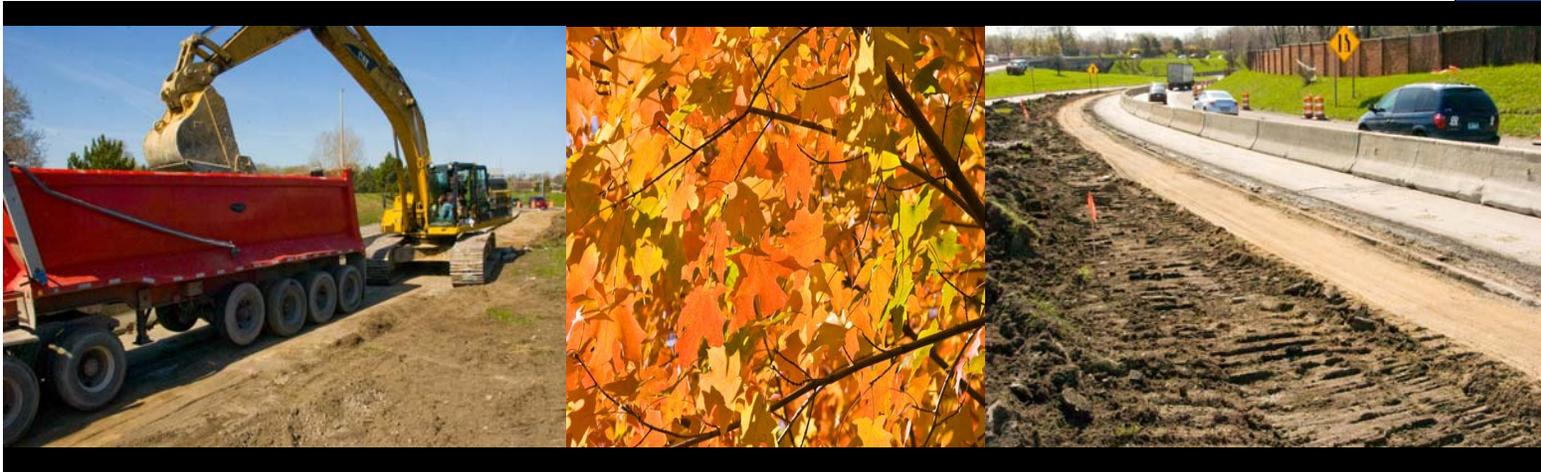


Michigan Intelligent Transportation Systems Center

Serving Motorists on Southeast Michigan Freeways

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

November 2010



Matt Smith, P.E., P.T.O.E.
18101 W. Nine Mile Road
Southfield, MI 48075
SmithMatt@michigan.gov

Sandra Montes, P.E.
1050 6th Street
Detroit, MI 48226
MontesS@michigan.gov

In the Spotlight



Construction Presentation

Construction Coordination
2010 End of Season



On Nov. 8, the MITS Center hosted the construction end of season meeting for the Metro Region 2010 construction season. The meeting incorporated members of MDOT from all facets of the construction process such as inspection, traffic and safety, and maintenance. The meeting is held to review such topics as lessons learned from the past and instituting best practices for future projects.

A large portion of the meeting is an open forum for engineers to collaborate together on future projects to minimize the impact to mobility and utilize resource allocation. Winter operations are also discussed for ongoing project work with regards to safety and closure timing restrictions.

Compiled by:

URS

Summary

Data Key

Nov. 2010

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.

4,009

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.

5,341

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.

113,571

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.

395

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).

