

# 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)



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## In the Spotlight



In March, the MITS Center began displaying real-time messages on select Dynamic Message Signs (DMS) throughout Metro Detroit showing how long it would take commuters to travel from the DMS to selected interchanges and cross-streets in the area. The messages are updated every six minutes through the combination of vehicle detection through loops, side-fire radar, and probe data. Displaying travel times like this helps Metro Detroit commuters easily spot upcoming delays and seek alternate routes - saving motorists precious time and gas. In the future, additional travel times will be displayed and should continue to improve driving in Metro Detroit.

Compiled by:



# Summary

## Data Key

## March 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.

4,110

### 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.

5,586

### 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.

124,600

### 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.

383

### 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



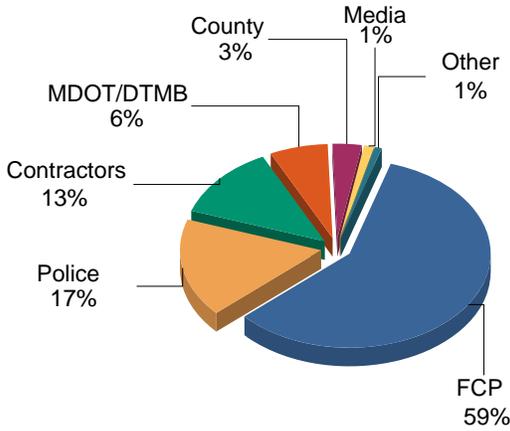
#### System Availability

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: 89%

CCTV: 91%

# Calls by Type



**Total Calls: 5,586**

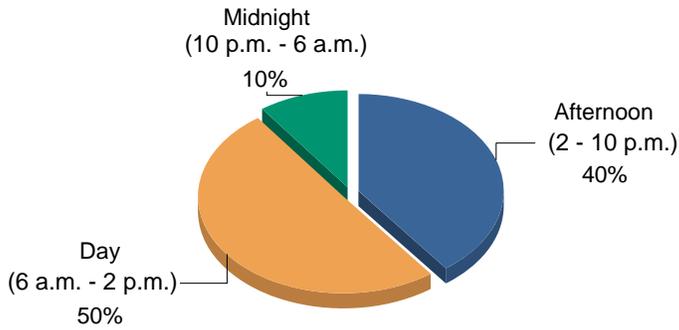
Agency	No. of Calls
FCP	3,268
Contractors	701
City	6
County	185
Federal	0
Fire	0
Police	938
Border	2
MDOT/DTMB	361
Media	67
Special Events	12
Transit	1
State	0
Parking	0
Airport	0
Animals	0
OTHER	45
<b>Total</b>	<b>5,586</b>

MDOT/DTMB	Total
Taylor TSC	143
Oakland TSC	49
MITS Center	45
Detroit TSC	40
Detroit Maintenance Garage	26
Macomb TSC	18
Answering Service	12
Metro Region Office	9
Auburn Hills Garage	6
Port Huron TSC	5
DTMB	4
Brighton TSC	2
Grand Rapids TOC	1
Lansing	1
<b>Total</b>	<b>361</b>

