2001

District 4 HOV REPORT



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

February 2002



California Department of Transportation
District 4 Oakland
Office of Highway Operations



TABLE OF CONTENTS

INTRODUCTIO	JN	
Acknowledger Map of Existin	nentsg HOV Lanes	
HOV FACILITI	ES SUMMARIES	
Existing Mainli Metered On-R Non-Metered I Mainline HOV Programmed I	HOV Lanes vs. Mixed Flow Lanes	9 10 11 12
2001 DATA SU	JMMARIES	
HOV & Non-Ho HOV Lane Pea HOV Lane Pea	ak Hour VolumesOV Lane Peak Hour Comparisonsak Period Violation Ratesak Hour Time Savings/Average Speeds	18 19
Mainline HOV	Lanes	23
	DV Bypass Lanes	
	PERSON DATA & VIOLATION HISTORY	
ALA-80 ALA-80	San Francisco-Oakland Bay Bridge Toll Plaza HOV Ramp Flyover [Powell Street to SFOBB]	37
ALA-80	Contra Costa County Line to Powell St	
ALA-84	Dumbarton Bridge Toll Plaza	
ALA-92	San Mateo-Hayward Bridge Toll Plaza	
ALA-880	South of Marina Boulevard to Whipple Road	55
ALA-880	Whipple Rd to Mission Blvd	
ALA-880	16th Street to SFOBB Toll Plaza	
CC-4	West of Railroad Ave. to Port Chicago Highway	
CC-80 CC-680	Rte 4 to Alameda County Line Livorna Road to Alcosta Boulevard	
MRN-101	Richardson Bay Bridge to Greenbrae I/C	
MRN-101	N. San Pedro to Route 37	
SCL-85	Route 101 [Mountain View] to Route 280	
SCL-85	Route 280 to Almaden Expressway	
SCL-85	Almaden Expressway to Route 101[So. San Jose]	
SCL-101	SM/SCI Co. Line to Ellis Street	
SCL-101 SCL-101	Ellis Street to Guadalupe ParkwayGuadalupe Parkway to Route 280/680 I/C	
SCL-101	Route 280/680 I/C to Bernal Road	
SCL-237	Mathilda Avenue to Route 880	
SCL-280	Magdalena Avenue to Leland Avenue	
SF-80	HOV-only on-ramp [Sterling Street on-ramp]	
SM-101	Whipple Avenue to SM/SCI Co. Line	
SOL-80	Carquinez Bridge Toll Plaza	156
HOV TOLL		
	Richmond-San Rafael Bridge Toll Plaza	
	Antioch Bridge Toll Plaza Benicia-Martinez Bridge Toll Plaza	163
	~	

INTRODUCTION

he ANNUAL HOVL REPORT is prepared by the Office of Highway Operations in District 4 of the California Department of Transportation (Caltrans). This report contains information concerning the High Occupancy Vehicle (HOV) lanes on the San Francisco Bay Area freeway system. Traffic performance data for calendar year 2001 for all mainline HOV lanes and HOV toll gates are provided, including volumes, vehicle occupancies, and violation rates. Data for this report is collected twice annually—once in the Spring and once in the Fall—when normal commute traffic patterns and conditions generally occur. Volumes and occupancy data for HOV bypass lanes at metered freeway on-ramps are not included in this annual report. However, general information on these ramps is included.

Major changes in 2001:

- The westbound Route 92 HOV lane on the east approach to the San Mateo/ Hayward Bridge in Alameda County was extended easterly to Hesperian Boulevard in July 2001. Also, the HOV lane was shifted from the right side to the left side, in the median.
- The westbound Route 4 HOV lane in CC County was extended to Railroad Avenue on July 23, 2001. On August 6, 2001, a new eastbound HOV lane was opened on Route 4 in Contra Costa County between Port Chicago Highway interchange and west of Railroad Avenue.

ACKNOWLEDGMENTS

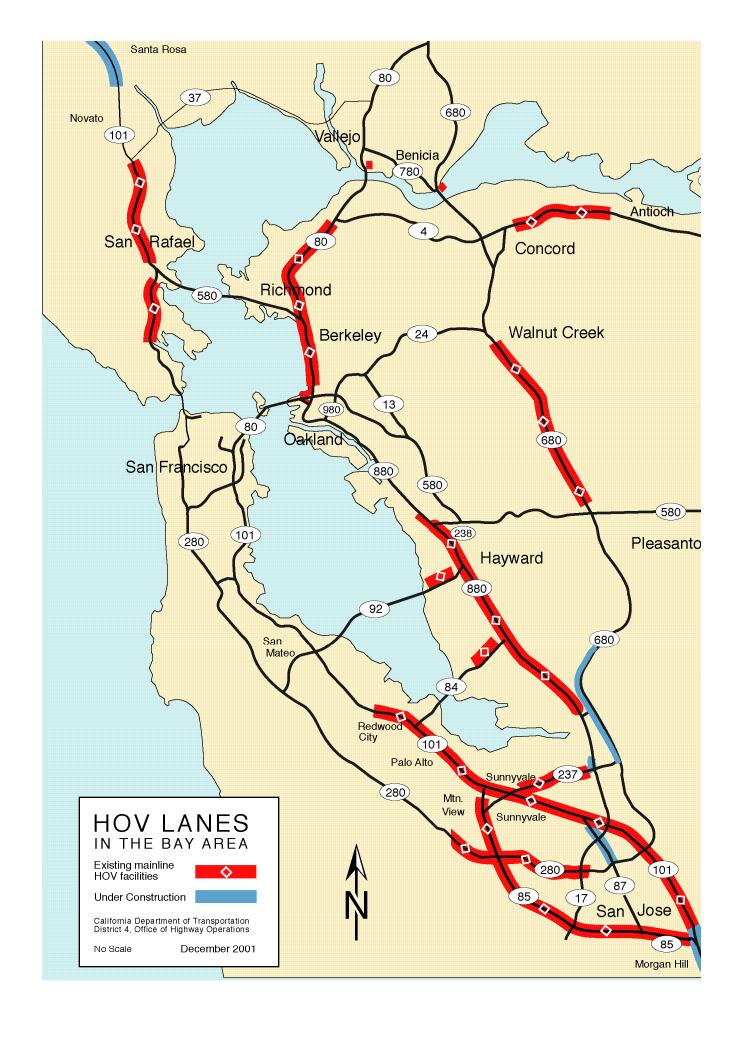
The following Caltrans personnel contributed to the preparation of this report:

H. DAVID SERIANI
District 4 HOV Lane Coordinator

Maria L. Castro, Report Coordinator

Hassan Ahmadi Indra Bhattacharya Roberto Fuertes Jun Magbitang Marvin Maltez Joseline Morales Thuan Tran Mr. H. DAVID SERIANI
District Branch Chief
California Department of Transportation
District 4, Office of Highway Operations
P.O. Box 23660
Oakland, CA 94623-0660
e-mail: David_Seriani@dot.ca.gov

