

# District 11 Mobility Performance Report

2016 First Quarter

**DEPARTMENT OF TRANSPORTATION**

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## District 11 Mobility Performance Report

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### EXECUTIVE SUMMARY

#### Overview

District 11 for Caltrans consists of both the Imperial and San Diego counties. With San Diego having a population of approximately 3,200,000 residents and Imperial County with approximately 183,000 residents. Although, District 11 is composed of these two counties, Imperial County does not report any performance data.

The Mobility Performance quarterly analysis compares information with over a year ago and over last quarter in the following performance measures:

- Vehicle Miles of Travel (VMT)
- Vehicle Hours of Delay (VHD), Bottleneck Locations
- Lost Lane Miles (equivalent lost productivity)
- Detector Health

This information is based on data collected every day of the quarter, twenty-four hours a day, by automated vehicle detector stations deployed on urban-area freeways where congestion is regularly experienced. The MPR presents congestion information at two speed thresholds: delay from vehicles traveling below 35 miles per hour (mph), and delay from vehicles traveling below 60 mph. The delay at the 35 mph threshold represents severe congestion while delay at 60 mph represents all congestion, both light and heavy. These thresholds are set by Caltrans and are based upon engineering experience and District input.

## FINDINGS

In the first quarter, the total delay equaled 2.8 million VHD at the 35 mph speed threshold, and 5.81 million VHD at the 60 mph threshold. The average weekday delay experienced in this quarter was approximately 41 thousand VHD at 35 mph, and 86 thousand VHD at 60 mph.

### Top Ten Bottlenecks for the Quarter 1

Fwy	Location	Shift	Abs PM	CA PM	# Days Active	Avg Extent (Miles)	Total Delay (veh-hrs)	Total Duration (mins)
I805-S	At I?15	PM	14.702	14.851	61	7.631147541	190,261	9,380
SR78-E	Twin Oaks Valley Rd	PM	13.018	13.022	62	3.909677419	100,238	11,085
I805-N	805 NB S/O 52	AM	23.111	23.26	57	3.263157895	78,773	8,220
I805-N	At I?15	AM	14.701	14.85	60	3.565	76,502	6,930
I5-S	5 S N/O VISTA VIEW	AM	39.059	R39.201	57	5.984210526	64,115	5,140
SR52-E	52 EB E/O Santo Rd	PM	9.271	9.271	57	3.2	60,066	9,225
I15-N	15 NB N/O Mission Rd	PM	52.347	R52.09	34	7.270588235	55,206	4,330
I8-W	8 WB W/O 15 Loops	AM	7.048	5.091	48	3.839583333	51,442	3,665
I5-S	5th Ave	PM	16.001	R16.11	61	2.526229508	50,593	6,065
I15-S	S/O BABOA AVE	PM	8.833	R8.662	57	3.647368421	49,892	4,275

## Quarterly Mobility Statistics

Measure	Graph	Percentage Change									
		Over one year ago	Over last quarter								
Vehicle Miles of Travel (VMT)	<p>Miles (Billions)</p> <table border="1"> <tr><th>Quarter</th><th>VMT (Billions)</th></tr> <tr><td>2015 Q1</td><td>3.4</td></tr> <tr><td>2015 Q4</td><td>3.44</td></tr> <tr><td>2016 Q1</td><td>3.4</td></tr> </table>	Quarter	VMT (Billions)	2015 Q1	3.4	2015 Q4	3.44	2016 Q1	3.4	0.1%	-1.2%
Quarter	VMT (Billions)										
2015 Q1	3.4										
2015 Q4	3.44										
2016 Q1	3.4										
Total Vehicle Hours of Delay (VHD) at 35 mph	<p>Hours (Millions)</p> <table border="1"> <tr><th>Quarter</th><th>VHD (Millions)</th></tr> <tr><td>2015 Q1</td><td>2.4</td></tr> <tr><td>2015 Q4</td><td>2.9</td></tr> <tr><td>2016 Q1</td><td>2.8</td></tr> </table>	Quarter	VHD (Millions)	2015 Q1	2.4	2015 Q4	2.9	2016 Q1	2.8	16.2%	-6%
Quarter	VHD (Millions)										
2015 Q1	2.4										
2015 Q4	2.9										
2016 Q1	2.8										
Average Non-Holiday Weekday Vehicle Hours of Delay (VHD) at 35 mph	<p>Hours (Thousands)</p> <table border="1"> <tr><th>Quarter</th><th>VHD (Thousands)</th></tr> <tr><td>2015 Q1</td><td>35</td></tr> <tr><td>2015 Q4</td><td>45</td></tr> <tr><td>2016 Q1</td><td>41</td></tr> </table>	Quarter	VHD (Thousands)	2015 Q1	35	2015 Q4	45	2016 Q1	41	17.2%	-7%
Quarter	VHD (Thousands)										
2015 Q1	35										
2015 Q4	45										
2016 Q1	41										
Total Vehicle Hours of Delay (VHD) at 60 mph	<p>Hours (Millions)</p> <table border="1"> <tr><th>Quarter</th><th>VHD (Millions)</th></tr> <tr><td>2015 Q1</td><td>5.31</td></tr> <tr><td>2015 Q4</td><td>6.03</td></tr> <tr><td>2016 Q1</td><td>5.81</td></tr> </table>	Quarter	VHD (Millions)	2015 Q1	5.31	2015 Q4	6.03	2016 Q1	5.81	9.5%	-3.7%
Quarter	VHD (Millions)										
2015 Q1	5.31										
2015 Q4	6.03										
2016 Q1	5.81										
Average Non-Holiday Weekday Vehicle Hours of Delay (VHD) at 60 mph	<p>Hours (Thousands)</p> <table border="1"> <tr><th>Quarter</th><th>VHD (Thousands)</th></tr> <tr><td>2015 Q1</td><td>77</td></tr> <tr><td>2015 Q4</td><td>90</td></tr> <tr><td>2016 Q1</td><td>86</td></tr> </table>	Quarter	VHD (Thousands)	2015 Q1	77	2015 Q4	90	2016 Q1	86	11%	-4%
Quarter	VHD (Thousands)										
2015 Q1	77										
2015 Q4	90										
2016 Q1	86										

