽⁵⁾

3:00 to 7:00 P.M.

PEAK HOUR

5:00 to 6:00 P.M.

VEHICLES

	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	118	—	37	—
Buses ⁽⁴⁾	24	—	10	—
Carpools ⁽¹⁾	997	—	336	—
2 - seaters ⁽²⁾	293	—	76	—
Vanpools	115	—	29	—
Violators (HOV only)	306	—	93	—
TOTAL	1853	13757 ⁽⁷⁾	581	3606

PERSONS

	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	118	—	37	—
Buses ⁽⁴⁾	840	—	350	—
Carpools ⁽¹⁾	3091	—	1042	—
2 - seaters ⁽²⁾	586	—	152	—
Vanpools	1150	—	290	—
Violators (HOV only)	448	—	144	—
TOTAL	6233	15133 ⁽⁷⁾	2015	3967

RATES

HOV Lane occupancy rate	3.4 persons/veh	3.5 persons/veh
Mixed Flow Occupancy Rate ⁽⁷⁾	1.1 persons/veh	1.1 persons/veh
Violation rate (HOV Lane) ⁽³⁾	16.5 %	16.0 %

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

(2) 2 - seater vehicles with 2 persons.

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

(4) Assumed PM bus occupancy = 35 persons/vehicle.

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

(6) Observations conducted 4/17/12 at the Carquinez Bridge Toll Plaza.

(7) Data from Toll Plaza vehicle Registration Report.

SOLANO-80

Carquinez Bridge Toll Plaza

Violation History

Eastbound

	DATE	PERIOD MONITORED	TOTAL HOVL VOLUME	VIOLATION RATE
A.M. PEAK	Year 2012	-	-	-
	Year 2010	-	-	-
	Year 2009	-	-	-
	Year 2008	-	-	-
	Year 2007	-	-	-
	Year 2006	-	-	-
	Year 2005	-	-	-
	Year 2004	-	-	-
	Year 2003	-	-	-
	Thu Nov 14, 2002	5:00 - 10:00 AM	706	10.1%
	Thu May 31, 2001	5:00 - 10:00 AM	804	24.5%
	Thu Nov 16, 2000	5:00 - 10:00 AM	773	34.4%
	P.M. PEAK	Tue Apr 17, 2012	3:00 - 7:00 PM	1853
Tue Mar 23, 2010		3:00 - 7:00 PM	3180	6.5%
Wed Mar 18, 2009		3:00 - 7:00 PM	3465	12.9%
Wed Apr 2, 2008		3:00 - 7:00 PM	3459	13.4%
Tue Sep 18, 2007		3:00 - 7:00 PM	3452	10.1%
Thu Sep 14, 2006		3:00 - 7:00 PM	3285	11.0%
Wed Sep 14, 2005		3:00 - 7:00 PM	3523	6.0%
Wed Oct 13, 2004		3:00 - 7:00 PM	3342	9.4%
Thu May 15, 2003		3:00 - 7:00 PM	3360	8.8%
Thu Sep 26, 2002		3:00 - 7:00 PM	3429	9.5%

NOTES: (a) Morning period of operation from 5:00 to 10:00 AM
(b) Evening period of operation from 3:00 to 7:00 PM.
(c) Data was not collected in 2012 for off-peak direction

SOLANO-80

Airbase Parkway to Red Top Road

Westbound - A.M.

Typical data for 2012 ⁽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	56	30	23	12
Buses	4	24	0	6
Carpools ⁽¹⁾	1137	876	487	381
Vanpools	6	0	1	0
Single Occ. ⁽²⁾	—	13346	—	4798
Violators	13	—	0	—
TOTAL	1216	14276	511	5197

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	56	30	23	12
Buses	140	840	0	210
Carpools ⁽¹⁾	2343	1800	1011	790
Vanpools	60	0	10	0
Single Occ. ⁽²⁾	—	13346	—	4798
Violators	13	—	0	—
TOTAL	2612	16016	1044	5810

RATES	PEAK PERIOD ⁽⁴⁾ 6:00 - 9:00 AM		PEAK HOUR 7:00 - 8:00 AM	
	HOV Lane occupancy rate	2.1 persons/veh		2.0 persons/veh
Mixed Flow occupancy rate	1.1 persons/veh		1.1 persons/veh	
Overall occupancy (incl. buses)	1.2 persons/veh		1.2 persons/veh	
Violation rate ⁽³⁾ (HOV Lane)	1.1 %		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 11/07/12 at Green Valley Rd Park&Ride.

