

# 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)

December 2010



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## In the Spotlight



During inclement weather, the MITS Center adapts its messaging to provide motorists with weather messages tailored to current conditions. These messages can vary from a stated weather advisory, such as High Winds, to general best practices for driving in inclement conditions.

### Weather Message



These weather messages also are utilized in situations where multiple accidents are occurring along a stretch of roadway. An example of this type of message can be seen in the illustration on the left. These messages have been shown to be more effective than general accident messages during inclement weather conditions.

Compiled by:

**URS**

# Summary

## Data Key

Dec. 2010

### 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.

4,177

### 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.

5,221

### 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.

130,045

### 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.

428

### 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



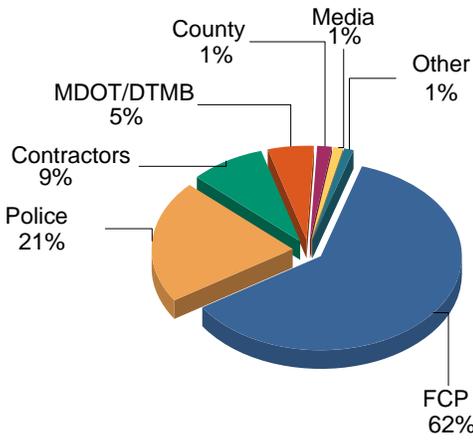
#### System Availability

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: 93%

CCTV: 93%

# Calls by Type



**Total Calls: 5,221**

Agency	No. of Calls
FCP	3,174
Contractors	442
City	4
County	77
Federal	0
Fire	2
Police	1,100
Border	7
MDOT/DTMB	285
Media	67
Special Events	12
Transit	0
State	0
Parking	0
Airport	0
Animals	0
OTHER	51
<b>Total</b>	<b>5,221</b>

MDOT/DTMB	Total
Taylor TSC	108
Oakland TSC	65
MITS Center	43
Detroit TSC	17
Answering Service	10
Auburn Hills Garage	10
Detroit Maintenance Garage	10
DTMB	8
Metro Region Office	7
Macomb TSC	6
Port Huron TSC	1
<b>Total</b>	<b>285</b>

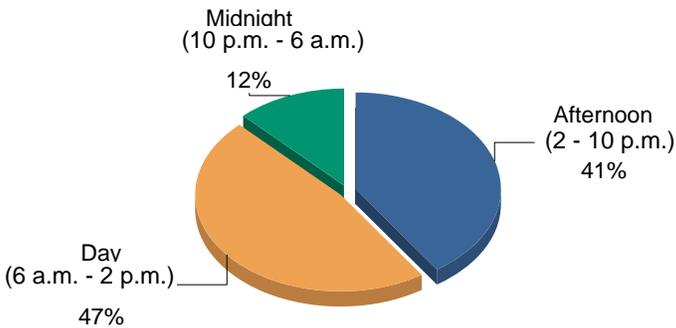


Control Room

# Calls by Weekday Shift



Monday - Friday



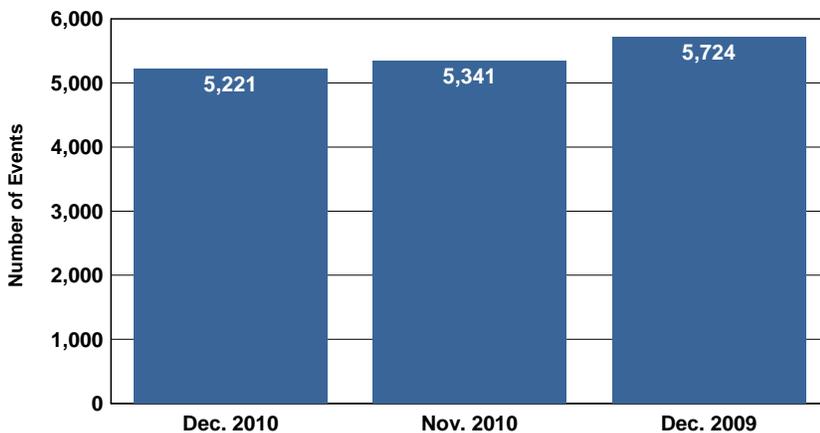
**Average Number of Calls per Weekday: 193**