99% Accurate

MaintStar



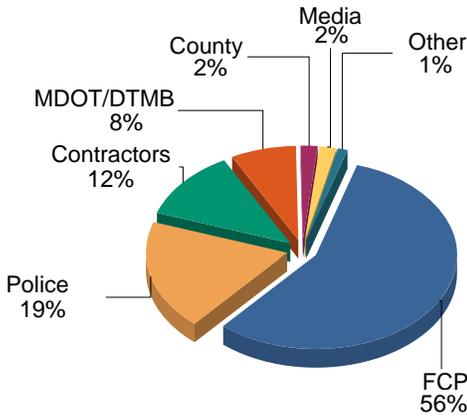
System Availability

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: 94%

CCTV: 94%

Calls by Type



Total Calls: 5,341

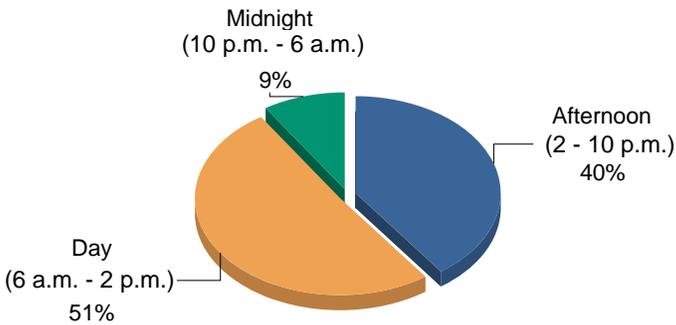
Agency	No. of Calls
FCP	3,016
Contractors	633
City	3
County	105
Federal	0
Fire	0
Police	1,003
Border	3
MDOT/DTMB	399
Media	96
Special Events	14
Transit	1
State	0
Parking	0
Airport	3
Animals	0
OTHER	65
Total	5,341

MDOT/DTMB	Total
Taylor TSC	164
MITS Center	53
Oakland TSC	44
DTMB	31
Detroit TSC	24
Detroit Maintenance Garage	20
Macomb TSC	18
Auburn Hills Garage	14
Metro Region Office	12
Answering Service	10
Port Huron TSC	7
Brighton TSC	1
University Region	1
Total	399

