

Michigan Intelligent Transportation Systems Center

Serving Motorists on Southeast Michigan Freeways

www.michigan.gov/its
www.michigan.gov/drive

July 2011



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In the Spotlight



The Michigan Intelligent Transportation Systems (MITS) Center works in conjunction with the Southeast Michigan Council of Governments (SEMCOG) to alert motorists of Ozone Action Days. These days typically occur during the summer months when weather conditions combine the following characteristics: heat, humidity, and air stagnation. These characteristics increase the risk of health problems for individuals with prolonged exposure to the elements. During the month of July, there were three consecutive Ozone Action Days: the 19th, 20th, and 21st. To assist in reducing these health risks, the MITS Center runs messages on the Dynamic Message Signs (DMS) promoting ridesharing, refueling after dusk, and the use of public transit. By creating more awareness of Ozone Action Days, the risks associated can be minimized while promoting alternatives to normal transportation.

OZONE ACTION DAY
SHARE THE RIDE

Compiled by:

URS

Summary

Data Key

July 2011

Call Card



Total Assists

Freeway Courtesy Patrol (FCP) drivers fill out information on data cards for each stop (abandoned vehicles), assist (occupied vehicles, debris, accidents, etc.), and tow.

4,529

Call Tracking



Total Calls

Operators manually enter all incoming and outgoing control room calls, including two-way communications, select Michigan State Police (MSP) Computer-Aided Dispatch entries, and high-impact incident notifications.

6,618

Mi Drive Web Site



Total Page Views

Operators inform media and general public about current incident information such as lane closures and road construction. Real-time camera images are also available.

342,345

Advanced Traffic Management System



Total Incidents

Data is entered into the Advanced Traffic Management System in order to send messages to Dynamic Message Signs (DMS) and to post incidents on the Web site.

490

Quality Assurance/Quality Control



All High-Impact Incidents

Comprehensive and systematic quality assurance/quality control audit of freeway operations including messaging and high-impact notifications (freeway closures, lane closures where only one lane is open, and freeway-to-freeway ramp closures).

100% Accurate

MaintStar



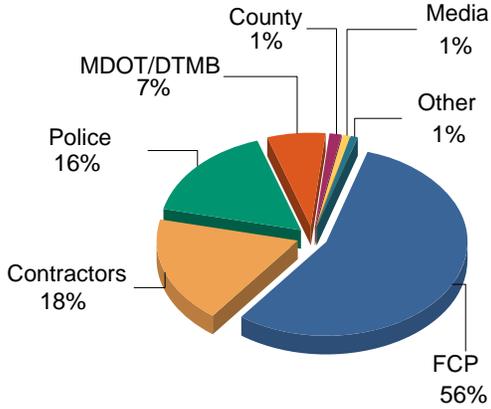
System Availability

MaintStar manages maintenance issues for all Intelligent Transportation System (ITS) equipment, including Dynamic Message Signs (DMS) and Closed-Circuit Television (CCTV) cameras, and tracks work orders and overall ITS performance.

DMS: 93%

CCTV: 87%

Calls by Type



Total Calls: 6,618

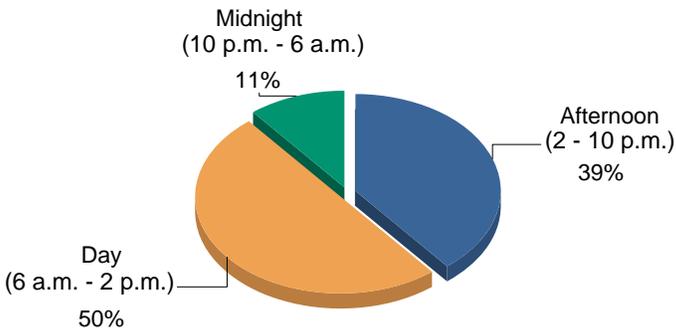
Agency	No. of Calls
FCP	3,664
Contractors	1,221
City	2
County	88
Federal	0
Fire	0
Police	1,083
Border	1
MDOT/DTMB	441
Media	55
Special Events	13
Transit	0
State	0
Parking	0
Airport	0
Animals	0
OTHER	50
Total	6,618