# Calls by Weekend Day



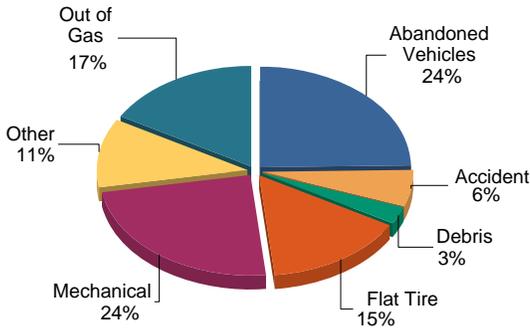
**Average Number of Calls per Weekend: 198**

# Monthly Event History





During Fiscal Year 2010, the Freeway Courtesy Patrol assisted 39,331 vehicles.

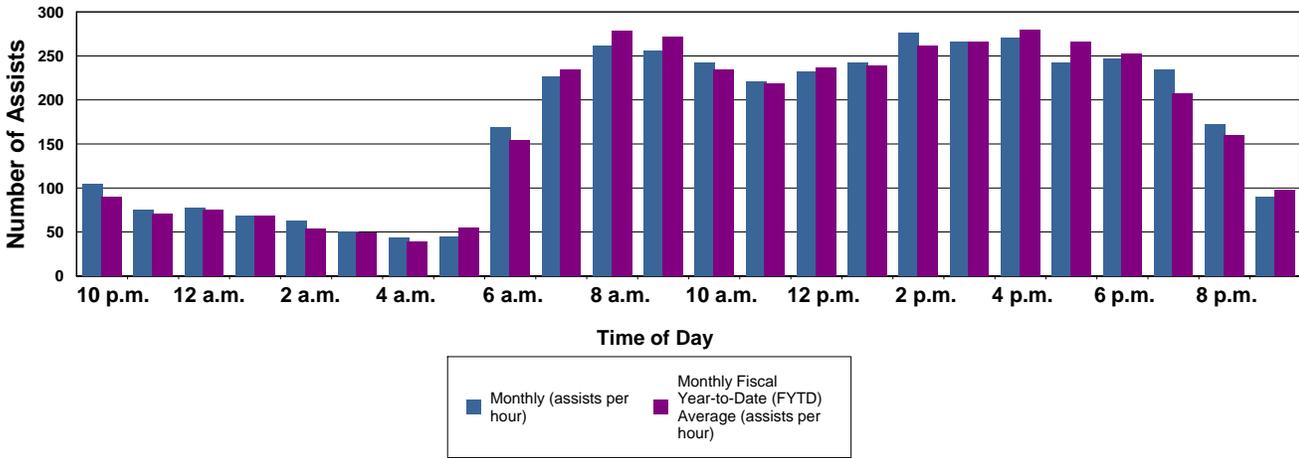


**December Total: 4,177**

**3,073 Assists**

**1,104 Abandoned Vehicle Stops**

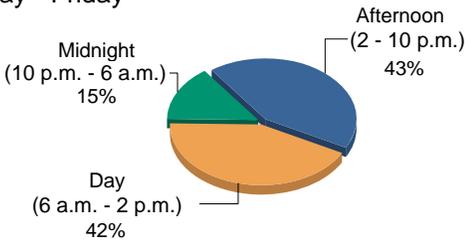
FCP Assists by Time of Day



FCP Dispatches by Weekday Shift



Monday - Friday



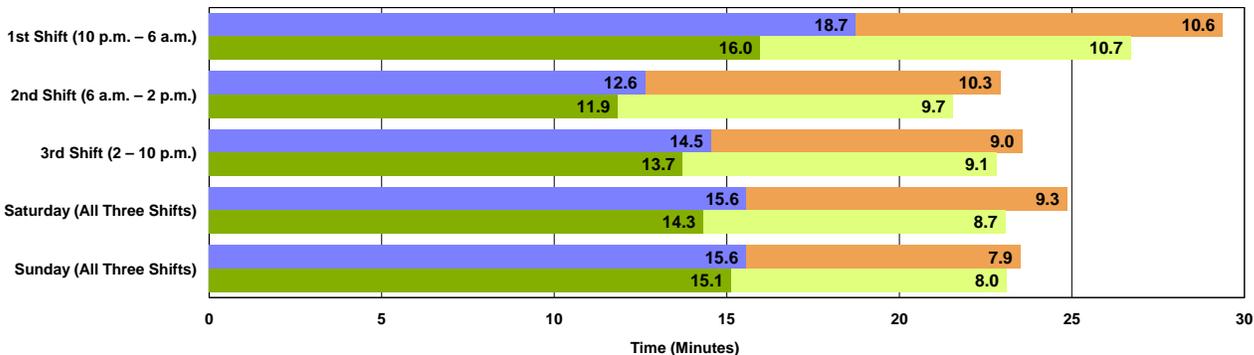
**Average Number of Dispatches per Weekday: 36**

FCP Dispatches by Weekend Day



**Average Number of Dispatches per Weekend: 42**

FCP Average Service Times



