

Michigan Intelligent Transportation Systems Center

Serving Motorists on Southeast Michigan Freeways
www.michigan.gov/its



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

Sarah Gill
1050 6th Street
Detroit, MI 48226
GILLS@michigan.gov

In the Spotlight



MITS Center management completed technical training on Aug. 11, 2009. This step completed the final phase of the control room video wall overhaul project. The video wall transformation consisted of removing the 36 existing 24-inch monitors and installing 16 seamless 67-inch Mitsubishi digital light processing rear-access video cubes, each of which can display various video configurations controlled by a touch-screen. The new video cubes also included lamp charger devices which can detect lamp failure and automatically switch to a new lamp, therefore, minimizing downtime. Another aspect of this project included the installation of an audio distribution system used to monitor television and

radio traffic broadcasts. Operators also received complete training on both systems and have transitioned to utilizing the new wall with ease.

Compiled by:



Summary

Data Key

Aug. 2009

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.

4,983

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.

6,477

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.

354,870

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.

348

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



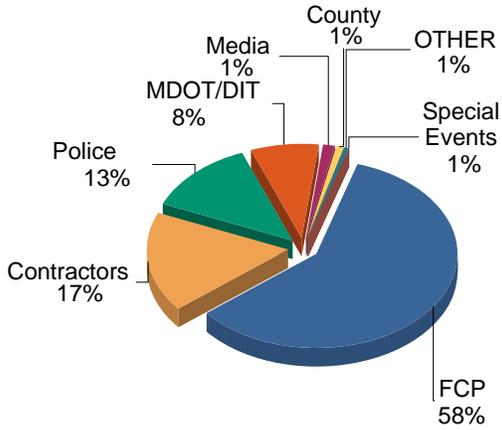
System Availability

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: 92%

Calls by Type

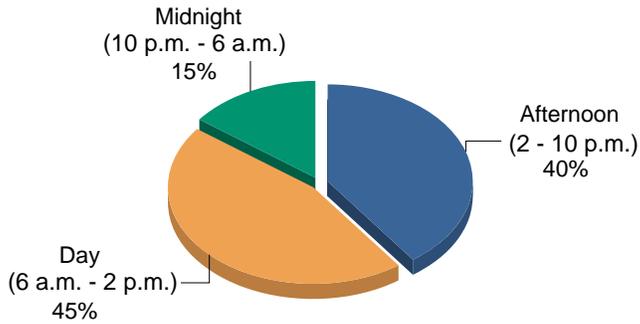


Total Calls: 6,477

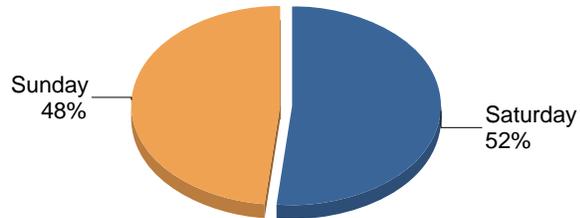
Agency	No. of Calls
FCP	3,851
Contractors	1,117
City	3
County	59
Federal	0
Fire	1
Police	824
Border	0
MDOT/DIT	494
Media	92
Special Events	6
Transit	0
State	0
Parking	0
Airport	0
Animals	0
OTHER	30
Total	6,477

Police	Total
MSP	782
Troy PD	6
Detroit PD	5
St. Clair Shores PD	4
Livonia PD	3
Roseville PD	3
Allen Park PD	2
Dearborn PD	2
Harper Woods PD	2
Hazel Park PD	2
Huron Twp. PD	2
Macomb County Sheriff	2
Madison Heights PD	2
Monroe County Sheriff	2
Brownstown Twp. PD	1
Canton PD	1
Redford Twp. PD	1
Southfield PD	1
Wayne County Sheriff	1
Total	824

