

# Michigan Intelligent Transportation Systems Center

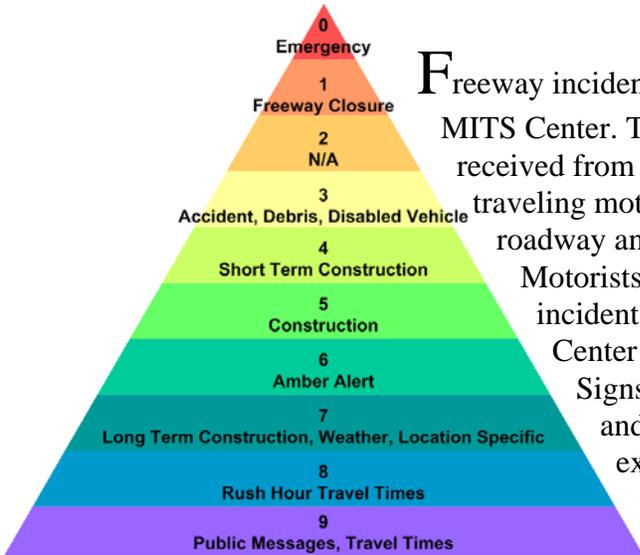
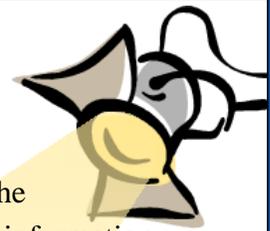
Serving Motorists on Southeast Michigan Freeways  
www.michigan.gov/its



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## In the Spotlight



Message Priority Pyramid

Freeway incident management is an essential task here at the MITS Center. The MITS Center staff, in conjunction with information received from the Michigan State Police (MSP), work collectively to inform traveling motorists of freeway incidents such as accidents, debris in the roadway and other obstructions that may influence the flow of traffic. Motorists, media, and construction field crews also report freeway incidents. Hundreds of incidents are reported each month; the MITS Center reports these incidents to the public on Dynamic Message Signs (DMS) via the Advanced Traffic Messaging System (ATMS) and the Mi Drive Web site in real time (see page 2 for more explanation). The message priority pyramid governs which messages display on the DMS as only two messages can rotate according to national standards.

Compiled by:



# Summary

## Data Key

May 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.

4,227

### 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.

6,037

### 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.

320,834

### 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.

341

### 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).

96% Accurate

### MaintStar



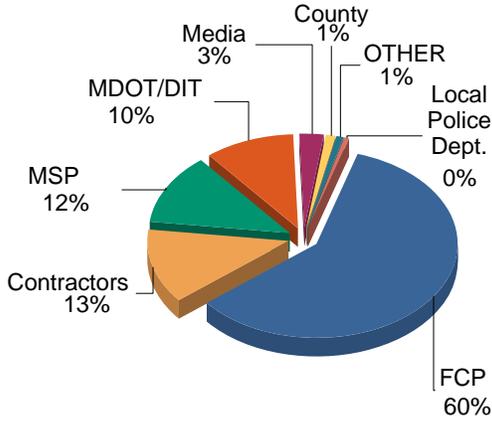
#### System Availability

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: 97%

CCTV: 94%

## Calls by Type

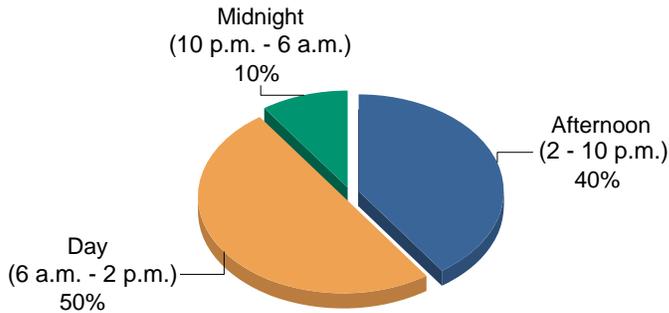


**Total Calls: 6,037**

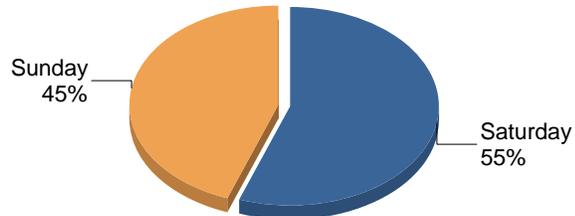
Agency	No. of Calls
FCP	3,579
Contractors	766
City	2
County	64
Federal	0
Fire	1
Local Police Dept.	29
MSP	740
Border	1
MDOT/DIT	626
Media	169
Special Events	1
Transit	6
Parking	0
Airport	0
Animals	0
OTHER	53
<b>Total</b>	<b>6,037</b>

