

Michigan Intelligent Transportation Systems Center

Serving Motorists on Southeast Michigan Freeways

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

October 2011



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In the Spotlight



Since the spring, motorists in Metro Detroit have had to contend with several projects occurring on M-39 (Southfield Freeway), one of MDOT's primary north-south trunklines. The closures and lane restrictions on M-39 were necessary to perform \$80 million in pavement resurfacing, overpass repairs and other projects. While the work is ongoing, the majority of the work finished ahead of schedule. As usual, the MITS Center was instrumental in keeping motorists informed of lane closures and delays. In addition to directing commuter traffic to an alternate route, MITS Center staff constantly monitored current road conditions that could further restrict traffic flow, including traffic incidents and the weather. Real-time incident monitoring, in addition to constant communication with the MITS Center's media partners, local municipalities and the Michigan State Police, served to give the motoring public the best information as quickly as possible.

Compiled by:

URS

Summary

Data Key

Oct. 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.

4,256

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.

6,070

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.

216,885

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.

475

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



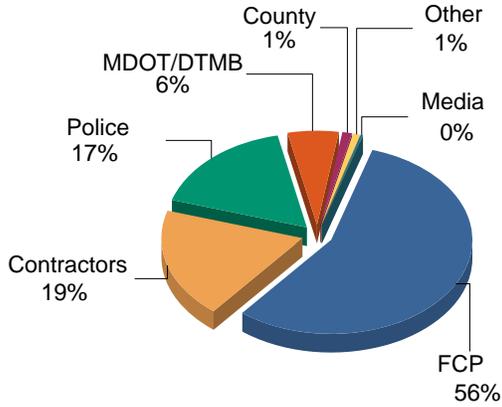
System Availability

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: 95%

CCTV: 96%

Calls by Type



Total Calls: 6,070

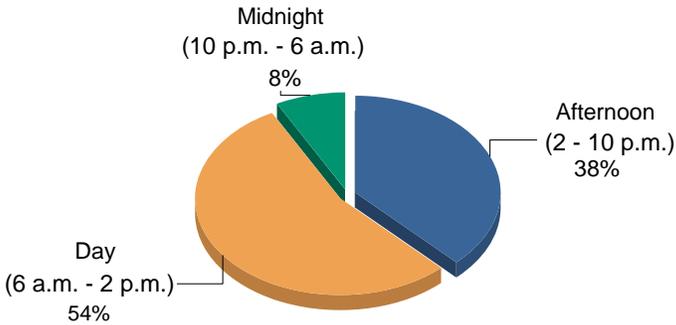
Agency	No. of Calls
FCP	3,386
Contractors	1,153
City	4
County	71
Federal	0
Fire	1
Police	1,012
Border	10
MDOT/DTMB	358
Media	19
Special Events	10
Transit	0
State	0
Parking	0
Airport	0
Animals	0
OTHER	46
Total	6,070

MDOT/DTMB	Total
Taylor TSC	168
Oakland TSC	50
Auburn Hills Garage	35
Detroit TSC	27
MITS Center	21
Metro Region Office	14
DTMB	13
Answering Service	11
Macomb TSC	9
Detroit Maintenance Garage	8
Brighton TSC	2
Total	358