Calls by Shift



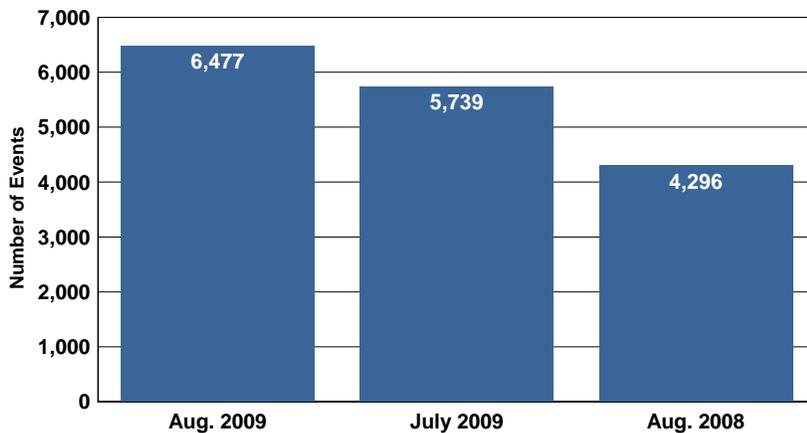
Calls by Weekend Day

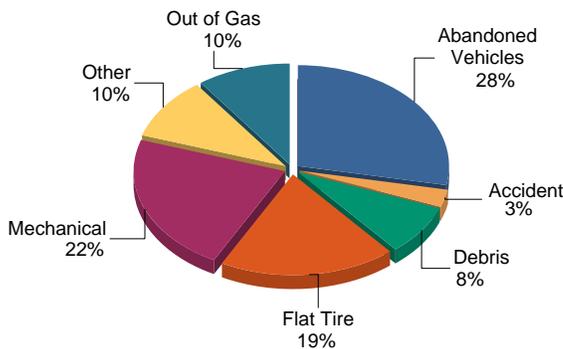


Average Number of Calls per Weekday: 238

Average Number of Calls per Weekend: 299

Monthly Event History





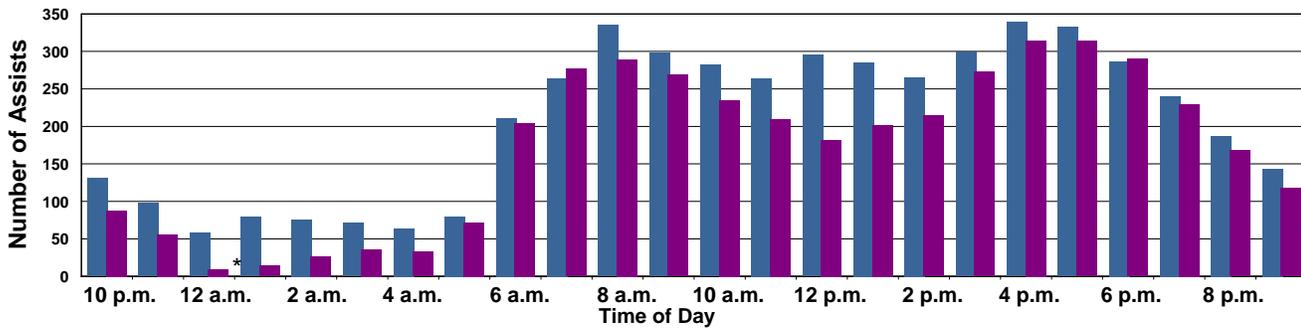
During August, FCP performed 178 more mechanical assists compared to last month. Although the Detroit metropolitan area has not experienced very hot weather for long periods of time, higher temperatures may have accounted for this slight increase in mechanical assists. However, this increase did not cause the percentage to change in the *FCP Assist Type* graph.

August Total: 4,983

3,537 Assists

1,446 Abandoned Vehicle Stops

FCP Assists by Time of Day

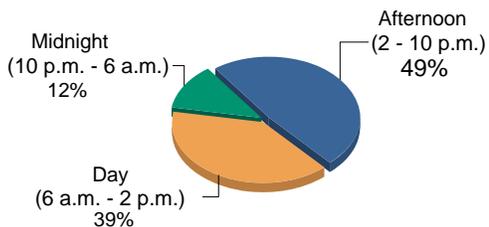


* FCP coverage hours resumed to 24 hours a day on Aug. 4, 2009.

