

Michigan Intelligent Transportation Systems Center

Serving Motorists on Southeast Michigan Freeways

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

August 2011



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In the Spotlight



During special events, traffic is a primary concern in southeast Michigan. With an increase in traffic congestion comes a higher probability of incidents. The MITS Center monitors special event traffic through the use of Closed Circuit Television (CCTV) and traffic detectors. In addition, the MITS Center uses Dynamic Message signs (MDS) to provide motorists the correct routes to events and also to warn motorists of back-ups, where applicable.

One of the main resources the MITS Center uses during events is its relationship with the media to provide real-time traffic information through both radio and television. By using all of these valuable resources, the MITS Center can help motorists arrive at their event destinations safely and on time.

Compiled by:

URS

Summary

Data Key

Aug. 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.

4,686

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.

6,791

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.

318,948

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.

470

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



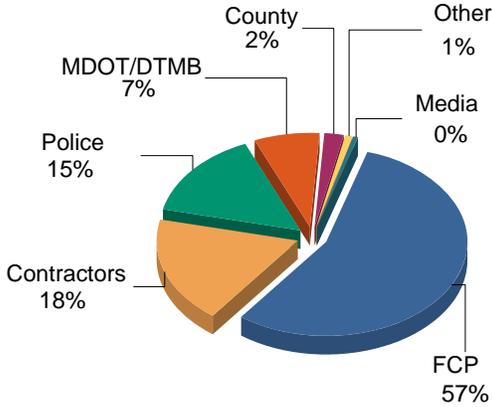
System Availability

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: 92%

CCTV: 87%

Calls by Type



Total Calls: 6,791

| Agency | No. of Calls |
|----------------|--------------|
| FCP | 3,751 |
| Contractors | 1,233 |
| City | 11 |
| County | 147 |
| Federal | 0 |
| Fire | 1 |
| Police | 1,004 |
| Border | 30 |
| MDOT/DTMB | 502 |
| Media | 31 |
| Special Events | 13 |
| Transit | 0 |
| State | 0 |
| Parking | 1 |
| Airport | 0 |
| Animals | 0 |
| OTHER | 67 |
| Total | 6,791 |

| MDOT/DTMB | Total |
|----------------------------|------------|
| Taylor TSC | 173 |
| Oakland TSC | 76 |
| MITS Center | 69 |
| Auburn Hills Garage | 51 |
| Detroit TSC | 31 |
| DTMB | 30 |
| Macomb TSC | 23 |
| Detroit Maintenance Garage | 17 |
| Metro Region Office | 11 |
| Answering Service | 9 |
| Port Huron TSC | 8 |
| Brighton TSC | 2 |
| Jackson TSC | 2 |
| Total | 502 |

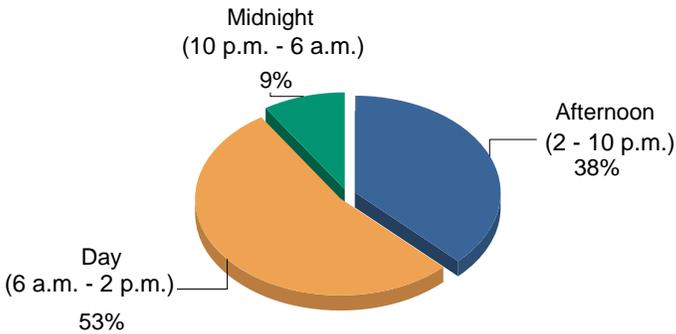


Control Room

Calls by Weekday Shift



Monday - Friday



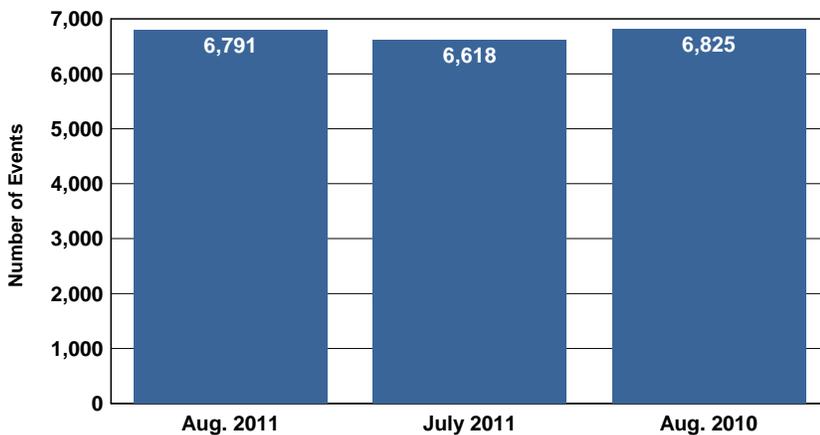
Average Number of Calls per Weekday: 255