Local Police Dept.	Total
Livonia PD	6
Roseville PD	3
Wayne County Sheriff	3
Chesterfield PD	2
Detroit PD	2
Huron Twp. PD	2
Macomb County Sheriff	2
Allen Park PD	1
Canton PD	1
Clinton Twp. PD	1
Farmington Hills PD	1
Southfield PD	1
St. Clair County Sheriff	1
Troy PD	1
Warren PD	1
Windsor Police	1
<b>Total</b>	<b>29</b>

## Calls by Shift



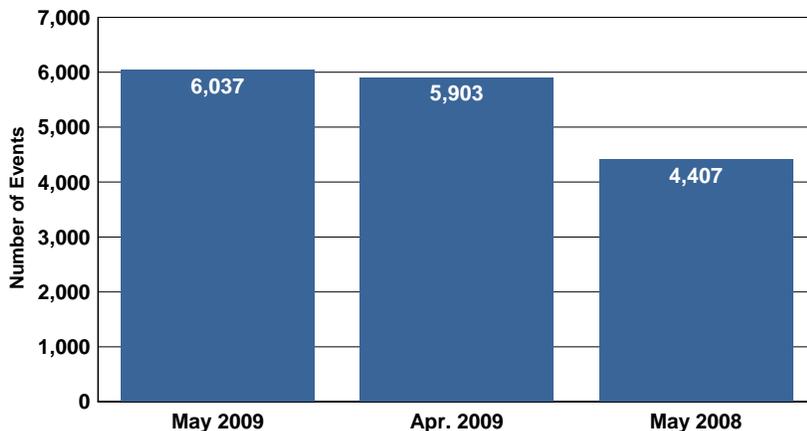
## Calls by Weekend Day

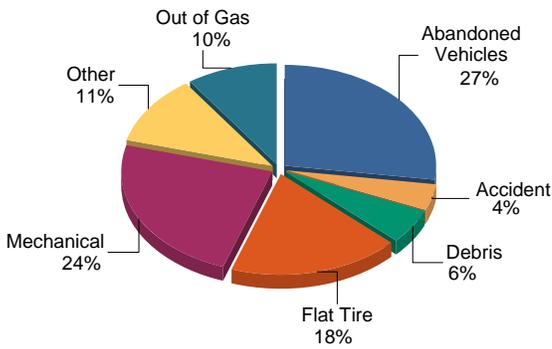


**Average Number of Calls per Weekday: 243**

**Average Number of Calls per Weekend: 196**

## Monthly Event History

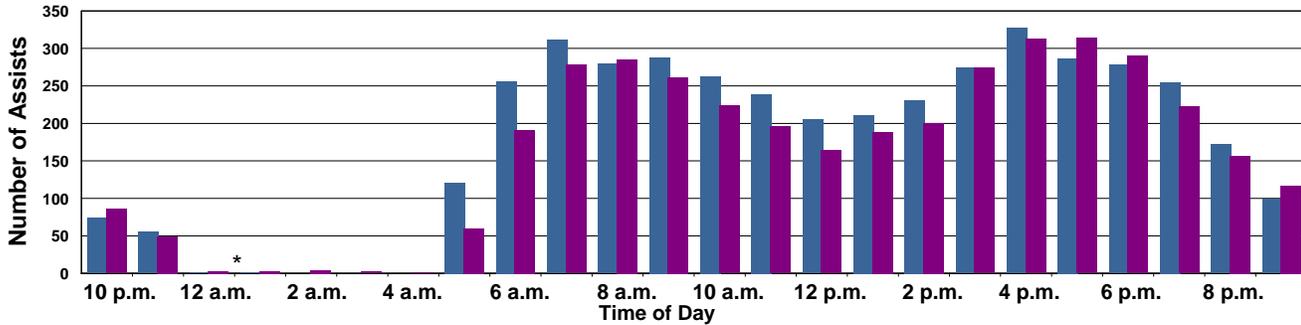




FCP can help with more than just car assists; they can clear the hay out of your way! In May, there were 177 debris assists, including tire treads, barrels, mattresses, bumpers, chairs, and bales of hay.