FCP Dispatches by Weekday Shift



FCP Dispatches by Weekend Day

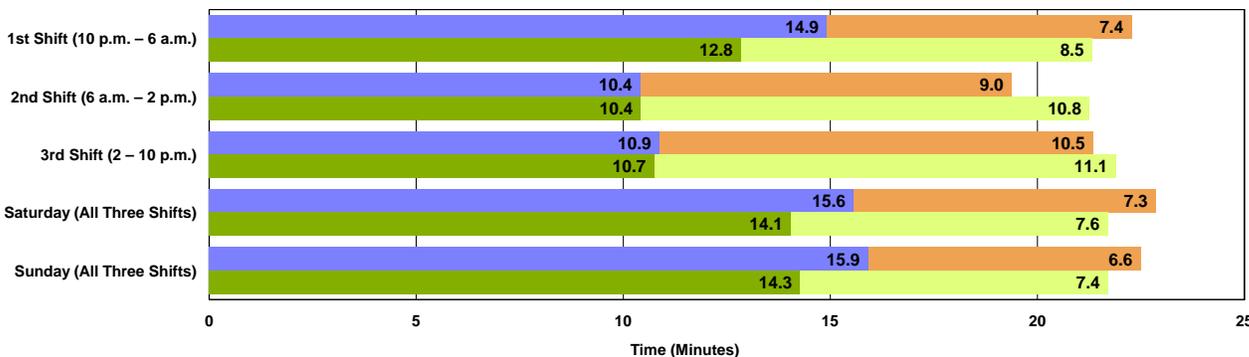


Average Number of Dispatches per Weekday: 27



Average Number of Dispatches per Weekend: 36

FCP Average Service Times



Legend: Current Month Average Response Times (Blue), Monthly FYTD Average Response Times (Green), Current Month Average Clear Times (Orange), Monthly FYTD Average Clear Times (Light Green)





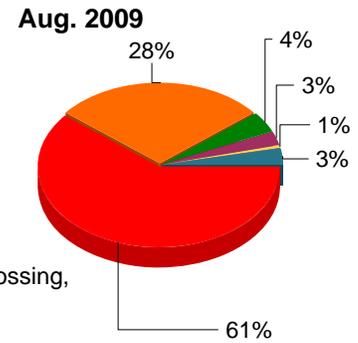
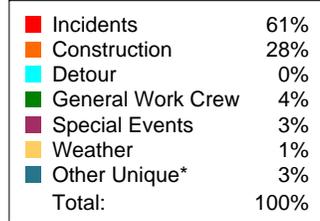
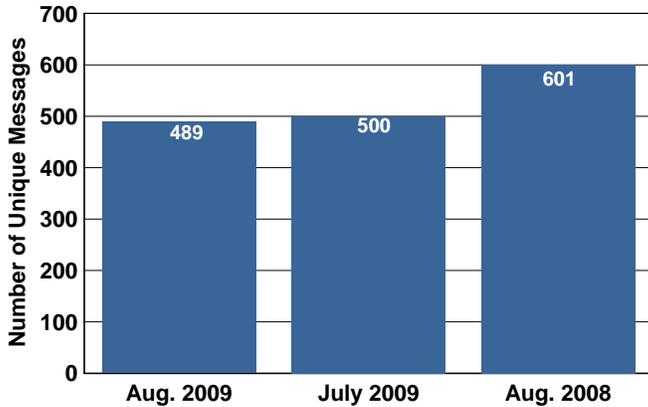
Motorist Quote of the Month:

"On Tuesday, August 18, just after 12 noon, I was on westbound I-94 near the Lodge when a ladder fell off of a truck a few vehicles in front of me. The ladder wound up wedged better than halfway under my car, and I could not remove it nor drive to a safer location. I and my two young girls were stuck in our van, in the left lane, on a very skinny shoulder with cars zooming past us. We were a bundle of nerves to say the least! Within 3 to 4 minutes of calling the police, a MDOT Courtesy van pulled up behind us. In less than 5 minutes he jacked up our car, pulled the ladder out and waited for me to safely pull back into traffic. I was so shaken; I feel I may have failed to thank our hero properly! I commend your entire Courtesy Patrol staff for putting themselves in some dangerous positions to come to the aid of others."