SOLANO-80

Airbase Parkway to Red Top Road

Westbound - P.M.

Typical data for 2012 ⁽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	17	51	7	15
Buses	15	51	0	18
Carpools ⁽¹⁾	928	2798	319	885
Vanpools	7	44	1	28
Single Occ. ⁽²⁾	—	9660	—	3457
Violators	16	—	0	—
TOTAL	983	12604	327	4403

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	17	51	7	15
Buses	525	1785	0	630
Carpools ⁽¹⁾	1931	6296	663	1941
Vanpools	70	440	10	280
Single Occ. ⁽²⁾	—	9660	—	3457
Violators	16	—	0	—
TOTAL	2559	18232	680	6323

RATES	PEAK PERIOD ⁽⁴⁾ 3:00 - 6:00 PM		PEAK HOUR 4:00 - 5:00 PM	
	HOV Lane occupancy rate	2.6 persons/veh		2.1 persons/veh
Mixed Flow occupancy rate	1.4 persons/veh		1.4 persons/veh	
Overall occupancy (incl. buses)	1.5 persons/veh		1.5 persons/veh	
Violation rate ⁽³⁾ (HOV Lane)	1.6 %		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 3:00 to 7:00 P.M.
(5) Observations conducted 10/30/12 at Green Valley Rd park&Ride.

SOLANO-80

Red Top Road to Airbase Parkway

Eastbound - A.M.

Typical data for 2012 ⁽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	29	15	12	0
Buses	8	30	6	18
Carpools ⁽¹⁾	458	706	143	406
Vanpools	9	33	0	18
Single Occ. ⁽²⁾	—	9803	—	3782
Violators	5	—	2	—
TOTAL	509	10587	163	4224

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	29	15	12	0
Buses	280	1050	210	630
Carpools ⁽¹⁾	945	1521	303	863
Vanpools	90	330	0	180
Single Occ. ⁽²⁾	—	9803	—	3782
Violators	5	—	2	—
TOTAL	1349	12719	527	5455

RATES	PEAK PERIOD ⁽⁴⁾ 6:00 - 9:00 AM		PEAK HOUR 6:00 - 7:00 AM	
	HOV Lane occupancy rate	2.6 persons/veh		3.2 persons/veh
Mixed Flow occupancy rate	1.2 persons/veh		1.3 persons/veh	
Overall occupancy (incl. buses)	1.3 persons/veh		1.4 persons/veh	
Violation rate ⁽³⁾ (HOV Lane)	1.0 %		1.2 %	

- NOTES:** (1) Two or more occupants per vehicle.
 (2) Mixed flow lanes only.
 (3) Violation rate = $\frac{\text{no. of violators in HOV lane} \times 100\%}{\text{Total no. of vehicles in HOV lane}}$
 (4) HOV lane in operation from 5:00 to 10:00 A.M.
 (5) Observations conducted 10/17/12 at Abernathy Road Interchange.

SOLANO-80

Red Top Road to Airbase Parkway

Eastbound - P.M.

Typical data for 2012 ⁽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	98	52	46	15
Buses	5	30	3	6
Carpools ⁽¹⁾	1796	1588	670	582
Vanpools	49	50	17	6
Single Occ. ⁽²⁾	—	15338	—	5285
Violators	14	—	1	—
TOTAL	1962	17058	737	5894

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	98	52	46	15
Buses	175	1050	105	210
Carpools ⁽¹⁾	3738	3370	1386	1239
Vanpools	490	500	170	60
Single Occ. ⁽²⁾	—	15338	—	5285
Violators	14	—	1	—
TOTAL	4515	20310	1708	6809