Calls by Weekday Shift



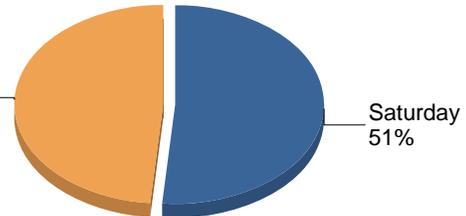
Monday - Friday



Calls by Weekend Day



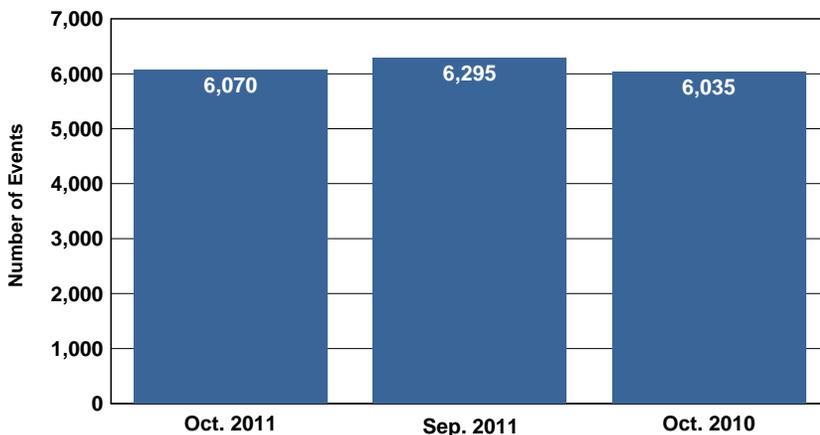
Sunday 49%

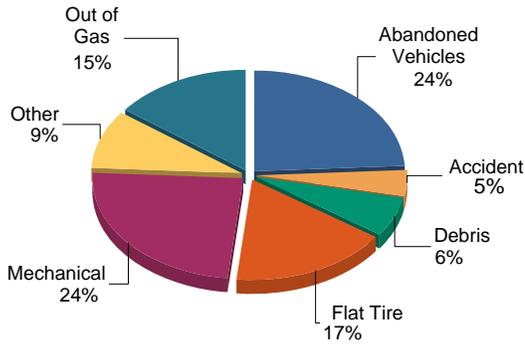


Average Number of Calls per Weekday: 232

Average Number of Calls per Weekend: 239

Monthly Event History





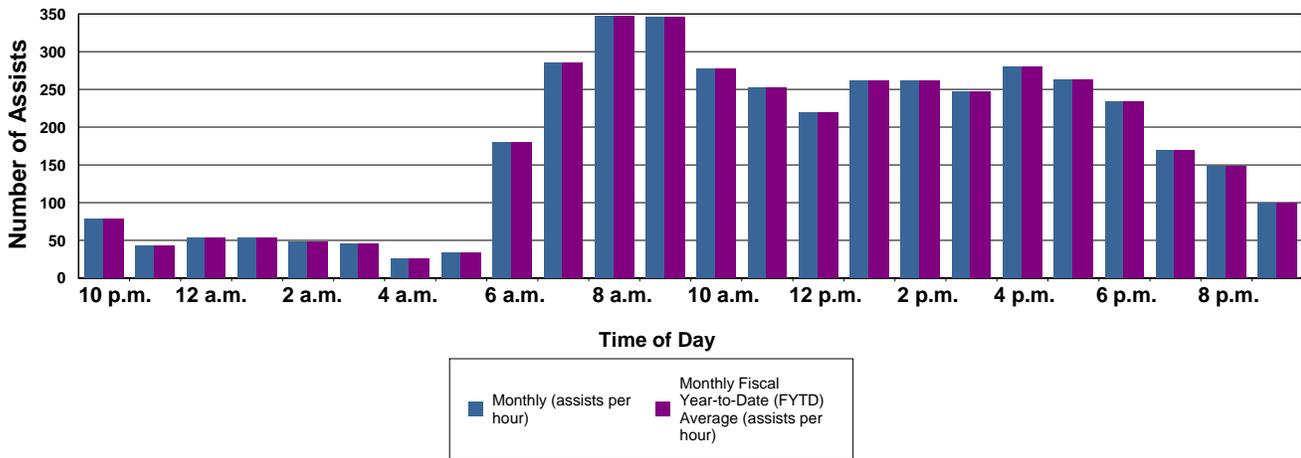
In October, the highest frequency of assists for the Freeway Courtesy Patrol occurred during the 8 a.m. hour, with the lowest frequency of assists occurring during the 4 a.m. hour.