Calls by Weekday Shift



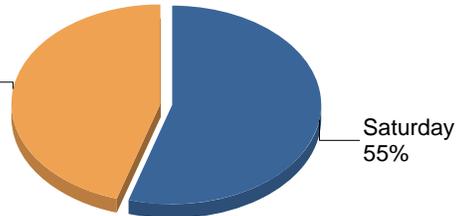
Monday - Friday



Calls by Weekend Day



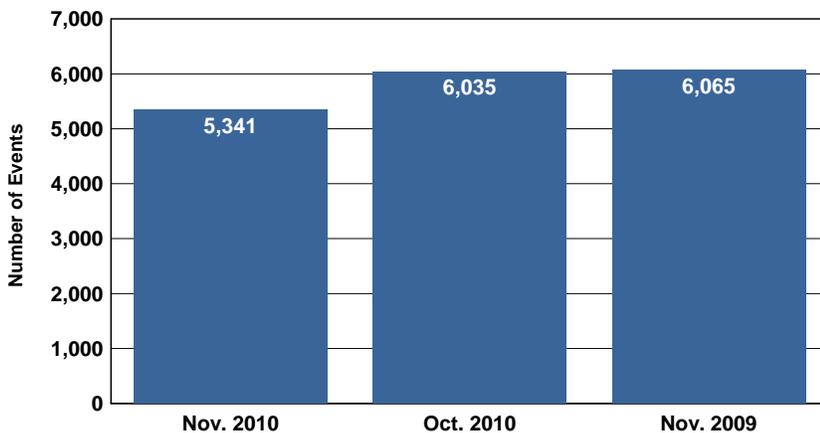
Sunday 45%

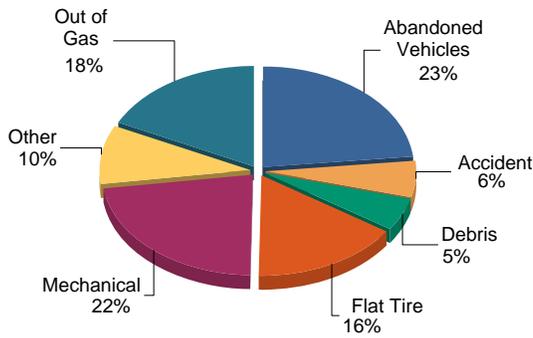


Average Number of Calls per Weekday: 204

Average Number of Calls per Weekend: 217

Monthly Event History

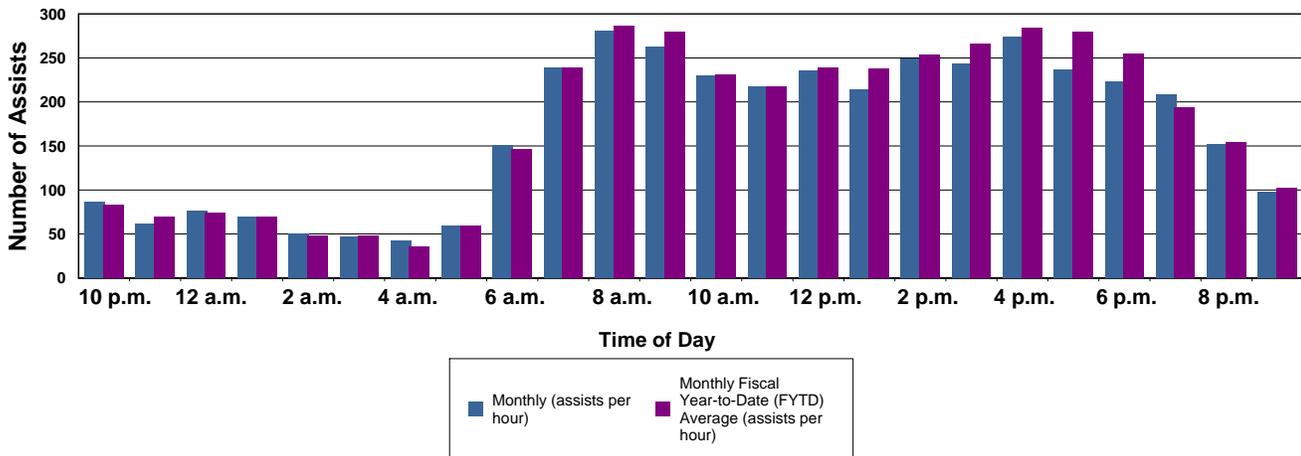




During the month of November, 98% of assists were made to vehicles with Michigan license plates. Assists also were made to vehicles with Texas, Florida, and Arizona plates.

November Total: 4,009
3,018 Assists
991 Abandoned Vehicle Stops

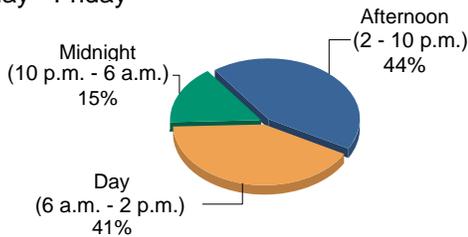
FCP Assists by Time of Day



FCP Dispatches by Weekday Shift

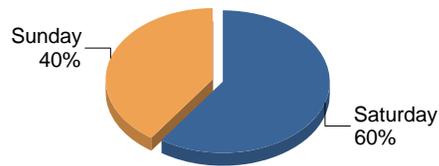


Monday - Friday



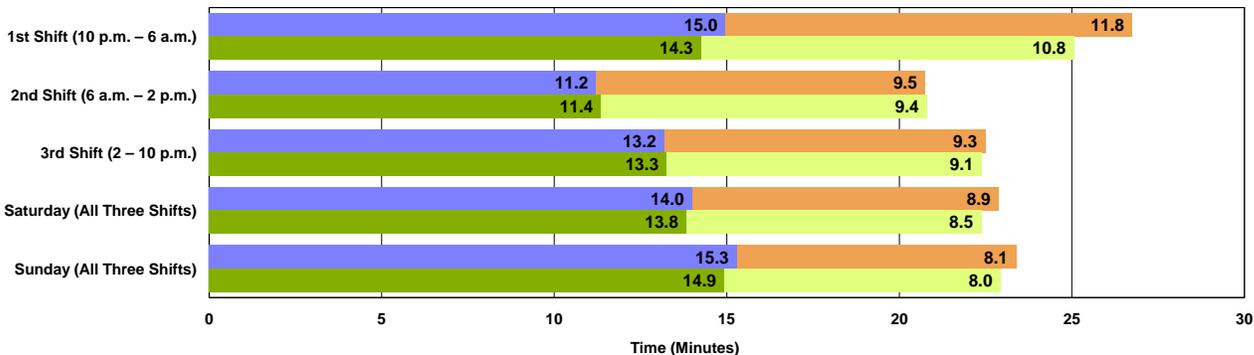
Average Number of Dispatches per Weekday: 33

FCP Dispatches by Weekend Day



Average Number of Dispatches per Weekend: 40

FCP Average Service Times



FCP Service Area and Assists per Mile



Motorist Quote of the Month:

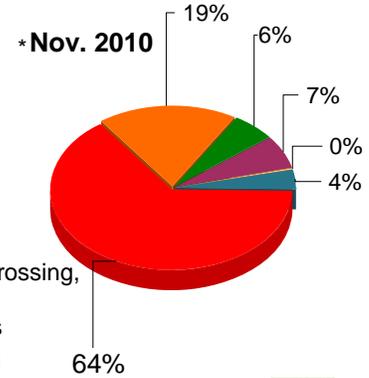
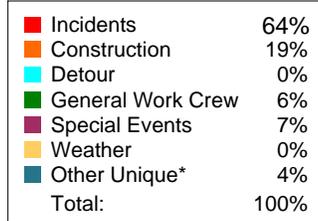
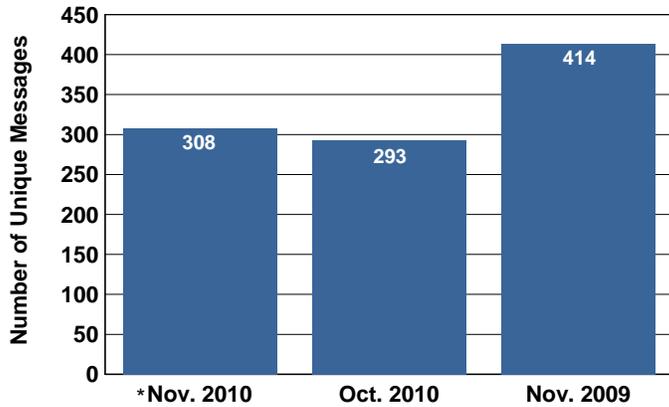
"The courtesy patrol service was a saving grace for me. I was on I-696 near Orchard Lake when my tire went flat. I could only make it over to the left shoulder, because traffic was too heavy. It was frightening to be parked in a disabled vehicle so close to fast traffic. I called 911 who stated a courtesy van was in route to my location. The van arrived quickly with a driver who was courteous, helpful, and efficient. He had me going on my way in no time. Thank you MDOT for providing such a great service!"

Courtesy Patrol



Freeway	Segment	TOTAL ASSISTS (miles)	ASSIST DENSITY		AVERAGE RESPONSE TIME (min)		AVERAGE CLEAR TIME (min)			
			Nov. 2010	FYTD Avg.	Nov. 2010	FYTD Avg.	Nov. 2010	FYTD Avg.		
I-75	Oakland County Line to I-696	37.0	365	384.5	9.9	10.4	17.9	17.1	8.6	8.9
	I-696 to I-94	8.0	226	241.0	28.3	30.1	11.7	11.0	11.3	10.0
	I-94 to I-96	5.6	72	78.5	12.9	14.0	10.8	11.6	8.7	8.7
	I-96 to I-275	37.0	234	248.5	6.3	6.7	11.8	11.9	10.0	9.2
		87.6	897	952.5	10.2	21.7	14.0	13.4	9.7	9.2
I-94	Washtenaw County Line to M-39	20.7	314	320.0	15.2	15.5	14.4	14.9	8.4	8.5
	M-39 to I-75	9.0	256	275.5	28.4	30.6	11.2	11.4	8.0	8.4
	I-75 to I-696	10.0	276	273.5	27.6	27.4	13.5	14.8	9.7	9.0
	I-696 to St. Clair County Line	21.0	132	132.5	6.3	6.3	19.6	20.3	7.0	6.7
		60.7	978	1,001.5	16.1	33.0	13.9	14.3	8.5	8.4
I-96	Livingston County Line to I-275/I-696	11.0	108	127.0	9.8	11.5	15.0	15.6	8.9	8.9
	I-275/M-14 to M-39	12.0	199	208.0	16.6	17.3	12.5	12.4	8.1	8.6
	M-39 to I-75	11.0	308	317.5	28.0	28.9	11.8	10.9	10.8	10.0
		34.0	615	652.5	18.1	38.4	12.7	12.3	9.6	9.4
I-275	I-96/I-696 to M-14/I-96	8.0	95	111.0	11.9	13.9	11.6	11.9	8.0	7.8
	M-14/I-96 to I-94	12.0	128	139.5	10.7	11.6	14.3	14.8	9.6	9.0
	I-94 to I-75	17.5	52	65.0	3.0	3.7	12.0	14.3	8.2	7.6
		37.5	275	315.5	7.3	16.8	13.0	13.8	8.8	8.3
I-696	I-96/I-275 to M-10	9.3	164	151.0	17.6	16.2	14.5	13.8	8.2	8.9
	M-10 to I-75	9.0	137	137.0	15.2	15.2	9.9	10.9	12.3	11.1
	I-75 to I-94	10.4	201	182.5	19.3	17.5	12.6	13.1	10.5	11.3
		28.7	502	470.5	17.5	32.8	12.3	12.5	10.2	10.4
M-59 (Veterans)		24.0	33	30.0	1.4	1.3		15.0	7.2	8.8
I-375		1.2	4	6.0	3.3	5.0	6.0	17.0	5.0	8.1
M-10 (Lodge)		17.9	313	327.0	17.5	18.3	11.9	11.4	9.0	9.2
M-14		6.4	39	56.5	6.1	8.8	14.0	14.7	11.4	8.6
M-39 (Southfield)		14.2	294	289.5	20.7	20.4	11.0	10.8	12.0	11.1
M-5 (Grand River)		10.3	26	29.0	2.5	2.8	15.0	14.5	9.0	9.5
M-8 (Davison)		2.2	33	24.0	15.0	10.9	8.7	8.8	10.1	10.3
Total		324.7	4,009	4,154.5						

