

# Michigan Intelligent Transportation Systems Center

Serving Motorists on Southeast Michigan Freeways

[www.michigan.gov/its](http://www.michigan.gov/its)  
[www.michigan.gov/drive](http://www.michigan.gov/drive)

January 2011



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## In the Spotlight



Courtesy Patrol Van



The Michigan Department of Transportation (MDOT) Freeway Courtesy Patrol (FCP) was established in 1994, and since then has assisted thousands of stranded motorists in southeast Michigan. The FCP provides assistance to motorists by reducing potential crash situations, relieving traffic congestion, and creating safer driving environments. The FCP provides stranded motorists assistance with fuel, directions, flat tires, and minor mechanical issues. They also clear debris from the road and assist with traffic policing accidents. In fiscal year 2010, the FCP averaged 3,278 assists per month, not including marking abandoned vehicles.

Compiled by:

**URS**

# Summary

## Data Key

Jan. 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.

3,896

### 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.

5,028

### 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.

144,954

### 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.

467

### 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



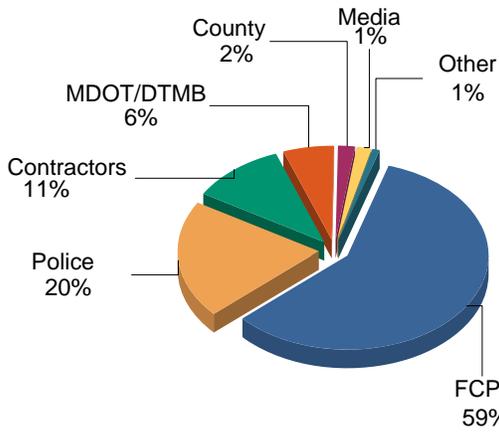
#### System Availability

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: 91%

# Calls by Type



**Total Calls: 5,028**

Agency	No. of Calls
FCP	2,921
Contractors	549
City	6
County	102
Federal	0
Fire	3
Police	1,008
Border	4
MDOT/DTMB	290
Media	74
Special Events	24
Transit	1
State	0
Parking	0
Airport	1
Animals	0
OTHER	45
<b>Total</b>	<b>5,028</b>

MDOT/DTMB	Total
Taylor TSC	94
Oakland TSC	50
Detroit TSC	44
MITS Center	35
DTMB	22
Macomb TSC	13
Detroit Maintenance Garage	9
Metro Region Office	8
Answering Service	7
Auburn Hills Garage	4
Brighton TSC	2
Port Huron TSC	2
<b>Total</b>	<b>290</b>