FCP Service Area and Assists per Mile



Motorist Quote of the Month:

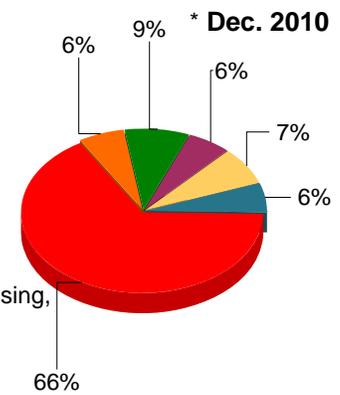
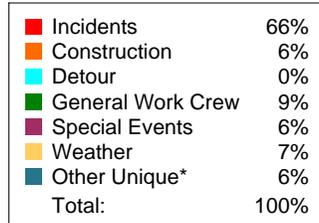
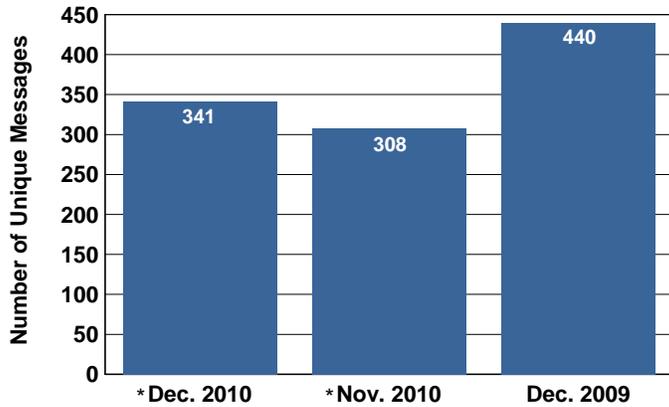
*"I was visiting my family in Michigan for the holidays. As I was driving home from Detroit in a friend's vehicle at 1 a.m., my rear right tire had a blowout. I was stranded on the highway and was quite nervous being stranded so late. Thankfully, a Courtesy Patrol driver stopped to help. I had no idea that there was a Courtesy Patrol! I can't properly express how grateful I am for the Courtesy Patrol driver. He was courteous and very helpful. Thank you so much for this service."*