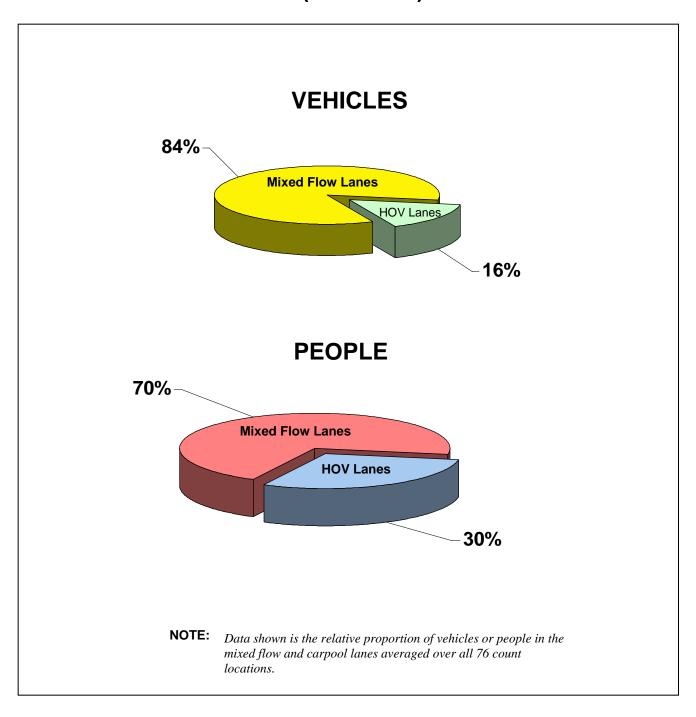
For more information, contact:



HOV FACILITIES SUMMARIES

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

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



District 4 EXISTING MAINLINE HOV LANES

Route	Dir	Limits	Lane- miles			Period of operation *		
ALA-80	W/B	Bay Bridge Toll Plaza	2.9	3+	5-10 AM	3-7 PM		
ALA-80	W/B	Contra Costa Co Line to Powell St	4.2	3+	5-10 AM	3-7 PM		
	E/B	Powell St to Contra Costa Co Line	4.2	3+	5-10 AM	3-7 PM		
ALA-84	W/B	East approach to Dumbarton Bridge	1.8	2+	5-10 AM	3-6 PM		
ALA-92	W/B	Hesperian Blvd. To San Mateo Bridge Toll Plaza	3.0	2+	5-10 AM	3-6 PM		
ALA-880	S/B	Marina Blvd to Mission Blvd	20.3	2+	5-9 AM	3-7 PM		
	N/B	Mission Blvd to South of Rte 238 I/C	16.9	2+	5-9 AM	3-7 PM		
ALA-880	N/B	16th Street to SFOBB Toll Plaza	1.2	3+	5- 10 AM	3-7 PM		
CC-04	W/B	West of Railroad Ave. to Port Chicago Hwy	7.0	2+	6-9 AM			
	E/B	Port Chicago Hwy to West of Railroad Ave.	7.5	2+		3-7 PM		
CC-80	W/B	Rte 4 to Alameda County Line	9.7	3+	5-10 AM	3-7 PM		
	E/B	Alameda County Line to Rte 4	9.9	3+	5-10 AM	3-7 PM		
CC-680	S/B	Livorna Rd to Alcosta Blvd	12.8	2+	6-9 AM	3-6 PM		
	N/B	Alcosta Blvd to Livorna Rd	11.9	2+	6-9 AM	3-6 PM		
MRN-101	S/B	Greenbrae ped o/c to Strawberry ped o/c	3.7	2+	6:30-8:30	AM		
	N/B	S/O Richardson Bay Br to Corte Madera	3.5	2+	4:30-7:00	PM		
MRN-101	S/B	Rte 37 to San Pedro Rd	6.1	2+	6:30-8:30	AM		
	N/B	San Pedro Rd to Rte 37	6.1	2+	4:30-7:00	PM		
SCL-85	S/B	Rte 101 (Mountain View) to Bernal Rd	23.3	2+	5-9 AM	3-7 PM		
	N/B	Rte 101 (So. San Jose) to Rte 101 (Mt. View)	23.8	2+	5-9 AM	3-7 PM		
SCL-101	S/B	San Mateo Co. Line to Bernal Rd	25.0	2+	5-9 AM	3-7 PM		
	N/B	Bernal Rd to San Mateo Co. Line	24.2	2+	5-9 AM	3-7 PM		
SCL-237	W/B	Rte 880 to Mathilda Ave	5.2	2+	5-9 AM	3-7 PM		
	E/B	Mathilda Ave to one mile w/o Rte 880	5.1	2+	5-9 AM	3-7 PM		
SCL-280	S/B	Magdalena Ave to Meridian Ave	11.2	2+	5-9 AM	3-7 PM		
	N/B	Leland Ave to Magdalena Ave	10.7	2+	5-9 AM	3-7 PM		
SM-101	S/B	Whipple Ave to Santa Clara Co. Line	6.6	2+	5-9 AM	3-7 PM		
	N/B	Santa Clara Co. Line to Whipple Ave	6.6	2+	5- 9 AM	3-7 PM		
SOL-80	E/B	Carquinez Bridge Toll Plaza	0.1	3+	5-10 AM	3-7 PM		