RATES	PEAK PERIOD ⁽⁴⁾ 3:00 - 6:00 PM		PEAK HOUR 4:00 - 5:00 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)	1.3 persons/veh		1.3 persons/veh	
Violation rate ⁽³⁾ (HOV Lane)	0.7 %		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 7:00 P.M.
 (5) Observations conducted 10/16/12 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	Wed Nov 7, 2012	6:00 - 9:00 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	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 Oct 17, 2012	6:00 - 9:00 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	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 2012 ⁽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	22	8	11	0
Buses	2	25	1	8
Carpools ⁽¹⁾	522	202	279	50
Vanpools	1	8	0	0
Single Occ. ⁽²⁾	—	5337	—	2730
Violators	11	—	4	—
TOTAL	558	5580	295	2788

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	22	8	11	0
Buses	70	875	35	280
Carpools ⁽¹⁾	1080	422	573	104
Vanpools	10	80	0	0
Single Occ. ⁽²⁾	—	5337	—	2730
Violators	11	—	4	—
TOTAL	1193	6722	623	3114

RATES	PEAK PERIOD ⁽⁴⁾ 7:00 - 9:00 AM		PEAK HOUR 8:00 - 9:00 AM	
	HOV Lane occupancy rate	2.1 persons/veh		2.1 persons/veh
Mixed Flow occupancy rate	1.2 persons/veh		1.1 persons/veh	
Overall occupancy (incl. buses)	1.3 persons/veh		1.2 persons/veh	
Violation rate ⁽³⁾ (HOV Lane)	2.0 %		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 7:00 to 9:00 A.M.
 (5) Observations conducted 05/30/12 at River Road Interchange.

SONOMA-101

Windsor River Road to Route 12

Southbound - P.M.

Typical data for 2012 ⁽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	55	29	18	4
Buses	15	4	5	0
Carpools ⁽¹⁾	1950	1508	593	420
Vanpools	1	53	1	4
Single Occ. ⁽²⁾	—	9718	—	3092
Violators	17	—	1	—
TOTAL	2038	11312	618	3520

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	55	29	18	4
Buses	525	140	175	0
Carpools ⁽¹⁾	4017	3513	1217	951
Vanpools	10	530	10	40
Single Occ. ⁽²⁾	—	9718	—	3092
Violators	17	—	1	—
TOTAL	4624	13930	1421	4087

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	1.2 persons/veh		1.2 persons/veh	
Overall occupancy (incl. buses)	1.4 persons/veh		1.3 persons/veh	
Violation rate ⁽³⁾ (HOV Lane)	0.8 %		0.2 %	

- 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 6:30 P.M.
 (5) Observations conducted 10/11/12 at River Road Interchange.

SONOMA-101

Route 12 to Windsor River Road

Northbound - A.M.

Typical data for 2012 ⁽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	36	29	18	17
Buses	2	44	1	22
Carpools ⁽¹⁾	556	314	338	143
Vanpools	2	10	2	0
Single Occ. ⁽²⁾	—	5573	—	2810
Violators	11	—	4	—
TOTAL	607	5970	363	2992

PERSONS	PEAK PERIOD ⁽⁴⁾ 7:00 - 9:00 AM		PEAK HOUR 8:00 - 9:00 AM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	36	29	18	17
Buses	70	1540	35	770
Carpools ⁽¹⁾	1156	641	708	295
Vanpools	20	100	20	0
Single Occ. ⁽²⁾	—	5573	—	2810
Violators	11	—	4	—
TOTAL	1293	7883	785	3892

RATES	PEAK PERIOD ⁽⁴⁾ 7:00 - 9:00 AM		PEAK HOUR 8:00 - 9:00 AM	
	HOV Lane occupancy rate	2.1 persons/veh		2.2 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)	1.8 %		1.1 %	

- 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 7:00 to 9:00 A.M.
 (5) Observations conducted 05/23/12 at Mendocino Ave./kaiser parking.

SONOMA-101

Route 12 to Windsor River Road

Northbound - P.M.