October Total: 4,256

3,166 Assists

1,090 Abandoned Vehicle Stops

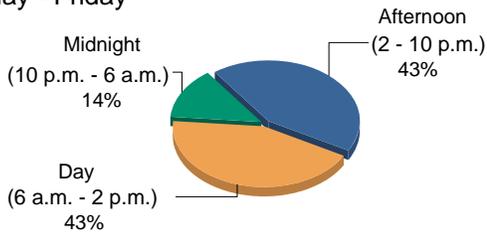
FCP Assists by Time of Day



FCP Dispatches by Weekday Shift

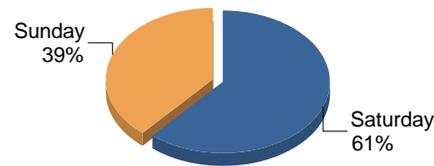


Monday - Friday



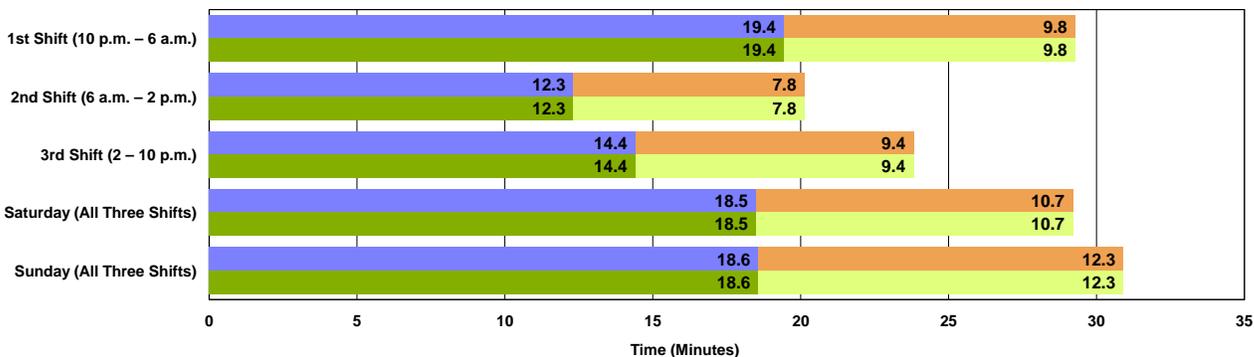
Average Number of Dispatches per Weekday: 33

FCP Dispatches by Weekend Day



Average Number of Dispatches per Weekend: 53

FCP Average Service Times





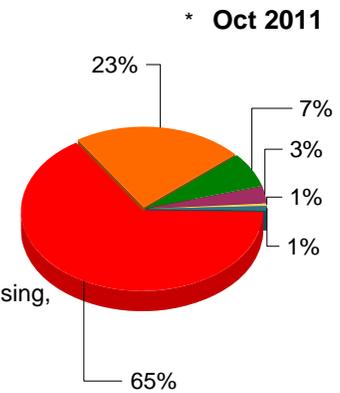
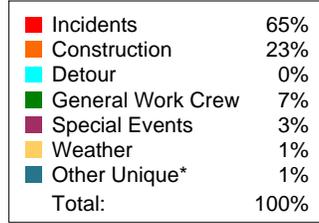
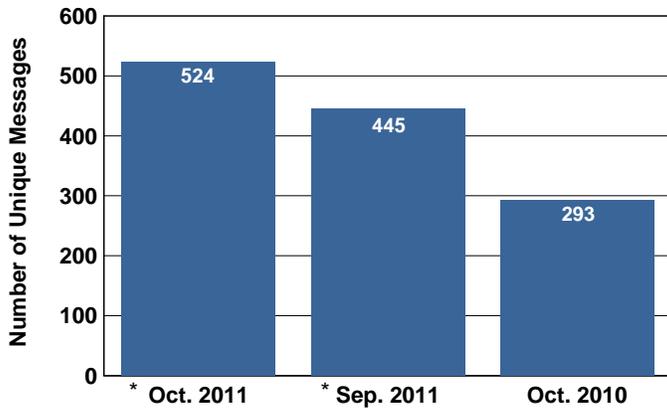
"I ran out of gas on my way to work. After waiting for 10 minutes, this excellent man stopped to help. He was professional, enthusiastic, and helpful. He would not take a tip. Thank you so much for being there when I needed you."

