

CALIFORNIA DEPARTMENT OF TRANSPORTATION

MOBILITY PERFORMANCE STATISTICS 2012

DISTRICT 4

Prepared by

District 4

January 2014

Unofficial Statistics

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1. DESCRIPTIVE STATISTICS

District Headquarters: Oakland

Counties: Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Solano, Sonoma

Counties without Detection: Napa has limited detection

Population: 7,327,626, 1.1% increase over 2011

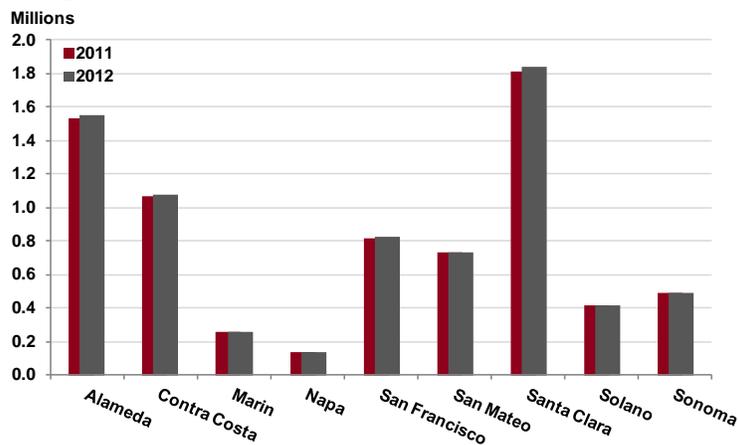
Population as a Percentage of Statewide: 19.3%

Table 1. POPULATION ESTIMATES AND ABSOLUTE AND PERCENT CHANGE, 2011–2012

County	2011	2012	Difference (2012 - 2011)	
	Population	Population	Absolute	Percent
Alameda	1,530,176	1,548,681	18,505	1.2%
Contra Costa	1,066,602	1,074,702	8,100	0.8%
Marin	253,374	254,007	633	0.2%
Napa	137,731	138,383	652	0.5%
San Francisco	816,311	825,111	8,800	1.1%
San Mateo	727,795	735,678	7,883	1.1%
Santa Clara	1,813,696	1,842,254	28,558	1.6%
Solano	415,787	418,387	2,600	0.6%
Sonoma	487,672	490,423	2,751	0.6%
Total	7,249,144	7,327,626	78,482	1.1%

Source: State of California, Department of Finance, E-1 Population Estimates for Cities, Counties, and the State—January 1, 2012 and 2013. Sacramento, California, May 2013.

Figure 1. POPULATION, BY COUNTY, 2011–2012



Unofficial Statistics

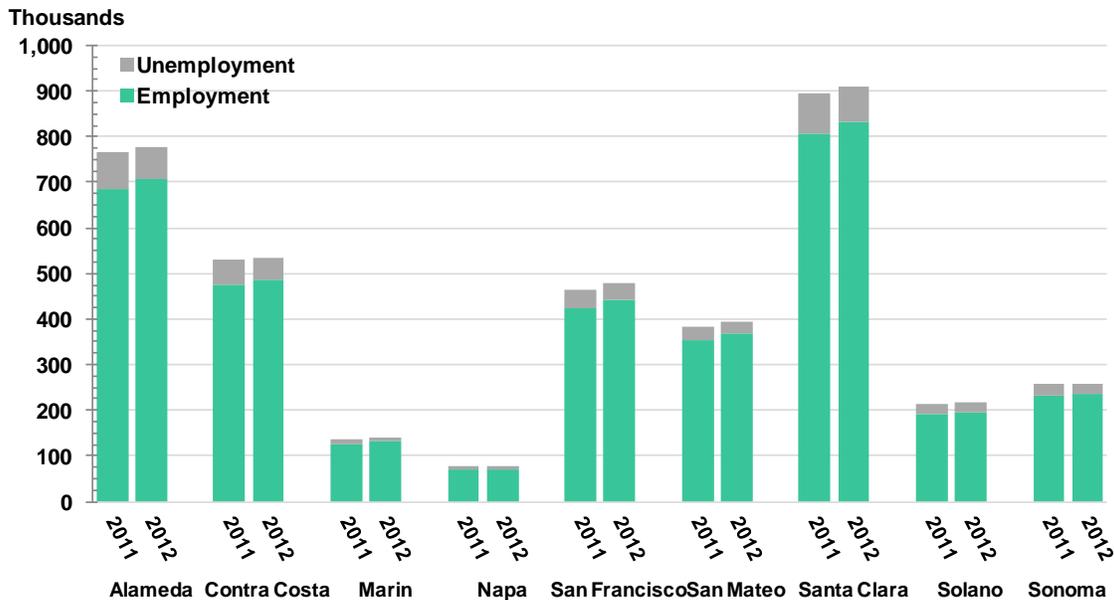
Employment, 2012 Monthly Average: 3,471,558
Unemployment Rate, 2012 Monthly Average: 8.3%, 1.3% decrease over 2011