**May Total: 4,227**  
**3,036 Assists**  
**1,191 Abandoned Vehicle Stops**

FCP Assists by Time of Day



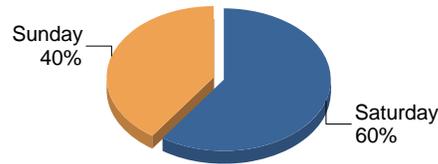
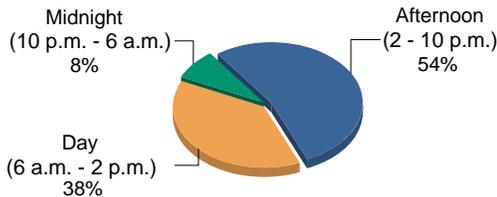
\* FCP coverage hours adjusted for Gateway Project, no scheduled coverage from 12 a.m. - 5 a.m.



FCP Dispatches by Weekday Shift



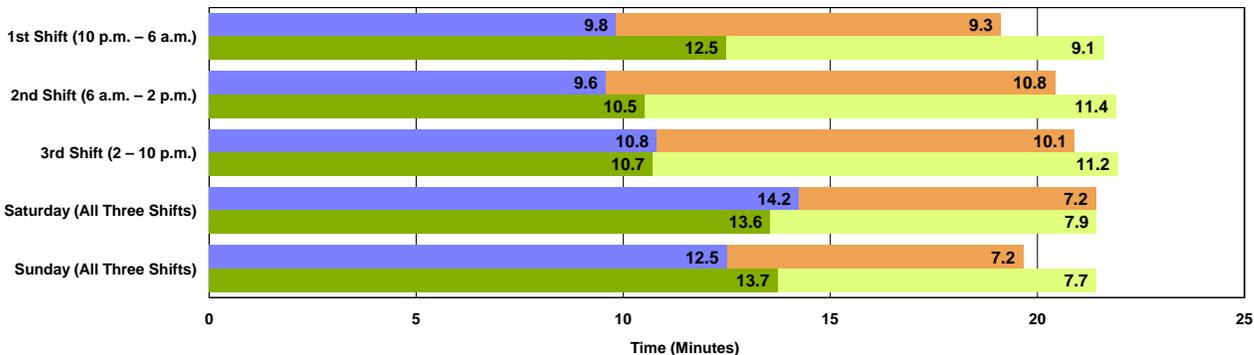
FCP Dispatches by Weekend Day



**Average Number of Dispatches per Weekday: 21**

**Average Number of Dispatches per Weekend: 32**

FCP Average Service Times





Motorist Quote of the Month:

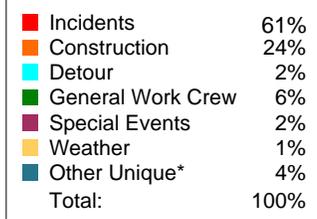
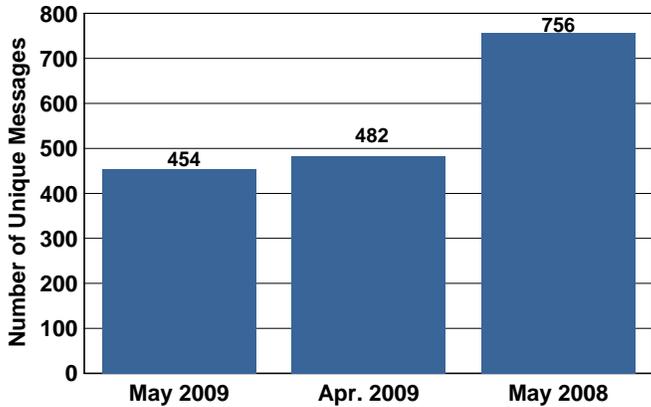
*“I recently had a flat tire on I-75. Within minutes, one of your courtesy vans arrived, and the driver efficiently changed the tire and helped me out of a bad situation. He was indeed a credit to himself and MDOT. The incident occurred about 5:45 p.m. on Tuesday, May 5, 2009. I certainly would have contacted you had your courtesy patrolman been rude or inefficient. Thus, it’s only appropriate that I also write when he did his job in a professional manner.”*