Courtesy
Patrol



Freeway Segment	TOTAL ASSISTS (miles)	TOTAL ASSISTS		ASSIST DENSITY		AVERAGE RESPONSE TIME (min)		AVERAGE CLEAR TIME (min)	
		Oct. 2011	FYTD Avg.	Oct. 2011	FYTD Avg.	Oct. 2011	FYTD Avg.	Oct. 2011	FYTD Avg.
I-75									
Oakland County Line to I-696	37.0	402	402.0	10.9	10.9	18.5	18.5	7.6	7.6
I-696 to I-94	8.0	260	260.0	32.5	32.5	12.0	12.0	10.2	10.2
I-94 to I-96	5.6	83	83.0	14.8	14.8	11.8	11.8	8.2	8.2
I-96 to I-275	37.0	331	331.0	8.9	8.9	15.9	15.9	7.5	7.5
Total I-75	87.6	1,076	1,076.0	12.3	12.3	15.0	15.0	8.2	8.2
I-94									
Washtenaw County Line to M-39	20.7	388	388.0	18.7	18.7	15.5	15.5	8.5	8.5
M-39 to I-75	9.0	269	269.0	29.9	29.9	12.8	12.8	8.2	8.2
I-75 to I-696	10.0	223	223.0	22.3	22.3	18.4	18.4	9.1	9.1
I-696 to St. Clair County Line	21.0	138	138.0	6.6	6.6	11.9	11.9	7.9	7.9
Total I-94	60.7	1,018	1,018.0	16.8	16.8	15.5	15.5	8.5	8.5
I-96									
Livingston County Line to I-275/I-696	11.0	126	126.0	11.5	11.5	21.4	21.4	9.3	9.3
I-275/M-14 to M-39	12.0	213	213.0	17.8	17.8	15.4	15.4	8.9	8.9
M-39 to I-75	11.0	270	270.0	24.5	24.5	13.1	13.1	9.9	9.9
Total I-96	34.0	609	609.0	17.9	17.9	16.1	16.1	9.5	9.5
I-275									
I-96/I-696 to M-14/I-96	8.0	88	88.0	11.0	11.0	14.9	14.9	11.1	11.1
M-14/I-96 to I-94	12.0	156	156.0	13.0	13.0	16.7	16.7	8.9	8.9
I-94 to I-75	17.5	107	107.0	6.1	6.1	17.7	17.7	6.9	6.9
Total I-275	37.5	351	351.0	9.4	9.4	16.2	16.2	8.9	8.9
I-696									
I-96/I-275 to M-10	9.3	146	146.0	15.7	15.7	18.8	18.8	8.5	8.5
M-10 to I-75	9.0	138	138.0	15.3	15.3	13.8	13.8	7.6	7.6
I-75 to I-94	10.4	194	194.0	18.7	18.7	13.9	13.9	9.8	9.8
Total I-696	28.7	478	478.0	16.7	16.7	15.4	15.4	8.8	8.8
M-59 (Veterans)	24.0	15	15.0	0.6	0.6	31.0	31.0	13.2	13.2
I-375	1.2	13	13.0	10.8	10.8	7.7	7.7	9.5	9.5
M-10 (Lodge)	17.9	385	385.0	21.5	21.5	14.5	14.5	11.4	11.4
M-14	6.4	53	53.0	8.3	8.3	14.6	14.6	11.1	11.1
M-39 (Southfield)	14.2	197	197.0	13.9	13.9	13.6	13.6	8.6	8.6
M-5 (Grand River)	10.3	19	19.0	1.8	1.8	29.6	29.6	10.1	10.1
M-8 (Davison)	2.2	42	42.0	19.1	19.1	11.0	11.0	10.1	10.1
Total	324.7	4,256	4,256.0						