# Calls by Weekday Shift

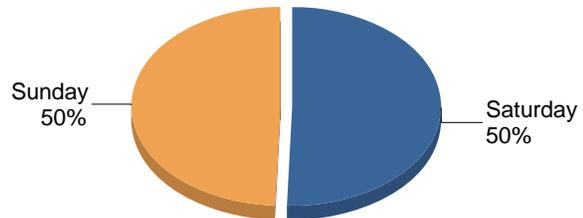


Monday - Friday



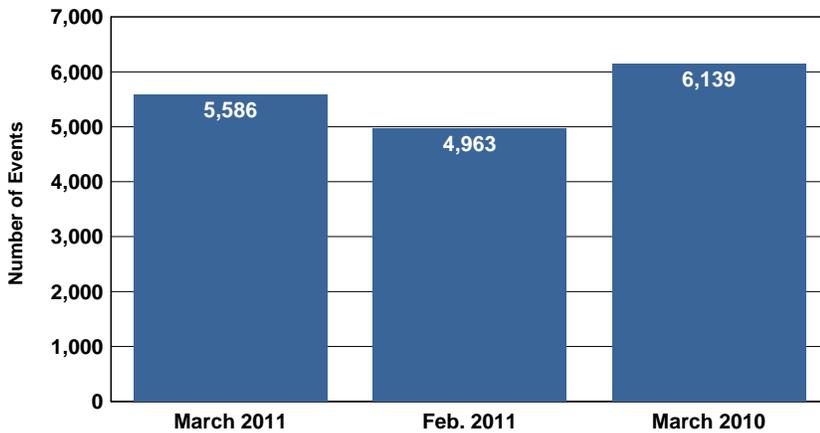
**Average Number of Calls per Weekday: 207**

# Calls by Weekend Day

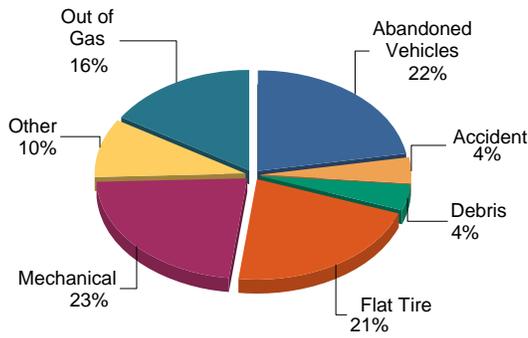


**Average Number of Calls per Weekend: 208**

# Monthly Event History



## FCP Assist Type



## FCP Random Fact & Monthly Totals



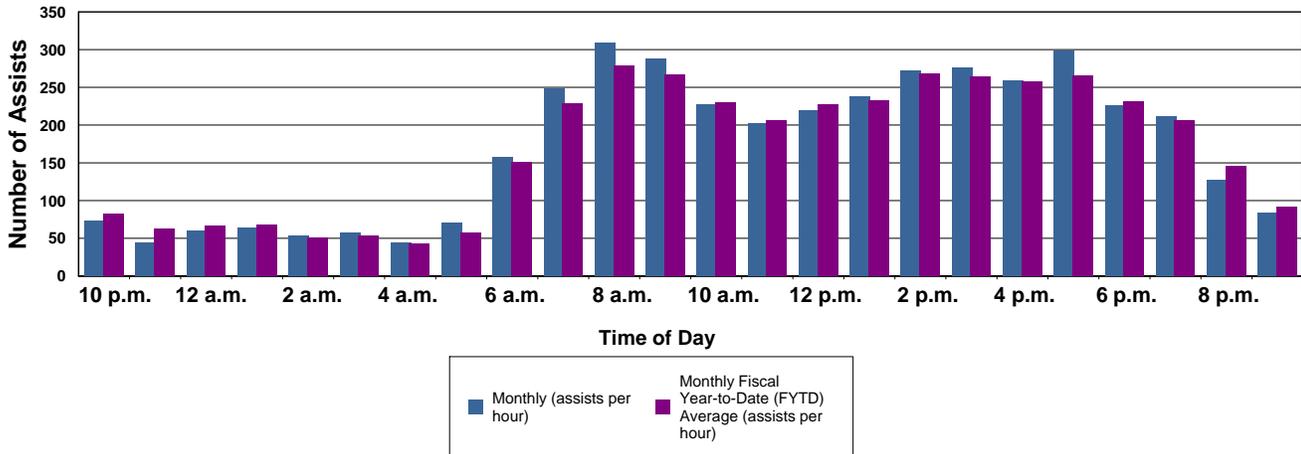
In March, the Freeway Courtesy Patrol assisted 3,130 vehicles. Of those vehicles the most predominant color assisted was white with 597; with the least assisted color was teal at 1 assist.