MDOT/DTMB	Total
Taylor TSC	183
Oakland TSC	85
MITS Center	54
Detroit Maintenance Garage	27
Macomb TSC	24
Detroit TSC	22
DTMB	15
Metro Region Office	11
Auburn Hills Garage	8
Answering Service	7
Jackson TSC	2
Bay Region	1
Monroe County	1
Port Huron TSC	1
Total	441

Calls by Weekday Shift



Monday - Friday



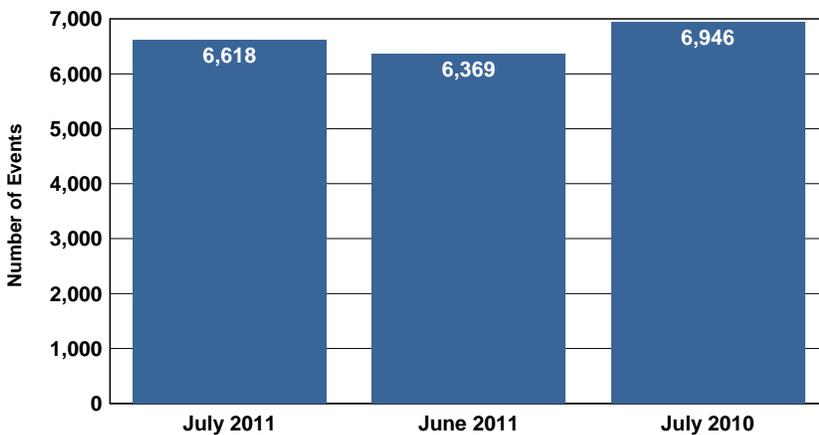
Average Number of Calls per Weekday: 252

Calls by Weekend Day



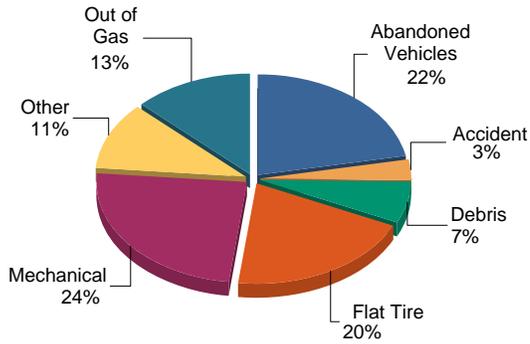
Average Number of Calls per Weekend: 273

Monthly Event History



FCP Assist Type

FCP Random Fact & Monthly Totals



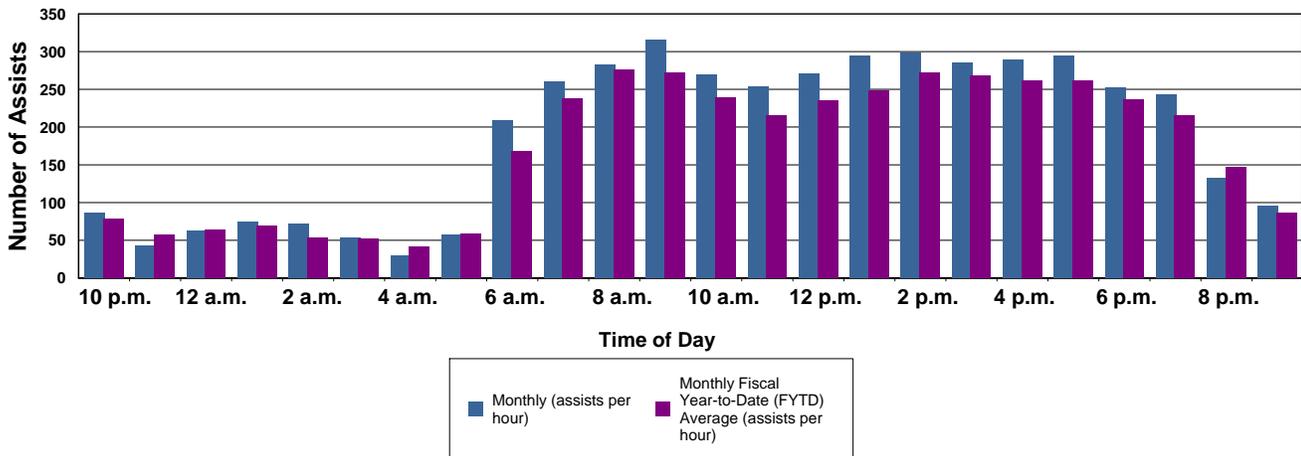
In July, the highest frequency of assists for the Freeway Courtesy Patrol occurred during the 9 a.m. hour, with the lowest frequency of assists occurring during the 4 a.m. hour.