Table 2. EMPLOYMENT, UNEMPLOYMENT, AND PERCENT CHANGE, BY COUNTY, 2011–2012

County	Unemployment Rate, 2011	Unemployment Rate, 2012	Percent Change in Rate of Unemployment (2012 - 2011)
Alameda	10.4%	9.0%	-1.3%
Contra Costa	10.4%	9.0%	-1.4%
Marin	7.4%	6.3%	-1.1%
Napa	9.1%	7.8%	-1.2%
San Francisco	8.6%	7.3%	-1.3%
San Mateo	7.9%	6.7%	-1.2%
Santa Clara	9.8%	8.4%	-1.4%
Solano	11.5%	10.1%	-1.3%
Sonoma	9.8%	8.6%	-1.3%
District Total	9.6%	8.3%	-1.3%

Data not seasonally adjusted.
 Source: State of California, Employment Development Department (EDD), Labor Market Information Division; data downloaded Sept. 9, 2013.

Figure 2. EMPLOYMENT AND UNEMPLOYMENT, BY COUNTY, 2011–2012

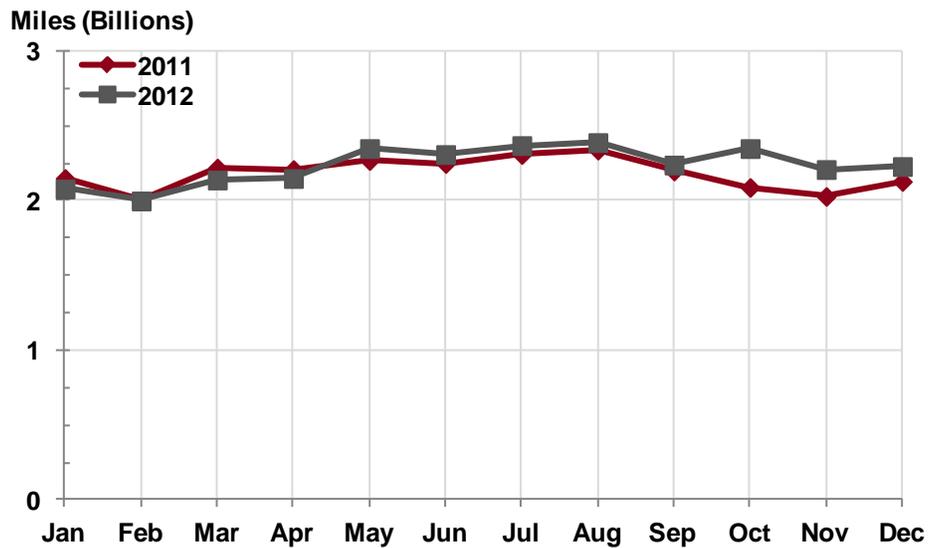


2. TRAVEL DEMAND

Vehicle Miles of Travel, 2012: 26.8 billion miles
Absolute and Percentage Change over 2011: 644.5 million VMT increase; 2.5% increase over 2011
Peak Travel Month, Percentage Change over 2011: August, 2.4 billion miles, 2.2% increase over 2011