**March Total: 4,110**

**3,130 Assists**

**980 Abandoned Vehicle Stops**

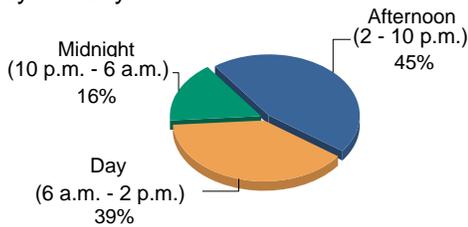
## FCP Assists by Time of Day



## FCP Dispatches by Weekday Shift

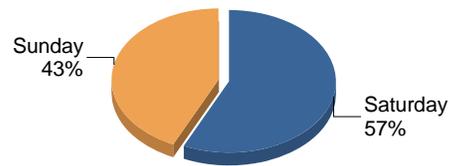


Monday - Friday



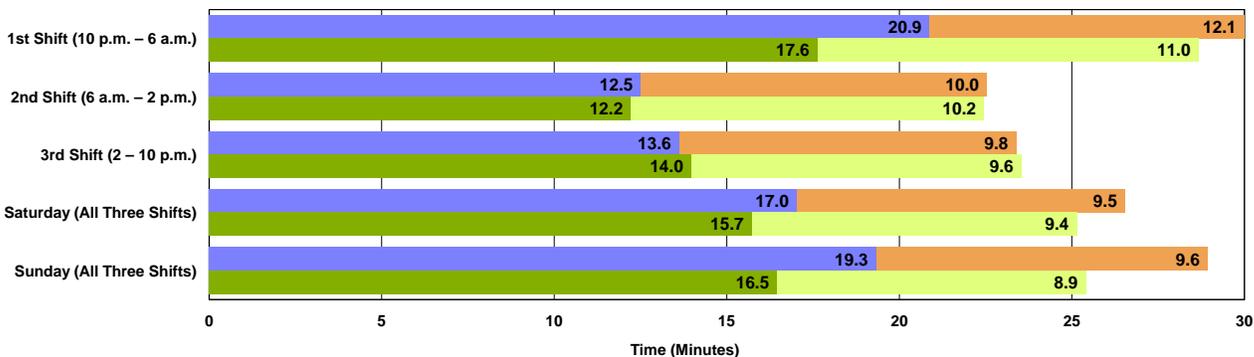
**Average Number of Dispatches per Weekday: 32**

## FCP Dispatches by Weekend Day



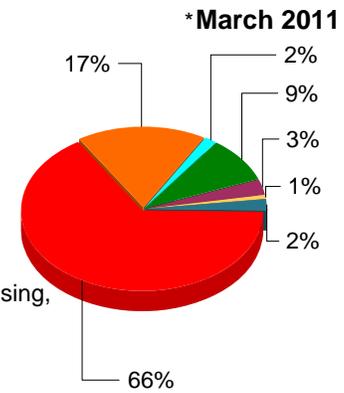
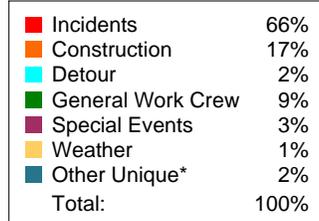
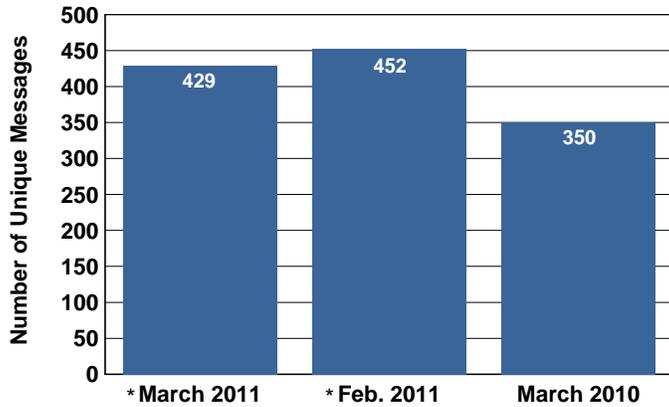
**Average Number of Dispatches per Weekend: 44**