Measure	Graph	Percentage Change	
Average Vehicle Hours of Delay by Day of Week at 60 mph		Largest Magnitude Decrease over one year ago	Largest Magnitude Decrease over last quarter
		Sun/Hol -22%	Monday -16.7%
Average Vehicle Hours of Delay by Hour of Day at 35 mph, Weekdays		Largest Magnitude Weekday Decrease over one year ago	Largest Magnitude Weekday Decrease over last quarter
		10 PM -49.8%	5 PM -13.8%
Average Vehicle Hours of Delay by Hour of Day at 35 mph, Saturdays		Largest Magnitude Saturday Decrease over one year ago	Largest Magnitude Saturday Decrease over last quarter
		11 AM -25.7%	9 AM -42.8%
Average Vehicle Hours of Delay by Hour of Day at 35 mph, Sundays/Holidays		Largest Magnitude Sun./Holiday Decrease over one year ago	Largest Magnitude Sun./Holiday Decrease over last quarter
		12 PM -41.6%	5 PM -46.7%
		Largest Magnitude Increase over one year ago	Largest Magnitude Increase over last quarter
		Wednesday 21.3%	Saturday 17.8%
		4 PM 22%	8 AM 4.5%
		8 AM 86.6%	1 PM 53.4%
		8 AM 166.6%	1 PM 38.2%

Measure	Graph	Percentage Change	
Total Vehicle Hours of Delay (VHD) by County at 35 mph	<p>Hours (Millions)</p> <p>San Diego</p>	Largest Magnitude Decrease over one year ago	Largest Magnitude Decrease over last quarter
		-	San Diego -6% ↓
		Largest Magnitude Increase over one year ago	Largest Magnitude Increase over last quarter
Average Non-Holiday Weekday Equivalent Lost Lane Mile Hours at 35 mph	<p>Miles</p> <p>AM Peak (6 AM to 10 AM)    Off-Peak Day (10 AM to 3 PM)    PM Peak (3 PM to 7 PM)    Off-Peak Night (7 PM to 6 AM)</p>	Largest Magnitude Decrease over one year ago	Largest Magnitude Decrease over last quarter
		Off-Peak Night -12.2% ↓	PM Peak -7.5% ↓
		Largest Magnitude Increase over one year ago	Largest Magnitude Increase over last quarter
		PM Peak 29.9% ↑	AM Peak 2.4% ↑
		Average Number of Good and Bad Detectors	<p>Number of Detectors</p> <p>Average of Good    Average of Bad</p> <p>2015 Q1    2015 Q4    2016 Q1</p>
-5% ↓	-1% ↓		
Change in Bad over one year ago	Change in Bad over last quarter		
		-3% ↓	3% ↑

Congestion by Route											
Route	County	Vehicle Hours of Delay at 35 mph			Difference 2016 Q1-2015 Q1		Difference 2016 Q1-2015 Q4		Rank		
		2015 Q1	2015 Q4	2016 Q1	Absolute	Percentage	Absolute	Percentage	2015 Q1	2015 Q4	2016 Q1
I5	San Diego	801,446	928,766	876,294	74,848	9.3%	-52,472	-5.6%	1	1	1
I805	San Diego	512,239	527,221	512,154	-85	0.0%	-15,066	-2.9%	2	3	2
I15	San Diego	359,924	536,895	493,601	133,677	37.1%	-43,294	-8.1%	3	2	3
SR78	San Diego	191,702	238,391	206,161	14,459	7.5%	-32,230	-13.5%	4	4	4
I8	San Diego	114,999	184,098	185,161	70,163	61.0%	1,063	0.6%	6	5	5
SR52	San Diego	119,549	143,005	150,571	31,022	25.9%	7,566	5.3%	5	6	6
SR125	San Diego	85,482	130,004	104,345	18,863	22.1%	-25,660	-19.7%	7	7	7
SR163	San Diego	69,561	108,365	102,538	32,977	47.4%	-5,827	-5.4%	8	8	8
SR94	San Diego	54,041	68,670	66,880	12,839	23.8%	-1,790	-2.6%	10	10	9
SR56	San Diego	59,939	71,636	57,308	-2,631	-4.4%	-14,328	-20.0%	9	9	10
I905	San Diego	5,831	3,500	7,246	1,415	24.3%	3,745	107.0%	11	11	11
SR54	San Diego	3,903	2,200	2,468	-1,435	-36.8%	269	12.2%	12	12	12
<b>TOTALS</b>		<b>2,378,616</b>	<b>2,942,751</b>	<b>2,764,726</b>	<b>386,110</b>	<b>16.2%</b>	<b>-178,025</b>	<b>-6.0%</b>			

I15: The decrease in vehicle hours of delay at 35 mph between 2015 Q4 and 2016 Q1 could be partially attributed to the I15 Manage Lanes barrier movement that occurs every Thursday.