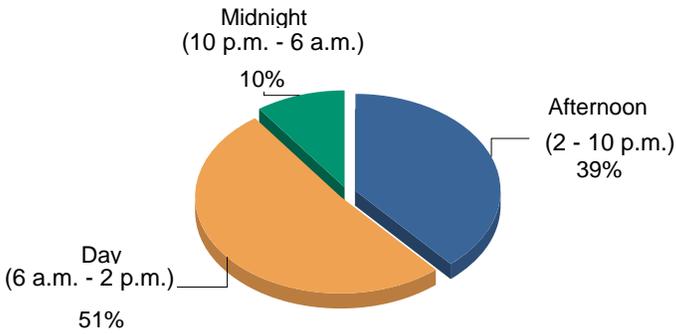


Control Room

# Calls by Weekday Shift



Monday - Friday

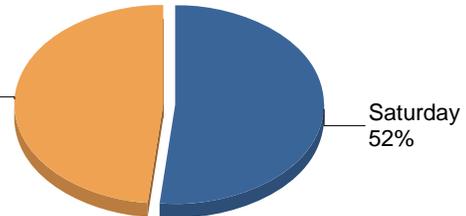


**Average Number of Calls per Weekday: 192**

# Calls by Weekend Day

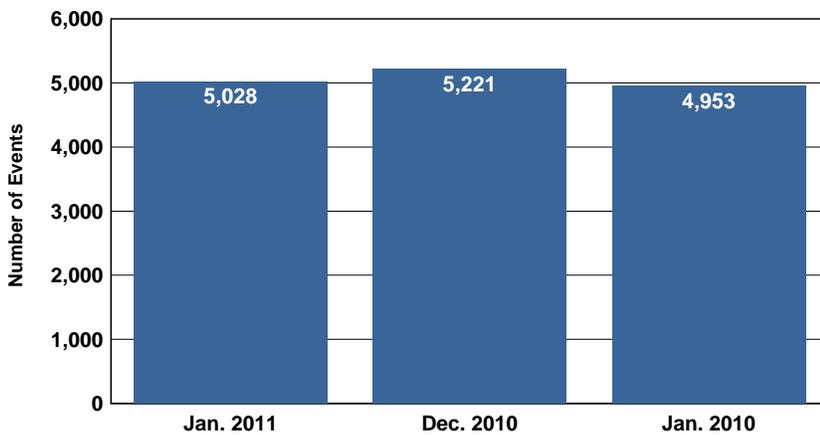


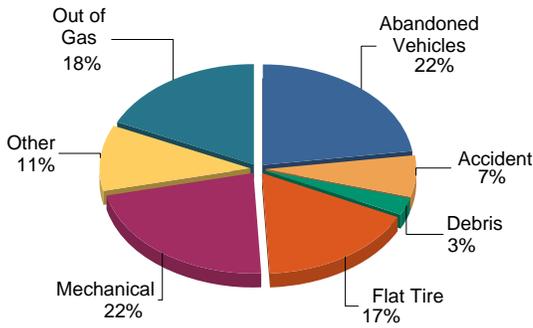
Sunday 48%



**Average Number of Calls per Weekend: 198**

# Monthly Event History

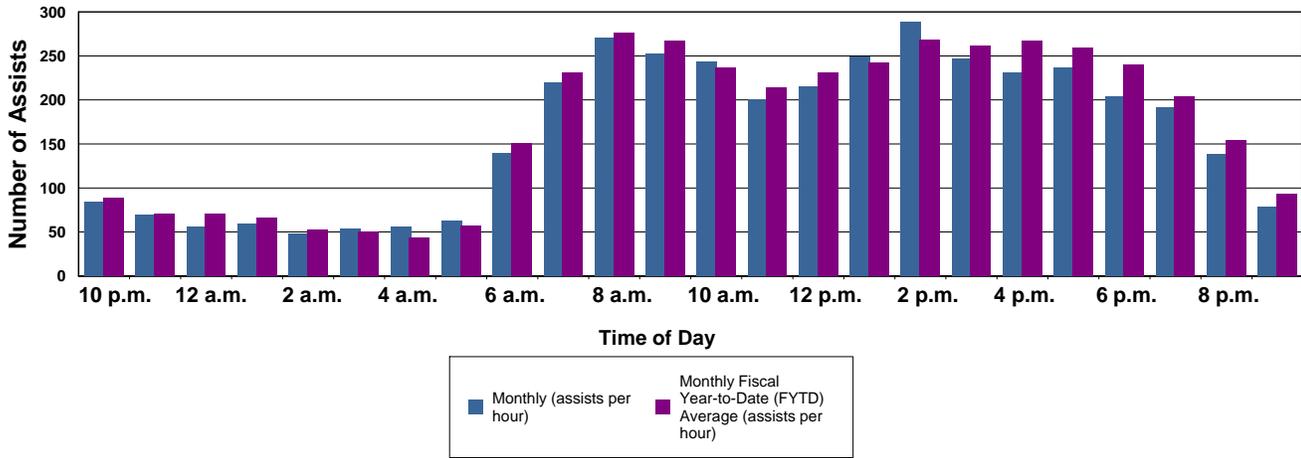




In January, the largest number of people assisted on one assist was 12. The vehicle was a conversion van and the Freeway Courtesy Patrol assisted with directions.