## FCP Average Service Times



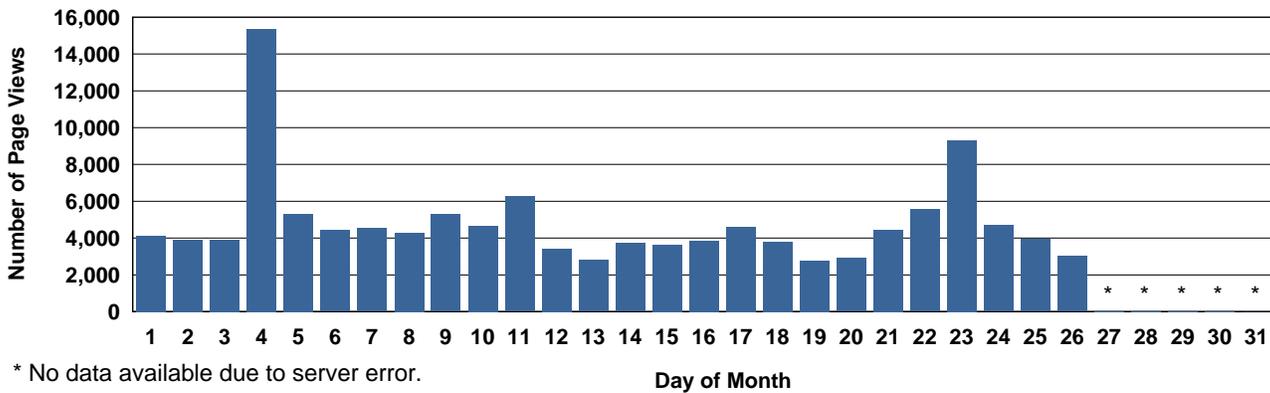


## Unique DMS Messages by Type

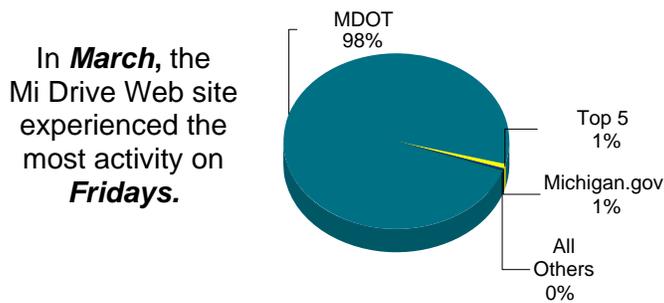


\* Airport, Amber Alert, Border Crossing, Location Specific, Safety, and Travel Time Unique Messages  
 \* March 2011 data averaged from past years due to system outage

## Mi Drive Web Site March Daily Page Views



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



### Top 5 Non-Michigan.gov Sites

- http://www.google.com/
- http://www.clickondetroit.com/
- http://search.yahoo.com/
- http://www.bing.com/
- http://www.tv20detroit.com/

On an average day in **March**, the Mi Drive Web site received the most activity between **8 and 9 a.m.**

## Incident Communication Accuracy



Weekend DMS Snapshot Review	March 2011	Feb. 2011	March 2010
All Incident Messages	100%	100%	100%
High-Impact DMS Messages	March 2011	Feb. 2011	March 2010
All High-Impact Messages	100%	100%	98%
Freeway Closure Messages	100%	100%	100%
Lane Closure Messages	100%	100%	96%
Ramp Closure Messages	100%	100%	100%
Other Communication	March 2011	Feb. 2011	March 2010
Advisory Text Messages	92%	90%	92%
Web Site Incident Postings	96%	97%	96%

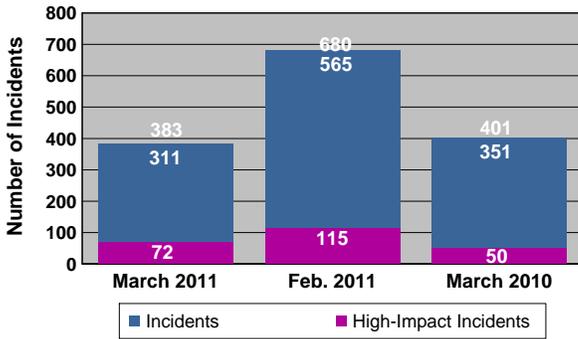
## Most Utilized DMS



1. I-75 SB at State Fair
2. M-39 NB at Puritan
3. I-696 EB at Couzens
4. M-39 NB at Fitzpatrick
5. I-696 EB at Manistee



## Total Number of Incidents



## High-Impact Incident Activity



	March 2011	Feb. 2011	March 2010
Freeway Closures All Lanes Closed	19	28	16
Lane Closures Only One Lane Open	39	73	24
Ramp Closures Freeway-to-Freeway	14	14	10
<b>Total</b>	<b>72</b>	<b>115</b>	<b>50</b>