Courtesy Patrol

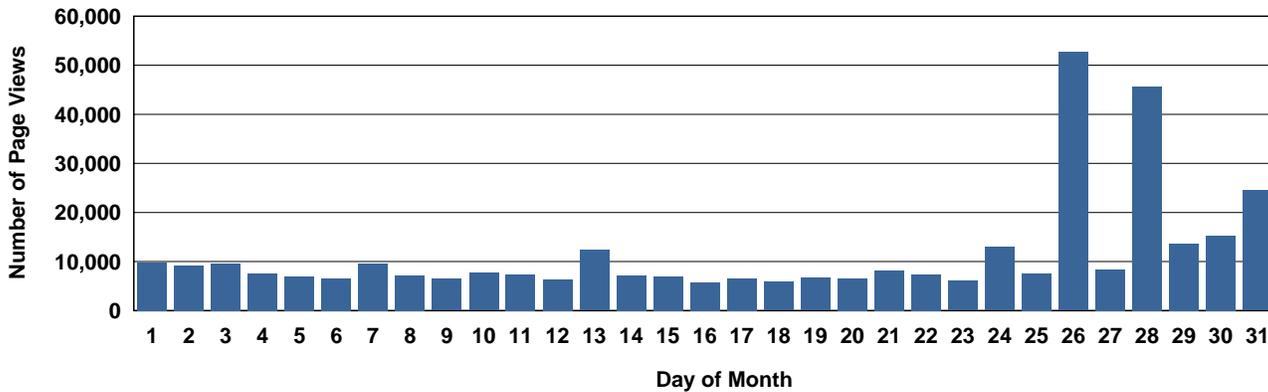
Freeway Segment (miles)	TOTAL ASSISTS		ASSIST DENSITY		AVERAGE RESPONSE TIME (min)		AVERAGE CLEAR TIME (min)	
	Aug. 2009	FYTD Avg.	Aug. 2009	FYTD Avg.	Aug. 2009	FYTD Avg.	Aug. 2009	FYTD Avg.
I-75								
Oakland County Line to I-696	37.0	491 400.1	13.3	10.8	15.1	16.7	11.2	11.9
I-696 to I-94	8.0	291 259.0	36.4	32.4	10.0	8.6	8.7	11.5
I-94 to I-96	5.6	80 58.5	14.3	10.4	10.1	10.2	9.9	10.3
I-96 to I-275	37.0	289 185.1	7.8	5.0	15.5	13.4	8.2	9.5
I-94	87.6	1,151 902.6	13.1	113.3	13.0	12.4	9.7	11.2
I-96								
Washtenaw County Line to M-39	20.7	426 344.0	20.6	16.6	10.8	10.3	8.3	9.8
M-39 to I-75	9.0	389 281.7	43.2	31.3	10.4	10.3	8.1	10.1
I-75 to I-696	10.0	372 284.6	37.2	28.5	11.9	10.7	8.5	9.7
I-696 to St. Clair County Line	21.0	291 182.5	13.9	8.7	10.5	11.9	8.5	8.2
I-96	60.7	1,478 1,092.8	24.3	198.0	11.0	10.5	8.3	9.6
I-275								
Livingston County Line to I-275/I-696	11.0	119 116.3	10.8	10.6	22.4	15.2	7.5	9.6
I-275/M-14 to M-39	12.0	185 155.4	15.4	12.9	12.5	10.6	9.1	10.2
M-39 to I-75	11.0	350 275.3	31.8	25.0	13.0	12.9	9.9	10.1
I-696	34.0	654 546.9	19.2	176.9	15.3	13.0	9.2	10.0
I-275								
I-96/I-696 to M-14/I-96	8.0	109 95.5	13.6	11.9	11.1	11.3	7.8	10.2
M-14/I-96 to I-94	12.0	145 154.2	12.1	12.8	12.3	11.5	7.9	10.2
I-94 to I-75	17.5	111 84.8	6.3	4.8	17.8	14.4	6.4	9.6
I-696	37.5	365 334.5	9.7	98.1	13.3	11.8	7.4	10.1
I-696								
I-96/I-275 to M-10	9.3	115 116.0	12.4	12.5	14.4	12.6	9.2	11.7
M-10 to I-75	9.0	156 143.4	17.3	15.9	11.1	10.7	9.7	11.7
I-75 to I-94	10.4	226 201.0	21.7	19.3	9.8	10.3	8.7	9.2
I-696	28.7	497 460.4	17.3	176.4	11.7	11.1	9.1	10.6
M-59 (Veterans)	11.6	1 0.1	0.1	0.0	47.0	47.0	2.0	2.0
I-375	1.2	7 6.7	5.8	5.6	9.0	10.9	10.4	9.8
M-10 (Lodge)	17.9	385 309.2	21.5	17.3	10.1	9.8	9.0	10.0
M-14	6.4	67 55.5	10.5	8.7	13.7	11.1	6.5	9.4
M-39 (Southfield)	14.2	286 229.8	20.1	16.2	10.6	11.6	10.4	11.7
M-5 (Grand River)	10.3	36 37.7	3.5	3.7	13.5	11.1	7.8	8.9
M-8 (Davison)	2.2	56 63.3	25.5	28.8	10.3	9.8	8.7	10.9
Total	312.3	4,983 4039.5						