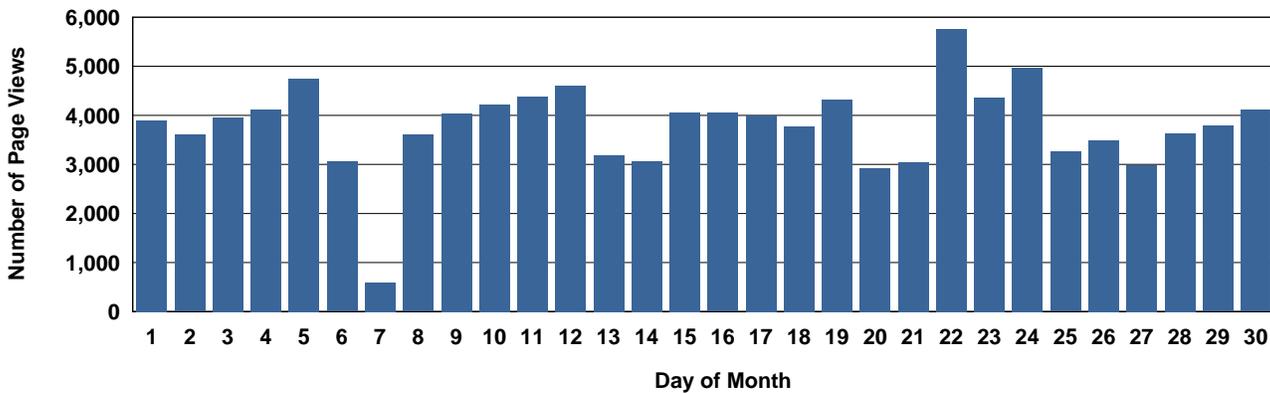
Unique DMS Messages by Type



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

* Nov. 2010 data averaged from past years due to system outage

Mi Drive Web Site November Daily Page Views



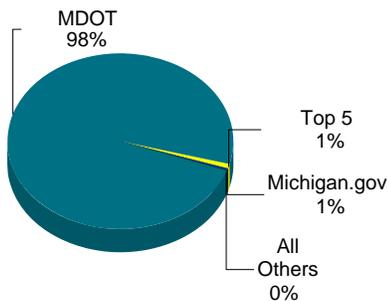
Traveler Information



Referring Site Requests to Mi Drive Web Site in November



In **November**, the Mi Drive Web site experienced the most activity on **Mondays**.



Top 5 Non-Michigan.gov Sites

- http://www.google.com/
- http://search.yahoo.com/
- http://www.clickondetroit.com/
- http://www.bing.com/
- http://www.ohsp.state.mi.us/