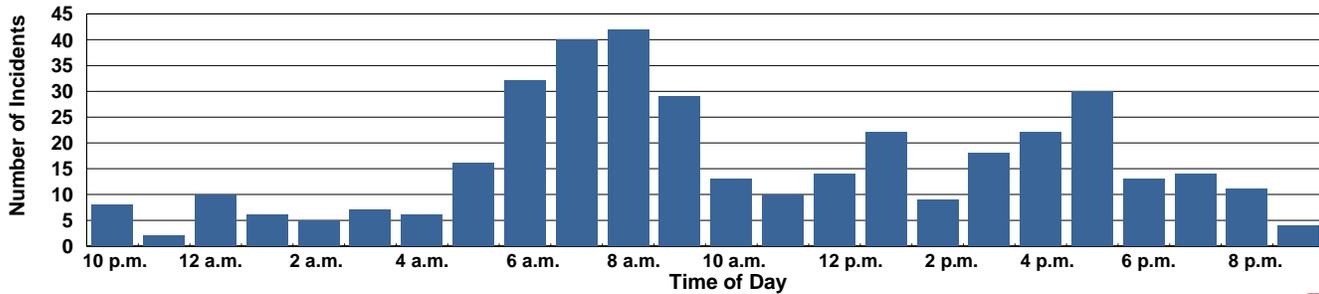
High-impact incidents account for **19%** of the total incidents in March.

## Total Incidents by Roadway

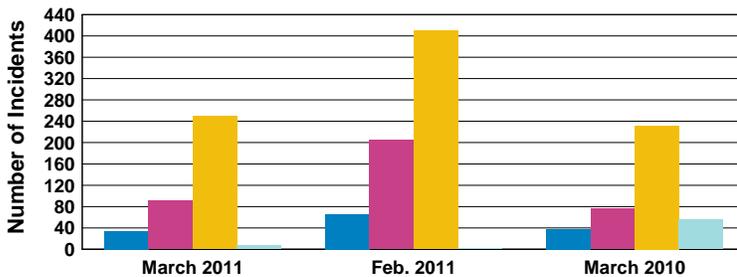


Freeway	March 2011	Feb. 2011	March 2010
I-75 (CHRYSLER/FISHER)	84	194	88
I-94 (FORD)	74	152	90
I-696 (REUTHER)	74	89	68
I-96 (JEFFRIES)	65	90	55
M-10 (LODGE)	22	38	41
M-39 (SOUTHFIELD)	34	62	33
I-275	30	51	25
I-375	0	4	1
<b>Total</b>	<b>383</b>	<b>680</b>	<b>401</b>