July Total: 4,529

3,479 Assists

1,050 Abandoned Vehicle Stops

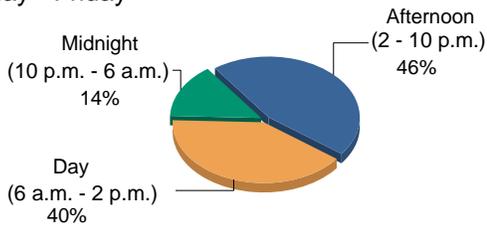
FCP Assists by Time of Day



FCP Dispatches by Weekday Shift

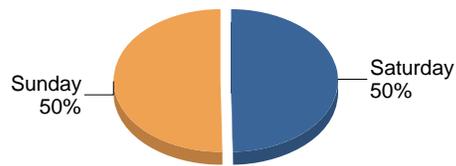


Monday - Friday



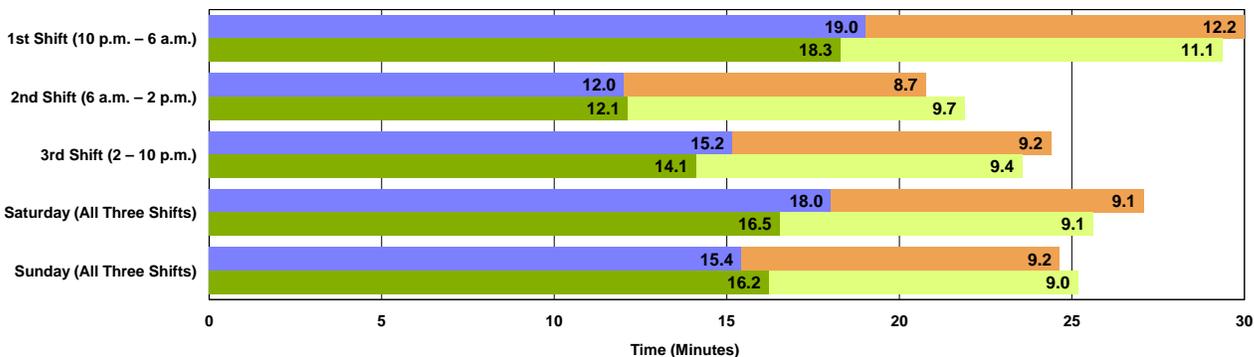
Average Number of Dispatches per Weekday: 36

FCP Dispatches by Weekend Day



Average Number of Dispatches per Weekend: 48

FCP Average Service Times



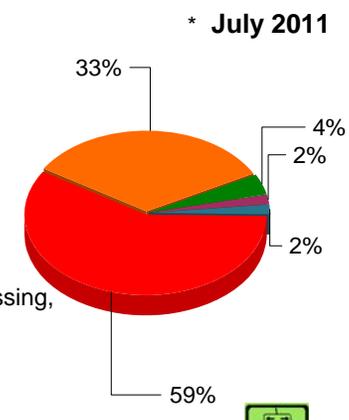
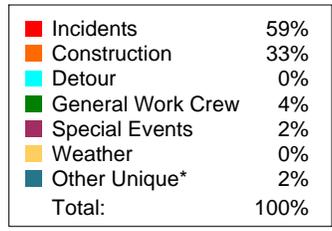
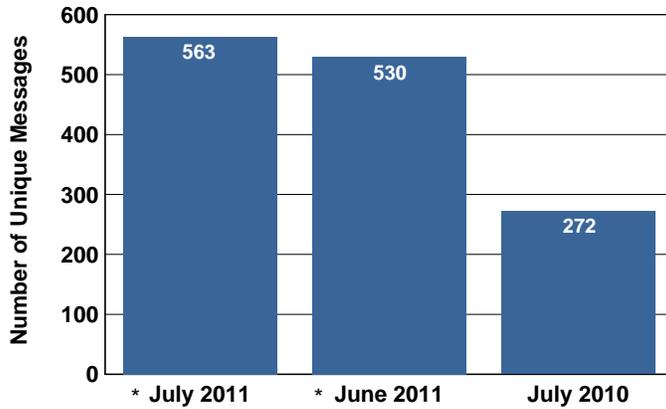