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

Incident Communication Accuracy



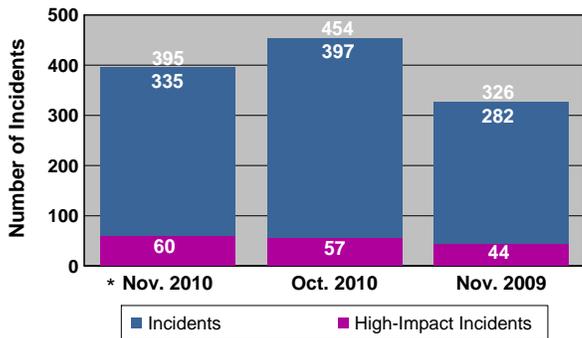
Weekend DMS Snapshot Review	Nov. 2010	Oct. 2010	Nov. 2009
All Incident Messages	100%	100%	100%
High-Impact DMS Messages	Nov. 2010	Oct. 2010	Nov. 2009
All High-Impact Messages	99%	100%	100%
Freeway Closure Messages	100%	100%	100%
Lane Closure Messages	98%	100%	100%
Ramp Closure Messages	100%	100%	100%
Other Communication	Nov. 2010	Oct. 2010	Nov. 2009
Advisory Text Messages	93%	91%	96%
Web Site Incident Postings	100%	100%	94%

Most Utilized DMS



1. I-696 EB at Manistee
2. I-75 NB at Woodward Hgts.
3. I-94 WB at 10 Mile
4. I-696 WB at Ryan
5. I-696 EB at Bunert

Total Number of Incidents



High-Impact Incident Activity



	Nov. 2010	Oct. 2010	Nov. 2009
Freeway Closures All Lanes Closed	13	9	15
Lane Closures Only One Lane Open	42	44	25
Ramp Closures	5	4	4
Freeway-to-Freeway			
Total	60	57	44

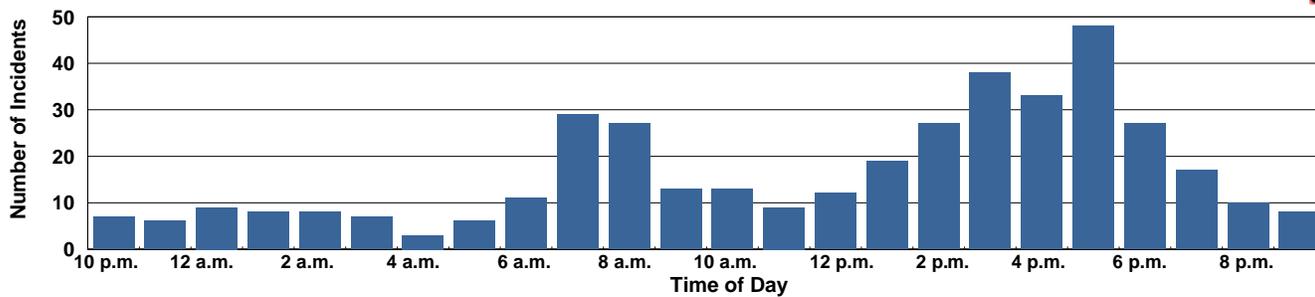
High-impact incidents account for **15%** of the total incidents in November.

Total Incidents by Roadway

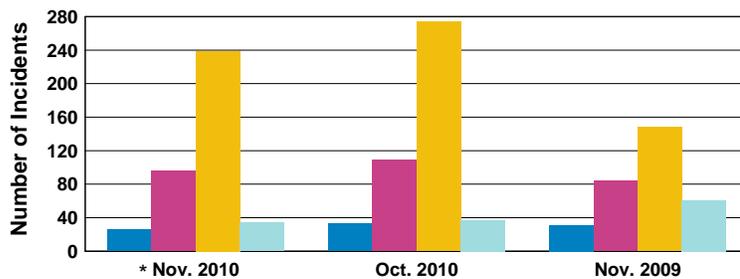


Freeway	* Nov. 2010	Oct. 2010	Nov. 2009
I-75 (CHRYSLER/FISHER)	97	119	93
I-94 (FORD)	94	95	72
I-696 (REUTHER)	49	76	42
I-96 (JEFFRIES)	44	63	29
M-10 (LODGE)	32	36	26
M-39 (SOUTHFIELD)	37	30	28
I-275	39	32	32
I-375	2	1	4
M-59	1	2	0
Total	395	454	326