TOTAL EXISTING LANE-MILES

274.5

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

District 4 METERED ON-RAMPS with HOV BYPASS LANES

Route	Dir	Ramp	Hours	HOVL metered?	Date opened	Notes
SCI-85	NB	NB Rte 101 connector	5-9am & 3-7pm	Yes	Aug 26, 1994	Monday - Friday
SCI-85	NB	Bernal Rd diag	24 hrs	Yes	Aug 26, 1994	
SCI-85	NB	Great Oaks Blvd diag	24 hrs	Yes	Aug 19, 1994	
SCI-85	NB	Cottle Rd diag	24 hrs	Yes	Aug 19, 1994	
SCI-85	NB	Blossom Hill Rd loop	24 hrs	Yes	Aug 19, 1994	
SCI-85	NB	Santa Teresa Blvd loop	24 hrs	Yes	Oct 19, 1994	
SCI-85	NB	Almaden Expwy (nb) loop	24 hrs	Yes	Mar 19, 1999	
SCI-85	NB	Bascom Ave diag	24 hrs	Yes	Oct 19, 1994	
SCI-85	NB	Winchester Blvd diag	24 hrs	Yes	Nov 14, 1994	
SCI-85	NB	Saratoga Ave diag	24 hrs	Yes	Oct 20, 1994	
SCI-85	SB	Almaden Expwy diag	24 hrs	Yes	Oct. 19, 1994	
SCI-85	SB	Bascom Ave diag	24 hrs	Yes	Oct 19, 1994	
SCI-85	SB	Camden Ave diag	24 hrs	Yes	Apr 4, 1995	
SCI-85	SB	Stevens Creek diag	24 hrs	Yes	Oct 19, 1994	
SCI-101	NB	Bernal Rd loop	24 hrs	Yes	Jun 10, 1996	
SCI-101	NB	Blossom Hill diag	24 hrs	Yes	Jun 23, 1992	
SCI-101	NB	Capitol Expwy diag	24 hrs	Yes	Jul 11, 1997	
SCI-101	NB	SB Rte 680 connector	6-9 am	No	Sep 2, 1982	Monday - Friday
SCI-101	NB	Guadalupe Pkwy connector	5-9 am	Yes	Feb 12, 1980	Monday - Friday
SCI-101	NB	Trimble Rd diag	24 hrs	Yes	Nov 1, 1991	
SCI-101	NB	Montague Expwy diag	24 hrs	Yes	Feb 12, 1980	
SCL-101	NB	Lawrence Expwy (nb) loop	24 hrs	Yes	Mar 8, 1999	
SCL-101	NB	Lawrence Expwy (sb)diag	24 hrs	Yes	Mar 8, 1999	
SCI-101	NB	San Tomas Expwy loop	6-9 am	No	Feb 12, 1980	Monday - Friday
SCI-237	EB	Lawrence Expwy diag	24 hrs	Yes	Aug. 14, 1998	
SCI-237	EB	Great America Pkwy diag	24 hrs	Yes	Sep 24, 1996	
SCI-237	EB	N. First Street diag	24 hrs	Yes	Sep 24, 1996	
SCI-237	EB	Zanker Rd diag	24 hrs	Yes	Sep 24, 1996	
SCI-280	NB	Wolfe Rd loop	6-9 am	Yes	Jun 8, 1976	Monday - Friday
SCI-280	SB	Wolfe Rd loop	24 hrs	Yes	Apr 27, 1993	
SCI-280	SB	Wolfe Rd diag	24 hrs	Yes	Apr 27, 1993	
SCI-280	SB	De Anza Blvd diag	24 hrs	Yes	Apr 27, 1993	
Ala-880	NB	Fremont Blvd loop	24 hrs	Yes	Oct 20, 1999	
Ala-880	NB	Auto Mall Pkwy(Durham) loop	24 hrs	Yes	Oct 20, 1999	
Ala-880	NB	Auto Mall Pkwy(Durham)diag	24 hrs	Yes	Oct 20, 1999	
Ala-880	NB	Stevenson Blvd. diagonal	24 hrs	Yes	Oct 20, 1999	
Ala-880	NB	E/B Mowry Ave loop	24 hrs	Yes	Oct 20, 1999	
Ala-880	NB	Thornton Ave loop	24 hrs	Yes	Oct 20, 1999	
Ala-880	NB	Thornton Ave diagonal	24 hrs	Yes	Oct 20, 1999	
Ala-880	NB	Alvarado-Fremont Blvd diag	24 hrs	Yes	Oct 20, 1999	

District 4 METERED ON-RAMPS with HOV BYPASS LANES

Route	Dir	Ramp	Hours	HOVL metered?	Date opened	Notes
Ala-880	NB	Alvarado-Niles Rd diagonal	24 hrs	Yes	Oct 20, 1999	
Ala-880	NB	Industrial Parkway diagonal	24 hrs	Yes	Dec 3, 1996	
Ala-880	NB	Tennyson Rd diag	24 hrs	Yes	Dec 3, 1996	
Ala-880	NB	West A-Street diag	24 hrs	Yes	Dec 3, 1996	
Ala-880	NB	Lewelling Blvd diagonal	24 hrs	Yes	Apr 28, 1999	
Ala-880	NB	98th Ave loop	24 hrs	Yes	Apr 28, 1999	
Ala-880	NB	E/B 23rd Ave. diag	24 hrs	Yes	Apr 28, 1999	
Ala-880	SB	Fremont Blvd. diag	24 hrs	Yes	Oct 19, 1999	
Ala-880	SB	Fremont Blvd. loop	24 hrs	Yes	Oct 19, 1999	
Ala-880	SB	Auto Mall Pkwy(Durham)Diag	24 hrs	Yes	Oct 19, 1999	
Ala-880	SB	Auto Mall Pkwy(Durham)loop	24 hrs	Yes	Oct 19, 1999	
Ala-880	SB	W/B Mowry Ave loop	24 hrs	Yes	Oct 19, 1999	
Ala-880	SB	Thornton Ave. diagonal	24 hrs	Yes	Oct 19, 1999	
Ala-880	SB	Thornton Ave. loop	24 hrs	Yes	Oct 19, 1999	
Ala-880	SB	Alvarado-Fremont Blvd diag	24 hrs	Yes	Oct 19, 1999	
Ala-880	SB	Alvarado-Niles Rd diagonal	24 hrs	Yes	Oct 19, 1999	
Ala-880	SB	Alvarado-Niles Rd loop	24 hrs	Yes	Oct 19, 1999	
Ala-880	SB	Whipple Rd diag	24 hrs	Yes	Oct 29, 1996	
Ala-880	SB	Tennyson Rd diag	24 hrs	Yes	Oct 29, 1996	
Ala-880	SB	Winton Ave diag	24 hrs	Yes	Oct 29, 1996	
Ala-880	SB	West A-Street diag	24 hrs	Yes	Oct 29, 1996	
Ala-880	SB	E/B Davis St(Route 112) diag	24 hrs	Yes	Apr 27, 1999	
Ala-880	SB	W/B Davis St(Route 112)loop	24 hrs	Yes	Apr 27, 1999	
Ala-880	SB	98th Ave diagonal	24 hrs	Yes	Apr 27, 1999	
Ala-880	SB	Hegenberger diagonal	24 hrs	Yes	Apr 27, 1999	
Ala-880	SB	Oak St. diagonal	24 hrs	Yes	Apr 27, 1999	

NOTES

- (a) Minimum occupancy requirement for all HOV bypass lanes is two persons per vehicle.
- (b) Motorcycles are permitted.
- (c) Bypass lane restrictions are in effect 7 days a week unless noted otherwise.

NON-METERED HOV LANE ON-RAMP

Route	Dir	Ramp	Hours	HOVL metered?	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, and motorcycles are permitted.

District 4 HOV LANES UNDER CONSTRUCTION

				Min.
Est. Opening	Route	Limits	Lane-miles	Occ.
Summer 2003	SB SCL-87	Rte 101 I/C to Julian Street	2.8	2+
Summer 2003	NB SCL-87	Julian Street to Rte 101 I/C	2.8	2+
Summer 2003	NB SCL-101	Cochrane Road to Bernal Road	9.8	2+
Summer 2003	SB SCL-101	Bernal Road to Cochrane Road	9.8	2+
Fall 2002	SB ALA/SCL-680	Between Rte 84 to Rte 237 (Phase 2)	14.0	2+
Summer 2003	NB SON-101	Wilfred Avenue to Rte 12	5.0	2+
Summer 2003	SB SON-101	Rte 12 to Wilfred Avenue	5.0	2+

TOTAL LANE-MILES UNDER CONSTRUCTION 49.2

District 4 PROGRAMMED HOVL PROJECTS (From 2000 UPDATED STIP)