Courtesy Patrol



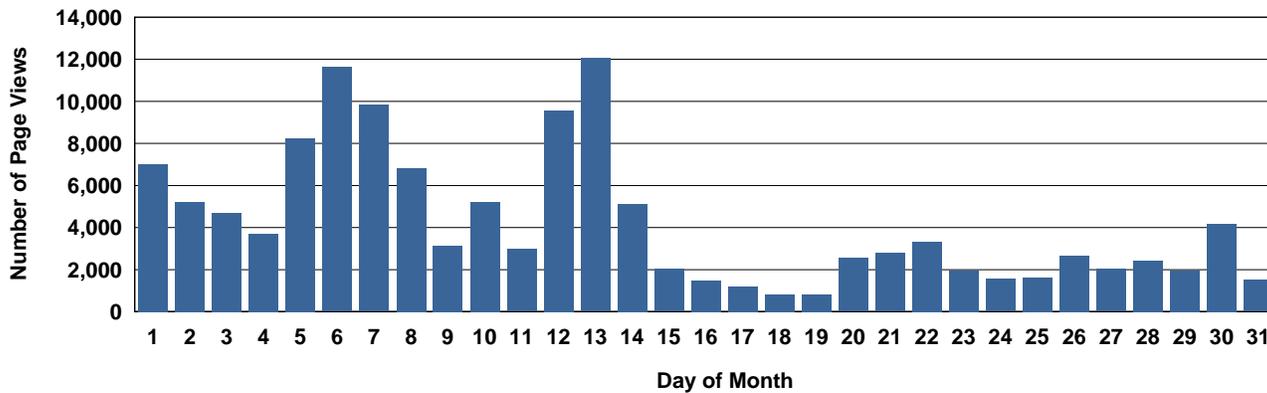
Freeway	Segment	TOTAL ASSISTS (miles)	ASSIST DENSITY		AVERAGE RESPONSE TIME (min)		AVERAGE CLEAR TIME (min)			
			Dec. 2010	FYTD Avg.	Dec. 2010	FYTD Avg.	Dec. 2010	FYTD Avg.		
I-75	Oakland County Line to I-696	37.0	388	385.7	10.5	10.4	20.1	18.3	10.5	9.4
	I-696 to I-94	8.0	241	241.0	30.1	30.1	11.2	11.1	11.4	10.5
	I-94 to I-96	5.6	61	72.7	10.9	13.0	11.7	11.6	10.3	9.2
	I-96 to I-275	37.0	281	259.3	7.6	7.0	15.6	13.5	9.7	9.4
		87.6	971	958.7	11.1	32.8	15.5	14.3	10.5	9.7
I-94	Washtenaw County Line to M-39	20.7	312	317.3	15.1	15.3	19.2	16.2	8.7	8.6
	M-39 to I-75	9.0	266	272.3	29.6	30.3	11.9	11.6	12.3	9.7
	I-75 to I-696	10.0	270	272.3	27.0	27.2	12.8	14.0	10.9	9.6
	I-696 to St. Clair County Line	21.0	148	137.7	7.0	6.6	15.0	18.4	9.6	7.7
		60.7	996	999.7	16.4	49.4	14.0	14.2	10.4	9.0
I-96	Livingston County Line to I-275/I-696	11.0	148	134.0	13.5	12.2	22.7	17.5	9.9	9.3
	I-275/M-14 to M-39	12.0	190	202.0	15.8	16.8	14.1	12.9	8.4	8.5
	M-39 to I-75	11.0	282	305.7	25.6	27.8	13.3	11.8	7.5	9.3
		34.0	620	641.7	18.2	56.6	15.0	13.1	8.3	9.0
I-275	I-96/I-696 to M-14/I-96	8.0	99	107.0	12.4	13.4	14.6	12.9	8.6	8.1
	M-14/I-96 to I-94	12.0	146	141.7	12.2	11.8	16.8	15.6	8.6	8.9
	I-94 to I-75	17.5	65	65.0	3.7	3.7	22.0	17.1	6.8	7.3
		37.5	310	313.7	8.3	25.1	16.8	14.9	8.2	8.3
I-696	I-96/I-275 to M-10	9.3	183	161.7	19.7	17.4	15.7	14.5	9.2	9.0
	M-10 to I-75	9.0	128	134.0	14.2	14.9	14.7	12.3	9.5	10.6
	I-75 to I-94	10.4	212	192.3	20.4	18.5	12.5	12.8	8.6	10.3
		28.7	523	488.0	18.2	51.0	14.2	13.1	9.0	9.9
M-59 (Veterans)		24.0	59	39.7	2.5	1.7	19.7	18.5	7.8	8.3
I-375		1.2	3	5.0	2.5	4.2	9.0	15.4	2.7	7.0
M-10 (Lodge)		17.9	297	317.0	16.6	17.7	12.1	11.6	9.5	9.3
M-14		6.4	78	63.7	12.2	9.9	22.0	17.7	8.9	8.7
M-39 (Southfield)		14.2	248	275.7	17.5	19.4	10.6	10.7	9.8	10.7
M-5 (Grand River)		10.3	42	33.3	4.1	3.2	19.5	16.1	7.2	8.5
M-8 (Davison)		2.2	30	26.0	13.6	11.8	10.8	9.8	11.7	10.8
<b>Total</b>		<b>324.7</b>	<b>4,177</b>	<b>4,162.0</b>						