“I just wanted to pass on my thanks for the assistance provided by the courtesy patrol this morning. My motorcycle had cut out on southbound I-75 near the McNichols exit. The courtesy patrol driver arrived to assess the situation, and I informed him that I had contacted my father to retrieve my pickup truck and come help me load it up. The driver waited for my father to arrive and assisted us with loading the motorcycle. I can't thank you enough for the assistance that the courtesy patrol driver provided.”

Courtesy Patrol

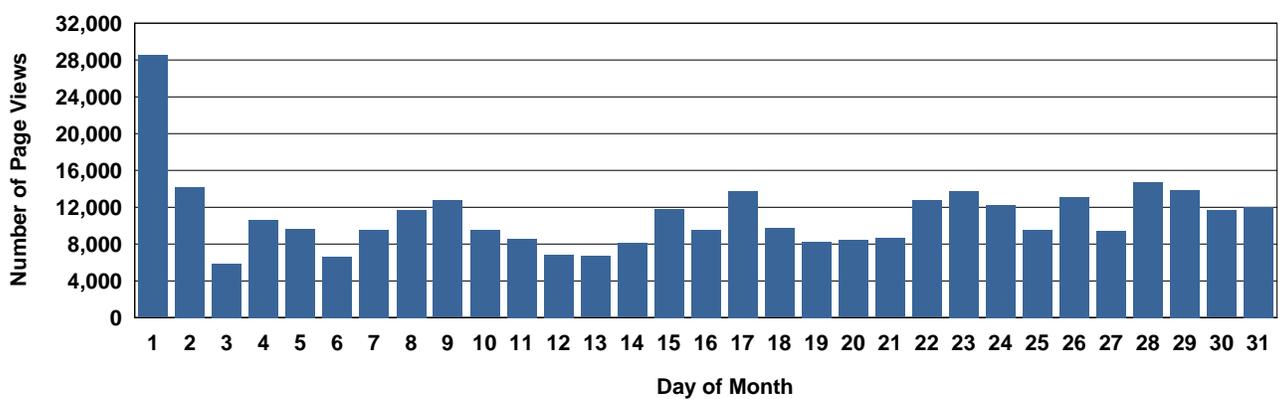
Freeway	Segment	TOTAL ASSISTS (miles)	ASSIST DENSITY		AVERAGE RESPONSE TIME (min)		AVERAGE CLEAR TIME (min)			
			July 2011	FYTD Avg.	July 2011	FYTD Avg.	July 2011	FYTD Avg.	July 2011	FYTD Avg.
I-75	Oakland County Line to I-696	37.0	387	387.1	10.5	10.5	18.2	19.6	9.0	9.4
	I-696 to I-94	8.0	252	238.5	31.5	29.8	10.9	11.6	11.5	11.3
	I-94 to I-96	5.6	79	75.5	14.1	13.5	10.3	11.1	10.9	11.1
	I-96 to I-275	37.0	411	297.9	11.1	8.1	15.6	15.1	7.8	9.5
		87.6	1,129	999.0	12.9	114.0	14.3	15.1	9.3	10.0
I-94	Washtenaw County Line to M-39	20.7	432	313.0	20.9	15.1	15.8	15.9	8.7	9.2
	M-39 to I-75	9.0	286	280.0	31.8	31.1	12.7	12.0	9.8	9.8
	I-75 to I-696	10.0	280	277.4	28.0	27.7	14.3	14.4	9.4	10.2
	I-696 to St. Clair County Line	21.0	196	153.1	9.3	7.3	13.9	17.1	7.2	8.1
		60.7	1,194	1,023.5	19.7	168.6	14.2	14.1	8.9	9.5
I-96	Livingston County Line to I-275/I-696	11.0	156	132.3	14.2	12.0	20.1	18.8	8.3	8.3
	I-275/M-14 to M-39	12.0	247	205.8	20.6	17.2	16.6	15.2	9.0	9.1
	M-39 to I-75	11.0	314	297.6	28.5	27.1	14.0	12.7	10.4	9.7
		34.0	717	635.7	21.1	187.0	16.5	14.7	9.5	9.2
I-275	I-96/I-696 to M-14/I-96	8.0	118	110.8	14.8	13.9	16.2	16.4	6.9	8.3
	M-14/I-96 to I-94	12.0	185	139.0	15.4	11.6	17.1	15.6	8.0	8.8
	I-94 to I-75	17.5	90	69.8	5.1	4.0	28.0	18.1	6.3	8.0
		37.5	393	319.6	10.5	85.2	17.3	16.2	7.3	8.5
I-696	I-96/I-275 to M-10	9.3	141	146.2	15.2	15.7	17.8	16.9	9.2	8.9
	M-10 to I-75	9.0	181	133.7	20.1	14.9	13.3	13.8	8.5	10.1
	I-75 to I-94	10.4	181	180.8	17.4	17.4	15.3	13.7	10.3	9.9
		28.7	503	460.7	17.5	160.5	14.9	14.6	9.3	9.6
M-59 (Veterans)		24.0	22	32.3	0.9	1.3	15.3	22.1	5.5	8.2
I-375		1.2	4	4.5	3.3	3.8	8.0	13.7	5.8	7.7
M-10 (Lodge)		17.9	353	322.5	19.7	18.0	13.5	11.9	11.3	10.4
M-14		6.4	66	57.4	10.3	9.0	15.6	17.8	8.5	9.1
M-39 (Southfield)		14.2	69	200.5	4.9	14.1	17.2	13.1	14.0	10.8
M-5 (Grand River)		10.3	41	33.3	4.0	3.2	24.0	19.9	7.6	7.3
M-8 (Davison)		2.2	38	29.8	17.3	13.5	10.2	10.2	9.8	11.6
Total		324.7	4,529	4,118.8						