County Route	EA	Location	Construct year	Cost (Prog. year)	Lane miles
ALA-80	254800	SFOBB Toll Plaza to Powell StEB	2003	\$3,420,000	1.1
ALA/SCL-680	253721	Rte 84 to Rte 237-SB (Phase 3)	2003	\$27,200,000	14.0
ALA/SCL-680	28600K	Rte 84 to Rte 237-NB	2004	\$42,300,000	14.0
ALA/SCL-880	233220	Mission to Route 237	2003	\$32,900,000	4.4
CC-80	263700	Rte 4 to Carquinez Bridge WB	2004	\$6,500,000	2.7
CC-680	228561	N. Main St to Marina Vista	2002	\$31,600,000	17.4
MRN-101	226121	Corte Madera Cr. to 580/101 Separation	2003	\$11,700,000	1.3
MRN-101	226131	Greenbrae POC to Corte Madera Cr.	2004	\$7,400,000	0.1
MRN-101	226141	Coleman School POC to N. San Pedro Rd	2004	\$40,000,000	1.6
MRN-101	226151	580/101 Separation to San Rafael Viaduct	2005	\$28,300,000	1.6
MRN/SON-101	264001	Rte 101 Novato Narrows Freeway Upgrade	-	\$5,000,000*	33.7
SON-101	129650	Rohnert Park Expwy. to Santa Rosa Ave.	2003	\$8,400,000	3.2
SON-101	263900	Steel Lane to Bicentenial Way	2004	\$9,900,000	1.2
SON-101	245400	Rte 12 to Steele Lane	2004	\$61,600,000	4.2

TOTAL \$311,220,000 100.5

PROGRAMMED HOVL PROJECTS (Locally Funded)

County Route	EA	Location	Construct year	Cost (Prog. year)	Lane miles
SCL-85/101	438800	Rte 85 and 101 Connectors (Mountain View)	2002	\$25,000,000	1.4
SCL-85/101	438300	Rte 85 and 101 Connectors (San Jose)	2002	\$36,000,000	0.5
SCL-237/880	439700	Rte 237 and 880 Connectors	2002	\$25,000,000	0.3

TOTAL \$86,000,000 2.2

^{*} In planning phase, this cost is for Environmental documents only. Construction cost not available at this time.

District 4 PROPOSED HOVL PROJECTS

County Route	EA	Location	Post-Mile	Cost (Prog. year)	Lane miles
ALA-580	29080K	Tassajara Rd to Vasco Rd (EB, WB)	9.6/17.9	\$60,500,000	16.6
SCL-87	43960K	Julian St. to Rte 280 I/C (NB, SB)	6.3/9.3	\$33,000,000	2.4
SCL-87	43960K	Rte 280 I/C to Santa Teresa Bl. (NB,SB)	0.5/6.3	\$27,000,000	9.8
SON-101	OA100K	Steel Lane to Windsor River	21.7/29.3	\$85,800,000	15.2
SON-101	OA180K	Old Redwood Hwy to Rohnert Park Expwy	7.5/13.9	\$45,400,000	12.8

TOTAL	\$251,700,000	56.8

2001 DATA SUMMARIES

- HOV Lane Peak Hour Volumes
- HOV & Non-HOV Lane Peak Hour Comparisons
- HOV Lane Peak Period Violation Rates
- HOV Lane Peak Hour Time Savings

HOV LANE PEAK HOUR VOLUMES

			A.M. Peak Hr (veh)	P.M. Peak Hr (veh)
ALA-80	WB	Bay Bridge Toll Plaza	3975	984
ALA-80	WB	Contra Costa County Line to Powell St	1555	374
	EB	Powell St to Contra Costa County Line	169	1080
ALA-84	WB	Dumbarton Bridge Toll Plaza	1354	334
ALA-92	WB	San Mateo Bridge Toll Plaza	746	378
ALA-880	SB	Marina Blvd to Whipple Road	1291	996
		Whipple Road to Mission Blvd.	1133	697
	NB	Mission Blvd to Whipple Road	332	1136
		Whipple Road to South of Rte 238 I/C	745	1338
ALA-880	NB	16th St to SFOBB Toll Plaza	963	121
CC-04	WB	West of Railroad Ave. to Port Chicago Hwy	617	_
	EB	Port Chicago Hwy to West of Railroad Ave.	_	691
CC-80	WB	Route 4 to Alameda County Line	1317	325
	EB	Alameda County Line to Route 4	143	1322
CC-680	SB	Livorna Rd. to Alcosta Blvd.	826	762
	NB	Alcosta Blvd. to Livorna Rd.	756	1383
MRN-101	SB	Rte 37 to N. San Pedro Rd	1361	_
		Greenbrae I/C to Richardson Bay Bridge	769	_
	NB	Richardson Bay Bridge to Greenbrae I/C	_	682
		N. San Pedro Rd to Rte 37	_	797
SCL-85	SB	Rte 101 (Mountain View) to Rte 280	267	1096
		Rte 280 to Almaden Expwy	187	1068
		Almaden Expwy to Rte 101 (So. San Jose)	239	849
	NB	Rte 101 (So. San Jose) to Almaden Expwy	517	329
		Almaden Expwy to Rte 280	1409	381
		Rte 280 to Rte 101 (Mountain View)	921	398
SCL-101	SB	San Mateo Co. Line to Ellis St	1022	856
		Ellis St to Guadalupe Pkwy	271	1331
		Guadalupe Pkwy to 101/280/680 I/C	114	1013
		101/280/680 I/C to Bernal Rd	265	603
	NB	Bernal Rd to 101/280/680 I/C	993	383
		101/280/680 I/C to Guadalupe Pkwy	1594	513
		Guadalupe Pkwy to Ellis St	638	636
		Ellis St to San Mateo Co. Line	852	1064
SCL-237	WB	Rte 880 to Mathilda Ave	776	473
	EB	Mathilda Ave to Rte 880	363	560
SCL-280	SB	Magdalena Ave to Leland Ave	267	860
	NB	Leland Ave to Magdalena Ave	578	477
SM-101	SB	Whipple Ave to Santa Clara Co. Line	711	766
	NB	Santa Clara Co. Line to Whipple Ave	693	722
SOL-80	EB	Carquinez Bridge Toll Plaza	218	963

