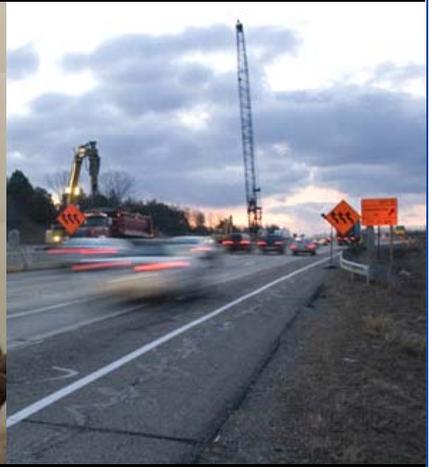


# Michigan Intelligent Transportation Systems Center

Serving Motorists on Southeast Michigan Freeways  
[www.michigan.gov/its](http://www.michigan.gov/its)



Mark Geib P.E., 1050 6th Street, Detroit, MI 48226  
GeibM@michigan.gov

## In the Spotlight



At the fourth annual Regional Operations Partnering Workshop on March 3, 2009, MITS Center representatives presented a demonstration of the Mi Drive Web site ([www.michigan.gov/drive](http://www.michigan.gov/drive)) to over 100 participants including representatives from the Michigan Department of Transportation (MDOT), Michigan State Police, local police and fire departments, Metropolitan Planning Organizations, universities, county road commissions, and private engineering consulting firms, among various others. This year's focus was to "Advance Traffic Incident Management" by increasing responder safety, promoting safe, quick clearance, and ensuring prompt reliable incident communication. For more information about the event, please visit [www.semco.org/RegionalOperations.aspx](http://www.semco.org/RegionalOperations.aspx). In the coming months, MITS Center staff will continue to engage first responders by hosting Public Incident Safety Responder Workshops, raising awareness of MITS Center resources to increase safety of field personnel responding to freeway incidents.

**Public Incident Responder Safety Workshop**

3 Sessions  
9:00 am to 12:00 pm  
Wednesday, April 15, 2009  
Thursday, April 16, 2009  
Friday, April 17, 2009

Sponsored by: **MDOT**

Hosted by: Westland Fire Department  
Location: 38425 Ford Rd., Westland, MI 48185

RSVP: Rob Marx  
MarxR@michigan.gov  
Information: Sarah Oll  
OllS@michigan.gov  
313-206-8800 x.317

Compiled by:  
**URS**

# Summary

## Data Key

## Mar. 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.

3,805

### 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.

4,621

### 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.

243,457

### 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.

365

### 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).

97% Accurate

### MaintStar



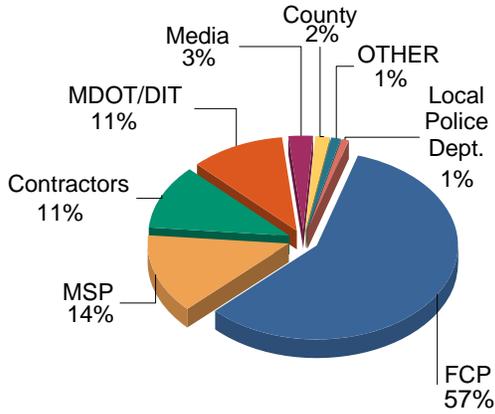
### System Availability

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: 81%

# Calls by Type

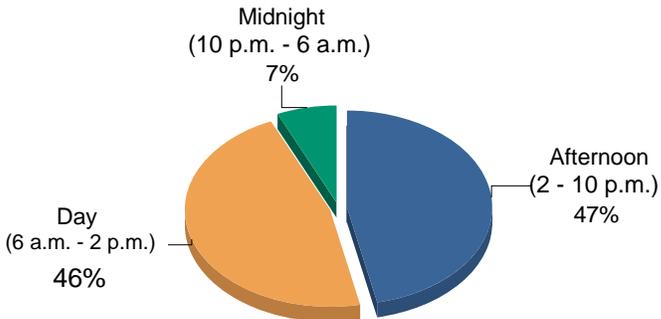


**Total Calls: 4,621**

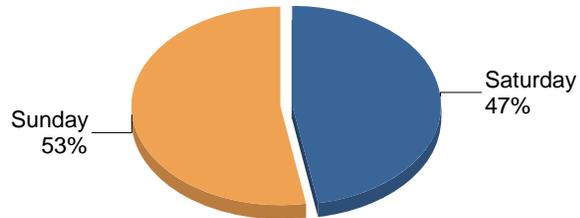
Agency	No. of Calls
FCP	2,675
Contractors	514
City	1
County	78
Federal	0
Fire	0
Local Police Dept.	41
MSP	633
Border	1
MDOT/DIT	493
Media	134
Special Events	2
Transit	5
Parking	0
Airport	1
Animals	0
OTHER	43
<b>Total</b>	<b>4,621</b>