Typical data for 2012 ⁽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	83	48	20	8
Buses	9	12	3	8
Carpools ⁽¹⁾	2139	1100	534	360
Vanpools	1	4	0	4
Single Occ. ⁽²⁾	—	11577	—	3517
Violators	21	—	16	—
TOTAL	2253	12741	573	3897

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	83	48	20	8
Buses	315	420	105	280
Carpools ⁽¹⁾	4431	2332	1124	775
Vanpools	10	40	0	40
Single Occ. ⁽²⁾	—	11577	—	3517
Violators	21	—	16	—
TOTAL	4860	14417	1265	4620

RATES	PEAK PERIOD ⁽⁴⁾ 3:00 - 6:30 PM		PEAK HOUR 5:00 - 6:00 PM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
HOV Lane occupancy rate	2.2 persons/veh		2.2 persons/veh	
Mixed Flow occupancy rate	1.1 persons/veh		1.2 persons/veh	
Overall occupancy (incl. buses)	1.3 persons/veh		1.3 persons/veh	
Violation rate ⁽³⁾ (HOV Lane)	0.9 %		2.8 %	

- 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 05/24/12 at Mendocino Ave./kaiser parking.

SONOMA-101

Windsor River road to Route 12

Violation History

Southbound

	DATE	PERIOD MONITORED	TOTAL HOVL VOLUME	VIOLATION RATE
A.M. PEAK	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 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	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 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 2012 ⁽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	48	4	29	4
Buses	6	72	4	33
Carpools ⁽¹⁾	704	327	380	123
Vanpools	0	20	0	16
Single Occ. ⁽²⁾	—	7188	—	3849
Violators	17	—	3	—
TOTAL	775	7611	416	4025

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	48	4	29	4
Buses	210	2520	140	1155
Carpools ⁽¹⁾	1462	808	789	307
Vanpools	0	200	0	160
Single Occ. ⁽²⁾	—	7188	—	3849
Violators	17	—	3	—
TOTAL	1737	10720	961	5475

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	1.4 persons/veh		1.4 persons/veh	
Overall occupancy (incl. buses)	1.5 persons/veh		1.4 persons/veh	
Violation rate ⁽³⁾ (HOV Lane)	2.2 %		0.7 %	

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

(2) Mixed flow lanes only.

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

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

(5) Observations conducted 05/22/12 at Corby st.

SONOMA-101

Route 12 to Wilfred Avenue

Southbound - P.M.

Typical data for 2012 ⁽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	59	36	25	28
Buses	17	49	3	12
Carpools ⁽¹⁾	2329	869	751	176
Vanpools	3	20	0	0
Single Occ. ⁽²⁾	—	11428	—	3563
Violators	26	—	1	—
TOTAL	2434	12402	780	3779

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	59	36	25	28
Buses	595	1715	105	420
Carpools ⁽¹⁾	4873	1738	1571	352
Vanpools	30	200	0	0
Single Occ. ⁽²⁾	—	11428	—	3563
Violators	26	—	1	—
TOTAL	5583	15117	1702	4363

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		1.2 persons/veh	
Overall occupancy (incl. buses)	1.4 persons/veh		1.3 persons/veh	
Violation rate ⁽³⁾ (HOV Lane)	1.1 %		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 05/15/12 at Corby st.

SONOMA-101

Wilfred Avenue to Route 12

Northbound - A.M.

Typical data for 2012 ⁽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	24	21	20
Buses	2	14	1	8
Carpools ⁽¹⁾	662	323	346	126
Vanpools	4	10	2	6
Single Occ. ⁽²⁾	—	6847	—	3458
Violators	21	—	6	—
TOTAL	721	7218	376	3618

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	24	21	20
Buses	70	490	35	280
Carpools ⁽¹⁾	1352	760	706	276
Vanpools	40	100	20	60
Single Occ. ⁽²⁾	—	6847	—	3458
Violators	21	—	6	—
TOTAL	1515	8221	788	4094

RATES	PEAK PERIOD ⁽⁴⁾ 7:00 - 9:00 AM		PEAK HOUR 8:00 - 9:00 AM	
	HOV Lane occupancy rate	2.1 persons/veh		2.1 persons/veh
Mixed Flow occupancy rate	1.1 persons/veh		1.1 persons/veh	
Overall occupancy (incl. buses)	1.2 persons/veh		1.2 persons/veh	
Violation rate ⁽³⁾ (HOV Lane)	2.9 %		1.6 %	

- 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 05/17/12 at Days inn parking lot.