**January Total: 3,896**  
**2,958 Assists**  
**938 Abandoned Vehicle Stops**

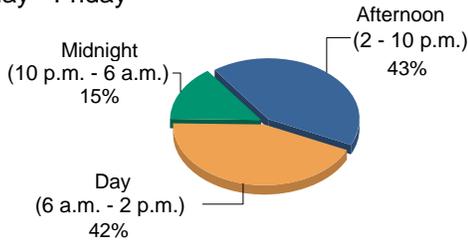
FCP Assists by Time of Day



FCP Dispatches by Weekday Shift

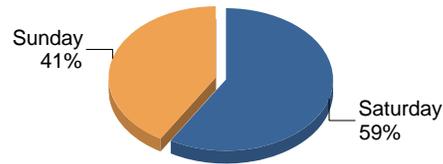


Monday - Friday



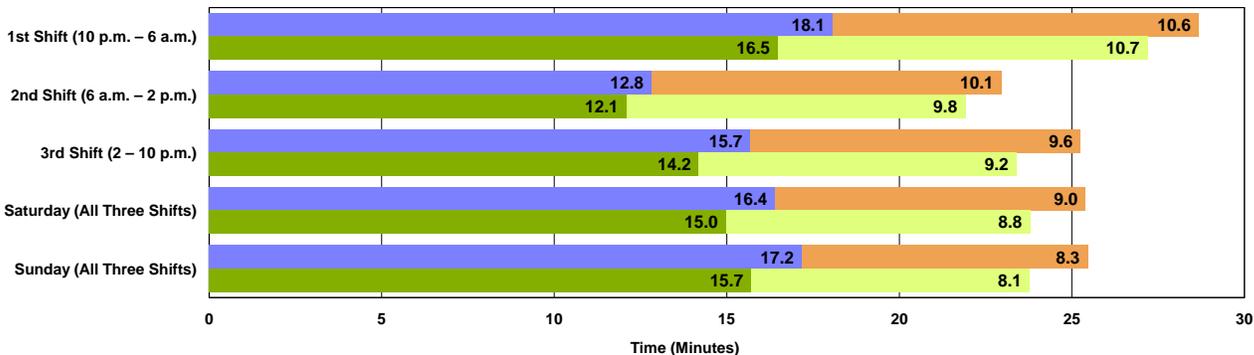
**Average Number of Dispatches per Weekday: 32**

FCP Dispatches by Weekend Day



**Average Number of Dispatches per Weekend: 46**

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)



FCP Service Area and Assists per Mile



Motorist Quote of the Month:

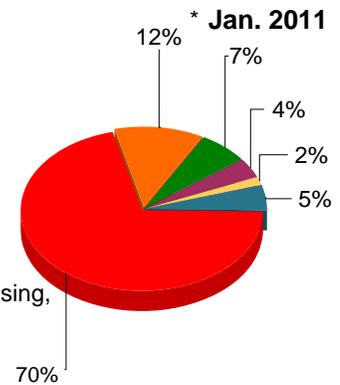
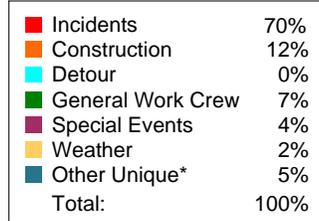
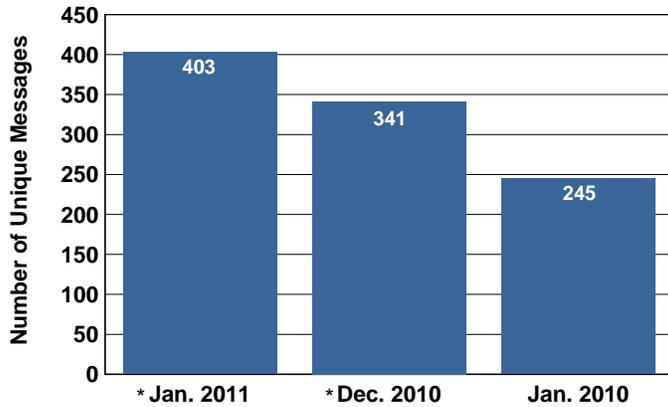
*"This morning while traveling on I-75 in northern Oakland County, my family and I got a flat tire on our SUV. My husband was just beginning to change the flat when an MDOT Freeway Courtesy Patrol vehicle pulled up behind us. It was perfect timing and such a welcome sight. My husband failed to get the driver's name, but he was so nice and friendly and really helped us out. Our spare tire was low on air and he inflated it and then assisted in putting the new tire on the car. Thanks for offering the Freeway Courtesy Patrol. It really helped us out!"*