Unique DMS Messages by Type



* Airport, Amber Alert, Border Crossing, Location Specific, Safety, and Travel Time Unique Messages
 * July 2011 data averaged from past years due to system outage

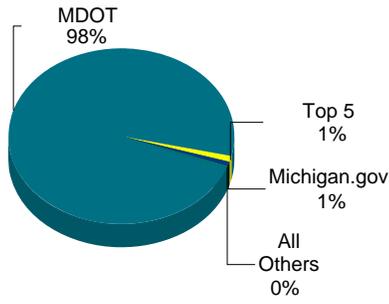
Mi Drive Web Site July Daily Page Views



Referring Site Requests to Mi Drive Web Site in July



In **July**, the Mi Drive Web site experienced the most activity on **Fridays**.



Top 5 Non-Michigan.gov Sites

- http://www.google.com/
- http://search.yahoo.com/
- http://www.clickondetroit.com/
- http://www.tv20detroit.com/
- http://www.bing.com/

On an average day in **July**, the Mi Drive Web site received the most activity between **4 and 5 p.m.**

Incident Communication Accuracy



Weekend DMS Snapshot Review	July 2011	June 2011	July 2010
All Incident Messages	100%	100%	100%
High-Impact DMS Messages	July 2011	June 2011	July 2010
All High-Impact Messages	100%	100%	100%
Freeway Closure Messages	100%	100%	100%
Lane Closure Messages	100%	100%	100%
Ramp Closure Messages	100%	100%	100%
Other Communication	July 2011	June 2011	July 2010
Advisory Text Messages	95%	96%	89%
Web Site Incident Postings	100%	100%	100%