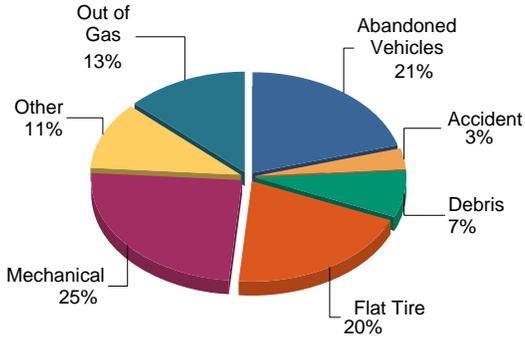
Calls by Weekend Day



Average Number of Calls per Weekend: 238

Monthly Event History





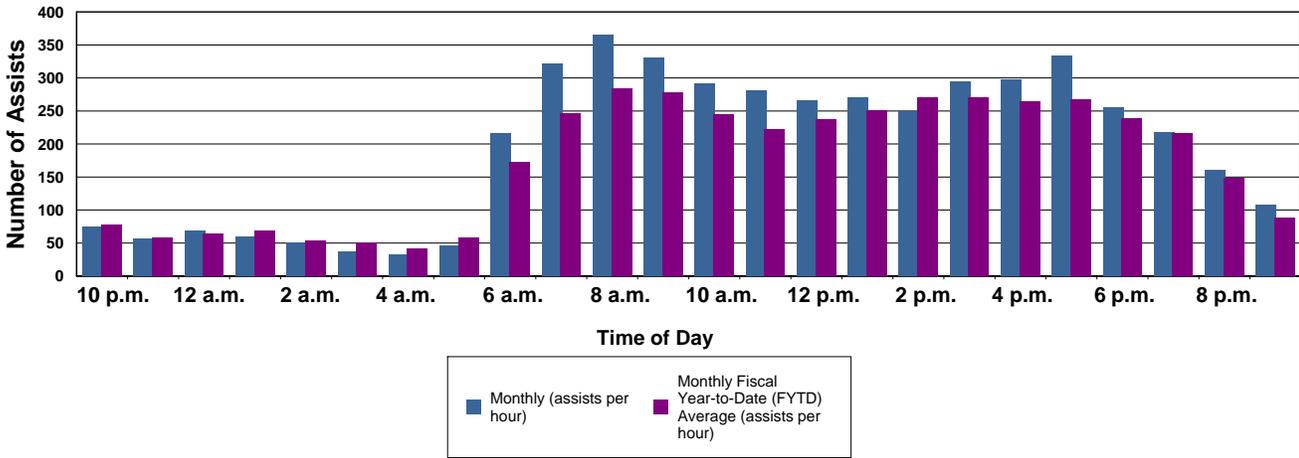
In August, the highest number of assists by a single Freeway Courtesy Patrol driver was 396.