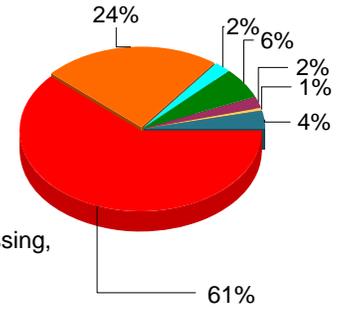
Courtesy Patrol

Freeway	Segment	TOTAL ASSISTS (miles)	ASSISTS PER MILE		AVERAGE RESPONSE TIME (min)		AVERAGE CLEAR TIME (min)			
			May 2009	FYTD Avg.	May 2009	FYTD Avg.	May 2009	FYTD Avg.		
<b>I-75</b>	Oakland County Line to I-696	37.0	442	375.6	11.9	10.2	17.1	17.6	12.5	11.9
	I-696 to I-94	8.0	269	251.8	33.6	31.5	7.2	8.1	10.2	12.0
	I-94 to I-96	5.6	35	52.8	6.3	9.4	7.0	10.4	9.7	10.1
	I-96 to I-275	37.0	174	158.9	4.7	4.3	13.3	12.9	7.9	10.0
	<b>Totals</b>	<b>87.6</b>	<b>920</b>	<b>839.0</b>	<b>10.5</b>	<b>9.6</b>	<b>12.3</b>	<b>12.3</b>	<b>10.8</b>	<b>11.5</b>
<b>I-94</b>	Washtenaw County Line to M-39	20.7	372	331.8	18.0	16.0	11.8	10.3	9.2	10.3
	M-39 to I-75	9.0	285	271.9	31.7	30.2	10.6	10.3	10.0	10.8
	I-75 to I-696	10.0	324	273.6	32.4	27.4	9.4	10.8	9.0	9.9
	I-696 to St. Clair County Line	21.0	210	152.6	10.0	7.3	12.2	12.4	7.3	8.0
	<b>Totals</b>	<b>60.7</b>	<b>1,191</b>	<b>1,029.9</b>	<b>19.6</b>	<b>17.0</b>	<b>10.7</b>	<b>10.6</b>	<b>9.0</b>	<b>10.0</b>
<b>I-96</b>	Livingston County Line to I-275/I-696	11.0	112	124.6	10.2	11.3	17.7	13.7	10.1	10.2
	I-275/M-14 to M-39	12.0	179	150.6	14.9	12.6	11.3	10.3	10.0	10.8
	M-39 to I-75	11.0	272	255.4	24.7	23.2	9.1	13.6	9.5	10.4
	<b>Totals</b>	<b>34.0</b>	<b>563</b>	<b>530.6</b>	<b>16.6</b>	<b>15.6</b>	<b>12.9</b>	<b>12.8</b>	<b>9.8</b>	<b>10.5</b>
<b>I-275</b>	I-96/I-696 to M-14/I-96	8.0	94	97.4	11.8	12.2	13.0	11.1	7.8	10.9
	M-14/I-96 to I-94	12.0	161	153.8	13.4	12.8	9.3	11.6	8.6	10.8
	I-94 to I-75	17.5	97	77.8	5.5	4.4	13.6	14.1	11.8	10.5
	<b>Totals</b>	<b>37.5</b>	<b>352</b>	<b>328.9</b>	<b>9.4</b>	<b>8.8</b>	<b>11.4</b>	<b>11.8</b>	<b>9.3</b>	<b>10.8</b>
<b>I-696</b>	I-96/I-275 to M-10	9.3	62	117.5	6.7	12.6	12.7	11.7	10.1	11.0
	M-10 to I-75	9.0	148	146.8	16.4	16.3	12.6	10.5	10.6	12.0
	I-75 to I-94	10.4	221	200.0	21.3	19.2	9.3	10.1	10.3	9.0
	<b>Totals</b>	<b>28.7</b>	<b>431</b>	<b>464.3</b>	<b>15.0</b>	<b>16.2</b>	<b>11.2</b>	<b>10.7</b>	<b>10.4</b>	<b>10.4</b>
<b>I-375</b>		1.2	7	6.8	5.8	5.6	6.5	10.2	9.7	10.5
<b>M-10 (Lodge)</b>		17.9	315	299.9	17.6	16.8	8.5	9.7	9.7	10.5
<b>M-14</b>		6.4	56	50.0	8.8	7.8	7.6	11.3	11.2	10.3
<b>M-39 (Southfield)</b>		14.2	279	217.8	19.6	15.3	11.3	11.7	10.0	12.2
<b>M-5 (Grand River)</b>		10.3	40	42.1	3.9	4.1	8.0	10.9	7.0	9.0
<b>M-8 (Davison)</b>		2.2	73	67.5	33.2	30.7	7.3	9.2	8.7	10.9
<b>Totals</b>		<b>300.7</b>	<b>4,227</b>	<b>3,876.6</b>	<b>Averages</b>	<b>Averages</b>	<b>11.1</b>	<b>11.3</b>	<b>9.8</b>	<b>10.7</b>