Transit	Total
DTC	3
Greyhound	2
<b>Total</b>	<b>5</b>

# Calls by Shift



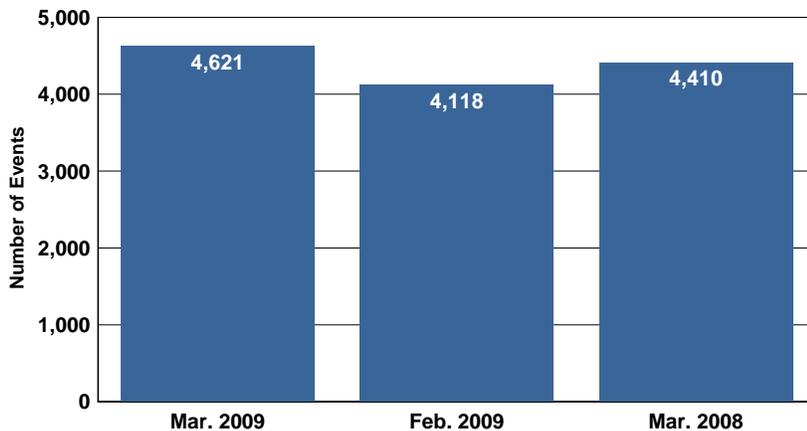
# Calls by Weekend Day

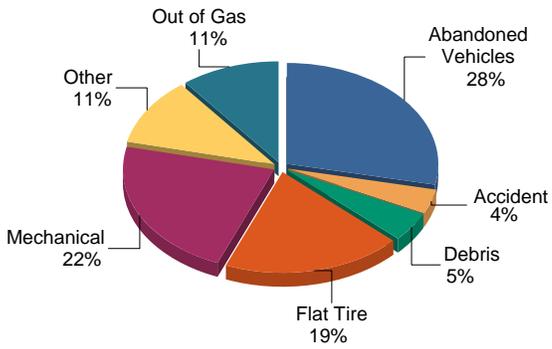


**Average Number of Calls per Weekday: 180**

**Average Number of Calls per Weekend: 187**

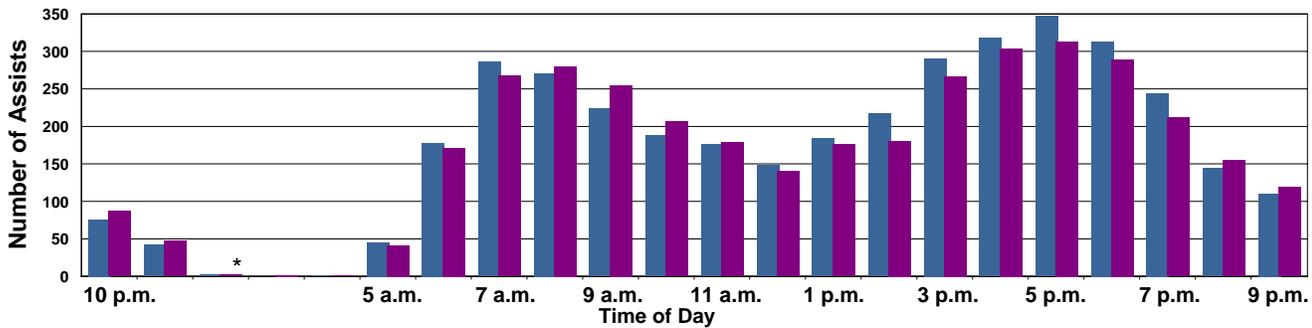
# Monthly Event History



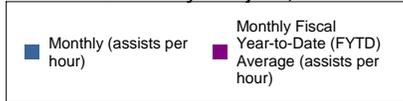


**March Total: 3,805**  
**2,695 Assists**  
**1,110 Abandoned Vehicle Stops**

FCP Assists by Time of Day



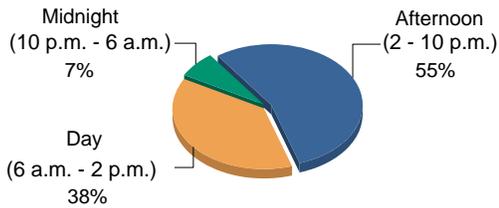
\* FCP coverage hours adjusted for Gateway Project, no scheduled coverage from 12 a.m. - 5 a.m.