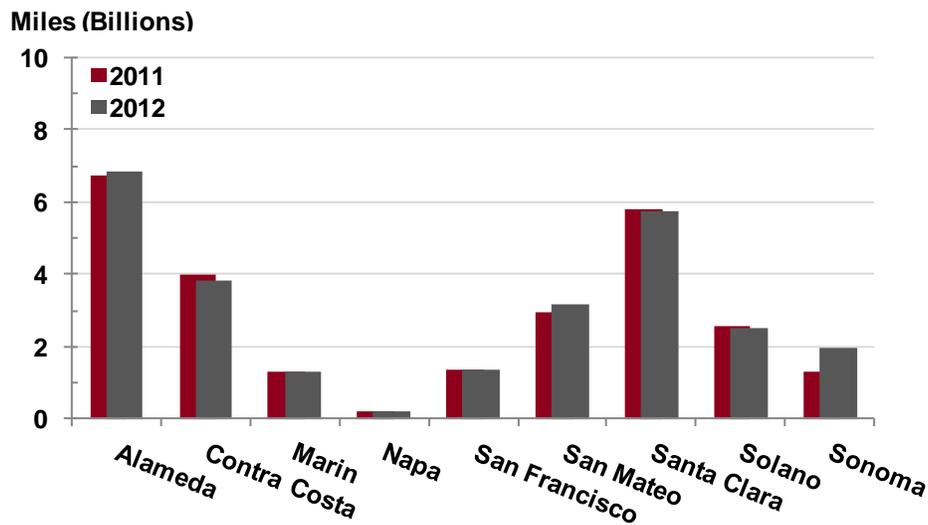
Monthly Trend

Figure 3 (a). TOTAL VEHICLE MILES OF TRAVEL, BY MONTH, 2011–2012



County Trend

Figure 3 (b). TOTAL VEHICLE MILES OF TRAVEL, BY COUNTY, 2011–2012



3. TRAFFIC CONGESTION

3.1. Total and Average Vehicle Hours of Delay at 35 and 60 Miles per Hour

3.1.1 Delay at 35 Miles per Hour

Vehicle Hours of Delay, 35 miles per hour: 25.5 million hours, 8.7% increase over 2011

Average Non-Holiday Weekday Delay, 35: 88,803 hours, 9.6% increase over 2011

Percentage of Statewide VHD at 35mph: 27.3%, 0.1% increase over 2011

Figure 4. TOTAL VEHICLE HOURS OF DELAY AT 35 MILES PER HOUR, BY MONTH, 2011–2012

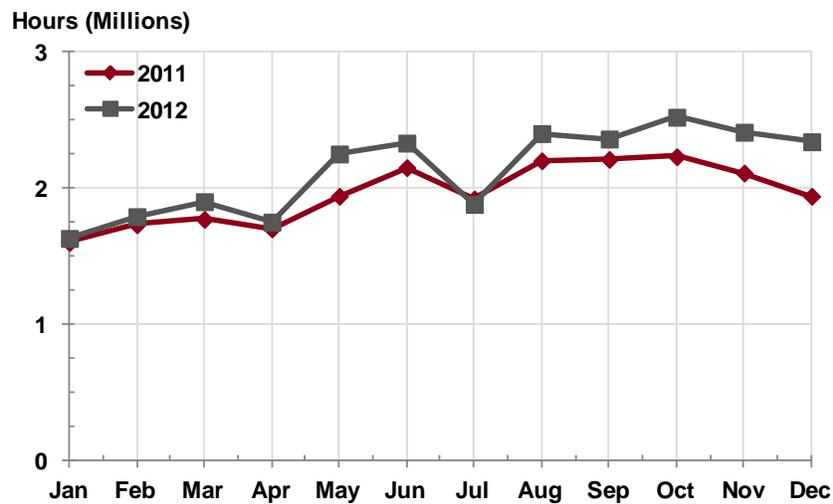
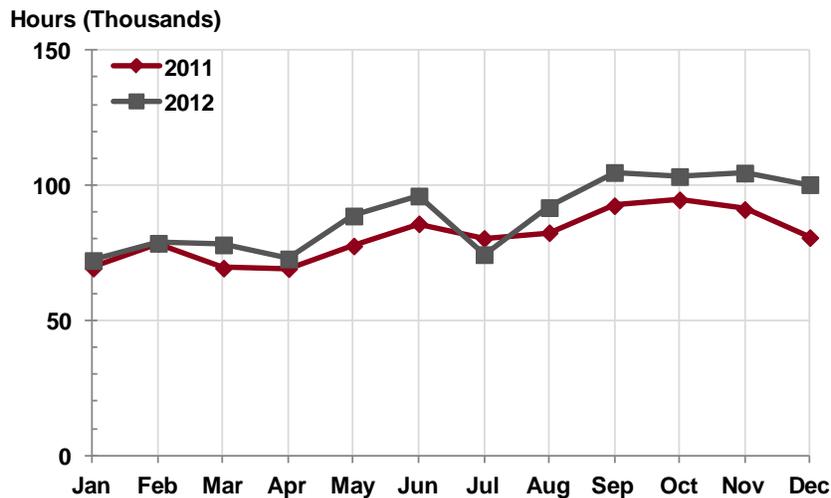


Figure 5. AVERAGE NON-HOLIDAY WEEKDAY VEHICLE HOURS OF DELAY AT 35 MILES PER HOUR, BY MONTH, 2011–2012



3.1.2 Delay at 60 Miles per Hour

Vehicle Hours of Delay, 60 miles per hour: 56.5 million hours, 8.0% increase over 2011
Average Non-Holiday Weekday Delay, 60: 195,972 hours, 8.3% increase over 2011
Percentage of Statewide VHD at 60mph: 25.5%, 0.2% decrease over 2011