## Unique DMS Messages by Type



\* Airport, Amber Alert, Border Crossing, Location Specific, Safety, and Travel Time Unique Messages  
\* Dec. 2010 data averaged from past years due to system outage

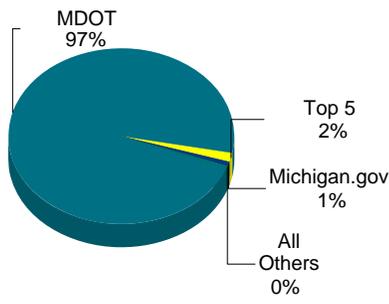
## Mi Drive Web Site December Daily Page Views



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



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



### Top 5 Non-Michigan.gov Sites

- http://www.google.com/
- http://www.clickondetroit.com/
- http://www.ohsp.state.mi.us/
- http://search.yahoo.com/
- http://www.bing.com/

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

## Incident Communication Accuracy



Weekend DMS Snapshot Review	Dec. 2010	Nov. 2010	Dec. 2009
All Incident Messages	100%	100%	100%
High-Impact DMS Messages	Dec. 2010	Nov. 2010	Dec. 2009
All High-Impact Messages	100%	99%	100%
Freeway Closure Messages	100%	100%	100%
Lane Closure Messages	100%	98%	100%
Ramp Closure Messages	100%	100%	100%
Other Communication	Dec. 2010	Nov. 2010	Dec. 2009
Advisory Text Messages	94%	93%	95%
Web Site Incident Postings	100%	100%	96%

## Most Utilized DMS

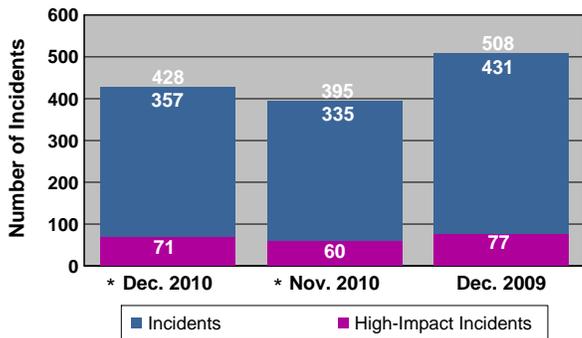


1. I-75 NB at 7 Mile
2. I-75 SB at State Fair
3. I-75 NB at Woodward Hghts.
4. I-94 WB at 10 Mile
5. I-75 SB at University



Traveler Information

## Total Number of Incidents



## High-Impact Incident Activity



	Dec. 2010	Nov. 2010	Dec. 2009
Freeway Closures All Lanes Closed	25	13	19
Lane Closures Only One Lane Open	38	42	51
Ramp Closures	8	5	7
Freeway-to-Freeway			
<b>Total</b>	<b>71</b>	<b>60</b>	<b>77</b>

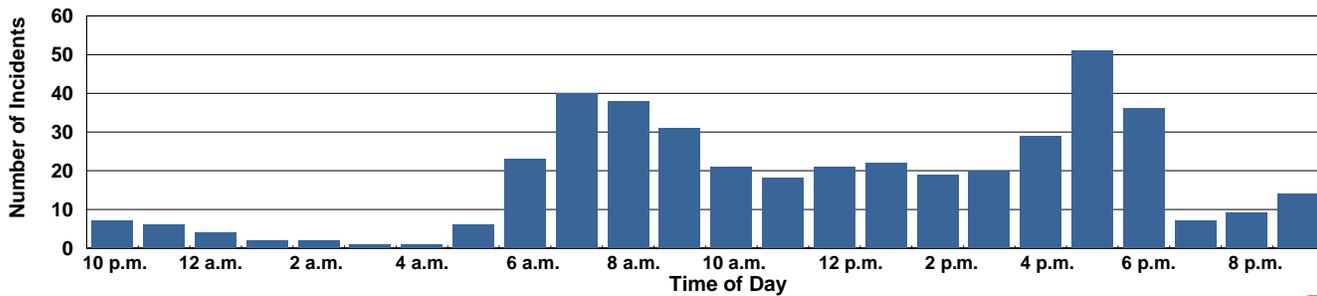
High-impact incidents account for 17% of the total incidents in December.