## Unique DMS Messages by Type

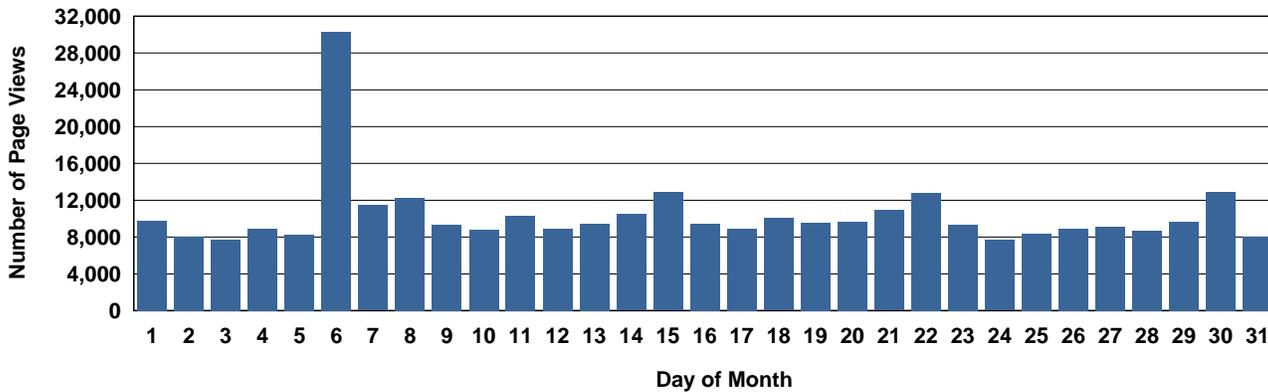


May 2009



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

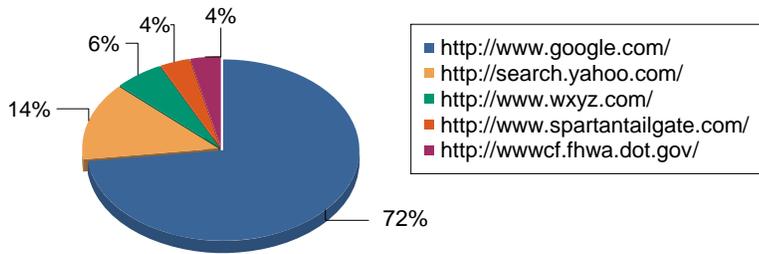
## Mi Drive Web Site Daily Page Views



## Top 5 Recurring Site Requests to Mi Drive Web Site



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



Does not include Michigan.gov requests.

On an average day in **May**, the Mi Drive Web site received the most hits between **3 and 4 p.m.**

## Incident Communication Accuracy



Weekend DMS Snapshot Review	May 2009	Apr. 2009	May 2008
All Incident Messages	100%	100%	100%
High-Impact DMS Messages	May 2009	Apr. 2009	May 2008
All High-Impact Messages	96%	100%	92%
Freeway Closure Messages	100%	100%	100%
Lane Closure Messages	93%	100%	86%
Ramp Closure Messages	100%	100%	100%
Other Communication	May 2009	Apr. 2009	May 2008
Advisory Text Messages	92%	98%	95%
Web Site Incident Postings	96%	100%	97%

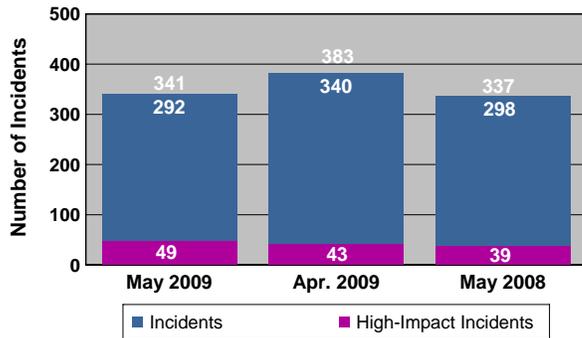
## Most Utilized DMS



1. I-75 SB South of 13 Mile
2. I-696 EB at Manistee
3. I-94 EB at Second
4. I-75 NB at Woodward Hghts.
5. I-696 WB at Ryan



## Total Number of Incidents



## High-Impact Incident Activity



	May 2009	Apr. 2009	May 2008
Freeway Closures All Lanes Closed	13	8	17
Lane Closures Only One Lane Open	30	32	21
Ramp Closures	6	3	1
Freeway-to-Freeway			
<b>Total</b>	<b>49</b>	<b>43</b>	<b>39</b>