Unique DMS Messages by Type

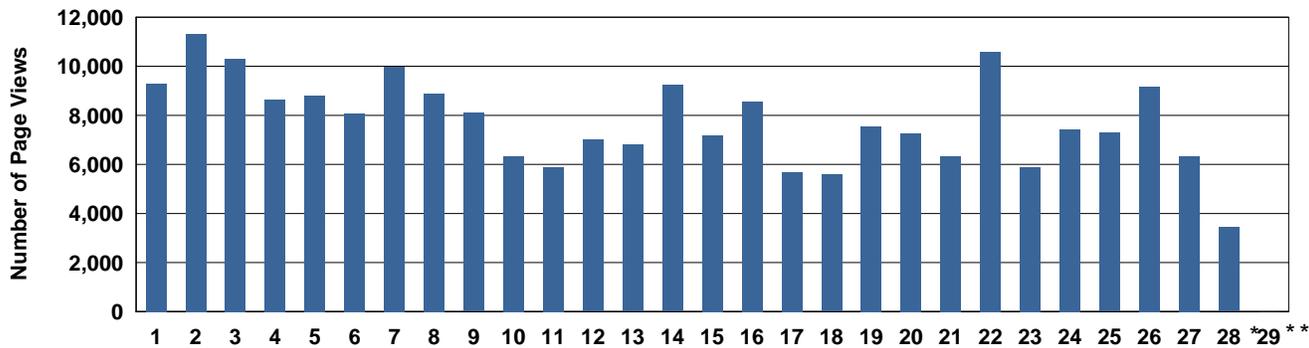


* Airport, Amber Alert, Border Crossing, Location Specific, Safety, and Travel Time Unique Messages

* Oct. 2011 data averaged from past years due to system outage



Mi Drive Web Site October Daily Page Views

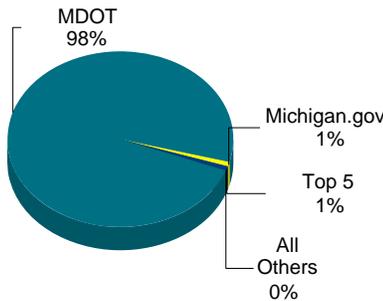


Day of Month * Due to system outages from October 29th - October 31st No data was pulled.

Referring Site Requests to Mi Drive Web Site in October



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



Top 5 Non-Michigan.gov Sites



On an average day in **October**, the Mi Drive Web site received the most activity between **9 and 10 a.m.**

Incident Communication Accuracy



Weekend DMS Snapshot Review	Oct. 2011	Sep. 2011	Oct. 2010
All Incident Messages	100%	100%	100%
High-Impact DMS Messages	Oct. 2011	Sep. 2011	Oct. 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	Oct. 2011	Sep. 2011	Oct. 2010
Advisory Text Messages	96%	98%	91%
Web Site Incident Postings	100%	100%	100%

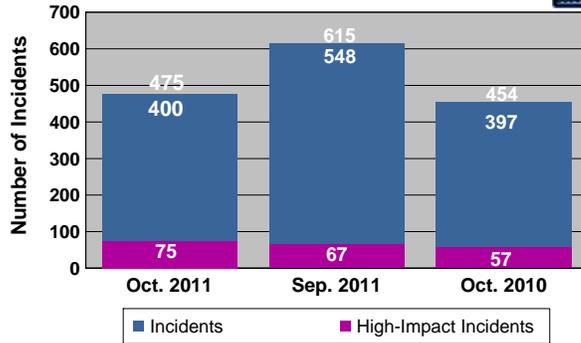
Most Utilized DMS



1. I-696 EB at Couzens
2. I-75 SB at Woodward Hgts.
3. I-75 NB at Clay
4. I-94 WB at 10 Mile
5. I-96 EB at Beech Daly



Total Number of Incidents



High-Impact Incident Activity



	Oct. 2011	Sep. 2011	Oct. 2010
Freeway Closures All Lanes Closed	17	12	9
Lane Closures Only One Lane Open	49	50	44
Ramp Closures Freeway-to-Freeway	9	5	4
Total	75	67	57