SONOMA-101

Wilfred Avenue to Route 12

Northbound - P.M.

Typical data for 2012 ⁽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	117	69	45	17
Buses	21	25	6	4
Carpools ⁽¹⁾	1623	1323	486	343
Vanpools	9	20	2	0
Single Occ. ⁽²⁾	—	11653	—	3486
Violators	20	—	5	—
TOTAL	1790	13090	544	3850

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	117	69	45	17
Buses	735	875	210	140
Carpools ⁽¹⁾	3331	2898	998	753
Vanpools	90	200	20	0
Single Occ. ⁽²⁾	—	11653	—	3486
Violators	20	—	5	—
TOTAL	4293	15695	1278	4396

RATES	PEAK PERIOD ⁽⁴⁾ 3:00 - 6:30 PM		PEAK HOUR 5:00 - 6:00 PM	
	HOV Lane occupancy rate	2.4 persons/veh		2.4 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)	1.1 %		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 3:00 to 6:30 P.M.
 (5) Observations conducted 05/10/12 at Days inn parking lot.

SONOMA-101

Route 12 to Wilfred Avenue

Violation History

Southbound

	DATE	PERIOD MONITORED	TOTAL HOVL VOLUME	VIOLATION RATE
A.M. PEAK	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%
	Thu Apr 10, 2003	6:30 - 9:30 AM	997	4.8%
	Tue Dec 10, 2002	6:30 - 9:30 AM	951	5.8%
P.M. PEAK	Tue May 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 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%
	Wed Apr 9, 2003	6:30 - 9:30 AM	839	6.0%
	Thu Dec 5, 2002	6:30 - 9:30 AM	696	6.6%
P.M. PEAK	Thu 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 2012 ⁽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	19	0	8	0
Buses	8	31	5	14
Carpools ⁽¹⁾	762	290	451	198
Vanpools	0	0	0	0
Single Occ. ⁽²⁾	—	6639	—	3473
Violators	11	—	4	—
TOTAL	800	6960	468	3685

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	19	0	8	0
Buses	280	1085	175	490
Carpools ⁽¹⁾	1583	580	938	396
Vanpools	0	0	0	0
Single Occ. ⁽²⁾	—	6639	—	3473
Violators	11	—	4	—
TOTAL	1893	8304	1125	4359

RATES	PEAK PERIOD ⁽⁴⁾ 7:00 - 9:00 AM		PEAK HOUR 8:00 - 9:00 AM	
	HOV Lane occupancy rate	2.4 persons/veh		2.4 persons/veh
Mixed Flow occupancy rate	1.2 persons/veh		1.2 persons/veh	
Overall occupancy (incl. buses)	1.3 persons/veh		1.3 persons/veh	
Violation rate ⁽³⁾ (HOV Lane)	1.4 %		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 7:00 to 9:00 A.M.

5) Observations conducted 11/01/12 at s/o serra rd/truck check brake area.

SONOMA-101

Wilfred Avenue to Old Redwood Highway

Southbound - P.M.

Typical data for 2012 ⁽⁵⁾

VEHICLES	PEAK PERIOD ⁽⁴⁾ 3:00 - 6:30 PM		PEAK HOUR 3:00 - 4:00 PM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	44	8	10	4
Buses	13	46	2	10
Carpools ⁽¹⁾	1679	1068	507	203
Vanpools	9	4	2	0
Single Occ. ⁽²⁾	—	8763	—	2678
Violators	21	—	0	—
TOTAL	1766	9889	521	2895

PERSONS	PEAK PERIOD ⁽⁴⁾ 3:00 - 6:30 PM		PEAK HOUR 3:00 - 4:00 PM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	44	8	10	4
Buses	455	1610	70	350
Carpools ⁽¹⁾	3471	2156	1053	406
Vanpools	90	40	20	0
Single Occ. ⁽²⁾	—	8763	—	2678
Violators	21	—	0	—
TOTAL	4081	12577	1153	3438

RATES	PEAK PERIOD ⁽⁴⁾ 3:00 - 6:30 PM		PEAK HOUR 3:00 - 4:00 PM	
	HOV Lane occupancy rate	2.3 persons/veh		2.2 persons/veh
Mixed Flow occupancy rate	1.3 persons/veh		1.2 persons/veh	
Overall occupancy (incl. buses)	1.4 persons/veh		1.3 persons/veh	
Violation rate ⁽³⁾ (HOV Lane)	1.2 %		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 04/18/12 at s/o serra rd/check brake area.