Unique DMS Messages by Type



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

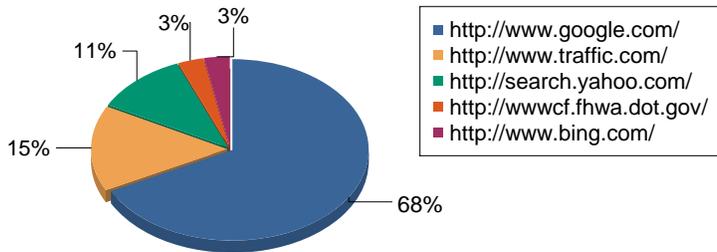
Mi Drive Web Site Daily Page Views



Top 5 Recurring Site Requests to Mi Drive Web Site



In **August**, the Mi Drive Web site experienced the most activity on **Saturdays**.



Does not include Michigan.gov requests (1,029,904).

On an average day in **August**, the Mi Drive Web site received the most hits between **2 and 3 p.m.**

Incident Communication Accuracy



Weekend DMS Snapshot Review	Aug. 2009	July 2009	Aug. 2008
All Incident Messages	100%	95%	100%
High-Impact DMS Messages	Aug. 2009	July 2009	Aug. 2008
All High-Impact Messages	100%	96%	100%
Freeway Closure Messages	100%	100%	100%
Lane Closure Messages	100%	96%	100%
Ramp Closure Messages	100%	80%	100%
Other Communication	Aug. 2009	July 2009	Aug. 2008
Advisory Text Messages	97%	91%	100%
Web Site Incident Postings	100%	93%	100%

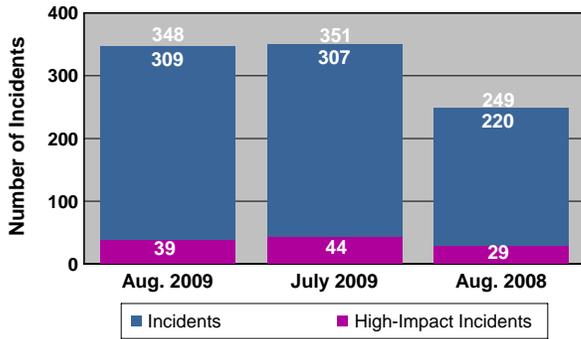
Most Utilized DMS



1. I-75 SB South of 13 Mile
2. M-10 NB at Porter
3. I-696 EB at Manistee
4. I-696 WB at Ryan
5. I-75 NB at Woodward Hghts.



Total Number of Incidents



High-Impact Incident Activity



	Aug. 2009	July 2009	Aug. 2008
Freeway Closures All Lanes Closed	7	16	11
Lane Closures Only One Lane Open	30	23	15
Ramp Closures	2	5	3
Freeway-to-Freeway			
Total	39	44	29