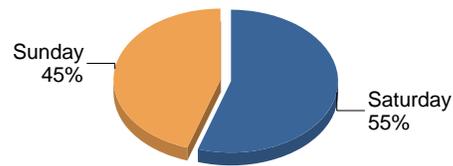
FCP Dispatches by Weekday Shift



FCP Dispatches by Weekend Day

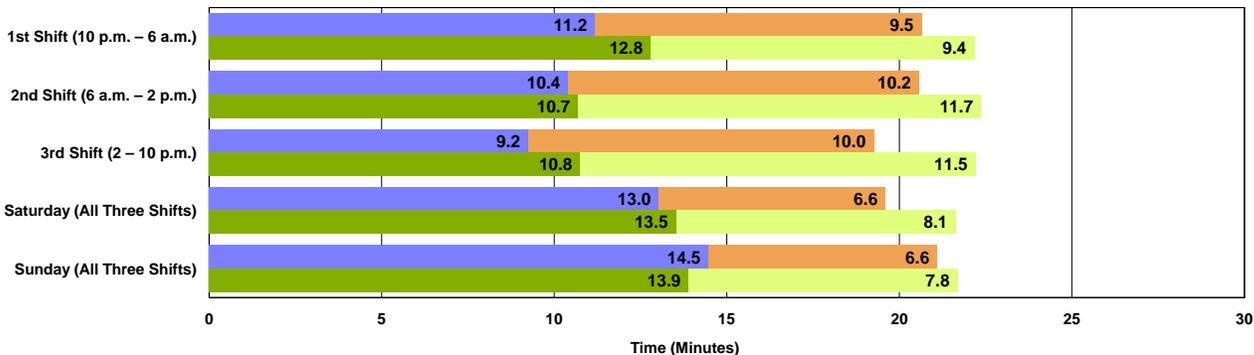


**Average Number of Dispatches per Weekday: 21**



**Average Number of Dispatches per Weekend: 25**

FCP Average Service Times





Motorist Quote of the Month:

"I am writing to thank you for your MDOT Courtesy Patrol service. I had a flat tire this morning (3/9/09) on I-75 during rush-hour traffic and no sooner had I pulled over and put on my hazard lights, then a Courtesy Patrolman pulled up behind me. He was very kind, professional, efficient and fast. He asked me if he could help, saw that I had a flat tire and set about to change it. He even checked to make sure that my spare was full of air before putting it on the car! In less than ten minutes, my car was ready to go and I was on the road again.

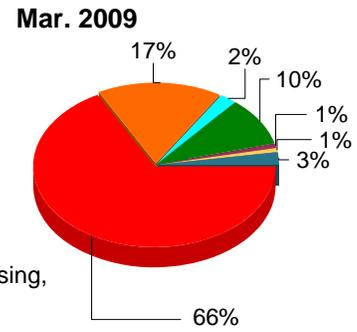
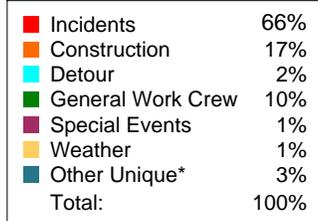
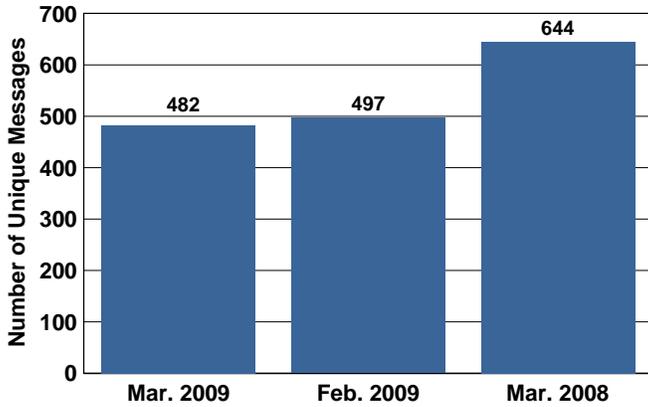
I am so very grateful to you and to the gentleman who helped me. I was not exactly sure what I was going to do nor how long I was going to be stranded on the side of a very busy (and scary) interstate highway. Thanks go to you and your amazing service."