Courtesy Patrol



Freeway	Segment	TOTAL ASSISTS (miles)	ASSIST DENSITY		AVERAGE RESPONSE TIME (min)		AVERAGE CLEAR TIME (min)			
			Jan. 2011	FYTD Avg.	Jan. 2011	FYTD Avg.	Jan. 2011	FYTD Avg.	Jan. 2011	FYTD Avg.
I-75	Oakland County Line to I-696	37.0	397	388.5	10.7	10.5	23.0	19.6	9.9	9.5
	I-696 to I-94	8.0	233	239.0	29.1	29.9	13.2	11.6	13.2	11.1
	I-94 to I-96	5.6	79	74.3	14.1	13.3	9.6	11.0	9.6	9.3
	I-96 to I-275	37.0	253	257.8	6.8	7.0	15.3	13.9	8.1	9.1
		87.6	962	959.5	11.0	11.0	16.9	15.0	10.2	9.8
I-94	Washtenaw County Line to M-39	20.7	244	299.0	11.8	14.4	14.5	15.8	9.8	8.8
	M-39 to I-75	9.0	304	280.3	33.8	31.1	10.7	11.3	9.4	9.6
	I-75 to I-696	10.0	247	266.0	24.7	26.6	14.6	14.1	10.6	9.8
	I-696 to St. Clair County Line	21.0	155	142.0	7.4	6.8	18.9	18.5	8.2	7.9
		60.7	950	987.3	15.7	15.7	13.3	14.0	9.6	9.2
I-96	Livingston County Line to I-275/I-696	11.0	120	130.5	10.9	11.9	18.4	17.7	7.2	8.8
	I-275/M-14 to M-39	12.0	213	204.8	17.8	17.1	17.6	14.5	9.5	8.8
	M-39 to I-75	11.0	266	295.8	24.2	26.9	13.9	12.2	9.5	9.3
		34.0	599	631.0	17.6	17.6	16.3	14.0	9.1	9.0
I-275	I-96/I-696 to M-14/I-96	8.0	93	103.5	11.6	12.9	19.3	14.3	8.5	8.1
	M-14/I-96 to I-94	12.0	111	134.0	9.3	11.2	16.0	15.7	7.4	8.6
	I-94 to I-75	17.5	48	60.8	2.7	3.5	16.6	16.9	11.5	8.1
		37.5	252	298.3	6.7	6.7	17.1	15.4	8.6	8.3
I-696	I-96/I-275 to M-10	9.3	138	155.8	14.8	16.7	19.6	15.7	10.1	9.2
	M-10 to I-75	9.0	127	132.3	14.1	14.7	14.7	12.9	10.7	10.6
	I-75 to I-94	10.4	159	184.0	15.3	17.7	15.4	13.5	9.9	10.2
		28.7	424	472.0	14.8	14.8	16.3	13.9	10.2	10.0
M-59 (Veterans)		24.0	34	38.3	1.4	1.6	34.0	23.7	9.7	8.6
I-375		1.2	6	5.3	5.0	4.4	21.0	16.3	7.0	7.0
M-10 (Lodge)		17.9	285	309.0	15.9	17.3	10.8	11.4	9.6	9.4
M-14		6.4	54	61.3	8.4	9.6	15.8	17.3	7.1	8.4
M-39 (Southfield)		14.2	271	274.5	19.1	19.3	15.6	12.1	10.9	10.7
M-5 (Grand River)		10.3	28	32.0	2.7	3.1	22.5	17.6	6.1	8.0
M-8 (Davison)		2.2	31	27.3	14.1	12.4	10.0	9.9	9.3	10.4
<b>Total</b>		<b>324.7</b>	<b>3,896</b>	<b>4,095.5</b>						