Figure 6. TOTAL VEHICLE HOURS OF DELAY AT 60 MILES PER HOUR, BY MONTH, 2011–2012

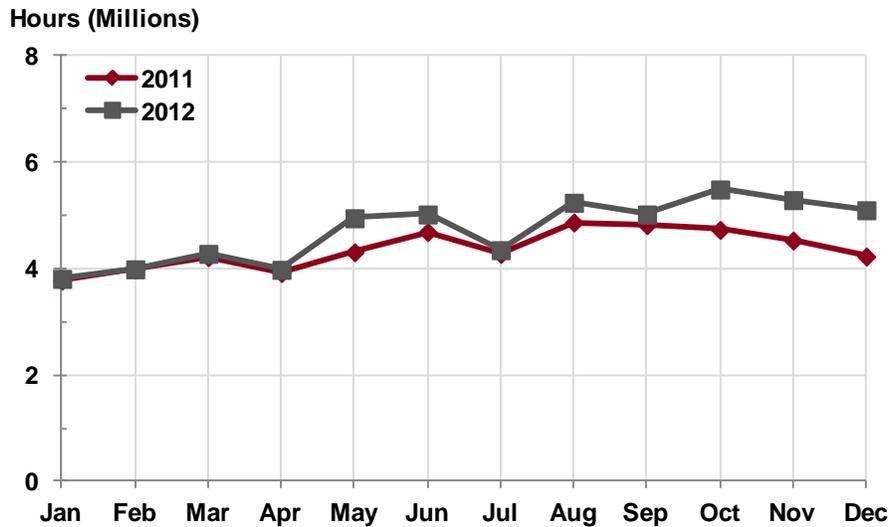
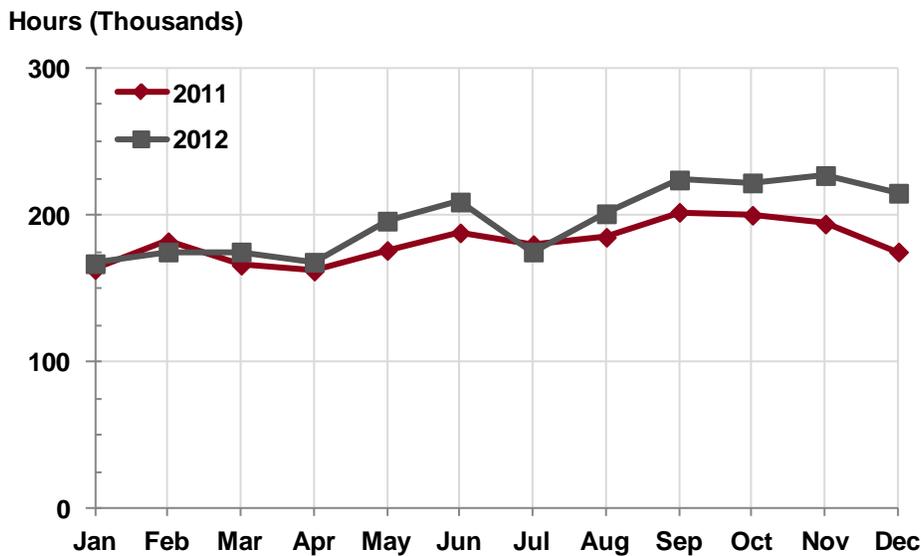


Figure 7. AVERAGE NON-HOLIDAY WEEKDAY VEHICLE HOURS OF DELAY AT 60 MILES PER HOUR, BY MONTH, 2011–2012

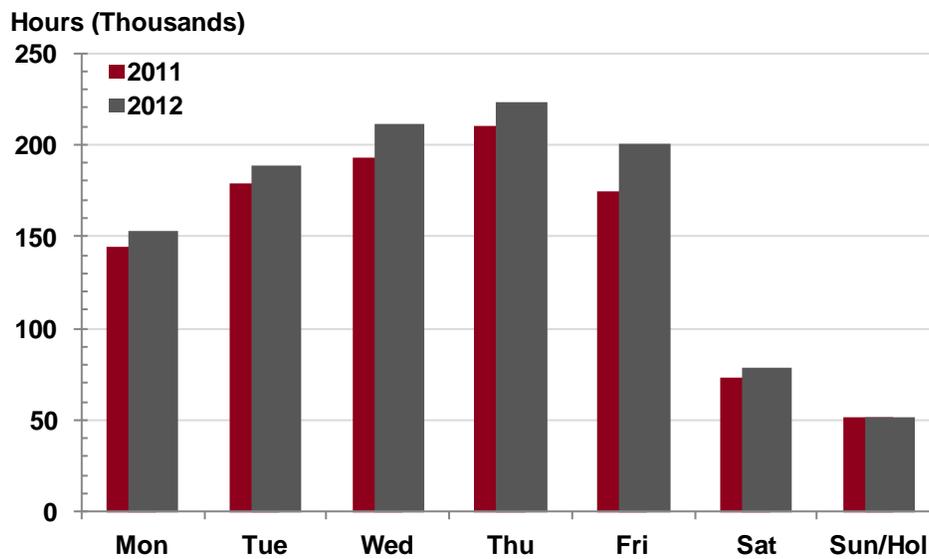


3.2. Average Vehicle Hours of Delay by Day of Week

- Most Congested Day of the Week, 60 mph:** Thursday, 222,682 hours, 6% increase over 2011
- Highest Absolute Change in Delay, 60mph:** Friday, 25,654 VHD increase, 15% increase over 2011
- Highest Percentage Change in Delay** Friday, 25,654 VHD increase, 15% increase over 2011