Courtesy Patrol



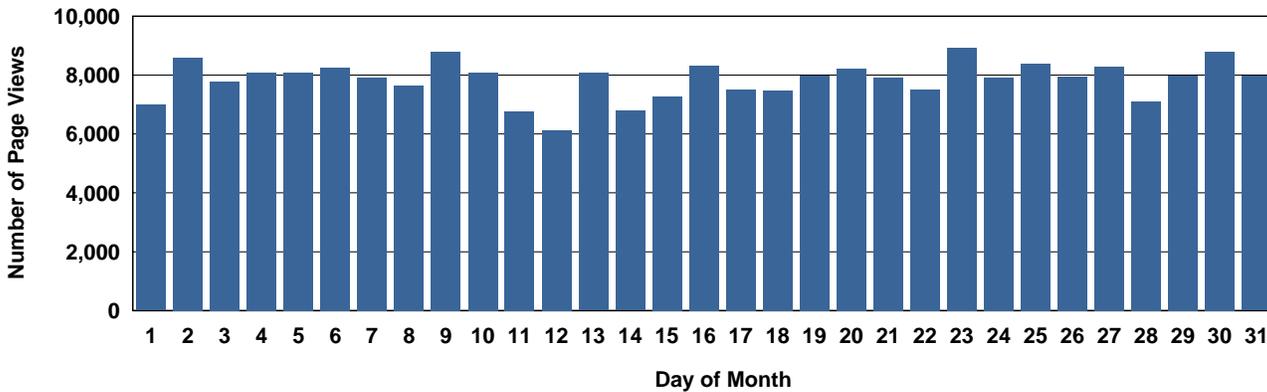
Freeway	Segment	TOTAL ASSISTS		ASSISTS PER MILE		AVERAGE RESPONSE		AVERAGE CLEAR		
		(miles)	Mar. 2009	FYTD 2009	Mar. 2009	FYTD 2009	TIME (min) Mar. 2009	FYTD 2009	TIME (min) Mar. 2009	FYTD 2009
<b>I-75</b>	Oakland County Line to I-696	37.0	365	356.2	9.9	9.6	12.5	18.1	11.0	11.8
	I-696 to I-94	8.0	283	236.5	35.4	29.6	7.7	8.2	9.3	12.7
	I-94 to I-96	5.6	52	53.5	9.3	9.6	8.4	10.3	8.0	10.4
	I-96 to I-275	37.0	159	153.3	4.3	4.1	12.3	12.9	11.0	10.9
	<b>Total</b>	<b>87.6</b>	<b>859</b>	<b>799.5</b>	<b>9.8</b>	<b>9.1</b>	<b>10.1</b>	<b>12.6</b>	<b>10.3</b>	<b>11.8</b>
<b>I-94</b>	Washtenaw County Line to M-39	20.7	290	322.2	14.0	15.6	9.4	10.3	8.8	10.5
	M-39 to I-75	9.0	265	258.3	29.4	28.7	10.9	10.1	10.0	11.1
	I-75 to I-696	10.0	254	259.5	25.4	26.0	12.7	11.1	8.3	10.0
	I-696 to St. Clair County Line	21.0	143	130.8	6.8	6.2	10.2	12.1	6.9	8.0
	<b>Total</b>	<b>60.7</b>	<b>952</b>	<b>970.8</b>	<b>15.7</b>	<b>16.0</b>	<b>11.0</b>	<b>10.6</b>	<b>8.7</b>	<b>10.2</b>
<b>I-96</b>	Livingston County Line to I-275/I-696	11.0	123	123.0	11.2	11.2	10.0	13.3	8.4	10.7
	I-275/M-14 to M-39	12.0	162	136.2	13.5	11.3	11.6	10.8	10.1	10.9
	M-39 to I-75	11.0	239	230.2	21.7	20.9	10.3	14.5	9.5	10.4
	<b>Total</b>	<b>34.0</b>	<b>524</b>	<b>489.3</b>	<b>15.4</b>	<b>14.4</b>	<b>10.6</b>	<b>13.2</b>	<b>9.4</b>	<b>10.6</b>
<b>I-275</b>	I-96/I-696 to M-14/I-96	8.0	87	94.5	10.9	11.8	10.9	11.1	9.7	11.3
	M-14/I-96 to I-94	12.0	153	149.3	12.8	12.4	10.5	11.9	9.7	11.2
	I-94 to I-75	17.5	81	70.3	4.6	4.0	13.7	14.2	8.8	10.4
	<b>Total</b>	<b>37.5</b>	<b>321</b>	<b>314.2</b>	<b>8.6</b>	<b>8.4</b>	<b>11.2</b>	<b>12.0</b>	<b>9.5</b>	<b>11.0</b>
<b>I-696</b>	I-96/I-275 to M-10	9.3	109	125.5	11.7	13.5	12.4	11.8	9.6	11.4
	M-10 to I-75	9.0	139	137.7	15.4	15.3	11.7	10.1	12.5	12.3
	I-75 to I-94	10.4	202	197.8	19.4	19.0	10.3	10.0	9.3	8.8
	<b>Total</b>	<b>28.7</b>	<b>450</b>	<b>461.0</b>	<b>15.7</b>	<b>16.1</b>	<b>11.4</b>	<b>10.6</b>	<b>10.3</b>	<b>10.5</b>
<b>I-375</b>		1.2	8	6.2	6.7	5.1	1.0	7.0	12.6	11.3
<b>M-10 (Lodge)</b>		17.9	306	292.2	17.1	16.3	9.7	9.4	8.5	10.6
<b>M-14</b>		6.4	34	48.7	5.3	7.6	7.3	11.6	8.8	10.2
<b>M-39 (Southfield)</b>		14.2	228	200.7	16.1	14.1	10.3	11.8	10.9	12.8
<b>M-5 (Grand River)</b>		10.3	48	43.5	4.7	4.2	5.8	10.8	8.5	9.5
<b>M-8 (Davison)</b>		2.2	75	65.2	34.1	29.6	7.6	9.5	8.7	11.6
	<b>Total</b>	<b>300.7</b>	<b>3,805</b>	<b>3,691.2</b>						