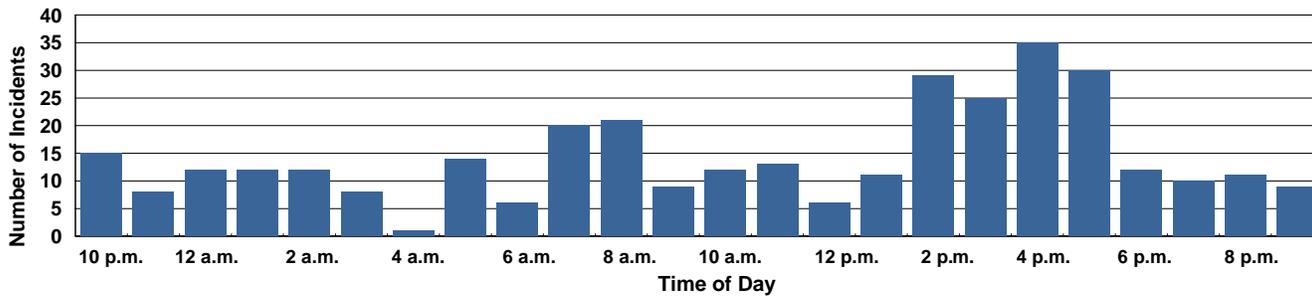
High-impact incidents account for 14% of the total incidents in May.

## Total Incidents by Roadway

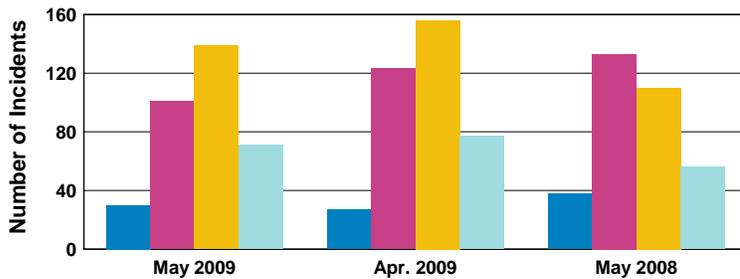


Freeway	May 2009	Apr. 2009	May 2008
I-75 (CHRYSLER/FISHER)	73	83	60
I-94 (FORD)	80	115	87
I-696 (REUTHER)	47	62	45
I-96 (JEFFRIES)	55	43	37
M-10 (LODGE)	28	27	46
M-39 (SOUTHFIELD)	34	28	27
I-275	24	24	30
I-375	0	1	3
M-59	0	0	2
<b>Total</b>	<b>341</b>	<b>383</b>	<b>337</b>

## Total Incidents per Hour

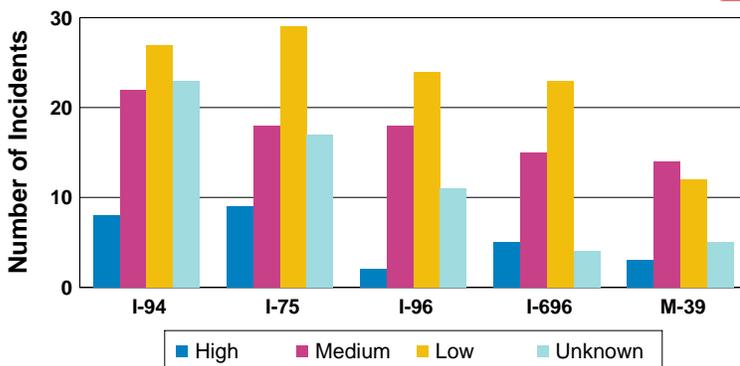


## Total Incident Severity/Duration by Month

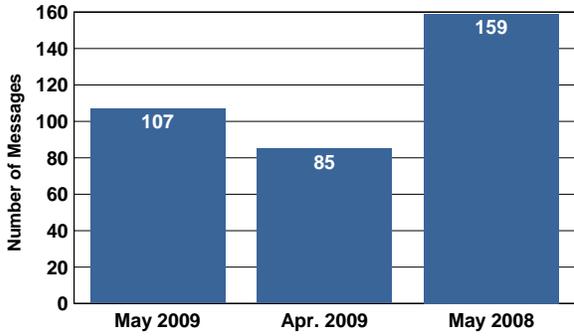


- Single-lane closures equal to 90+ minutes, partial closures (more than one lane, but not all) equal to 45+ minutes, or total closures (all lanes) 20+ minutes
- Shoulder closures equal to 90+ minutes, single-lane closures between 20 and 89 minutes, partial closures (more than one lane but not all) between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