Delay at 60 miles per hour

Figure 8: AVERAGE VEHICLE HOURS OF DELAY AT 60 MILES PER HOUR, BY DAY OF WEEK, 2011–2012



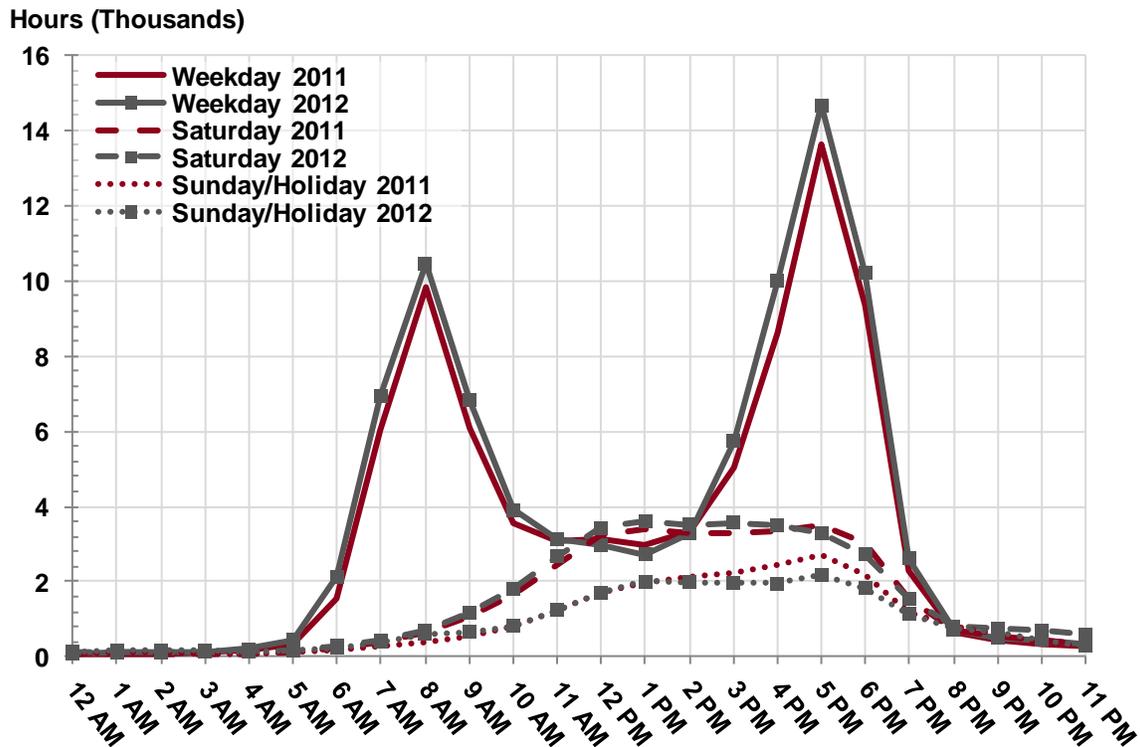
3.3. Average Vehicle Hours of Delay by Hour of Day

3.3.1 Delay at 35 Miles per Hour

- Weekday PM Peak Hour, 35 mph:** 5 PM, 14,664 hours, 8% increase over 2011
- Weekday AM Peak Hour, 35 mph:** 8 AM, 10,452 hours, 6% increase over 2011
- Saturday Peak Hour, 35mph** 1 PM, 3,595 hours, 6% increase over 2011
- Sunday/Holiday Peak Hour, 35mph** 5 PM, 2,182 hours, 19% decrease over 2011