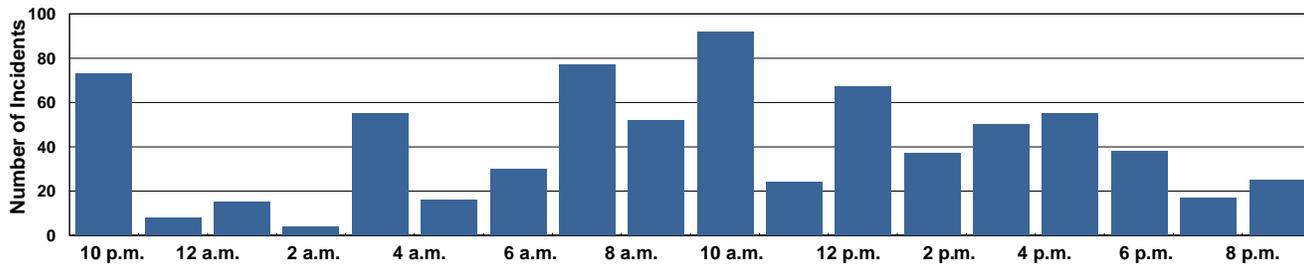
High-impact incidents account for 16% of the total incidents in October.



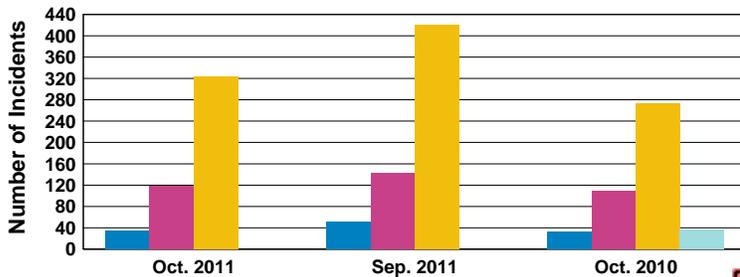
Total Incidents by Roadway

Freeway	Oct. 2011	Sep. 2011	Oct. 2010
I-75 (CHRYSLER/FISHER)	120	197	119
I-94 (FORD)	120	148	95
I-696 (REUTHER)	64	96	76
I-96 (JEFFRIES)	76	87	63
M-10 (LODGE)	26	31	36
M-39 (SOUTHFIELD)	21	3	30
I-275	37	49	32
I-375	0	2	1
M-14	9	0	0
M-59	1	2	2
M-8	1	0	0
Total	475	615	454

Total Incidents per Hour

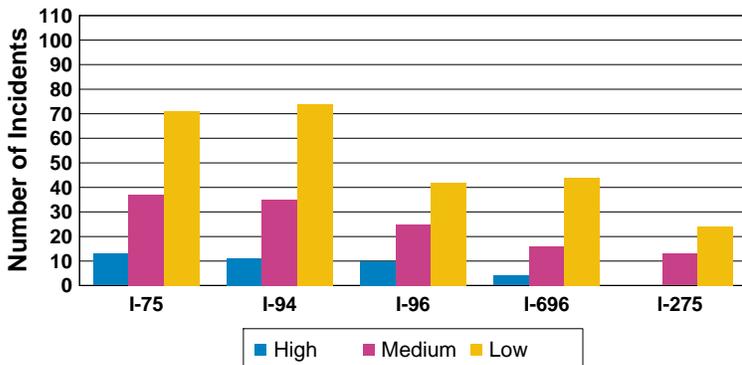


Total Incident Severity/Duration by Month

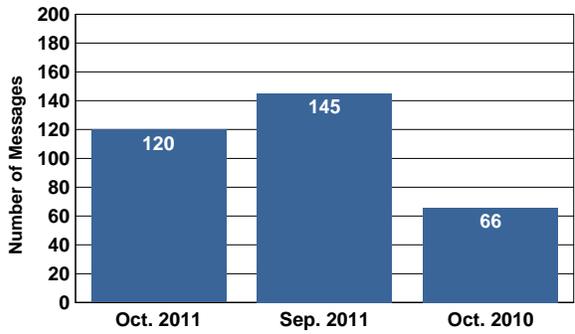


- Single-lane closures equal to 90+ minutes, partial closures (more than one lane, but not all) equal to 45+ minutes, or total closures (all lanes) 20+ minutes
- Shoulder closures equal to 90+ minutes, single-lane closures between 20 and 89 minutes, partial closures (more than one lane but not all) between 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