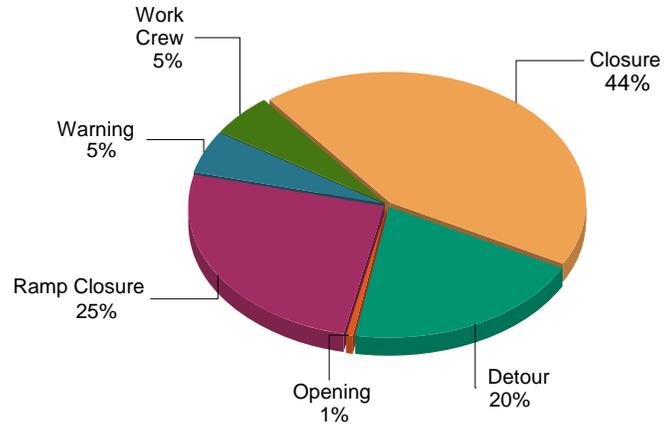
## Severity/Duration by Top 5 Freeways



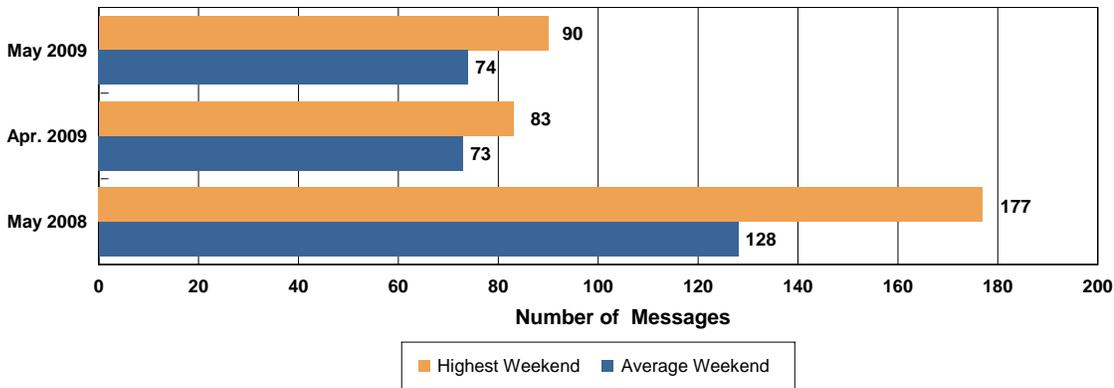
## Unique Construction Messages



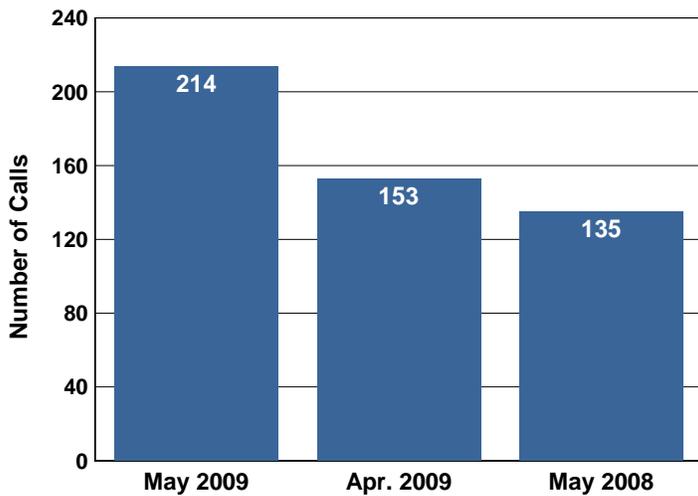
## Highest Weekend Unique Construction Messages



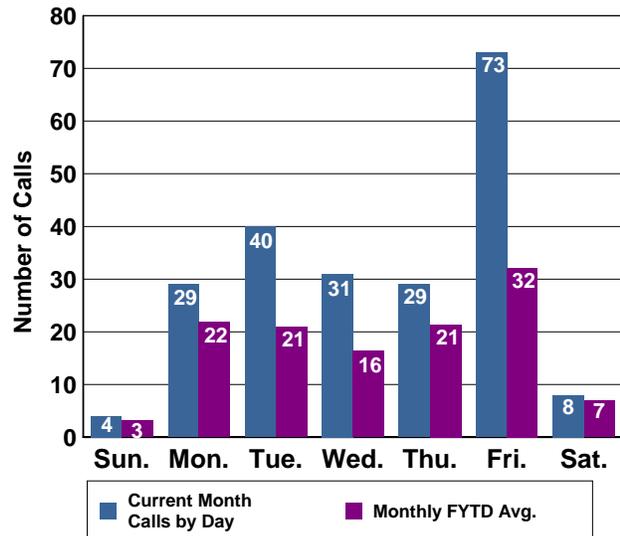
## Weekend Construction DMS Message Activity