## Total Incidents by Roadway

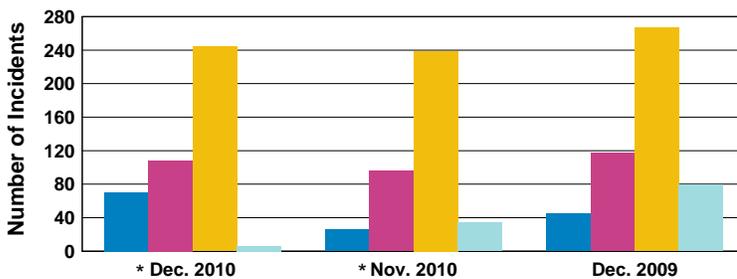


Freeway	* Dec. 2010	* Nov. 2010	Dec. 2009
I-75 (CHRYSLER/FISHER)	113	97	150
I-94 (FORD)	114	94	126
I-696 (REUTHER)	58	49	64
I-96 (JEFFRIES)	51	44	53
M-10 (LODGE)	22	32	34
M-39 (SOUTHFIELD)	30	37	31
I-275	37	39	48
I-375	0	2	1
M-59	3	1	1
<b>Total</b>	<b>428</b>	<b>395</b>	<b>508</b>

## \*Total Incidents per Hour

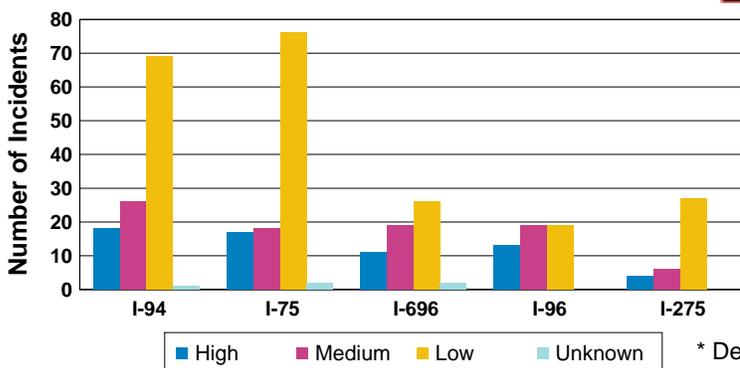


## Total Incident Severity/Duration by Month

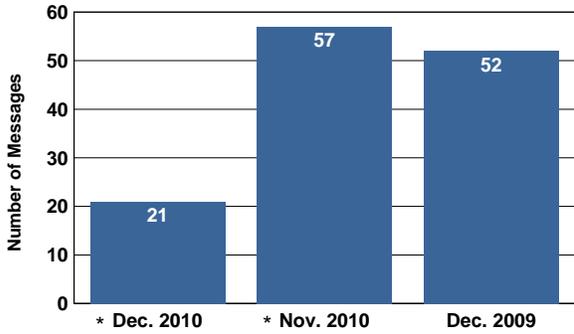


- Single-lane closures equal to 90+ minutes, partial closures (more than one lane, but not all) equal to 45+ minutes, or total closures (all lanes) 20+ minutes
- Shoulder closures equal to 90+ minutes, single-lane closures between 20 and 89 minutes, partial closures (more than one lane but not all) between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