August Total: 4,686

3,656 Assists

1,030 Abandoned Vehicle Stops

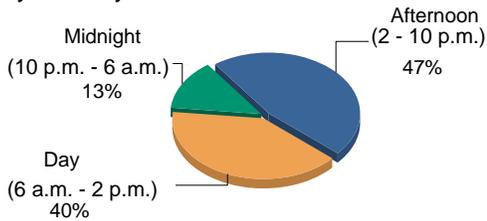
FCP Assists by Time of Day



FCP Dispatches by Weekday Shift

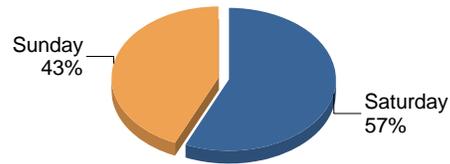


Monday - Friday



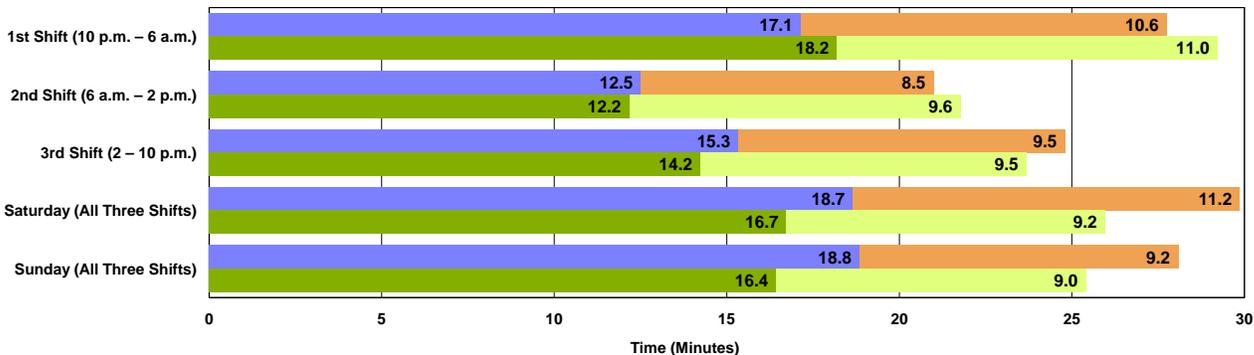
Average Number of Dispatches per Weekday: 35

FCP Dispatches by Weekend Day



Average Number of Dispatches per Weekend: 50

FCP Average Service Times





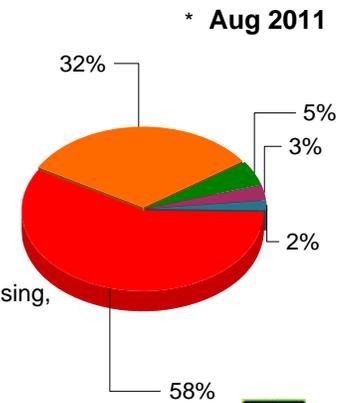
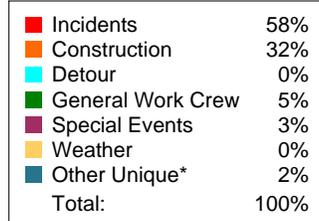
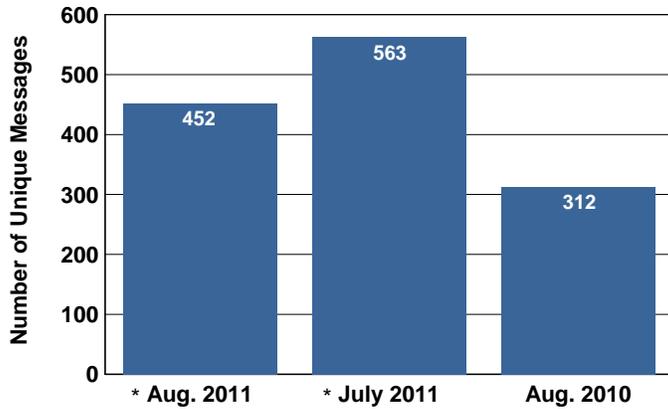
"I was on eastbound I-94 stranded with a flat tire blocking a lane, when the MDOT Courtesy Van pulled behind me. He instructed me to pull over to the side of the road safely and began to work. He changed the tire in no time. He was very professional and courteous and that made me feel safe. He knew what he was doing. When he completed the service, he instructed me that I could continue to my destination and I would be alright. Thank you MDOT for such a wonderful service. He was great!"