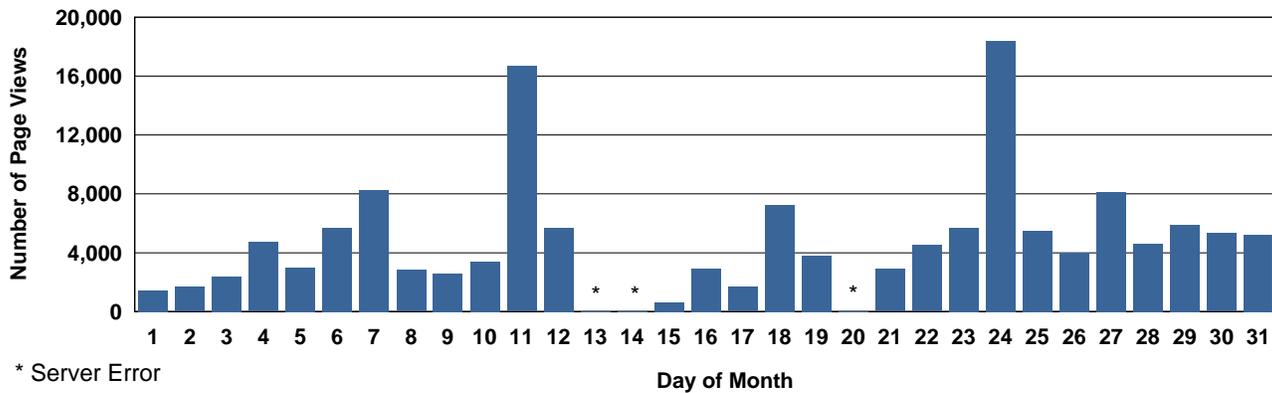
## Unique DMS Messages by Type



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

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

## Mi Drive Web Site January Daily Page Views

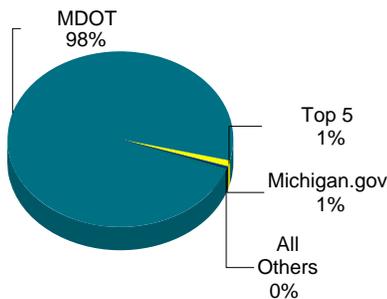


\* Server Error

## Referring Site Requests to Mi Drive Web Site in January



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



### Top 5 Non-Michigan.gov Sites



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

## Incident Communication Accuracy



Weekend DMS Snapshot Review	Jan. 2011	Dec. 2010	Jan. 2010
All Incident Messages	100%	100%	100%
High-Impact DMS Messages	Jan. 2011	Dec. 2010	Jan. 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	Jan. 2011	Dec. 2010	Jan. 2010
Advisory Text Messages	94%	94%	94%
Web Site Incident Postings	96%	100%	96%

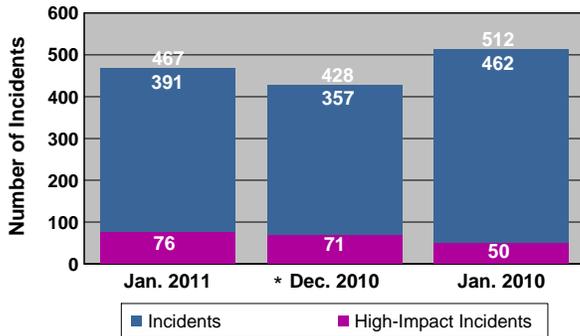
## Most Utilized DMS



1. I-94 WB at 10 Mile
2. I-696 EB at Bunert
3. I-75 SB at State Fair
4. I-75 NB at Woodward Hgts.
5. I-75 NB at 7 Mile



## Total Number of Incidents



## High-Impact Incident Activity



	Jan. 2011	Dec. 2010	Jan. 2010
Freeway Closures All Lanes Closed	18	25	11
Lane Closures Only One Lane Open	48	38	36
Ramp Closures Freeway-to-Freeway	10	8	3
<b>Total</b>	<b>76</b>	<b>71</b>	<b>50</b>