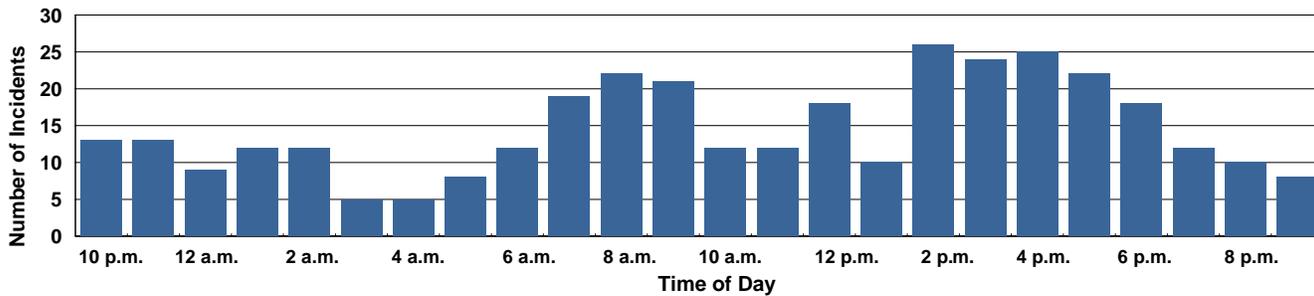
High-impact incidents account for 11% of the total incidents in August.

Total Incidents by Roadway

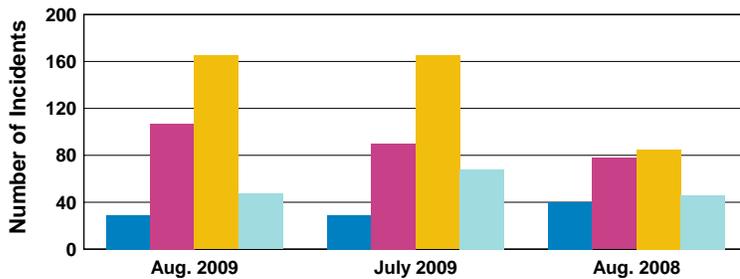


Freeway	Aug. 2009	July 2009	Aug. 2008
I-75 (CHRYSLER/FISHER)	99	81	46
I-94 (FORD)	75	90	57
I-696 (REUTHER)	47	56	41
I-96 (JEFFRIES)	37	43	24
M-10 (LODGE)	33	32	21
M-39 (SOUTHFIELD)	36	24	35
I-275	21	23	23
I-375	0	2	2
Total	348	351	249

Total Incidents per Hour

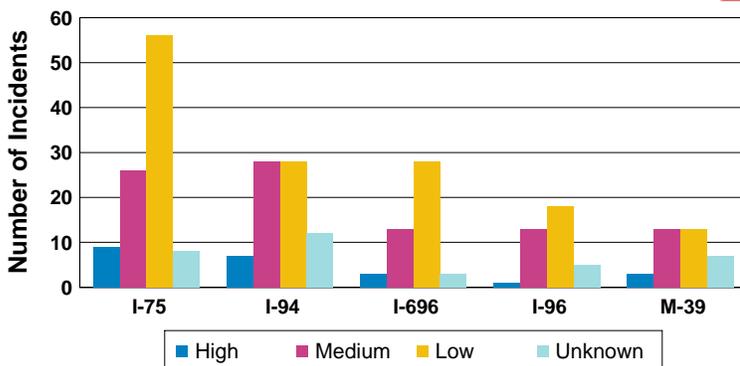


Total Incident Severity/Duration by Month

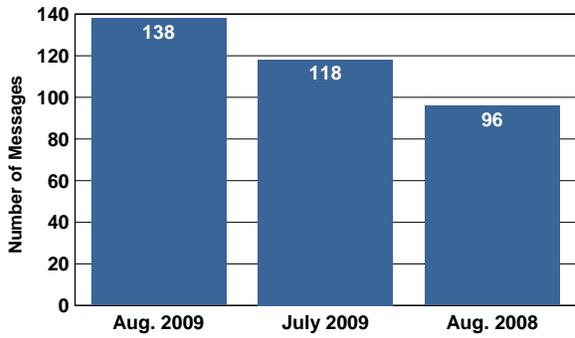


- Single-lane closures equal to 90+ minutes, partial closures (more than one lane, but not all) equal to 45+ minutes, or total closures (all lanes) 20+ minutes
- Shoulder closures equal to 90+ minutes, single-lane closures between 20 and 89 minutes, partial closures (more than one lane but not all) between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