## Total Incidents per Hour

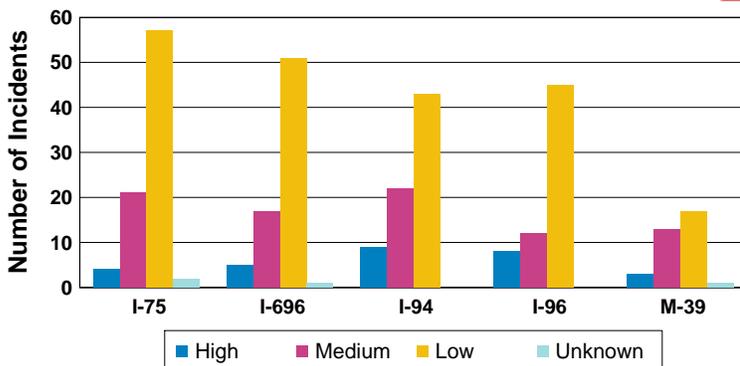


## Total Incident Severity/Duration by Month

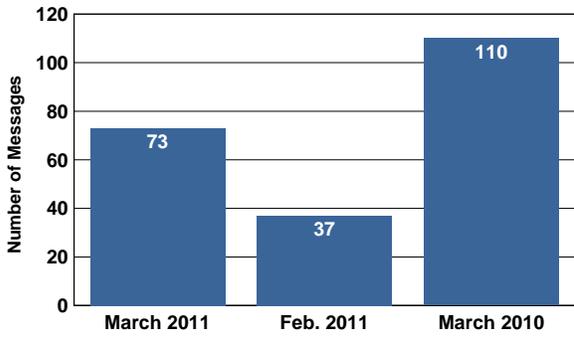


- Single-lane closures equal to 90+ minutes, partial closures (more than one lane, but not all) equal to 45+ minutes, or total closures (all lanes) 20+ minutes
- Shoulder closures equal to 90+ minutes, single-lane closures between 20 and 89 minutes, partial closures (more than one lane but not all) between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

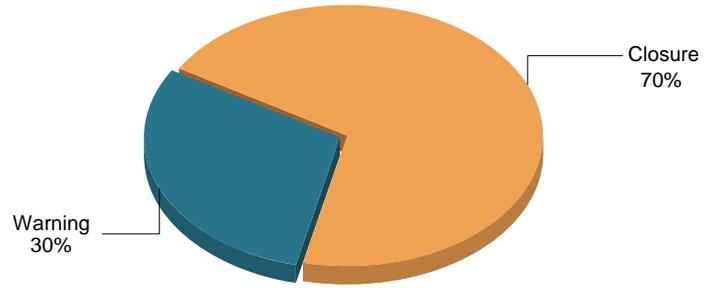
## Severity/Duration by Top 5 Freeways



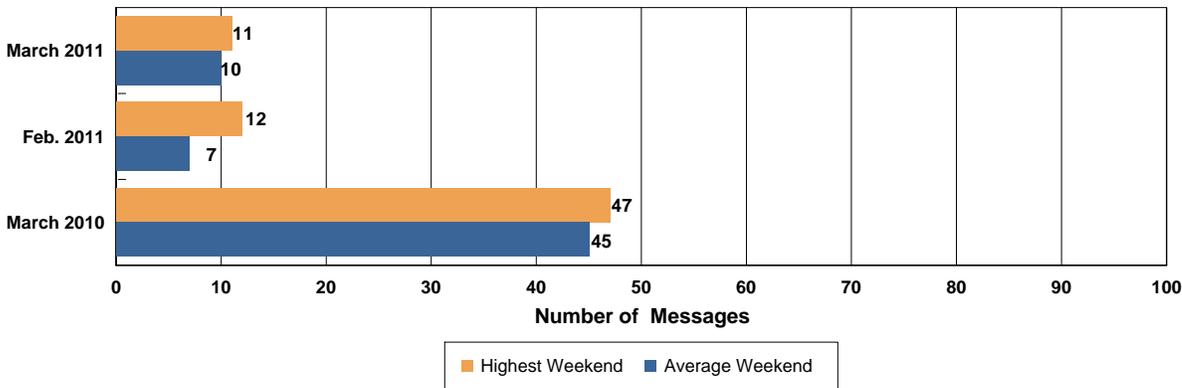
### Unique Construction Messages



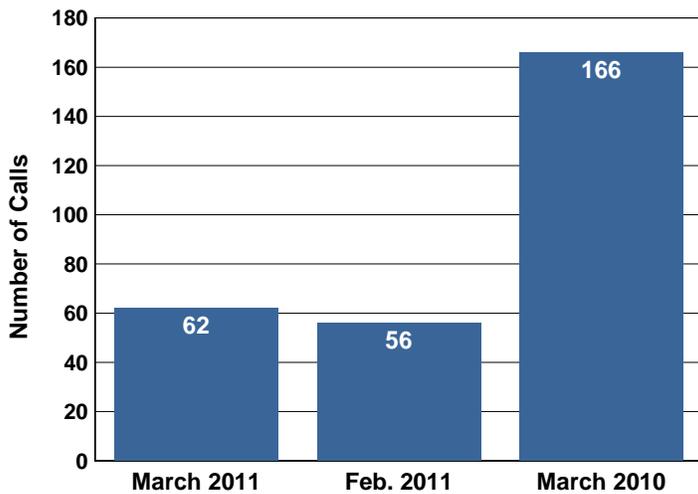
### Highest Weekend Unique Construction Messages