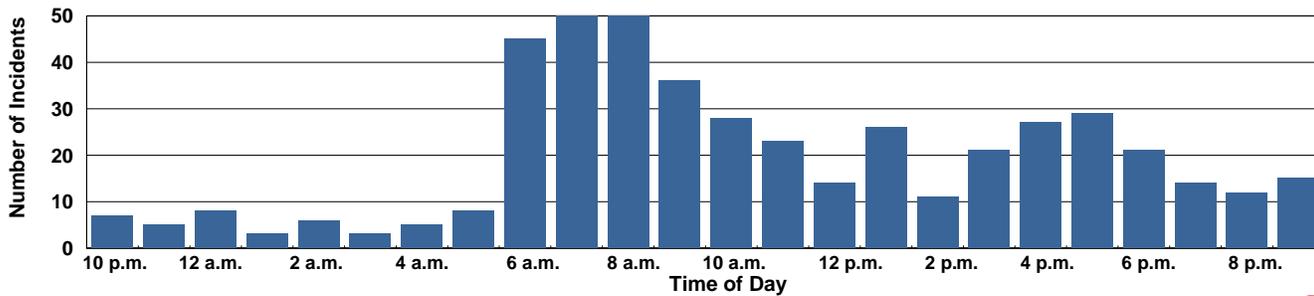
High-impact incidents account for **16%** of the total incidents in January.

## Total Incidents by Roadway

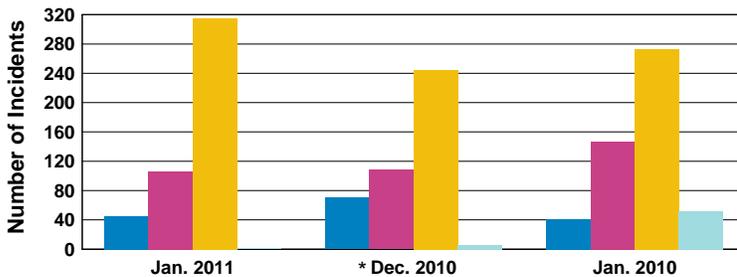


Freeway	Jan. 2011	* Dec. 2010	Jan. 2010
I-75 (CHRYSLER/FISHER)	119	113	142
I-94 (FORD)	95	114	118
I-696 (REUTHER)	60	58	70
I-96 (JEFFRIES)	57	51	59
M-10 (LODGE)	37	22	35
M-39 (SOUTHFIELD)	55	30	49
I-275	41	37	38
I-375	3	0	1
M-59	0	3	0
<b>Total</b>	<b>467</b>	<b>428</b>	<b>512</b>

## Total Incidents per Hour

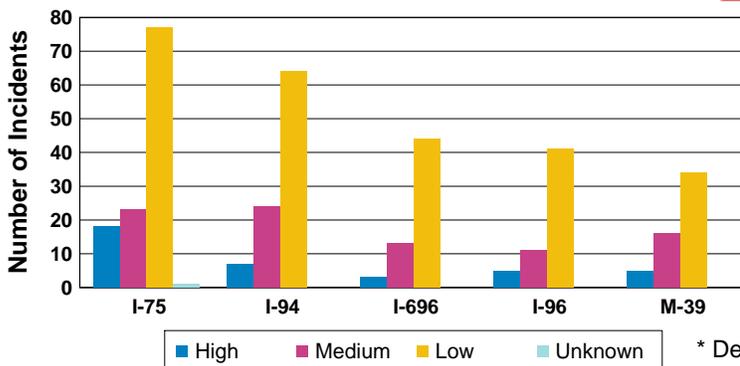


## Total Incident Severity/Duration by Month

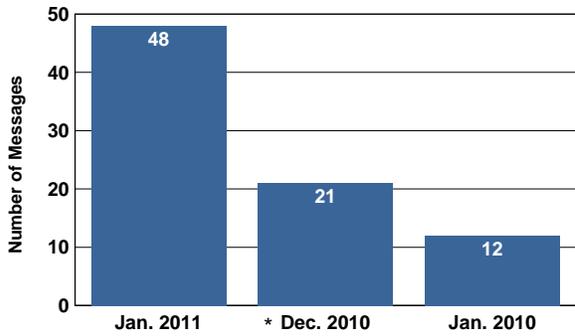


- Single-lane closures equal to 90+ minutes, partial closures (more than one lane, but not all) equal to 45+ minutes, or total closures (all lanes) 20+ minutes
- Shoulder closures equal to 90+ minutes, single-lane closures between 20 and 89 minutes, partial closures (more than one lane but not all) between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