## Unique DMS Messages by Type



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

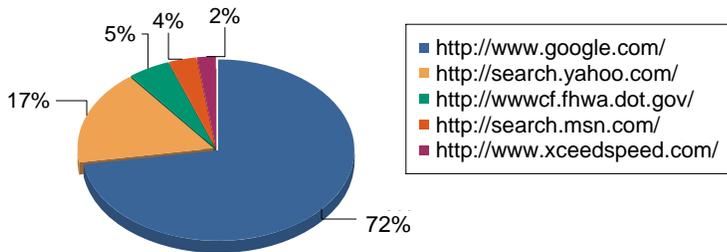
## Mi Drive Web Site Daily Page Views



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



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



Does not include Michigan.gov requests.

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

## Incident Communication Accuracy



Weekend DMS Snapshot Review	Mar. 2009	Feb. 2009	Mar. 2008
All Incident Messages	100%	100%	100%
High-Impact DMS Messages	Mar. 2009	Feb. 2009	Mar. 2008
All High-Impact Messages	98%	98%	96%
Freeway Closure Messages	90%	93%	95%
Lane Closure Messages	100%	100%	97%
Ramp Closure Messages	100%	100%	100%
Other Communication	Mar. 2009	Feb. 2009	Mar. 2008
Advisory Text Messages	98%	93%	100%
Web Site Incident Postings	100%	93%	91%

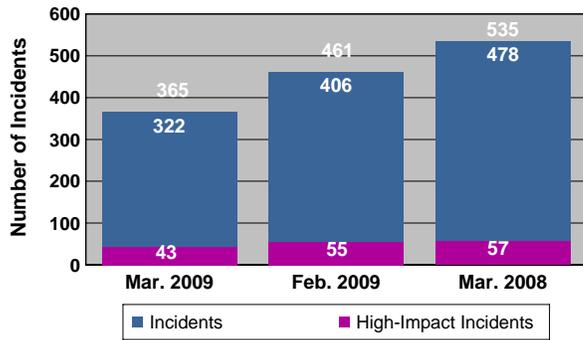
## Most Utilized DMS



1. I-94 EB at Central
2. I-94 EB at Second
3. M-10 NB at Porter
4. I-375 NB at Gratiot
5. I-75 SB South of 13 Mile



## Total Number of Incidents



## High-Impact Incident Activity



	Mar. 2009	Feb. 2009	Mar. 2008
Freeway Closures All Lanes Closed	10	16	22
Lane Closures Only One Lane Open	32	34	30
Ramp Closures Freeway-to-Freeway	1	5	5
<b>Total</b>	<b>43</b>	<b>55</b>	<b>57</b>