Delay at 35 miles per hour

Figure 9. AVERAGE VEHICLE HOURS OF DELAY AT 35 MILES PER HOUR, BY HOUR OF DAY, 2011–2012

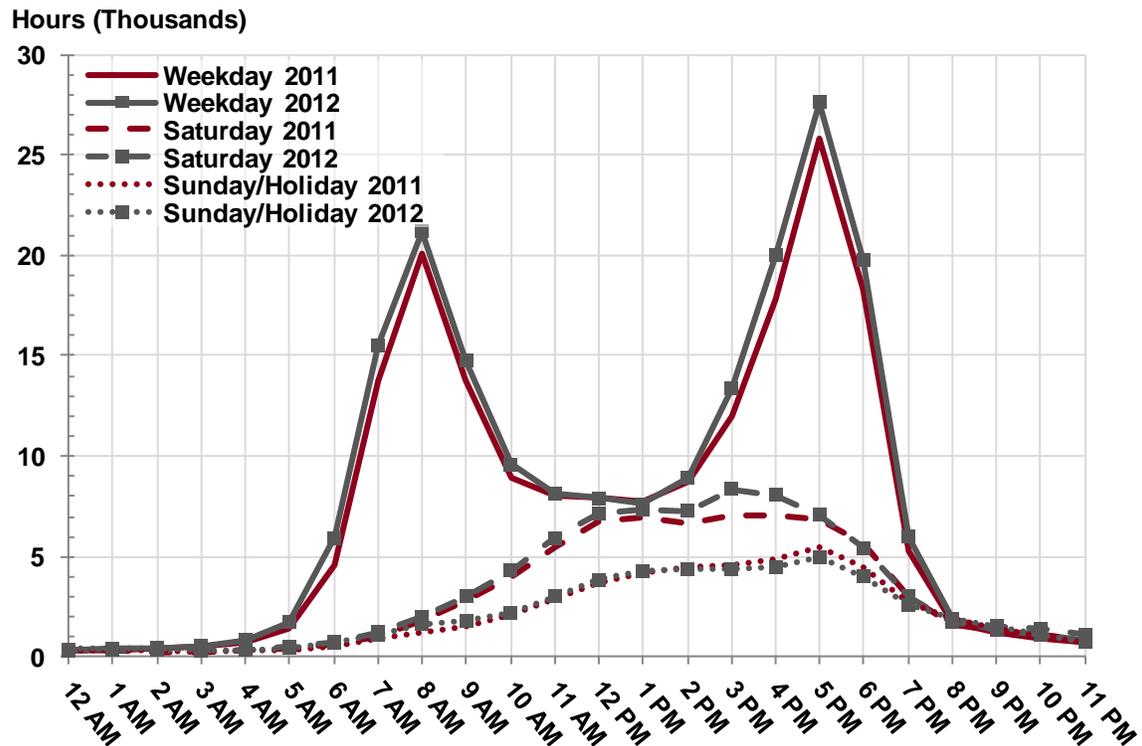


3.3.2 Delay at 60 Miles per Hour

Weekday PM Peak Hour, 60 mph: 5 PM, 27,622 hours, 7% increase over 2011
Weekday AM Peak Hour, 60 mph: 8 AM, 21,199 hours, 6% increase over 2011
Saturday Peak Hour, 60mph 3 PM, 8,361 hours, 9% decrease over 2011
Sunday/Holiday Peak Hour, 60mph 5 PM, 4,952 hours, 9% decrease over 2011