*Total Incidents per Hour

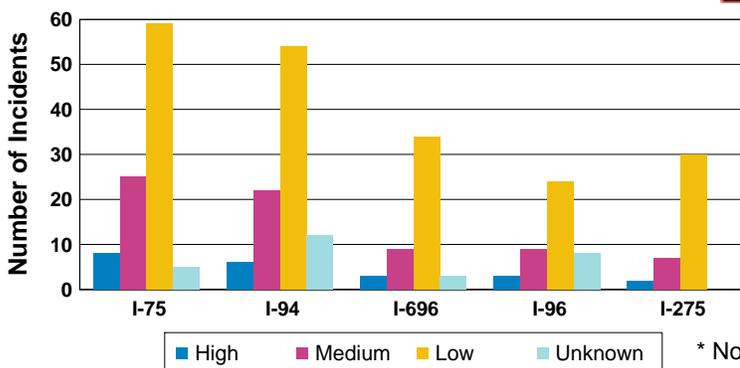


Total Incident Severity/Duration by Month

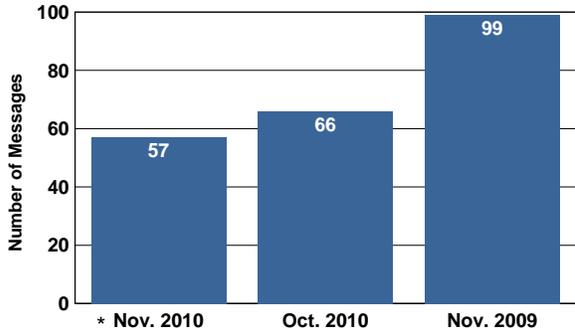


- Single-lane closures equal to 90+ minutes, partial closures (more than one lane, but not all) equal to 45+ minutes, or total closures (all lanes) 20+ minutes
- Shoulder closures equal to 90+ minutes, single-lane closures between 20 and 89 minutes, partial closures (more than one lane but not all) between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