2001 PEAK HOUR HOV & non-HOV LANE COMPARISONS

				% of al	Vehicles	% of all Persons			
				in HOVL	in Non- HOVL	in HOVL	in Non- HOVL	Number of Non-HOV Lanes	in Non- HOVL (Avg per Lane)
ALA-80	WB	Bay Bridge Toll Plaza	AM PM	* 43% * 13%	** 57% ** 87%	* 70% * 33%	** 30% ** 67%	18 18	2% 4%
SOL-80	EB	Carquinez Bridge	AM PM	8% 20%	92% 80%	21% 45%	79% 55%	11 11	7% 5%
ALA-84	WB	Dumbarton Bridge Toll Plaza	AM	32%	68%	51%	49%	3	24%
ALA-92	WB	San Mateo Bridge Toll Plaza	PM AM	20% 18%	80% 82%	37% 32%	63% 68%	3	32% 34%
ALA-80	WB	Contra Costa County Line to Powell Street	PM AM	15% 17%	85% 83%	31% 35%	69% 65%	3 4	34% 16%
	EB	Powell Street to Contra Costa County Line	PM AM	6% 2%	94% 98%	11% 7%	89% 93%	4	22% 23%
ALA-880	SB	Marina Blvd to Whipple Rd	PM AM	14% 21%	86% 79%	30% 33%	70% 67%	3	17% 22%
	-	Whipple Rd to Mission Blvd	PM AM	16% 19%	84% 81%	26% 33%	74% 67%	3	25% 22%
	NB		PM AM	16%	84%	25%	75% 100%	3	25%
	IND	Mission Blvd to Whipple Rd	PM	9% 18%	79% 66%	18% 32%	100%	3	10% 22%
		Whipple Rd to South of Rte 238 I/C	AM PM	17% 21%	83% 79%	33% 37%	67% 65%	3 3	22% 22%
ALA-880	NB	16th Street to SFOBB	AM PM	42% 7%	58% 93%	67% 13%	33% 87%	2 2	17% 44%
CC-04	WB	West of Railroad Ave. to Port Chicago Hwy	AM	11%	89%	18%	82%	2	41%
	EB	Port Chicago Hwy to West of Railroad Avenue	PM	16%	84%	28%	72%	2	36%
CC-80	EB	Alameda County Line to Route 4	AM PM	4%	96%	10%	90%	3	30%
	WB	Route 4 to Alameda County Line	AM	21% 19%	79% 81%	43% 44%	57% 56%	3	19% 19%
CC-680	SB	Livorna Rd to Alcosta Blvd	PM AM	7% 13%	93% 87%	19% 25%	81% 75%	3	27% 25%
	NB	Alcosta Blvd to Livorna Rd	PM AM	14% 10%	86% 90%	27% 24%	73% 76%	3	24% 25%
MRN-101	SB	Rte 37 to N. San Pedro Rd	PM AM	22% 25%	78% 75%	36% 43%	64% 57%	3	21% 19%
	NB	Greenbrae I/C to Richardson Bay Brdg Richardson Bay Brdg to Greenbrae I/C	AM	14% 13%	86% 87%	34% 34%	66% 66%	3	22% 22%
		N. San Pedro Rd to Rte 37	PM	11%	89%	27%	73%	3	24%
SM-101	SB	Whipple Ave to Santa Clara Co. Line	AM PM	12% 13%	88% 87%	23% 19%	77% 81%	3 3	26% 27%
	NB	Santa Clara Co. Line to Whipple Ave	AM PM	13% 13%	87% 87%	24% 21%	76% 79%	3 3	25% 26%
SCL-85	SB	Rte 101 (Mtn View) to Rte 280	AM PM	8% 26%	92% 74%	14% 41%	86% 59%	2 2	43% 30%
		Rte 280 to Almaden Expwy	AM PM	5% 21%	95% 79%	9% 34%	91% 66%	2 2	45% 33%
		Almaden Expwy to Rte 101 (So. San Jose)	AM	7%	93%	13%	87%	2	43%
	NB	Rte 101 (So. San Jose) to Almaden Expwy	PM AM	20% 15%	80% 85%	33% 26%	67% 74%	2	34% 37%
		Almaden Expwy to Rte 280	PM AM	8% 27%	92% 73%	12% 43%	88% 57%	2	44% 28%
		Rte 280 to Rte 101 (Mtn View)	PM AM	9% 18%	91% 82%	15% 31%	85% 69%	2 2	42% 34%
SCL-101	SB	San Mateo Co. Line to Ellis St	PM AM	12% 17%	88% 83%	20% 31%	80% 69%	3	40% 23%
002 101	OB		PM	15%	85%	28%	72%	3	24%
		Ellis St to Guadalupe Pkwy	AM PM	6% 23%	94% 77%	13% 36%	87% 64%	3	29% 21%
		Guadalupe Pkwy to 101/280/680 I/C	AM PM	5% 18%	95% 82%	8% 30%	92% 70%	3 3	31% 23%
		101/280/680 I/C to Bernal Rd	AM PM	7% 13%	93% 87%	14% 21%	86% 79%	3 3	29% 26%
	NB	Bernal Rd to 101/280/680 I/C	AM PM	20% 10%	80% 90%	33% 19%	67% 81%	3 3	22% 27%
		101/280/680 I/C to Guadalupe Pkwy	AM PM	23% 11%	77% 89%	38% 20%	62% 80%	3	21% 27%
		Guadalupe Pkwy to Ellis St	AM PM	12% 14%	88% 86%	20% 26%	80% 74%	3 3	27% 27% 25%
		Ellis St to San Mateo Co. Line	AM	15%	85%	26%	74%	3	25%
SCL-237	WB	Rte 880 to Mathilda Ave	PM AM	17% 17%	83% 83%	29% 31%	71% 69%	3	24% 35%
	EB	Mathilda Ave to Rte 880	PM AM	12% 9%	88% 91%	22% 18%	78% 82%	2	39% 41%
SCL-280	SB	Magdalena Ave to Leland Ave	PM AM	16% 6%	84% 94%	28% 12%	72% 88%	3	36% 29%
	NB	Leland Ave to Magdalena Ave	PM AM	15% 10%	85% 90%	27% 18%	73% 82%	3	24% 27%
		OVL's combined.	PM	11%	89%	19%	81%	3	27%

^{*} Total in all 4 HOVL's combined.

^{**} Total in all 18 Non HOVL's combined.
District 4, Year 2001 Annual HOV Lane Report

HOV LANE PEAK PERIOD VIOLATION RATE SUMMARY

			A.M.	P.M.
ALA-80	WB	Bay Bridge Toll Plaza	10.0%	9.8%
ALA-80	WB	Contra Costa County Line to Powell St	13.8%	24.4%
	EB	Powell St to Contra Costa County Line	21.5%	6.5%
ALA-84	WB	Dumbarton Bridge Toll Plaza	3.1%	2.2%
ALA-92	WB	San Mateo Bridge Toll Plaza	8.1%	5.4%
ALA-880	SB	Marina Blvd to Whipple Road	5.2%	3.9%
		Whipple Road to Mission Blvd.	4.8%	3.8%
	NB	Mission Blvd to Whipple Road	9.7%	3.9%
		Whipple Road to South of Rte 238 I/C	5.2%	4.8%
ALA-880	NB	16th St to SFOBB Toll Plaza	15.5% 1	
CC-04	WB	West of Railroad Ave. to Port Chicago Hwy.	7.0%	_
	EB	Port Chicago Hwy to West of Railroad Ave.	_	4.0%
CC-80	WB	Rte 4 to Alameda County Line	8.7%	24.2%
	EB	Alameda County Line to Rte 4	18.3%	4.4%
CC-680	SB	Livorna Rd. to Alcosta Blvd.	5.3%	8.5%
	NB	Alcosta Blvd. to Livorna Rd.	3.0%	5.0%
MRN-101	SB	Rte 37 to N. San Pedro Rd	1.4%	_
		Greenbrae I/C to Richardson Bay Bridge	2.3%	_
	NB	Richardson Bay Bridge to Greenbrae I/C	_	3.9%
		N. San Pedro Rd to Rte 37	_	1.1%
SCL-85	SB	Rte 101 (Mountain View) to Rte 280	4.1%	6.4%
		Rte 280 to Almaden Expwy	5.9%	0.5%
		Almaden Expwy to Rte 101 (So. San Jose)	1.7%	0.2%
	NB	Rte 101 (So. San Jose) to Almaden Expwy	7.3%	8.6%
		Almaden Expwy to Rte 280	6.4%	8.9%
		Rte 280 to Rte 101 (Mountain View)	1.8%	0.4%
SCL-101	SB	San Mateo Co. Line to Ellis St	0.8%	4.4%
		Ellis St to Guadalupe Pkwy	2.1%	3.1%
		Guadalupe Pkwy to 101/280/680 I/C	3.0%	2.6%
		101/280/680 I/C to Bernal Rd	5.4%	0.8%
	NB	Bernal Rd to 101/280/680 I/C	3.5%	5.4%
		101/280/680 I/C to Guadalupe Pkwy	2.9%	5.0%
		Guadalupe Pkwy to Ellis St	0.8%	2.4%
		Ellis St to San Mateo Co. Line	6.0%	3.2%
SCL-237	WB	Rte 880 to Mathilda Ave	5.3%	3.1%
	EB	Mathilda Ave to one mile w/o Rte 880	15.0%	2.1%
SCL-280	SB	Magdalena Ave to Leland Ave	2.7%	1.0%
	NB	Leland Ave to Magdalena Ave	1.6%	0.9%
SM-101	SB	Whipple Ave to Santa Clara Co. Line	2.2%	7.0%
	NB	Santa Clara Co. Line to Whipple Ave	2.1%	0.2%
SOL-80	EB	Carquinez Bridge Toll Plaza	24.5%	1.2%