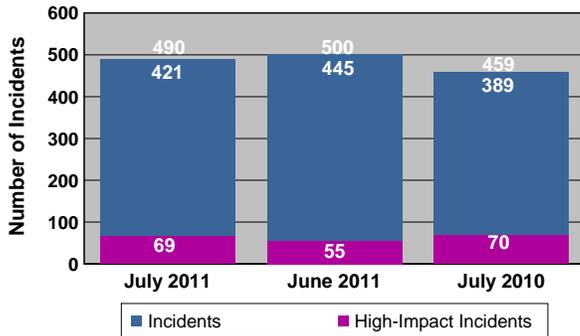
Most Utilized DMS



1. I-75 NB at Clay
2. I-96 EB Local at Evergreen
3. I-75 SB at Woodward Hghts.
4. I-96 EB at Beech Daly
5. M-39 NB at Puritan



Total Number of Incidents



High-Impact Incident Activity



	July 2011	June 2011	July 2010
Freeway Closures All Lanes Closed	17	10	15
Lane Closures Only One Lane Open	49	43	48
Ramp Closures	3	2	7
Freeway-to-Freeway			
Total	69	55	70

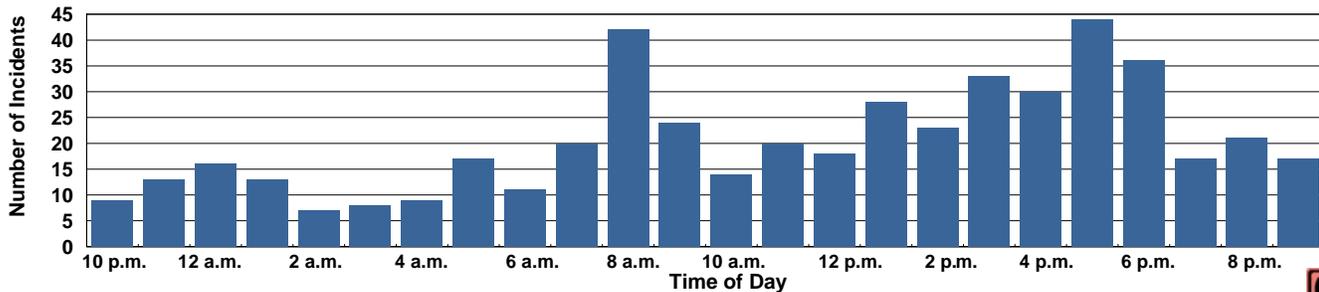
High-impact incidents account for **14%** of the total incidents in July.



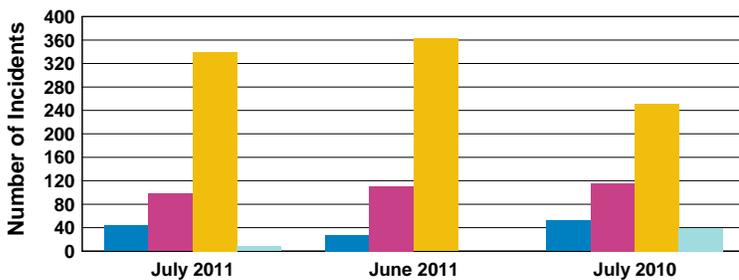
Total Incidents by Roadway

Freeway	July 2011	June 2011	July 2010
I-75 (CHRYSLER/FISHER)	138	135	120
I-94 (FORD)	111	88	96
I-696 (REUTHER)	89	113	66
I-96 (JEFFRIES)	71	54	63
M-10 (LODGE)	22	33	36
M-39 (SOUTHFIELD)	12	4	34
I-275	42	62	40
I-375	2	0	3
M-14	3	10	0
M-59	0	1	1
Total	490	500	459