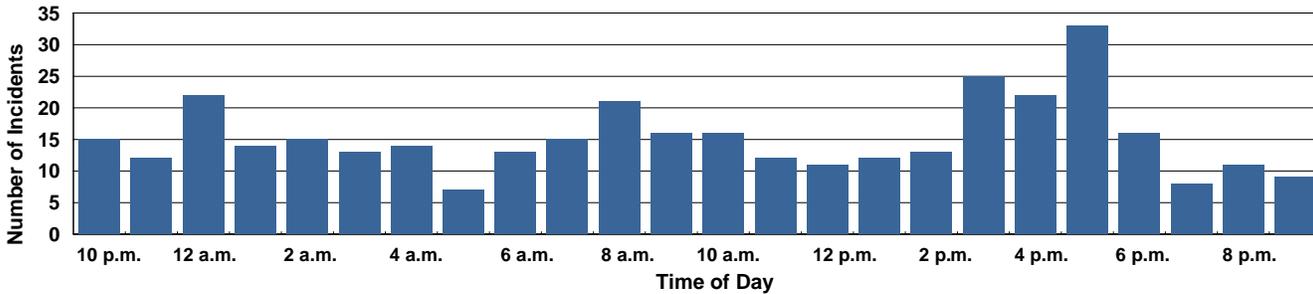
High-impact incidents account for **8%** of the total incidents in March.

## Total Incidents by Roadway

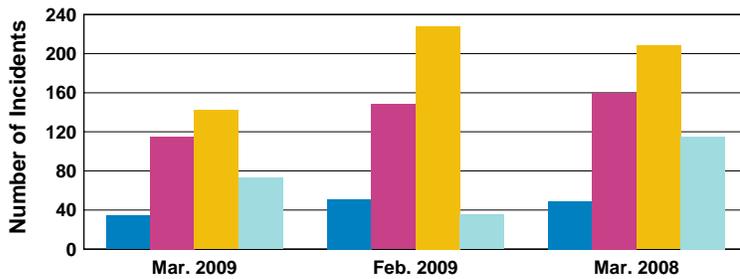


Freeway	Mar. 2009	Feb. 2009	Mar. 2008
I-75 (CHRYSLER/FISHER)	71	87	126
I-94 (FORD)	108	119	123
I-696 (REUTHER)	49	59	88
I-96 (JEFFRIES)	40	64	62
M-10 (LODGE)	30	32	39
M-39 (SOUTHFIELD)	40	62	49
I-275	26	38	46
I-375	1	0	1
M-59	0	0	1
<b>Total</b>	<b>365</b>	<b>461</b>	<b>535</b>

## Total Incidents per Hour

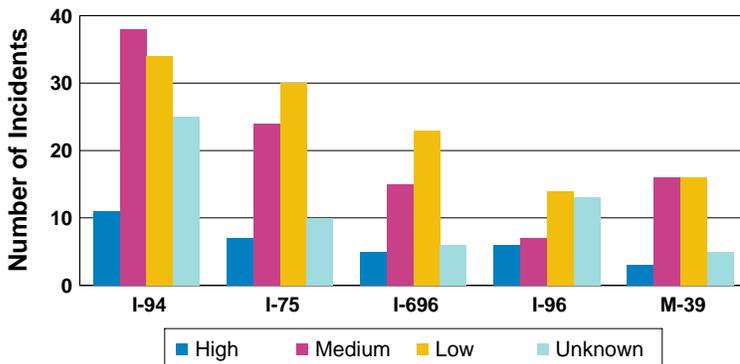


## Total Incident Severity/Duration by Month

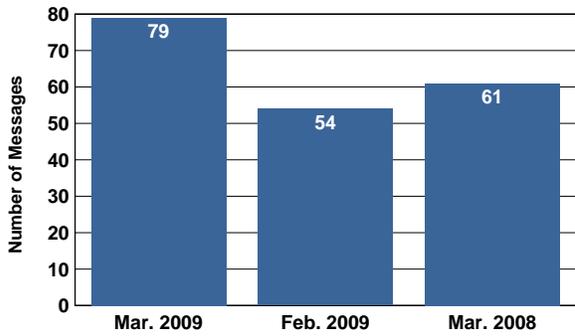


- Single-lane closures equal to 90+ minutes, partial closures (more than one lane, but not all) equal to 45+ minutes, or total closures (all lanes) 20+ minutes
- Shoulder closures equal to 90+ minutes, single-lane closures between 20 and 89 minutes, partial closures (more than one lane but not all) between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