Courtesy Patrol



| Freeway | Segment | TOTAL ASSISTS (miles) | TOTAL ASSISTS | | ASSIST DENSITY | | AVERAGE RESPONSE TIME (min) | | AVERAGE CLEAR TIME (min) | |
|-------------------|---------------------------------------|-----------------------|---------------|----------------|----------------|-----------|-----------------------------|-----------|--------------------------|-----------|
| | | | Aug. 2011 | FYTD Avg. | Aug. 2011 | FYTD Avg. | Aug. 2011 | FYTD Avg. | Aug. 2011 | FYTD Avg. |
| I-75 | Oakland County Line to I-696 | 37.0 | 454 | 393.2 | 12.3 | 10.6 | 21.5 | 19.8 | 8.8 | 9.4 |
| | I-696 to I-94 | 8.0 | 253 | 239.8 | 31.6 | 30.0 | 11.6 | 11.6 | 9.8 | 11.2 |
| | I-94 to I-96 | 5.6 | 95 | 77.3 | 17.0 | 13.8 | 14.4 | 11.3 | 8.7 | 10.9 |
| | I-96 to I-275 | 37.0 | 445 | 311.3 | 12.0 | 8.4 | 14.8 | 15.0 | 9.1 | 9.4 |
| | | 87.6 | 1,247 | 1,021.5 | 14.2 | 128.3 | 16.2 | 15.2 | 9.1 | 9.9 |
| I-94 | Washtenaw County Line to M-39 | 20.7 | 399 | 320.8 | 19.3 | 15.5 | 15.3 | 15.8 | 8.7 | 9.2 |
| | M-39 to I-75 | 9.0 | 326 | 284.2 | 36.2 | 31.6 | 13.8 | 12.2 | 9.4 | 9.7 |
| | I-75 to I-696 | 10.0 | 270 | 276.7 | 27.0 | 27.7 | 14.3 | 14.4 | 9.3 | 10.1 |
| | I-696 to St. Clair County Line | 21.0 | 174 | 155.0 | 8.3 | 7.4 | 15.6 | 16.9 | 8.3 | 8.1 |
| | | 60.7 | 1,169 | 1,036.7 | 19.3 | 187.9 | 14.4 | 14.2 | 8.9 | 9.4 |
| I-96 | Livingston County Line to I-275/I-696 | 11.0 | 164 | 135.2 | 14.9 | 12.3 | 20.4 | 19.1 | 10.3 | 8.5 |
| | I-275/M-14 to M-39 | 12.0 | 248 | 209.6 | 20.7 | 17.5 | 14.6 | 15.1 | 9.1 | 9.1 |
| | M-39 to I-75 | 11.0 | 332 | 300.7 | 30.2 | 27.3 | 15.4 | 13.0 | 9.8 | 9.7 |
| | | 34.0 | 744 | 645.5 | 21.9 | 208.9 | 16.6 | 14.9 | 9.7 | 9.2 |
| I-275 | I-96/I-696 to M-14/I-96 | 8.0 | 118 | 111.5 | 14.8 | 13.9 | 20.0 | 16.8 | 7.9 | 8.3 |
| | M-14/I-96 to I-94 | 12.0 | 152 | 140.2 | 12.7 | 11.7 | 15.8 | 15.6 | 7.7 | 8.7 |
| | I-94 to I-75 | 17.5 | 135 | 75.7 | 7.7 | 4.3 | 15.8 | 17.8 | 6.6 | 7.8 |
| | | 37.5 | 405 | 327.4 | 10.8 | 96.0 | 17.3 | 16.3 | 7.4 | 8.3 |
| I-696 | I-96/I-275 to M-10 | 9.3 | 175 | 148.8 | 18.8 | 16.0 | 18.4 | 17.0 | 7.8 | 8.8 |
| | M-10 to I-75 | 9.0 | 144 | 134.6 | 16.0 | 15.0 | 13.5 | 13.8 | 10.0 | 10.1 |
| | I-75 to I-94 | 10.4 | 195 | 182.1 | 18.8 | 17.5 | 14.4 | 13.7 | 10.0 | 9.9 |
| | | 28.7 | 514 | 465.5 | 17.9 | 178.4 | 15.2 | 14.6 | 9.2 | 9.6 |
| M-59 (Veterans) | | 24.0 | 24 | 31.5 | 1.0 | 1.3 | 77.0 | 25.7 | 10.9 | 8.3 |
| I-375 | | 1.2 | 6 | 4.6 | 5.0 | 3.9 | 10.0 | 13.4 | 7.0 | 7.6 |
| M-10 (Lodge) | | 17.9 | 372 | 327.0 | 20.8 | 18.3 | 12.3 | 11.9 | 11.1 | 10.4 |
| M-14 | | 6.4 | 64 | 58.0 | 10.0 | 9.1 | 16.8 | 17.8 | 10.0 | 9.1 |
| M-39 (Southfield) | | 14.2 | 64 | 188.1 | 4.5 | 13.2 | 15.4 | 13.2 | 9.2 | 10.8 |
| M-5 (Grand River) | | 10.3 | 35 | 33.5 | 3.4 | 3.2 | 20.3 | 20.0 | 4.3 | 7.0 |
| M-8 (Davison) | | 2.2 | 42 | 30.9 | 19.1 | 14.0 | 9.0 | 10.1 | 10.8 | 11.5 |
| Total | | 324.7 | 4,686 | 4,170.4 | | | | | | |