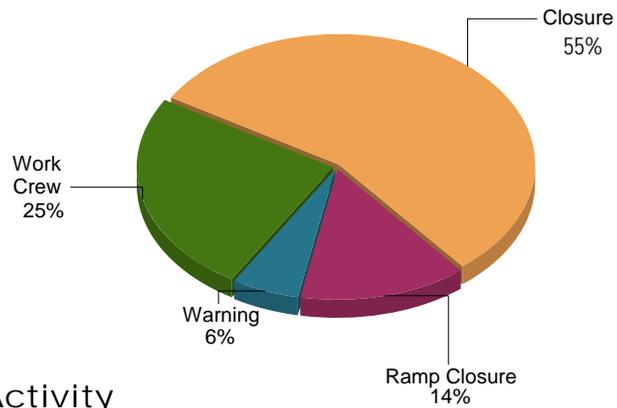
Severity/Duration by Top 5 Freeways



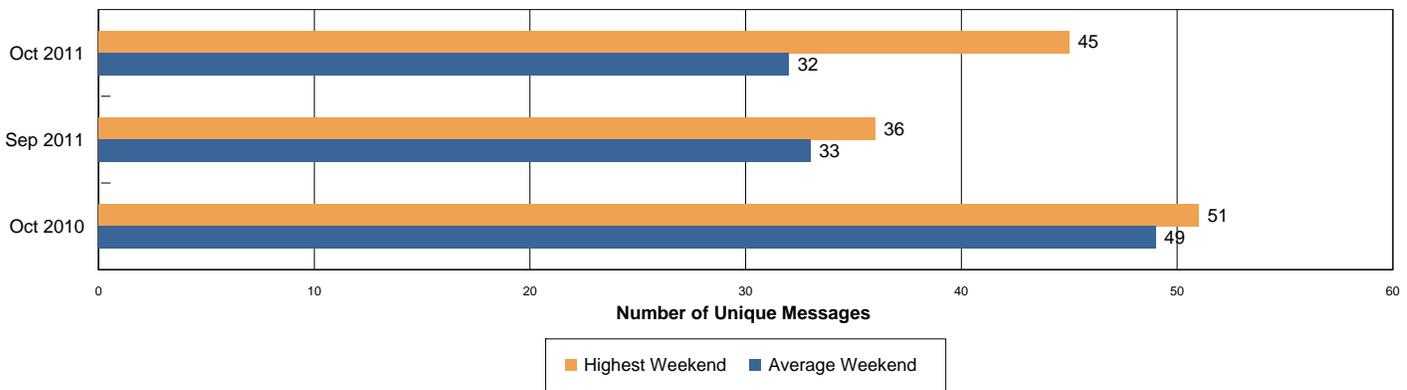
Unique Construction Messages



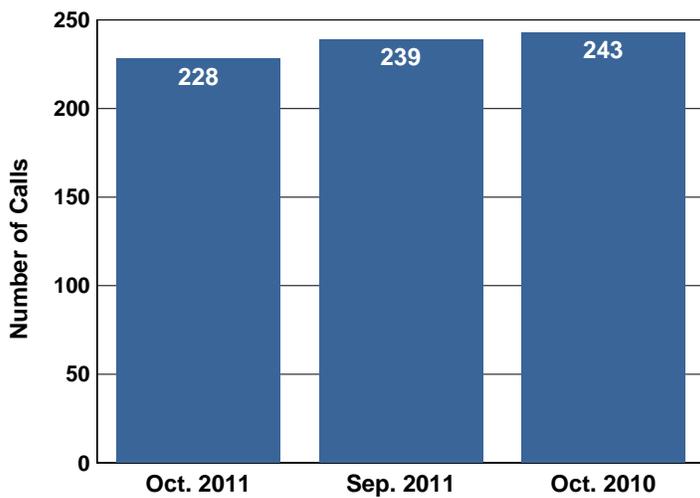
Highest Weekend Unique Construction Messages