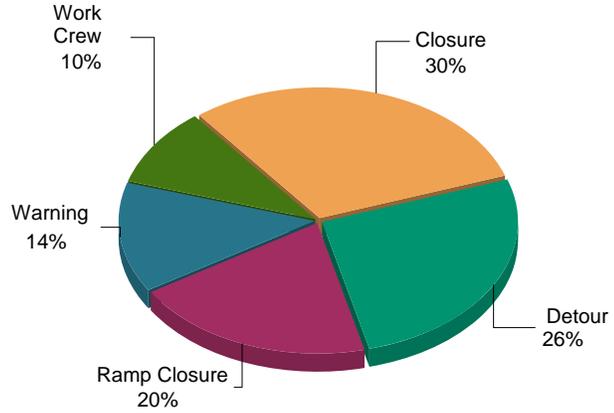
## Severity/Duration by Top 5 Freeways



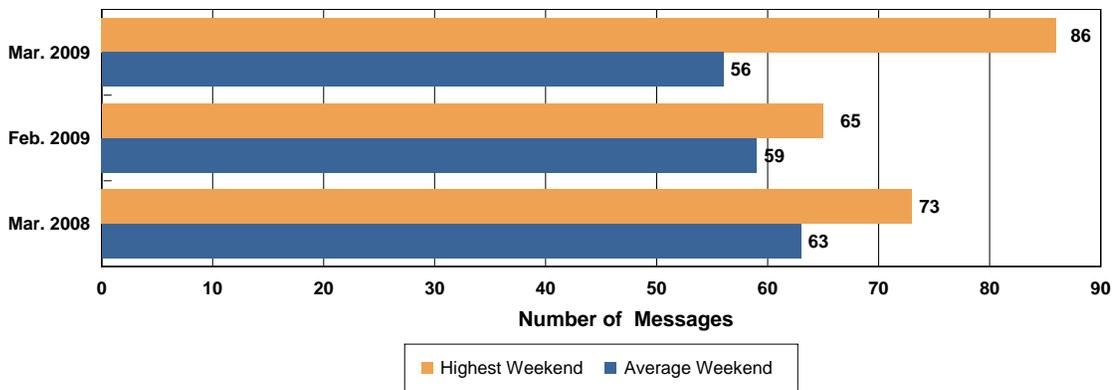
## Unique Construction Messages



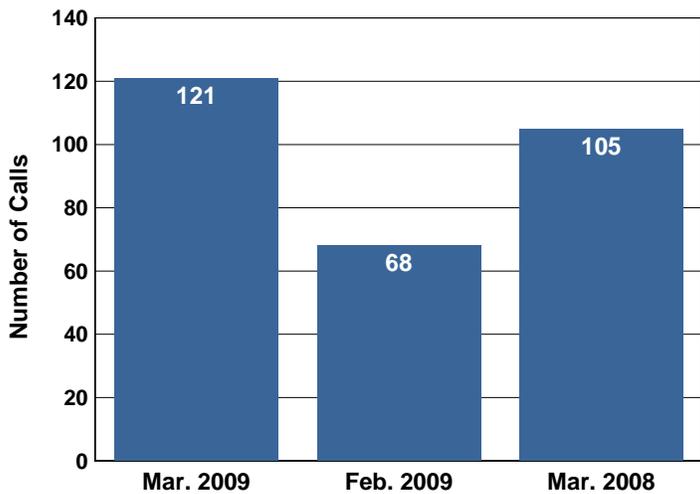
## Highest Weekend Unique Construction Messages