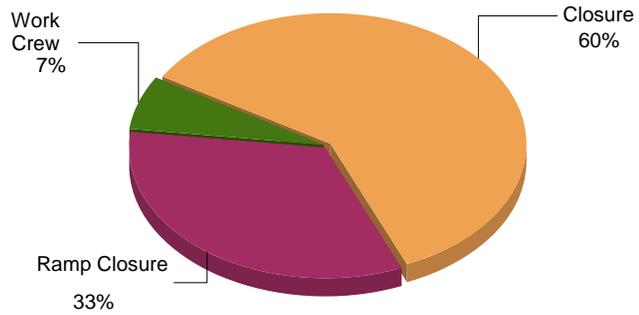


Unique Construction Messages

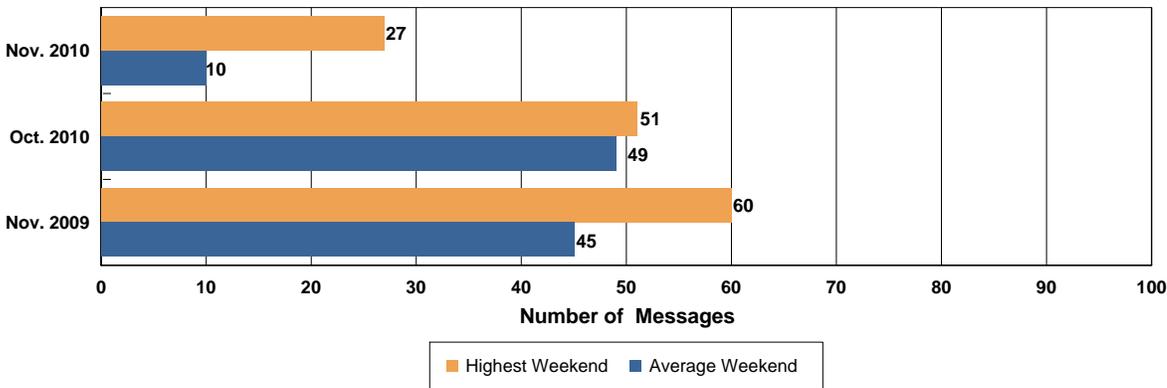


* Nov. 2010 data averaged from past years due to system outage

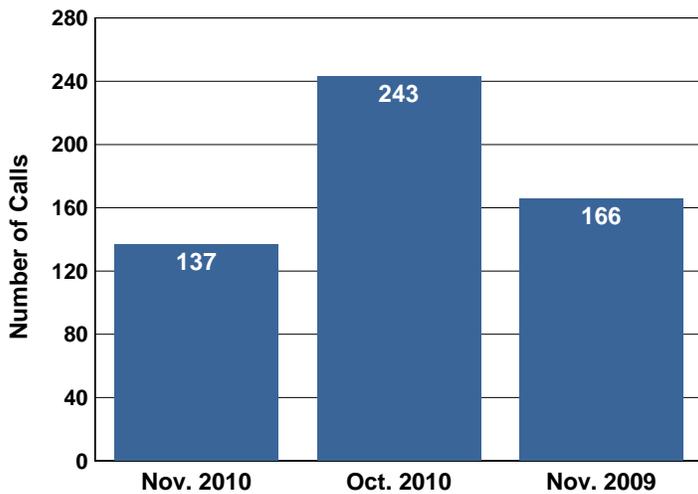
Highest Weekend Unique Construction Messages



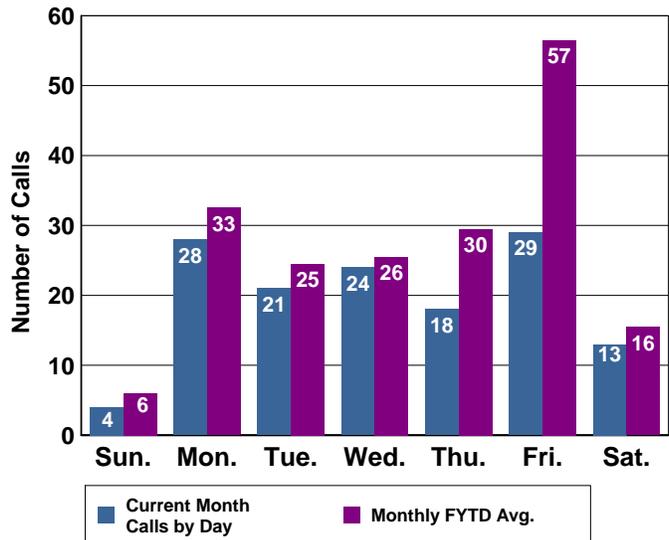
Weekend Construction DMS Message Activity



Total Construction Calls per Month



Construction Calls by Day



Construction Activity



DMS Availability

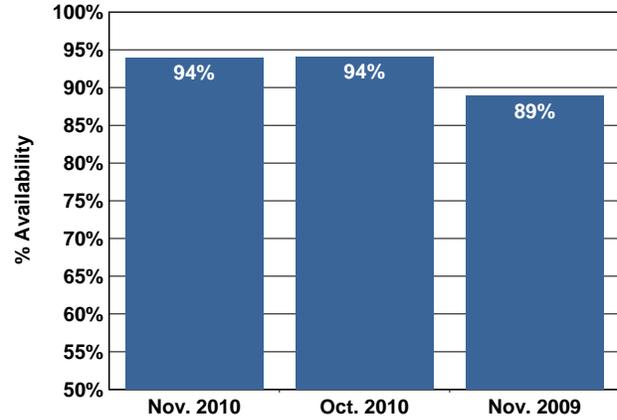
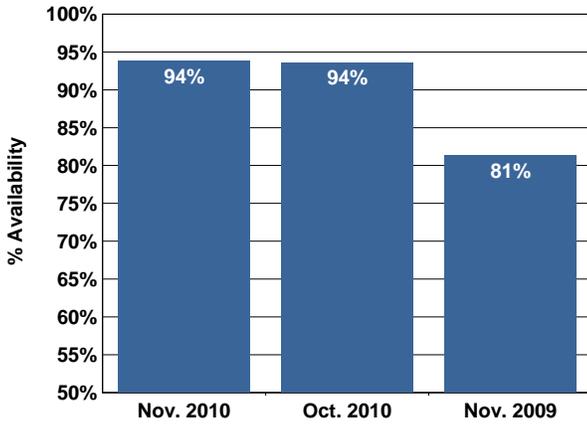


CCTV Camera Availability



	Nov. 2010	Oct. 2010	Nov. 2009
Available	65	65	54
Not Available	4	4	12
Total	69	69	66

	Nov. 2010	Oct. 2010	Nov. 2009
Available	160	160	146
Not Available	10	10	18
Total	170	170	164



Equipment Upgrades



Equipment Type	Maintenance Activity
CCTV	
----	-
TOTAL	0
DMS	
Southbound M-39 at 7 Mile	Installed/Replaced Hardware
TOTAL	1
Hub/Node Tower	
----	-
TOTAL	0

Work Order Processing