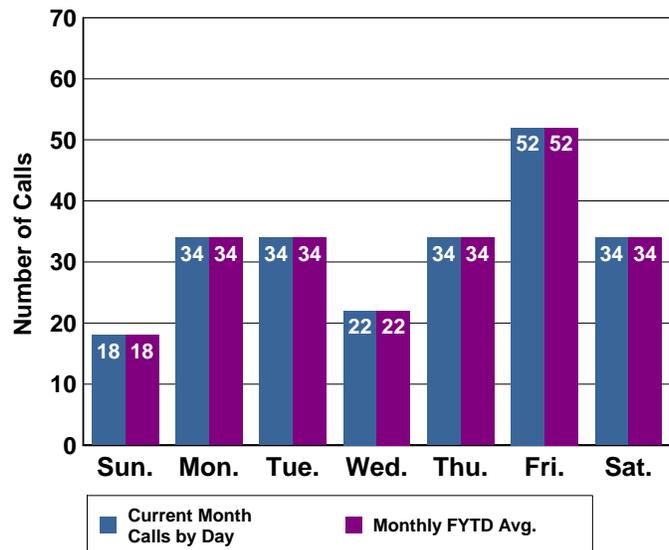
Weekend Construction DMS Message Activity



Total Construction Calls per Month



Construction Calls by Day



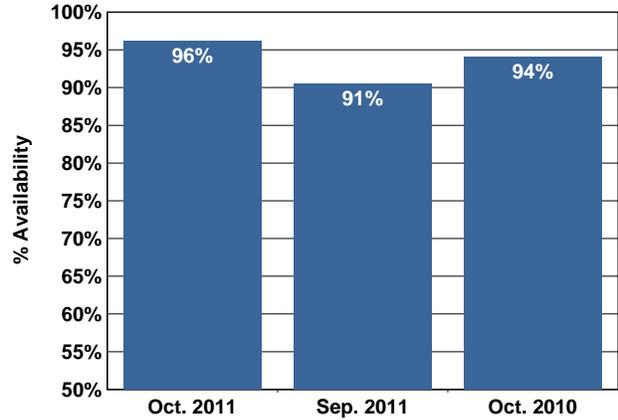
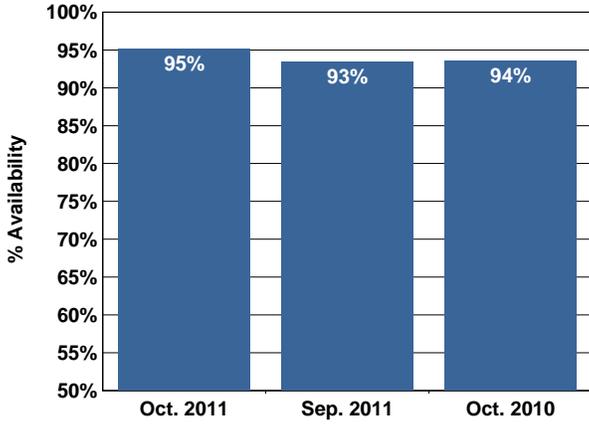
Construction Activity





	Oct. 2011	Sep. 2011	Oct. 2010
Available	88	64	65
Not Available	5	5	4
Total	93	69	69

	Oct. 2011	Sep. 2011	Oct. 2010
Available	232	154	160
Not Available	9	16	10
Total	241	170	170



Equipment Upgrades



Equipment Type	Maintenance Activity
CCTV	
----	-
TOTAL	0
DMS	
----	-
TOTAL	0
Hub-Node Tower/Other	
----	-
TOTAL	0

Work Order Processing