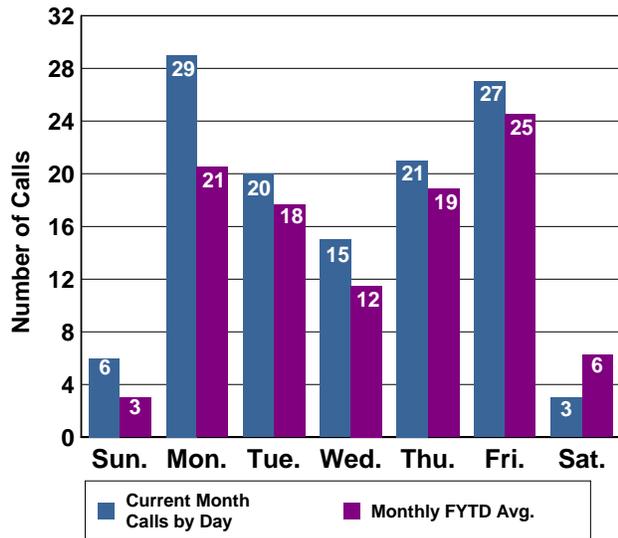
## Weekend Construction DMS Message Activity



## Total Construction Calls per Month



## Construction Calls by Day



Construction Activity



## DMS Availability

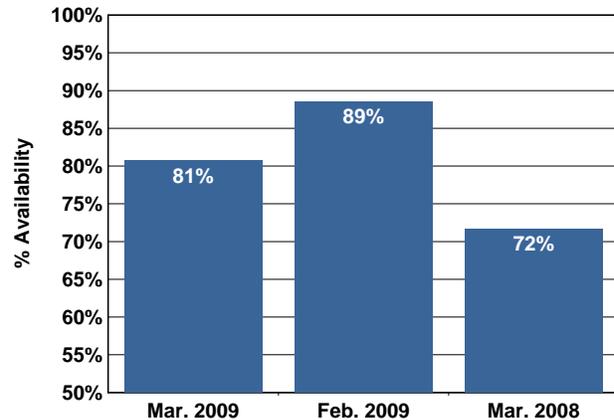
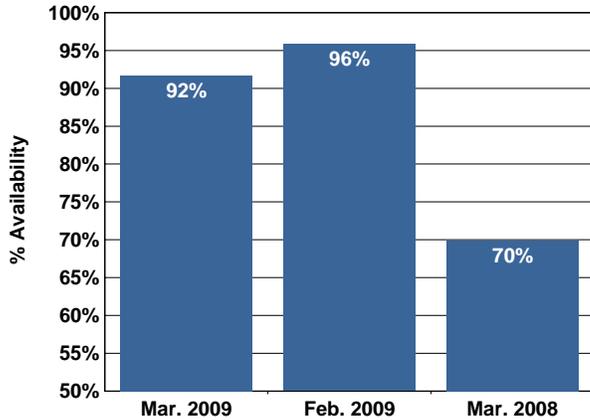


	Mar. 2009	Feb. 2009	Mar. 2008
<b>Available</b>	<b>66</b>	<b>69</b>	<b>44</b>
<b>Not Available</b>	<b>6</b>	<b>3</b>	<b>19</b>
<b>Total</b>	<b>72</b>	<b>72</b>	<b>63</b>

## CCTV Camera Availability



	Mar. 2009	Feb. 2009	Mar. 2008
<b>Available</b>	<b>134</b>	<b>147</b>	<b>119</b>
<b>Not Available</b>	<b>32</b>	<b>19</b>	<b>47</b>
<b>Total</b>	<b>166</b>	<b>166</b>	<b>166</b>



## Equipment Upgrades



Equipment Type	Maintenance Activity
<b>CCTV</b>	
I-96 @ Novi	Upgraded camera
M-39 @ I-96	Upgraded camera
<b>TOTAL</b>	<b>2</b>
<b>DMS</b>	
Eastbound I-94 @ Cotton	Power cycled modems
Eastbound I-94 @ Joy/M-59	Power cycled modems
Westbound I-94 @ North River	Replaced Light Emitting Diode (LED) panels
Southbound I-75 @ Clay	Installed internal equipment to communicate to new software
Northbound I-75 @ Clay	Installed internal equipment to communicate to new software
Southbound I-75 @ Canfield	Installed internal equipment to communicate to new software
Westbound I-94 @ 14 Mile	Reset for communications restoration
Eastbound I-94 @ Allard	Installed internal equipment to communicate to new software
Westbound I-94 @ Weigh Station	Reboot modems for communication restoration
<b>TOTAL</b>	<b>9</b>