2001 HOV LANE PEAK HOUR AVERAGE SPEEDS AND TRAVEL TIMES

				Travel Time (minutes) Non-HOVL	Travel Time (minutes) HOVL	HOVL Time Saving (minutes)	Avg. Speed (mph) Non-HOVL	Avg. Speed (mph) HOVL
ALA-80	WB	Bay Bridge Toll Plaza	AM PM	28 6	4 2	24 4	5 22	33 65
ALA-80	WB	Contra Costa County Line to Powell St	AM PM	10 9	6 4	4 5	26 29	43 65
	EB	Powell St to Contra Costa County Line	AM PM	5 14	5 5	0 9	65 23	65 65
ALA-84	WB	Dumbarton Bridge Toll Plaza	AM PM	21	2 2	19 1	6 44	65 65
ALA-92	WB	San Mateo Bridge Toll Plaza	AM	13	3	10	15	65
ALA-880	SB	Marina Blvd. to Whipple Road	PM AM	4 20	3 8	1 12	49 26	65 65
		Whipple Road to Mission Blvd	PM AM	10 51	8 11	2 40	52 14	65 65
	NB	Mission Blvd. to Whipple Road	PM AM	12 15	11 10	<u>1</u>	60 43	65 65
	IND	••	PM	25	10	15	26	65
		Whipple Road to South of Rte 238 I/C	AM PM	11 12	11 11	0 1	65 60	65 65
ALA-880	NB	16th St to SFOBB Toll Plaza	AM PM	34 3	3 2	31 1	4 44	44 65
CC-04	WB	West of Railroad to Port Chicago Hwy	AM	6	6	0	65	65
CC-80	EB WB	Port Chicago Hwy to West of Railroad Ave. Rte 4 to Alameda County Line	PM AM	9 25	7 12	2 13	43 29	65 60
	ЕВ	Alameda County Line to Rte 4	PM AM	11 10	11 10	0	65 65	65 65
		•	PM	18	10	8	36	65
CC-680	SB	Livorna Rd to Alcosta Blvd	AM PM	20 12	12 12	8	39 65	65 65
	NB	Alcosta Blvd to Livorna Rd	AM PM	14 18	11 11	3 7	51 40	65 65
MRN-101	SB	Rte 37 to N. San Pedro Rd	AM	25	12	13	13	27
	NB	Greenbrae I/C to Richardson Bay Brdg Richardson Bay Brdg to Greenbrae I/C	AM PM	5 11	<u>4</u> 8	<u>1</u> 3	52 24	65 33
SCL-85	SB	N. San Pedro Řd to Řte 37 Rte 101 (Mtn View) to Rte 280	PM AM	5 5	5 5	0	65 65	65 65
002-03	OD	, ,	PM	16	5	11	20	65
		Rte 280 to Almaden Expwy	AM PM	11 26	11 11	0 15	65 28	65 65
		Almaden Expwy to Rte 101 (So. San Jose)	AM PM	7 7	5 5	2 2	46 46	65 65
	NB	Rte 101 (So. San Jose) to Almaden Expwy	AM PM	16 7	6	10 1	24 56	65 65
		Almaden Expwy to Rte 280	AM	29	13	16	27	60
		Rte 280 to Rte 101 (Mtn View)	PM AM	13 17	12 5	1 12	60 19	65 65
SCL-101	SB	San Mateo Co. Line to Ellis St	PM AM	5 11	5 5	<u>0</u>	65 30	65 65
	JD		PM	14	5	9	23	65
		Ellis St to Guadalupe Pkwy	AM PM	7 15	6 14	1 1	56 26	65 28
		Guadalupe Pkwy to 101/280/680 I/C	AM PM	5 23	5 11	0 12	65 14	65 30
		101/280/680 I/C to Bernal Rd	AM PM	8 12	7	1 5	57 38	65 65
	NB	Bernal Rd to 101/280/680 I/C	AM	9	8	1	58	65
		101/280/680 I/C to Guadalupe Pkwy	PM AM	9 22	<u>8</u> 9	1 13	58 15	65 36
		Guadalupe Pkwy to Ellis St	PM AM	5 9	5 6	0 3	65 43	65 65
			PM	10	6	4	39	65
		Ellis St to San Mateo Co. Line	AM PM	7 10	5 5	2 5	46 32	65 65
SCL-237	WB	Rte 880 to Mathilda Ave	AM PM	12 10	7 7	5 3	38 46	65 65
	EB	Mathilda Ave to Rte 880	AM PM	10 15	6 12	4 3	39 26	65 33
SCL-280	SB	Magdalena Ave to Leland Ave	AM PM	11 16	10 10	1 6	59 41	65 65
	NB	Leland Ave to Magdalena Ave	AM	18	10	8	36	65
SM-101	SB	Whipple Ave to Santa Clara Co. Line	PM AM	13 16	10 7	3 9	50 28	65 65
J 101			PM	9	7	2	51	65
	NB	Santa Clara Co. Line to Whipple Ave	AM PM	15	6 6	4 9	39 26	65 65
SOL-80	EB	Carquinez Bridge Toll Plaza	AM PM	1 1	1 1	0	65 65	65 65

GENERAL FACILITY INFORMATION

- Mainline HOV Lanes
- Toll Bridge HOV Bypass Lanes

District 4 MAINLINE HOV LANES

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

OCCUPANCY Three or more persons per vehicle, motorcycles permitted, 2-seat vehicles

with 2 persons

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

LIMITS: Lane 1: Route 880 left side HOV ramp to metering signals

Length = 0.4 mile

Lane 2: Route 580 connector to metering signals

Length = 1.1 miles

Lane 21: Route 880 right side HOV ramp to metering signals

Length = 0.6 mile

Lane 22: HOV slip ramp to metering signals

Length = 0.8 miles

DATES: Apr 17, 1970 Opened; Buses only

Dec 8, 1971 Carpools permitted; min. occ. three persons per vehicle Feb 2, 1979 Buses only in lane 17; 6:30-8:30, Mon-Fri-only lane on