Delay at 60 miles per hour

Figure 10. AVERAGE VEHICLE HOURS OF DELAY AT 60 MILES PER HOUR, BY HOUR OF DAY, 2011-2012

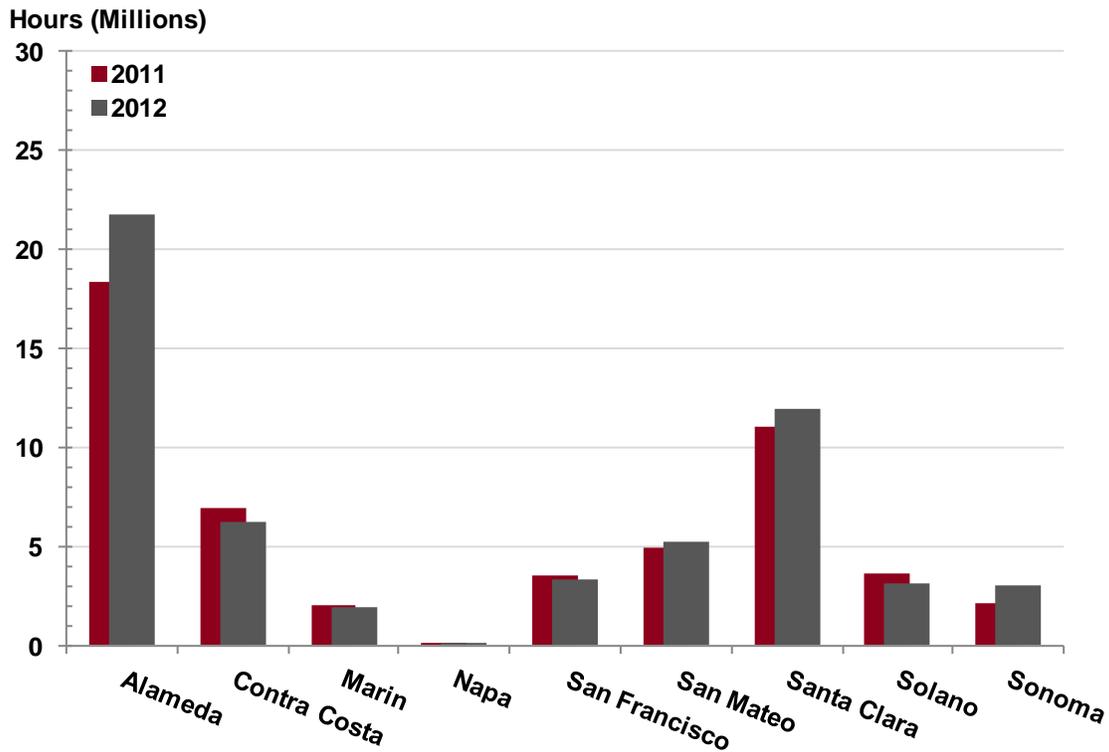


3.4. Total Vehicle Hours of Delay by County

County with Largest Delay, 60 mph:	Alameda, 21.7 million hours, 19.0% increase over 2011 VHD, 38% of District total VHD
County with 2nd Largest Delay, 60mph:	Santa Clara, 11.9 million hours, 8.7% increase over 2011 VHD, 21% of District total VHD
County with Largest Increase in Delay, 60 mph:	Alameda, 3.5 million hours, 19.0% increase over 2011
County with Largest Decrease in Delay, 60 mph:	Contra Costa, -733,826 hours, 10.6% decrease over 2011

Delay at 60 miles per hour

Figure 11. TOTAL ANNUAL VEHICLE HOURS OF DELAY AT 60 MILES PER HOUR, BY COUNTY, 2011-2012

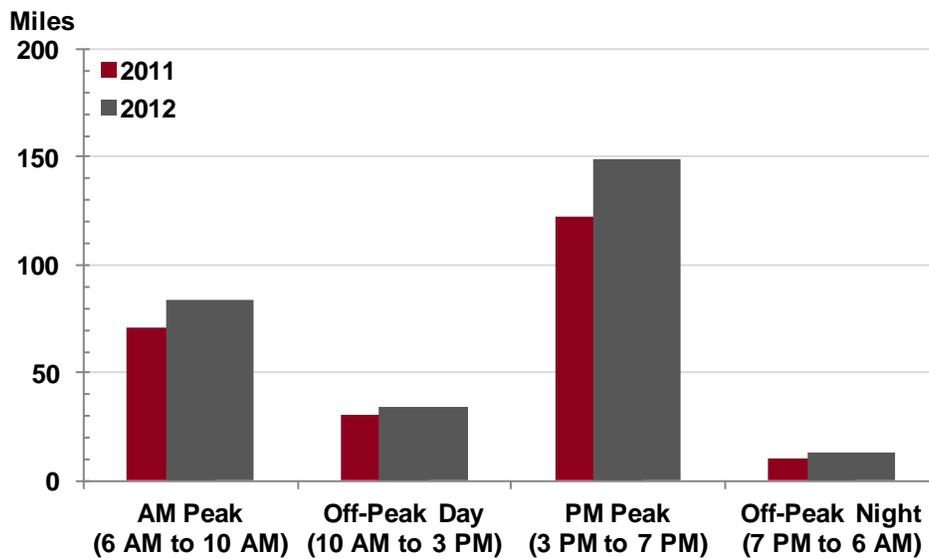


3.5. Lost Productivity

AM Peak:	84 miles, 18.9% increase over 2011
Off-Peak Day:	34 miles, 10.8% increase over 2011
PM Peak:	149 miles, 21.4% increase over 2011
Off-Peak Night:	13 miles, 34% increase over 2011