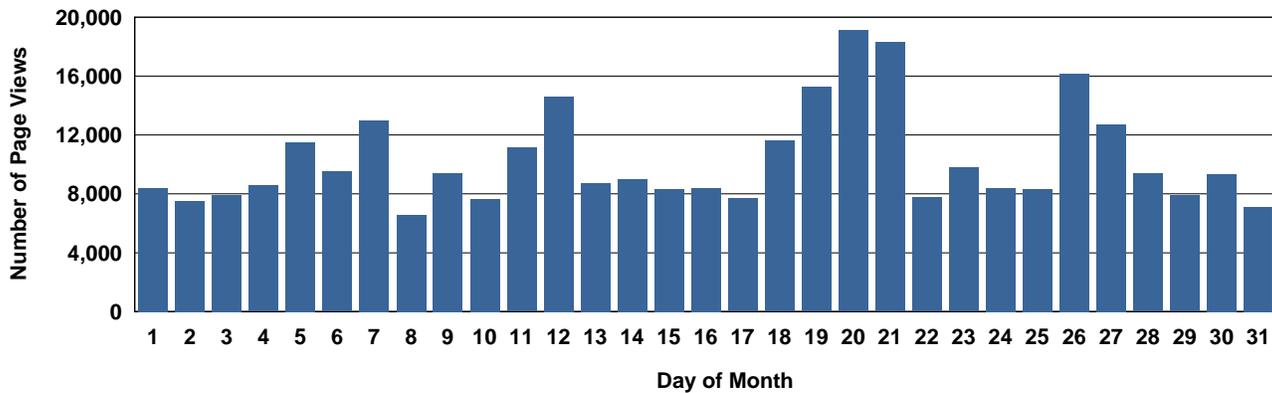
Unique DMS Messages by Type



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

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

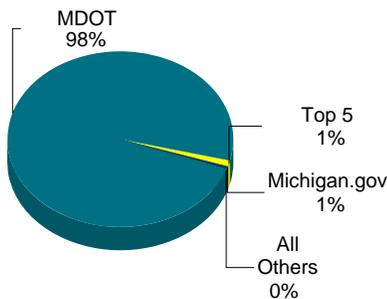
Mi Drive Web Site August Daily Page Views



Referring Site Requests to Mi Drive Web Site in August



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



Top 5 Non-Michigan.gov Sites



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

Incident Communication Accuracy



| Weekend DMS Snapshot Review | Aug. 2011 | July 2011 | Aug. 2010 |
|-----------------------------|-----------|-----------|-----------|
| All Incident Messages | 100% | 100% | 100% |
| High-Impact DMS Messages | Aug. 2011 | July 2011 | Aug. 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 | Aug. 2011 | July 2011 | Aug. 2010 |
| Advisory Text Messages | 91% | 95% | 92% |
| Web Site Incident Postings | 100% | 100% | 100% |

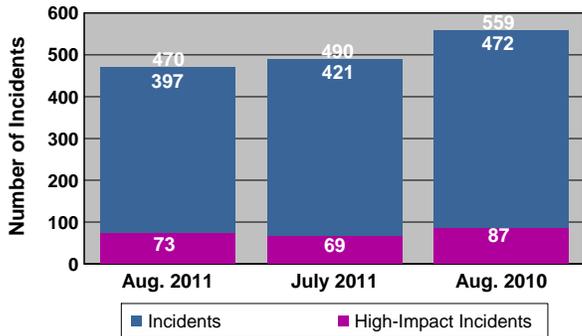
Most Utilized DMS



1. I-75 SB South of 13 Mile
2. M-39 NB at Puritan
3. I-75 NB at 7 Mile
4. I-696 WB at Mohawk
5. I-75 NB at Clay



Total Number of Incidents



High-Impact Incident Activity



| | Aug. 2011 | July 2011 | Aug. 2010 |
|-----------------------------------|-----------|-----------|-----------|
| Freeway Closures All Lanes Closed | 14 | 17 | 24 |
| Lane Closures Only One Lane Open | 47 | 49 | 48 |
| Ramp Closures | 12 | 3 | 15 |
| Freeway-to-Freeway | | | |
| Total | 73 | 69 | 87 |