SONOMA-101

Old Redwood Highway to Wilfred Avenue

Northbound - A.M.

Typical data for 2012 ⁽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	17	0	6	0
Buses	0	4	0	0
Carpools ⁽¹⁾	452	188	252	76
Vanpools	5	0	2	0
Single Occ. ⁽²⁾	—	4963	—	2752
Violators	16	—	7	—
TOTAL	490	5155	267	2828

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	17	0	6	0
Buses	0	140	0	0
Carpools ⁽¹⁾	918	394	508	163
Vanpools	50	0	20	0
Single Occ. ⁽²⁾	—	4963	—	2752
Violators	16	—	7	—
TOTAL	1001	5497	541	2915

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		1.0 persons/veh	
Overall occupancy (incl. buses)	1.2 persons/veh		1.1 persons/veh	
Violation rate ⁽³⁾ (HOV Lane)	3.3 %		2.6 %	

- 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 05/02/12 at south of serra road.

SONOMA-101

Old Redwood Highway to Wilfred Avenue

Northbound - P.M.

Typical data for 2012 ⁽⁵⁾

VEHICLES	PEAK PERIOD ⁽⁴⁾ 3:00 - 6:30 PM		PEAK HOUR 3:00 - 4:00 PM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	86	12	31	4
Buses	16	32	5	12
Carpools ⁽¹⁾	1993	1175	567	384
Vanpools	8	28	4	10
Single Occ. ⁽²⁾	—	11781	—	3415
Violators	32	—	1	—
TOTAL	2135	13028	608	3825

PERSONS	PEAK PERIOD ⁽⁴⁾ 3:00 - 6:30 PM		PEAK HOUR 3:00 - 4:00 PM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	86	12	31	4
Buses	560	1120	175	420
Carpools ⁽¹⁾	4165	2589	1212	860
Vanpools	80	280	40	100
Single Occ. ⁽²⁾	—	11781	—	3415
Violators	32	—	1	—
TOTAL	4923	15782	1459	4799

RATES	PEAK PERIOD ⁽⁴⁾ 3:00 - 6:30 PM		PEAK HOUR 3:00 - 4:00 PM	
	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
HOV Lane occupancy rate	2.3 persons/veh		2.4 persons/veh	
Mixed Flow occupancy rate	1.2 persons/veh		1.3 persons/veh	
Overall occupancy (incl. buses)	1.4 persons/veh		1.4 persons/veh	
Violation rate ⁽³⁾ (HOV Lane)	1.5 %		0.2 %	

- NOTES:** (1) Two or more occupants per vehicle.
 (2) Mixed flow lanes only.
 (3) Violation rate = $\frac{\text{no. of violators in HOV lane} \times 100\%}{\text{Total no. of vehicles in HOV lane}}$
 (4) HOV lane in operation from 3:00 to 6:30 P.M.
 (5) Observations conducted 10/18/12 at South of serra road.

SONOMA-101

Wilfred Avenue to Old Redwood Highway

Violation History

Southbound

	DATE	PERIOD MONITORED	TOTAL HOVL VOLUME	VIOLATION RATE
A.M. PEAK	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	Wed Apr 18, 2012	3:00 - 6:30 PM	1766	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

Old Redwood Highway to Wilfred Avenue

Violation History

Northbound

	DATE	PERIOD MONITORED	TOTAL HOVL VOLUME	VIOLATION RATE
A.M. PEAK	Wed May 2, 2012	7:00 - 9:00 AM	490	3.3%
P.M. PEAK	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.