Total Incidents per Hour

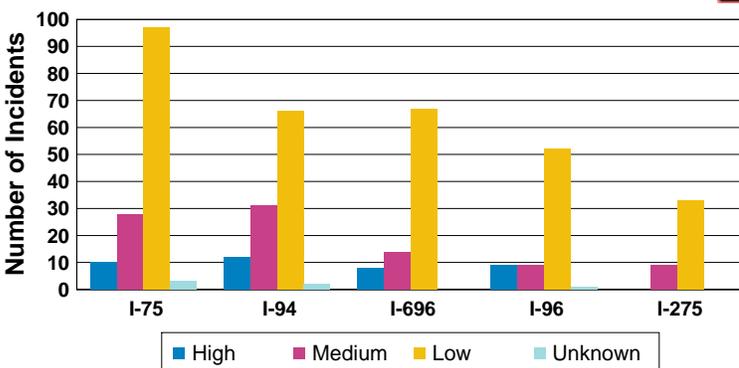


Total Incident Severity/Duration by Month

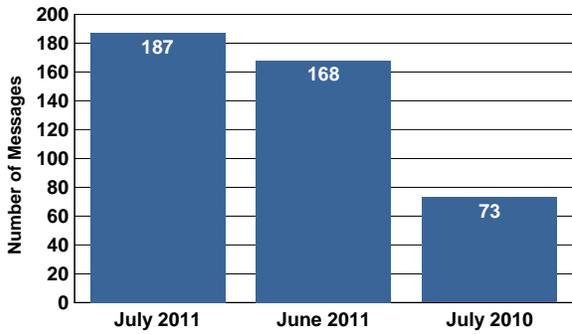


- Single-lane closures equal to 90+ minutes, partial closures (more than one lane, but not all) equal to 45+ minutes, or total closures (all lanes) 20+ minutes
- Shoulder closures equal to 90+ minutes, single-lane closures between 20 and 89 minutes, partial closures (more than one lane but not all) between 20 and 44 minutes, and total closures (all lanes) less than 20 minutes
- Shoulder closures less than 90 minutes, single-lane closures or partial closures (more than one lane, but not all) less than 20 minutes
- The duration and/or severity is unknown

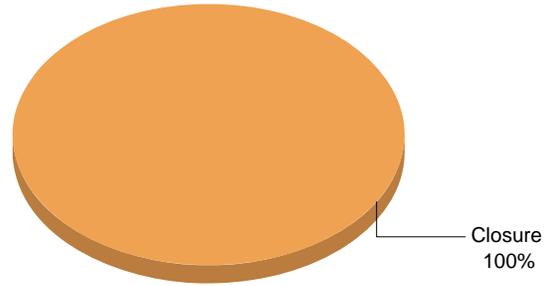
Severity/Duration by Top 5 Freeways



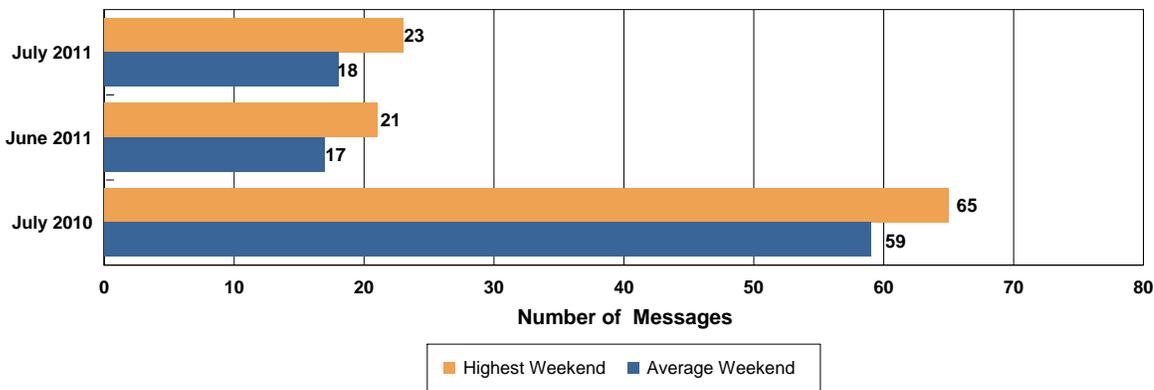
Unique Construction Messages



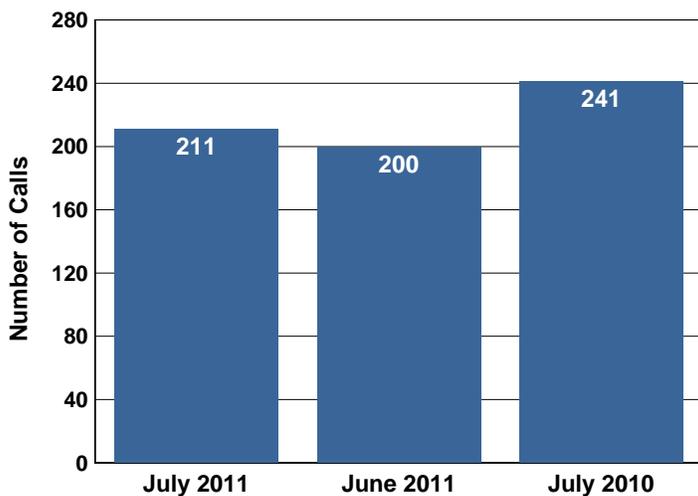
Highest Weekend Unique Construction Messages