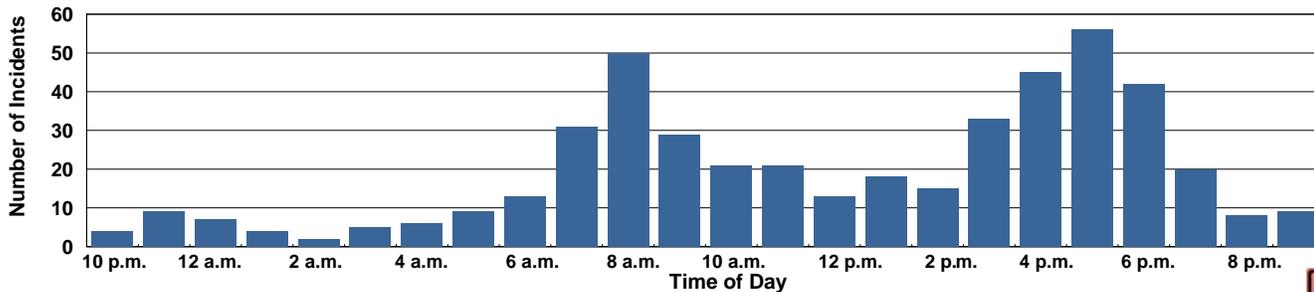
High-impact incidents account for **16%** of the total incidents in August.



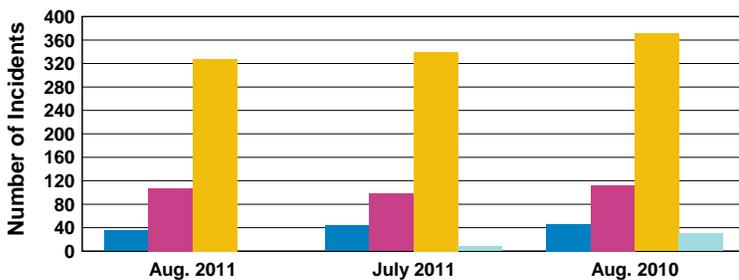
Total Incidents by Roadway

| Freeway | Aug. 2011 | July 2011 | Aug. 2010 |
|------------------------|------------|------------|------------|
| I-75 (CHRYSLER/FISHER) | 118 | 138 | 164 |
| I-94 (FORD) | 110 | 111 | 112 |
| I-696 (REUTHER) | 82 | 89 | 100 |
| I-96 (JEFFRIES) | 72 | 71 | 61 |
| M-10 (LODGE) | 27 | 22 | 41 |
| M-39 (SOUTHFIELD) | 4 | 12 | 30 |
| I-275 | 48 | 42 | 46 |
| I-375 | 2 | 2 | 1 |
| M-14 | 4 | 3 | 0 |
| M-59 | 3 | 0 | 4 |
| Total | 470 | 490 | 559 |