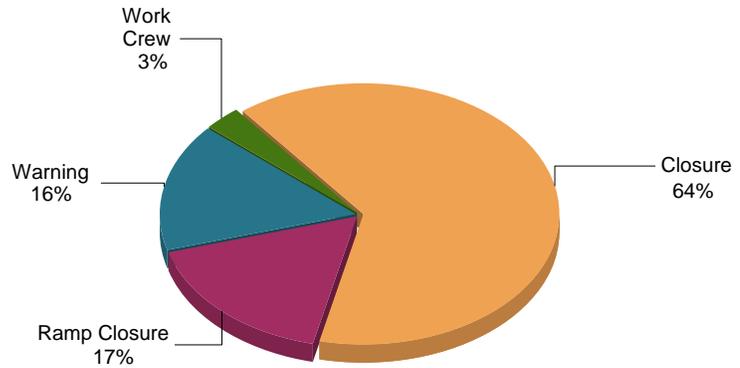
Severity/Duration by Top 5 Freeways



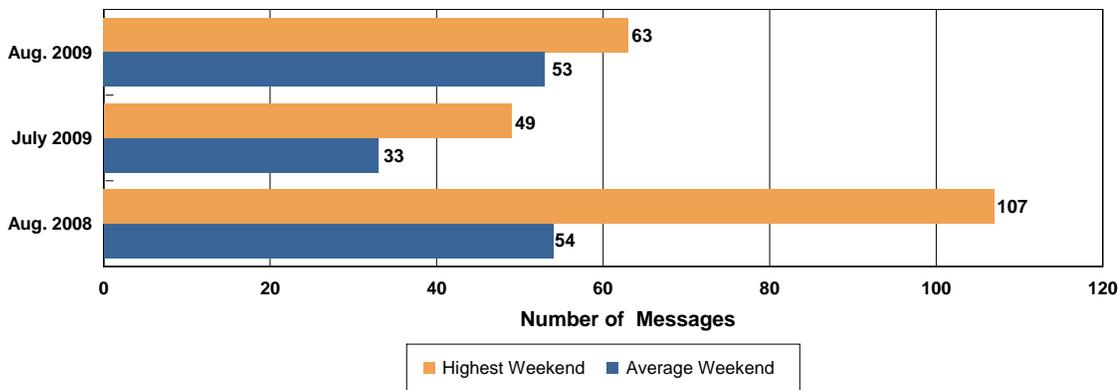
Unique Construction Messages



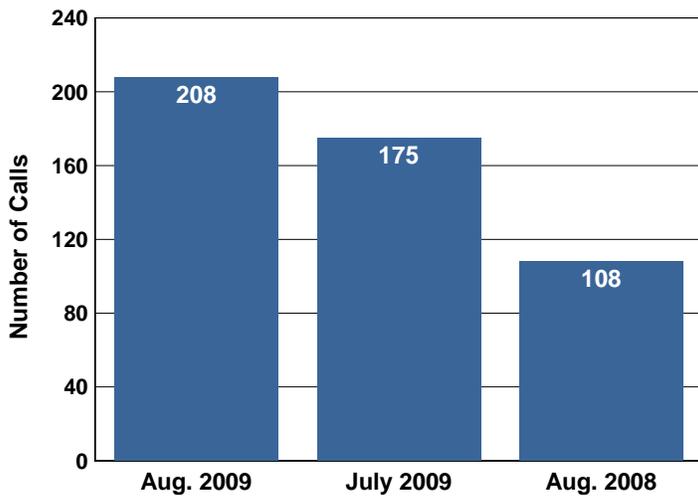
Highest Weekend Unique Construction Messages