W. Grand Ave, approached from Maritime on-ramp to toll plaza;

temporary measure in response to BART tube closure

Apr 17, 1979 Bus-only in lane 17 & W. Grand Ave approach made permanent;

W. Grand Ave slip ramp designated for buses only; hours of operation changed to 6:00-9:00 AM, Mon-Fri; lane 8 reverted to mixed flow; carpools permitted to use lane 10 during AM peak

Oct 12, 1981 Opened; lanes 18 & 19; buses only, 24 hours/day, 7 days/week;

carpools permitted, 6:00-9:00 AM, Mon-Fri; lane 17 reverted to

mixed flow

Jul 18, 1983 Lanes 8 & 9 reverted to mixed flow; lane 1 converted to HOV;

lanes 18/19 merge moved from downstream of toll plaza to

downstream of metering signals

Apr 22, 1986 Mini toll plaza (lane 18, 19, 20) opened; right side HOV lanes

designated as lanes 21 & 22

Nov 3, 1989 Lane 2 converted to HOV; left HOVL extended upstream to 32nd

St on-ramp; AM HOV hours changed to 5:00- 10:00 AM, Mon-Fri

Mar 1, 1992 Motorcycles permitted

Oct 1, 1995 Two-seat vehicles with two occupants permitted

Apr 8, 1997 HOV slip ramp approaching right side of toll plaza opened;

buses only, 24 hours/day, 7 days/week; carpools/motorcycles

OK, 5:00-10:00 AM, 3:00-6:00 PM, Mon-Fri

Jul 23, 1997 Route 880 right side HOV ramp opened; buses only, 24 hours/day,

7 days/week; carpools/motorcycles OK, 5:00-10:00 AM;

3:00-6:00 PM, Mon-Fri

Feb. 2, 1998 PM Hours of operation changed to 3:00-7:00 PM

May 16, 1998 Route 880 left side HOV ramp opened; buses/carpools/

motorcycles only, 5:00-10:00 AM, 3:00-7:00 PM, Mon-Fri

ALA-80: Contra Costa County Line to Powell St

OCCUPANCY Three or more persons per vehicle, motorcycles permitted,

2-seat vehicles with 2 persons

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: Powell St (MP 3.8) to Contra Costa County Line (MP 8.0)

Length = 4.2 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

ALA-84: Dumbarton Bridge Toll Plaza

OCCUPANCY Two or more persons per vehicle, motorcycles permitted

WESTBOUND HOURS: 5:00 - 10:00 AM, 3:00 - 6:00 PM, Monday thru Friday

LIMITS: Newark Blvd U/C (MP 4.9) to west of Toll Plaza (MP 3.1)

Length = 1.8 miles

DATES: Oct 6, 1982 Opened with new bridge; 1000-ft long bypass lane at booths

Nov 22, 1989 Extended due to Loma Prieta quake; Newark Blvd to

University Ave

Nov 17, 1990 Shortened; Newark Blvd to west of Toll Plaza

Jan 1, 1992 Minimum occupancy reduced from three to two persons per vehicle

NOTE: HOV lane is located on the left side.

ALA-92: San Mateo Bridge Toll Plaza

OCCUPANCY Two or more persons per vehicle, motorcycles permitted

WESTBOUND HOURS: 5:00 - 10:00 AM, 3:00 - 6:00 PM, Monday thru Friday

LIMITS: Hesperian on-ramp (MP 5.6) to west of Toll Plaza (MP 2.5)

Length = 3.0 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

NOTE: HOV lane is now located on the left side.

ALA 880: Marina Blvd to Mission Blvd (Rte 262)

OCCUPANCY Two or more persons per vehicle, motorcycles permitted

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

LIMITS: Marina Blvd. (MP 22.7) to Mission Blvd. (Rte 262) (MP 2.4)

Length = 20.3 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)

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

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

Length = 23 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

Jun 15, 1998

Oct 30, 1998

Nov 30, 1998

Shortened; Whipple Rd to one mile south of Rte 238

Extended; Alvarado/Fremont Blvd. to Whipple Rd.

Extended; Mowry Ave. to Alvarado/Fremont Blvd.

Extended; Mission Blvd. (Rte 262) to Mowry Ave.

ALA-880: 16th Street to SFOBB Toll Plaza

OCCUPANCY Three or more persons per vehicle, motorcycles permitted,

2-seat vehicles with 2 persons

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

LIMITS: 16th Street to SFOBB Toll Plaza

Length = 1.2 miles

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

CC-4: West of Railroad Ave. to Port Chicago Highway

OCCUPANCY Two or more persons per vehicle, motorcycles permitted.

WESTBOUND HOURS: 6:00 - 9:00 AM, Monday thru Friday

LIMITS: West of Railroad Ave. (MP 22.6) to Port Chicago Highway (MPR16.2)

Length = 7.0 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

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

LIMITS: Port Chicago Highway (MPR 16.2) to West of Railroad Ave. (MPR22.5)

Length = 7.5 miles

DATES: Aug 6, 2001 Opened; Port Chicago Highway to West of Railroad Ave.;

3-7 PM. Mon-Fri.

CC-80 Route 4 to Alameda County Line

OCCUPANCY Three or more persons per vehicle, motorcycles permitted,

2-seat vehicles with 2 persons.

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

LIMITS: Route 4 (MP 9.67) to Alameda County Line (MP 0.0)

Length = 9.7 miles

DATES: Mar 5, 1997 Opened; Pinole Valley Rd to Cutting Blvd; 5-10 AM, Mon-Fri

Apr 18, 1997 2-seat vehicles with 2 persons permitted to use HOVL

May 3, 1997 Extended: Cutting Blvd to Central Ave Sep 20, 1997 Extended; Route 4 to Pinole Valley Rd

Feb 2, 1998 Extended; Central Ave to Alameda County Line;

Hours of operation changed to 5:00 AM-7:00 PM, Mon-Fri

Aug 3, 1998 Hours of operation changed to 5-10 AM, 3-7 PM, Mon-Fri

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

LIMITS: Alameda County Line (MP 0.0) to West of Route 4 off-ramp (MP 9.9)

Length = 9.9 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, Central Ave to Cutting Blvd

Aug 30, 1997 Extended; Pinole Valley Rd to Route 4

Feb 2, 1998 Hours of operation changed to 5:00 AM-7:00 PM, Mon-Fri Aug 3, 1998 Hours of operation changed to 5-10 AM, 3-7 PM, Mon-Fri

Extended; Central Ave to Alameda County Line

CC-680: Livorna Rd to Alcosta Blvd.