Total Incidents per Hour

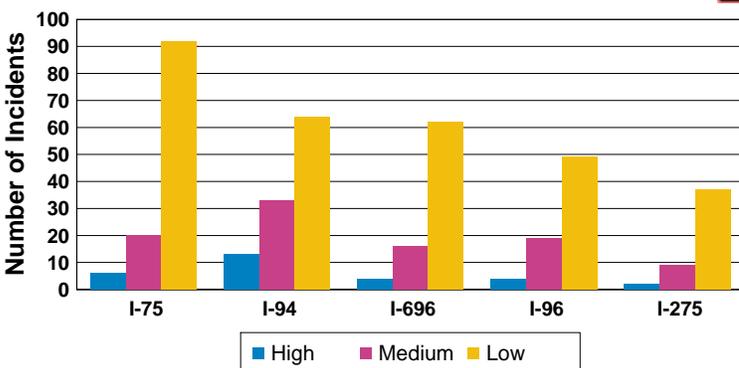


Total Incident Severity/Duration by Month

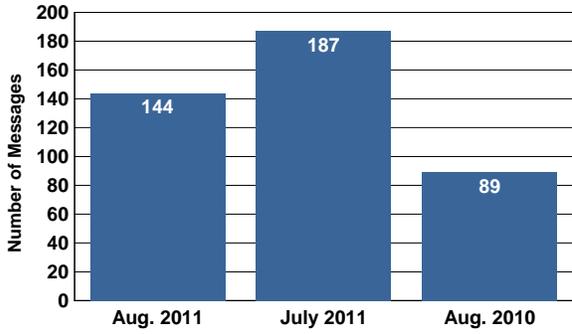


- Single-lane closures equal to 90+ minutes, partial closures (more than one lane, but not all) equal to 45+ minutes, or total closures (all lanes) 20+ minutes
- Shoulder closures equal to 90+ minutes, single-lane closures between 20 and 89 minutes, partial closures (more than one lane but not all) between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

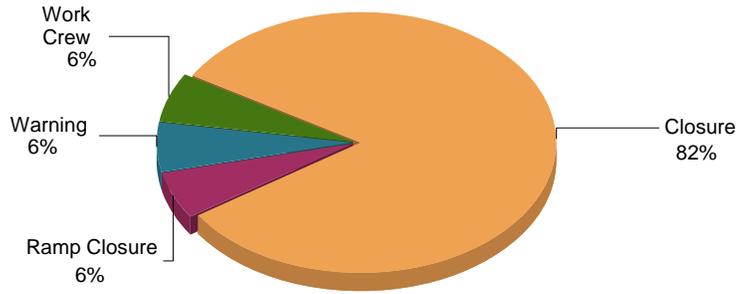
Severity/Duration by Top 5 Freeways



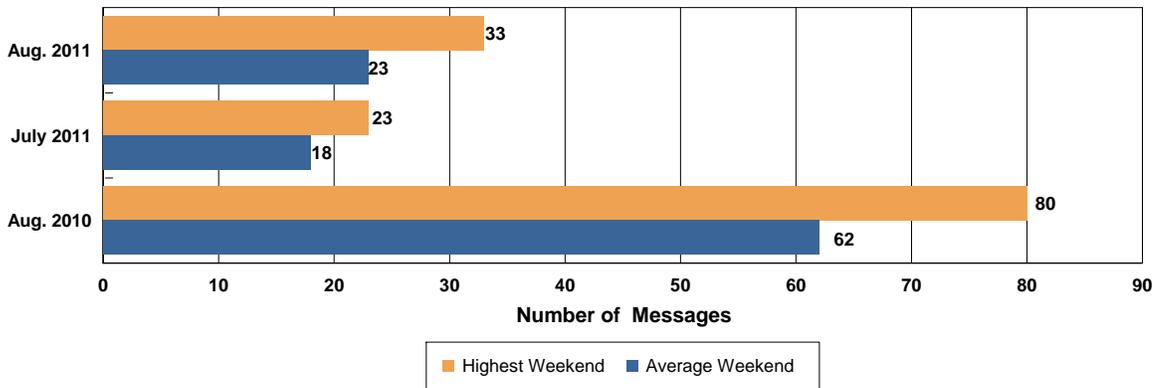
Unique Construction Messages



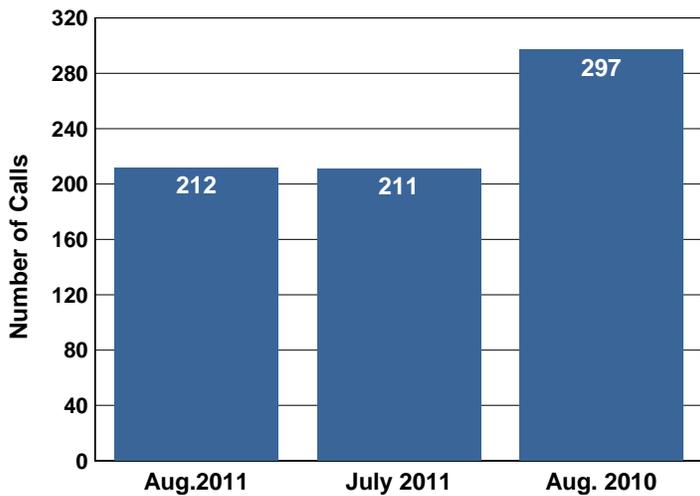
Highest Weekend Unique Construction Messages