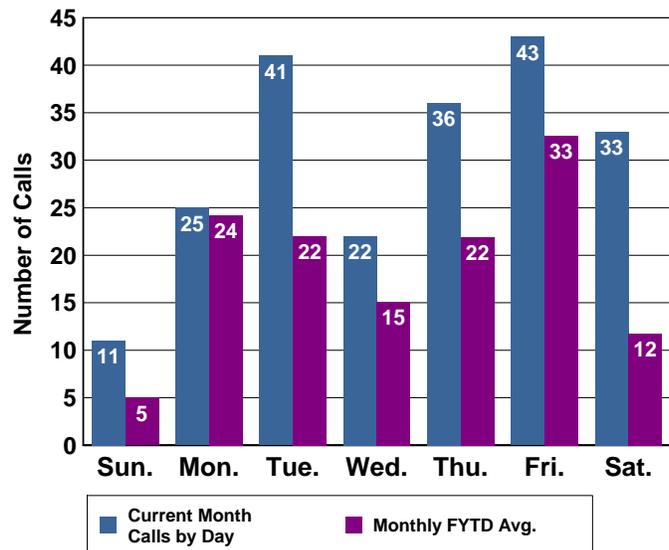
Weekend Construction DMS Message Activity



Total Construction Calls per Month



Construction Calls by Day



Construction Activity



DMS Availability

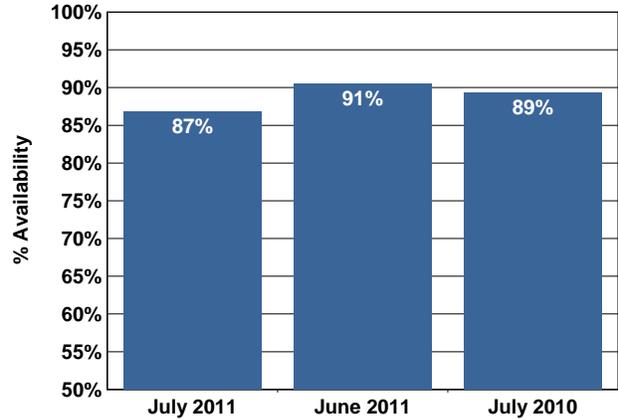
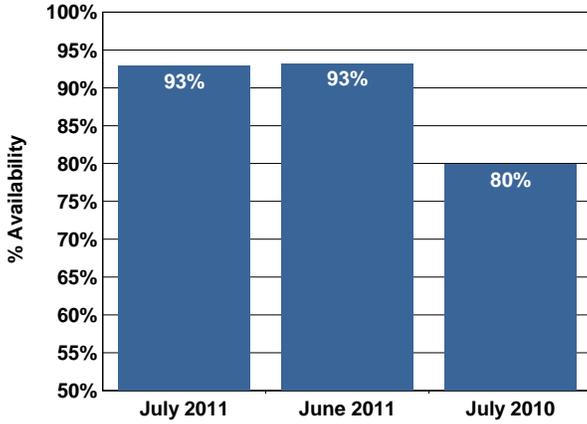


CCTV Camera Availability



	July 2011	June 2011	July 2010
Available	64	64	55
Not Available	5	5	14
Total	69	69	69

	July 2011	June 2011	July 2010
Available	148	154	165
Not Available	22	16	20
Total	170	170	185



Equipment Upgrades



Equipment Type	Maintenance Activity
CCTV	
----	-
TOTAL	0
DMS	
----	-
TOTAL	0
Hub-Node Tower/Other	
Hub 9	Investigation (Verizon Wireless)
TOTAL	1

Work Order Processing