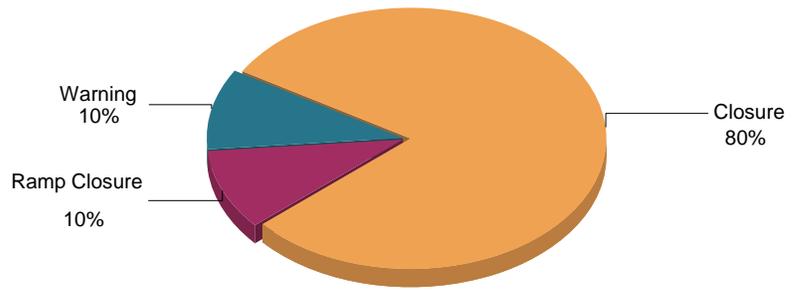


## Unique Construction Messages

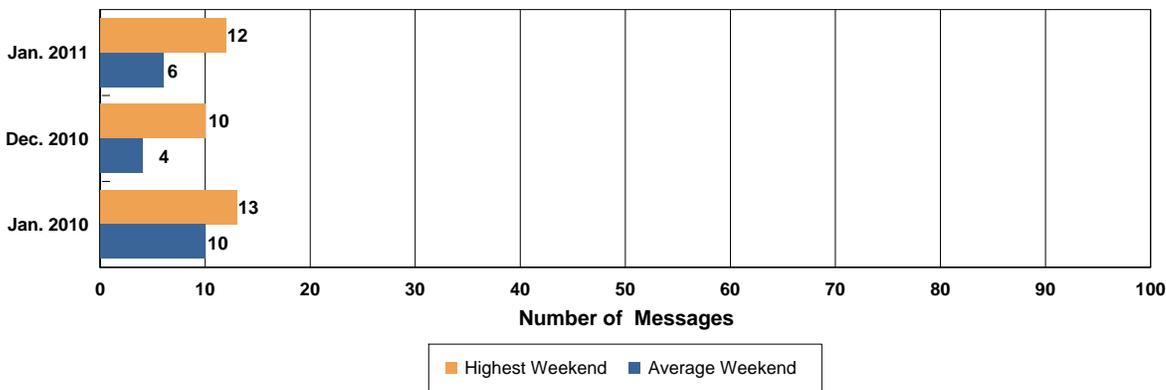


\* Dec. 2010 data averaged from past years due to system outage

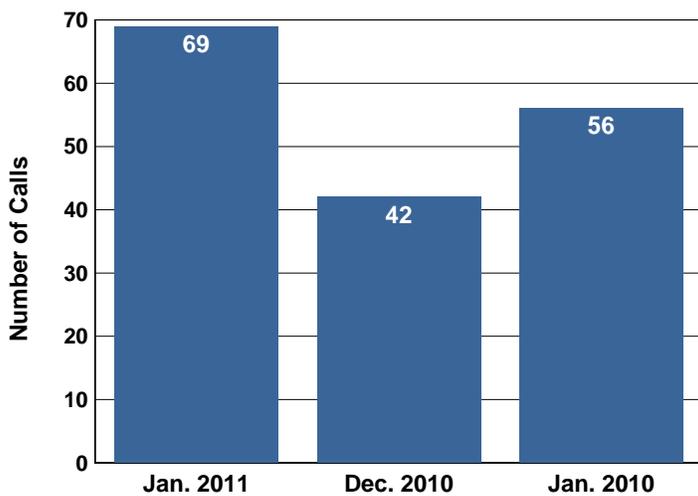
## Highest Weekend Unique Construction Messages