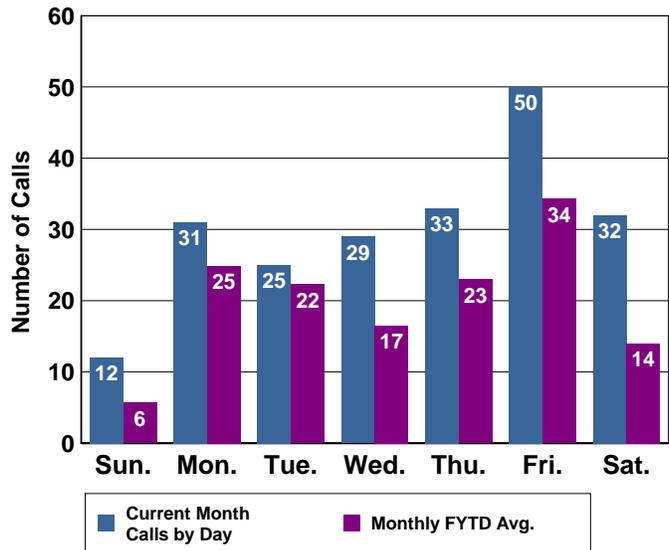
Weekend Construction DMS Message Activity



Total Construction Calls per Month



Construction Calls by Day



Construction Activity



DMS Availability

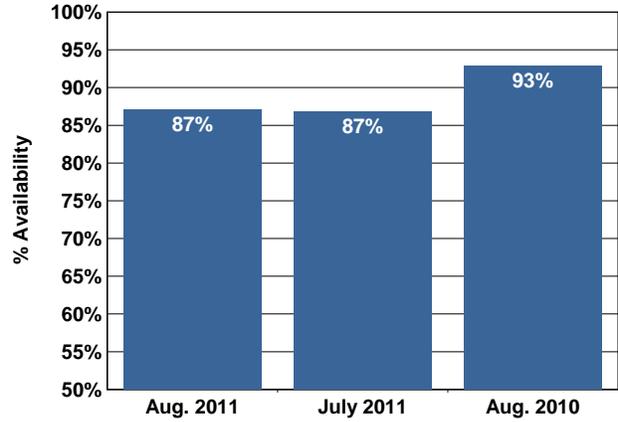
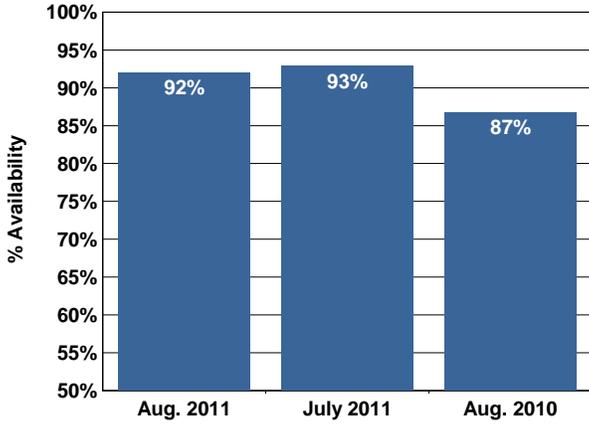


CCTV Camera Availability



| | Aug. 2011 | July 2011 | Aug. 2010 |
|----------------------|-----------|-----------|-----------|
| Available | 74 | 64 | 60 |
| Not Available | 7 | 5 | 9 |
| Total | 81 | 69 | 69 |

| | Aug. 2011 | July 2011 | Aug. 2010 |
|----------------------|------------|------------|------------|
| Available | 185 | 148 | 172 |
| Not Available | 27 | 22 | 13 |
| Total | 212 | 170 | 185 |



Equipment Upgrades



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

Work Order Processing