Lost Lane Miles at 35 miles per hour

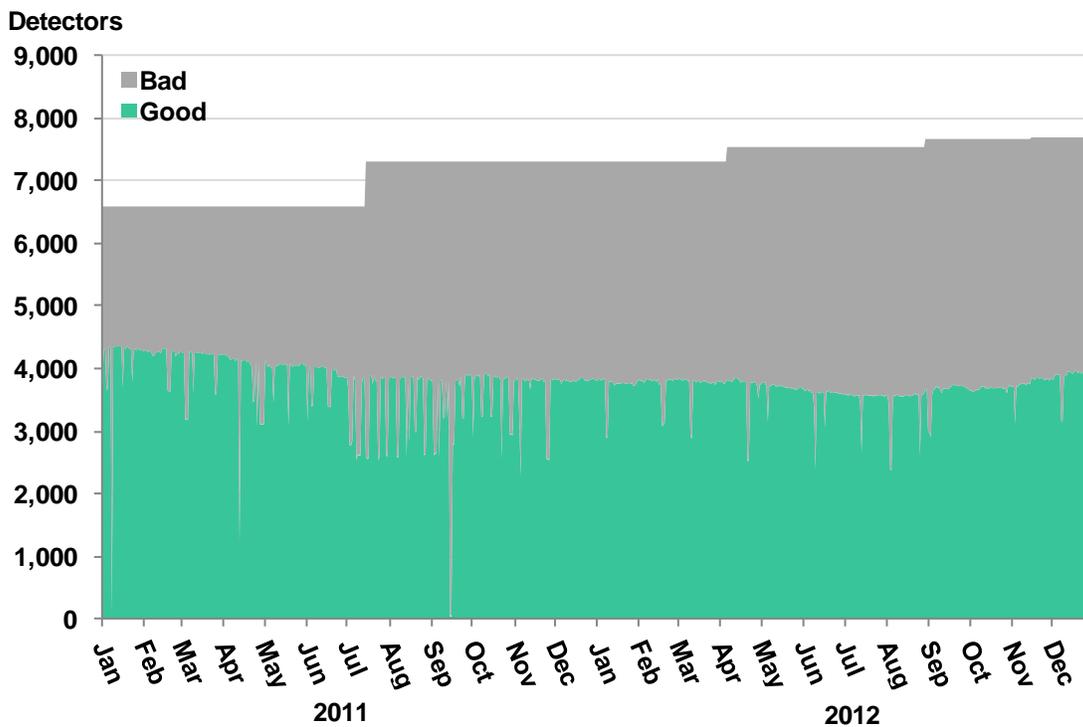
Figure 12. AVERAGE NON-HOLIDAY WEEKDAY EQUIVALENT LOST LANE MILES



4. DETECTOR HEALTH AND DATA QUALITY

Directional Mainline Miles:	2,872 miles
Directional Mainline Miles with Detection:	1,357 miles
Number of Detectors at End of 2012:	7,687, 5% increase over 2011
Average Percentage of Good and Bad Detection:	49% good, 2.5% decrease over 2011; 51% bad, 22.1% increase over 2011
Number of Days Reporting less Than 50% Working Detection:	229

Figure 13. DETECTOR HEALTH BY DAY, 2011–2012



5. FREEWAY CONGESTION AND BOTTLENECK LOCATIONS

5.1. Congestion by Freeway

Congestion Contributed by Top Congested Freeways: 35,921,339 hours, 64% of total VHD in 2012

Table 3. TOP CONGESTED FREEWAYS, 2011–2012

Route	County	Vehicle Hours of Delay at 60 mph		Difference (2012 - 2011)		Rank	
		2011	2012	Absolute	Percent	2011	2012
I-580	Alameda	6,175,539	6,630,988	455,450	7%	1	1
I-880	Alameda	5,061,942	5,340,413	278,471	6%	2	2
SR-101	Santa Clara	5,050,585	5,034,740	-15,845	0%	3	3
SR-101	San Mateo	4,029,135	3,855,674	-173,461	-4%	4	4
I-80	Alameda	2,804,222	3,607,965	803,743	29%	6	5
I-80	Solano	3,399,152	2,890,420	-508,732	-15%	5	6
SR-101	Sonoma	1,997,664	2,875,059	877,395	44%	11	7
SR-101	Marin	2,000,121	1,912,732	-87,389	-4%	10	8
SR-238	Alameda	1,422,616	1,899,563	476,948	34%	14	9
SR-4	Contra Costa	2,027,503	1,873,785	-153,718	-8%	9	10
TOTALS		33,968,477	35,921,339	1,952,863	5.7%		

5.2. Bottleneck Locations

Total Delay, All AM Bottlenecks, 2012:	4,270,590 hours
Top Bottleneck Delay, AM, 2012:	1,345,727 hours
Percentage Top Bottleneck Delay of Total Bottleneck Delay, AM, 2012:	32%

Table 4 (a). TOP BOTTLENECKS, AM PEAK PERIOD, 2012

Forthcoming

Total Delay, All PM Bottlenecks, 2012:	8,951,472 hours
Top Bottleneck Delay, PM, 2012:	2,404,787 hours
Percentage Top Bottleneck Delay of Total Bottleneck Delay, PM, 2012:	27%

Table 4 (b). TOP BOTTLENECKS, PM PEAK PERIOD, 2012

Forthcoming

Figure 14 (a). BOTTLENECKS AND CONGESTED SEGMENTS, AM PEAK PERIOD, 2012

Forthcoming

Figure 14 (b). BOTTLENECKS AND CONGESTED SEGMENTS, PM PEAK PERIOD, 2012

Forthcoming