NORTHBOUND HOURS: 6:00 - 9:00 AM, 3:00 - 6:00 PM, Monday thru Friday

LIMITS: 0.4 miles south of Alcosta on-ramp (MP R21.6) to Livorna

on-ramp (MP R11.4) 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

SOUTHBOUND HOURS: 6:00 - 9:00 AM, 3:00 - 6:00 PM, Monday thru Friday

LIMITS: 0.5 miles north of Livorna Rd off-ramp (MP R11.9) to 0.6 miles south

of Alcosta Blvd on-ramp (MP R21.6)

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

MRN-101: Richardson Bay Bridge to Greenbrae I/C

OCCUPANCY Two or more persons per vehicle, motorcycles permitted

SOUTHBOUND HOURS: 6:30 - 8:30 AM, Monday thru Friday

LIMITS: North of Greenbrae ped OC (MP 8.4) to south of Strawberry ped OC (MP 4.7)

Length = 3.7 miles

DATES: Dec 23, 1974 Opened; buses only

Jun 16, 1976 Carpools permitted; min. occ. three persons per vehicle

Oct 1, 1988 Minimum occupancy reduced from three to two persons per vehicle

Sep 23, 1990 Motorcycles permitted

Jul 13, 1998 HOV hours extended to 5:00-9:00 AM

Dec 14, 1998 Extended hours cancelled

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

LIMITS: South of Richardson Bay Bridge (MP 4.0) to north of Corte

Madera O/C (MP 7.5) Length = 3.5 miles

DATES: Dec 20, 1974 Opened; buses only

Jun 15, 1976 Carpools permitted; min. occ. three persons per vehicle

Oct 1, 1988 Minimum occupancy reduced from three to two persons per vehicle

Sep 23, 1990 Motorcycles permitted

Jul 13, 1998 HOV hours extended to 3:00-7:00 PM

Dec 14, 1998 Extended hours cancelled

MRN-101: North San Pedro Rd to Rte 37

OCCUPANCY Two or more persons per vehicle, motorcycles permitted

SOUTHBOUND HOURS: 6:30 - 8:30 AM, Monday thru Friday

LIMITS: Route 37/S. Novato Blvd (MP 18.9) to north of San Pedro U/C (MP 12.8)

Length = 6.1 miles

DATES: Jul 24, 1987 Opened; Marinwood to North San Pedro Rd

Oct 1, 1988 Minimum occupancy reduced from three to two persons per vehicle

Sep 23, 1990 Motorcycles permitted

Feb 8, 1991 Extended; Marinwood to Rte 37
Jul 13, 1998 HOV hours extended to 5:00-9:00 AM

Dec 14, 1998 Extended hours cancelled

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

LIMITS: North of San Pedro U/C (MP 12.8) to Route 37/S. Novato Blvd (MP 18.9)

Length = 6.1 miles

DATES: Aug 12, 1986 Opened; North San Pedro to Marinwood

Oct 1, 1988 Minimum occupancy reduced from three to two persons per vehicle

Sep 23, 1990 Motorcycles permitted

Feb 21, 1991 Extended; Marinwood to Rte 37 Jul 13, 1998 HOV hours extended to 3:00-7:00 PM

Dec 14, 1998 Extended hours cancelled

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

OCCUPANCY Two or more persons per vehicle, motorcycles permitted

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

LIMITS: Rte 101 (MP 23.8) to Bernal Rd (MP 0.5)

Length = 23.3 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

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 23.8)

Length = 23.8 miles

DATES: Feb 22, 1990 Opened; Rte 280 to Rte 237

Aug 12, 1994 New section; Rte 101 (So. San Jose) to Almaden Expwy

Oct 19, 1994 Extended; Almaden Expwy to Rte 280

Nov 6, 1998 Extended; Rte 237 to Rte 101 (Mountain View)

SCL-101: San Mateo County Line to Bernal Rd

OCCUPANCY Two or more persons per vehicle, motorcycles permitted

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

LIMITS: San Mateo County Line (M 52.6) to 0.5 mile north of Bernal Rd

off-ramp (MP 27.6) Length = 25.0 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 NORTHBOUND HOURS: 5:00 - 9:00 AM, 3:00 - 7:00 PM, Monday thru Friday

LIMITS: Bernal Rd loop on-ramp (MP 27.0) to San Mateo County Line (MP 51.2)

Length = 24.2 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

SCL-237: Rte 880 to Mathilda Ave

OCCUPANCY Two or more persons per vehicle, motorcycles permitted

(Motorcycles were permitted on Apr 7, 1986)

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

LIMITS: Rte 880/237 merge (MP 9.5) to east of Mathilda Ave (MP 4.3)

Length = 5.2 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)

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

LIMITS: Mathilda Ave (MP 3.0) to 1.1 mile west of Rte 880 (MP 8.1)

Length = 5.1 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

SCL-280: Magdalena Ave to Leland Ave

OCCUPANCY Two or more persons per vehicle, motorcycles permitted

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 = 11.2 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 = 10.7 miles

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

SM-101: Whipple Ave to Santa Clara County Line

OCCUPANCY Two or more persons per vehicle, motorcycles permitted

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

LIMITS: Whipple Ave (MP 6.6) to Santa Clara Co. Line (MP 0.0)

Length = 6.6 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: Carquinez Bridge Toll Plaza

OCCUPANCY Three or more persons per vehicle, motorcycles permitted,

2-seat vehicles with 2 persons

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

LIMITS: 0.1 miles West of Toll Plaza (MP 0.5) to east of Toll Plaza (MP 0.6)

Length = 0.1 mile

DATES: Jul 1, 1991 Reduced 10c toll tickets for HOVs (with purchase of 50-ticket book)

Oct 1, 1995 Toll-free passage in designated booth only;

Two-seat vehicles with two occupants permitted Jul 30, 1997 Opened; West of Toll Plaza to east of Toll Plaza

NOTE: HOV lane is located in toll booth #6

District 4 TOLL BRIDGE HOV BYPASS LANES

Benicia, Antioch Bridges

OCCUPANCY Three or more persons per vehicle, motorcycles permitted, two-seat vehicles

with two occupants

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

TOLL-FREE Benicia #4, #5 BOOTHS Antioch Any booth

DATES Jul 1, 1991 Reduced 10¢ toll tickets for HOVs (with purchase of 50-ticket book)

Oct 1, 1995 Toll-free passage in designated booth only;

Two-seat vehicles with two occupants permitted

Richmond-San Rafael Bridge

OCCUPANCY Three or more persons per vehicle, motorcycles permitted, two-seat vehicles

with two occupants

HOURS 5:00 - 10:00 AM, 3:00 - 6:00 PM, Monday thru Friday

TOLL-FREE BOOTH #8

DATES Oct. 23, 1989 Toll-free passage in designated booth only;

Oct 1, 1995 Two-seat vehicles with two occupants permitted

San Mateo, Dumbarton Bridges

OCCUPANCY Two or more persons per vehicle, motorcycles permitted

HOURS 5:00 - 10:00 AM, 3:00 - 6:00 PM, Monday thru Friday

TOLL-FREE San Mateo Right side bypass lane BOOTHS Dumbarton Left side bypass lane

DATES See information in Mainline HOV Lane section

District 4 TOLL BRIDGE HOV BYPASS LANES

San Francisco-Oakland Bay Bridge

OCCUPANCY Three or more persons per vehicle, motorcycles permitted, two-seat vehicles

with two occupants

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

TOLL-FREE BOOTHS

#1, #2, Lanes 21 & 22

DATES See information in Ala-80 Mainline HOV Lane section

Carquinez Bridge

OCCUPANCY Three or more persons per vehicle, motorcycles permitted, two-seat vehicles

with two occupants

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

TOLL-FREE BOOTHS #6

DATES See information in Sol-80 Mainline HOV lane section



http://www.dot.ca.gov/dist4/d4hwops/01HOVReport/01HOVReport_x1.htm