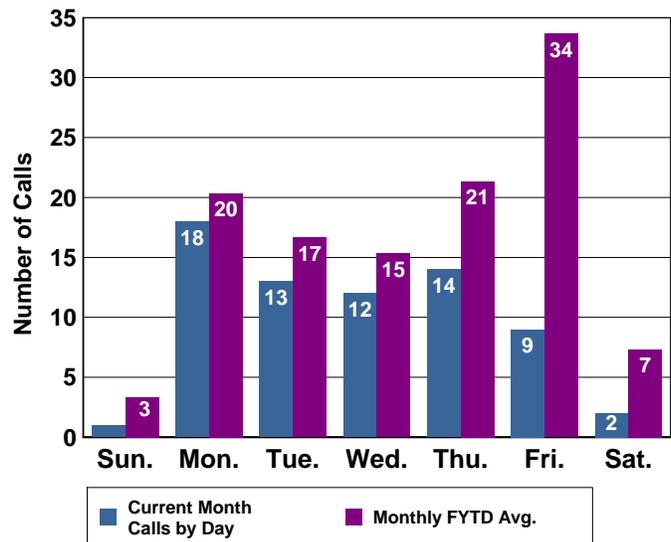
## Weekend Construction DMS Message Activity



## Total Construction Calls per Month



## Construction Calls by Day



Construction Activity



## DMS Availability

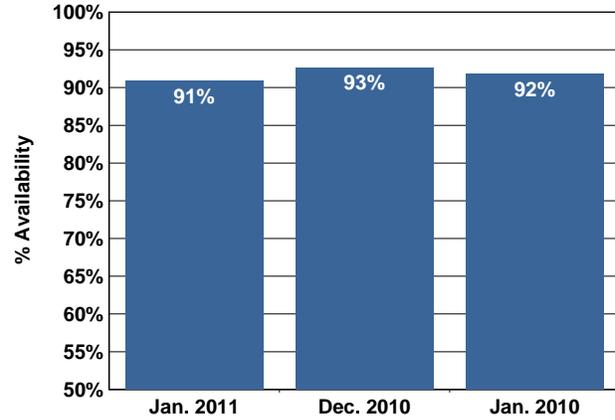
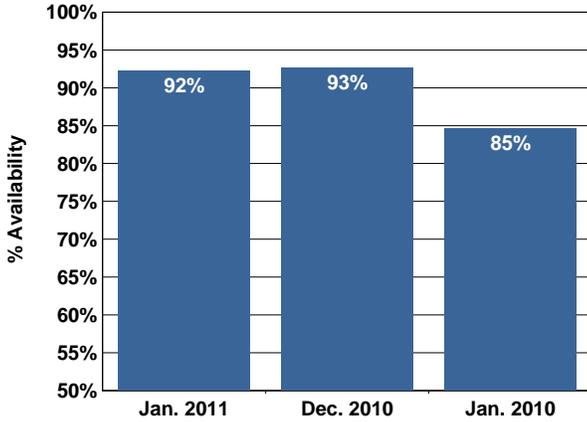


## CCTV Camera Availability



	Jan. 2011	Dec. 2010	Jan. 2010
<b>Available</b>	<b>64</b>	<b>64</b>	<b>56</b>
<b>Not Available</b>	<b>5</b>	<b>5</b>	<b>10</b>
<b>Total</b>	<b>69</b>	<b>69</b>	<b>66</b>

	Jan. 2011	Dec. 2010	Jan. 2010
<b>Available</b>	<b>154</b>	<b>157</b>	<b>151</b>
<b>Not Available</b>	<b>16</b>	<b>13</b>	<b>13</b>
<b>Total</b>	<b>170</b>	<b>170</b>	<b>164</b>



## Equipment Upgrades



Equipment Type	Maintenance Activity
<b>CCTV</b>	
----	-
TOTAL	0
<b>DMS</b>	
----	-
TOTAL	0
<b>Hub/Node Tower</b>	
----	-
TOTAL	0

## Work Order Processing