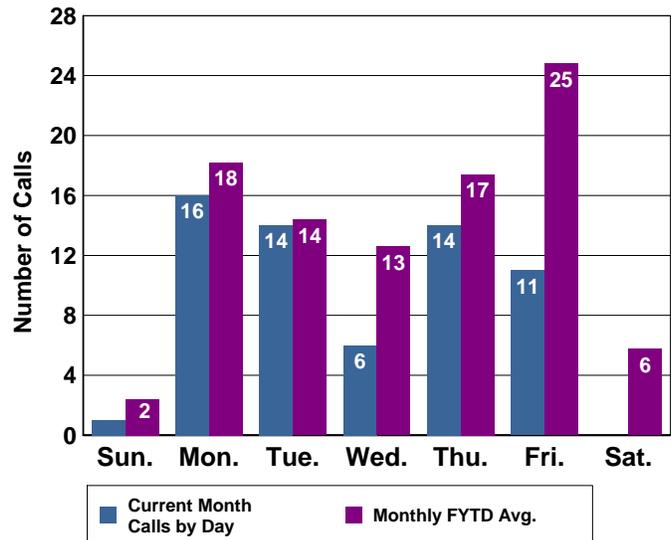
### Weekend Construction DMS Message Activity



### Total Construction Calls per Month



### Construction Calls by Day



Construction Activity



## DMS Availability

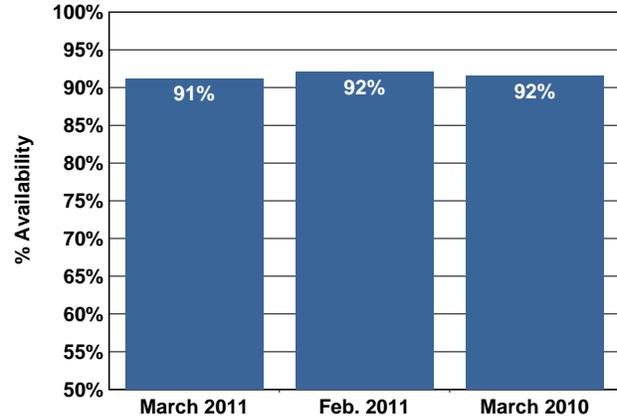
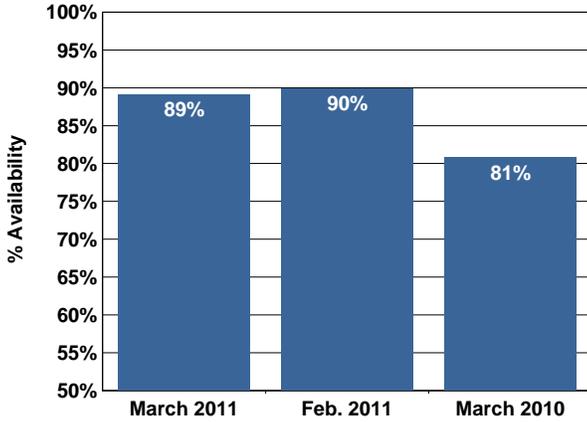


## CCTV Camera Availability



	March 2011	Feb. 2011	March 2010
<b>Available</b>	<b>61</b>	<b>62</b>	<b>56</b>
<b>Not Available</b>	<b>8</b>	<b>7</b>	<b>13</b>
<b>Total</b>	<b>69</b>	<b>69</b>	<b>69</b>

	March 2011	Feb. 2011	March 2010
<b>Available</b>	<b>155</b>	<b>156</b>	<b>169</b>
<b>Not Available</b>	<b>15</b>	<b>14</b>	<b>16</b>
<b>Total</b>	<b>170</b>	<b>170</b>	<b>185</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