## Total Construction Calls per Month



## Construction Calls by Day



Construction Activity



## DMS Availability

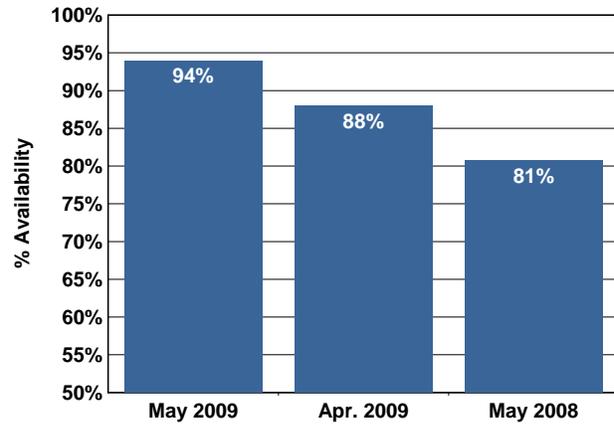
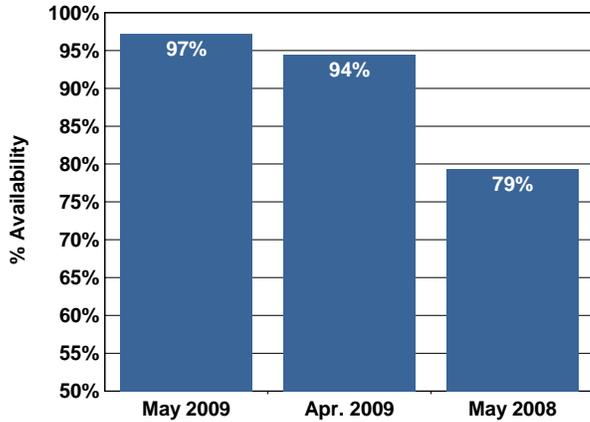


	May 2009	Apr. 2009	May 2008
<b>Available</b>	<b>70</b>	<b>68</b>	<b>50</b>
<b>Not Available</b>	<b>2</b>	<b>4</b>	<b>13</b>
<b>Total</b>	<b>72</b>	<b>72</b>	<b>63</b>

## CCTV Camera Availability



	May 2009	Apr. 2009	May 2008
<b>Available</b>	<b>156</b>	<b>146</b>	<b>134</b>
<b>Not Available</b>	<b>10</b>	<b>20</b>	<b>32</b>
<b>Total</b>	<b>166</b>	<b>166</b>	<b>166</b>



## Equipment Upgrades



Equipment Type	Maintenance Activity
<b>CCTV</b>	
I-696 @ Middlebelt	Upgraded Camera
I-275 @ Plymouth	Upgraded Camera
I-696 @ Southfield	Upgraded Camera
<b>TOTAL</b>	<b>3</b>
<b>DMS</b>	
Northbound I-375 @ Gratiot	Fiber Splice
Eastbound I-94 @ Joy (M-59)	Sealed and Weatherproofed sign
Eastbound I-94 @ Cotton	Sealed and Weatherproofed sign
Eastbound I-94 @ Allard	Sealed and Weatherproofed sign
Westbound I-94 @ Weigh Station (St. Clair)	Sealed and Weatherproofed sign
Westbound I-94 @ 14 Mile	Sealed and Weatherproofed sign
Westbound I-94 @ North River Road	Sealed and Weatherproofed sign
Westbound I-69 West of M-19	Sealed and Weatherproofed sign
Eastbound I-94 West of Gratiot (Marysville)	Sealed and Weatherproofed sign
Eastbound I-69 at Wadhams	Sealed and Weatherproofed sign
Northbound I-75 @ 7 Mile	Sealed and Weatherproofed sign
Westbound I-96 @ Beck	Sealed and Weatherproofed sign
Southbound I-75 @ Clay	Sealed and Weatherproofed sign
Northbound I-75 @ Clay	Sealed and Weatherproofed sign
Eastbound I-96 @ Kensington	Sealed and Weatherproofed sign
Southbound I-75 @ Canfield	Sealed and Weatherproofed sign
<b>TOTAL</b>	<b>16</b>