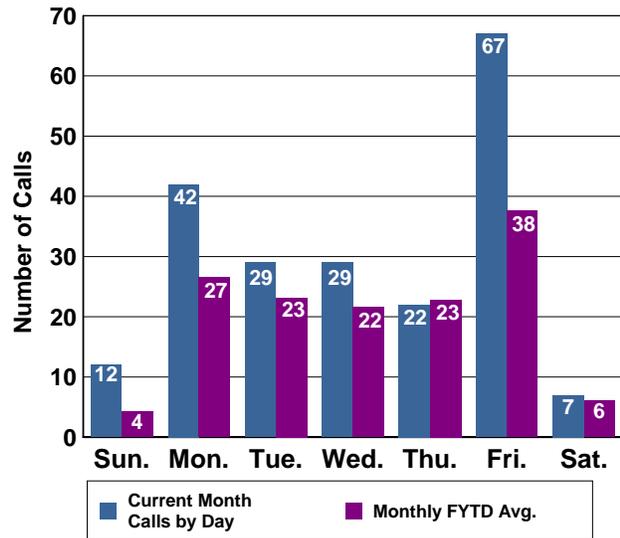
Weekend Construction DMS Message Activity



Total Construction Calls per Month



Construction Calls by Day



Construction Activity



DMS Availability

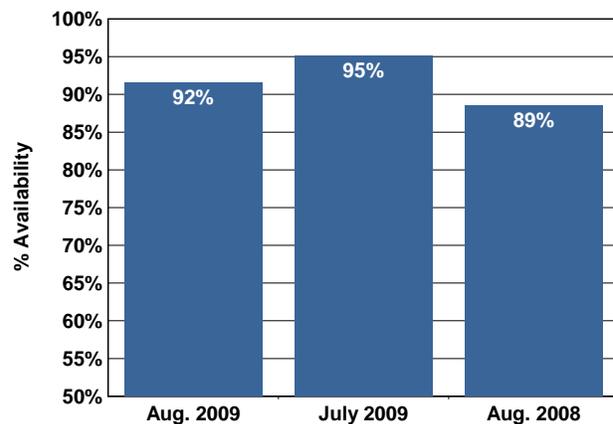
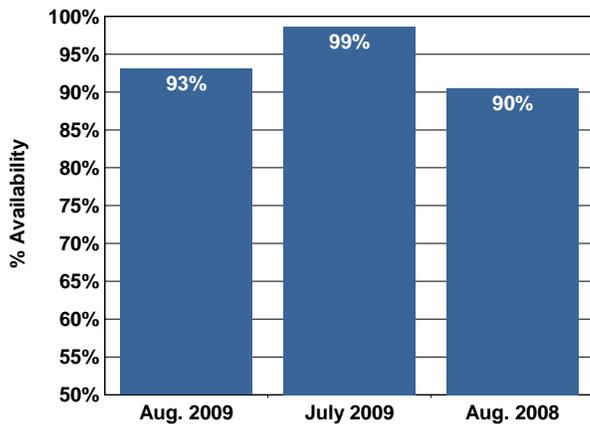


	Aug. 2009	July 2009	Aug. 2008
Available	67	71	57
Not Available	5	1	6
Total	72	72	63

CCTV Camera Availability



	Aug. 2009	July 2009	Aug. 2008
Available	152	158	147
Not Available	14	8	19
Total	166	166	166



Equipment Upgrades



Equipment Type	Maintenance Activity
CCTV	
I-275 @ 8 Mile	Video and control restored
I-275 @ 9 Mile	Video and control restored
I-275 @ I-696	Video and control restored
I-375 @ W Jefferson	Control restored
I-696 @ Drake	Keypad reset
I-696 @ Farmington	Keypad reset
I-696 @ Greenliegh	Video and control restored
I-696 @ Hub 6 Tower	Video and control restored
I-696 @ I-696/I-275/I-96	Keypad reset
I-696 @ Inkster	Video and control restored
I-696 @ M-10/I-696	Video and control restored
I-696 @ Middlebelt	Video and control restored
I-696 @ Mound	Installed camera and replaced fuse
I-696 @ Telegraph	Video and control restored
I-75 @ Adams	Upgraded camera
I-75 @ I-94 South	Upgraded Camera
I-75 @ South Blvd	Video restored
I-75 @ Square Lake	Video and control restored
I-96 @ I-96/I-275/I-696	Video and control restored
I-96 @ Novi	Video and control restored
M-10 @ Evergreen	Video and control restored
M-10 N. of M-39	Video and control restored
M-10 S. of M-39	Video and control restored
M-59 @ Adams	Video and control restored
TOTAL	24
DMS	
M-39 N. of Puritan	Replaced drivers and updated panels
TOTAL	1

Equipment Maintenance