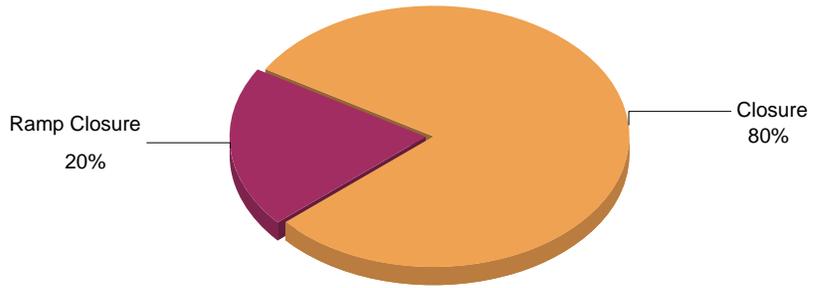


## Unique Construction Messages

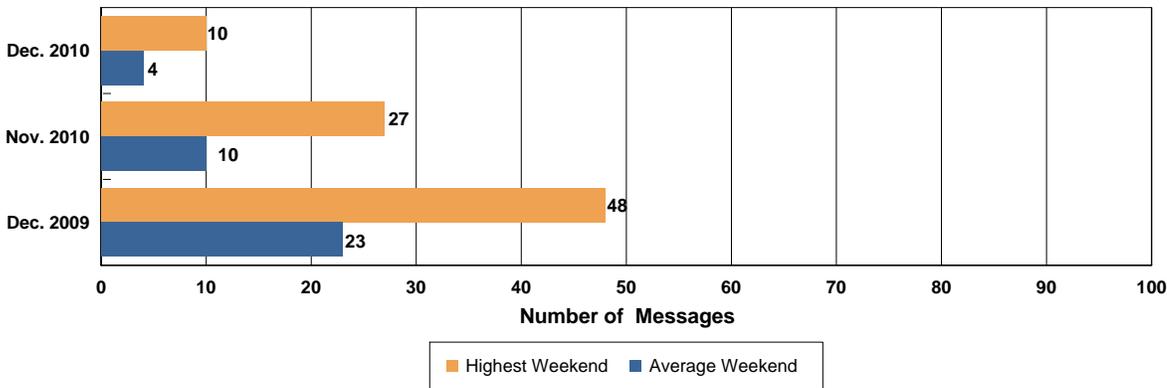


\* Dec. 2010 data averaged from past years due to system outage

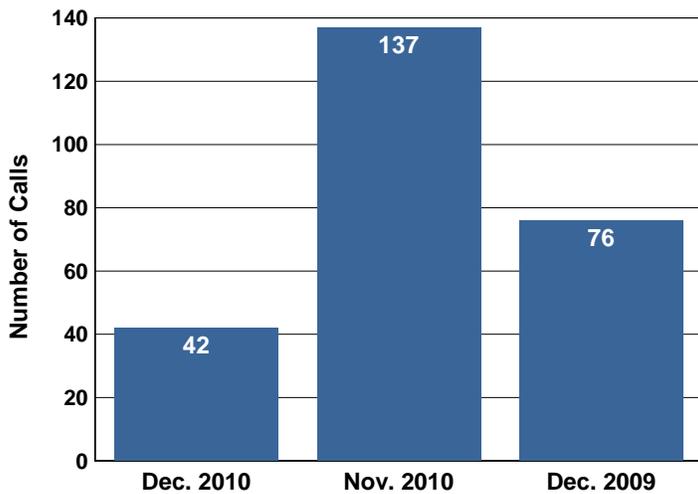
## Highest Weekend Unique Construction Messages



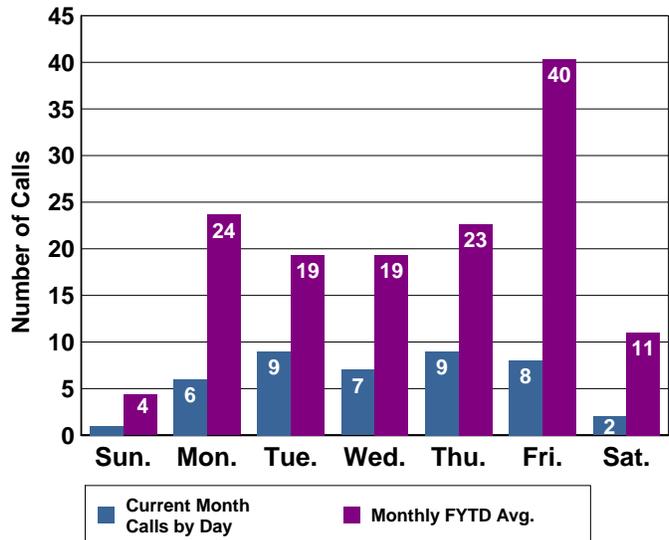
## Weekend Construction DMS Message Activity



## Total Construction Calls per Month



## Construction Calls by Day



Construction Activity



## DMS Availability

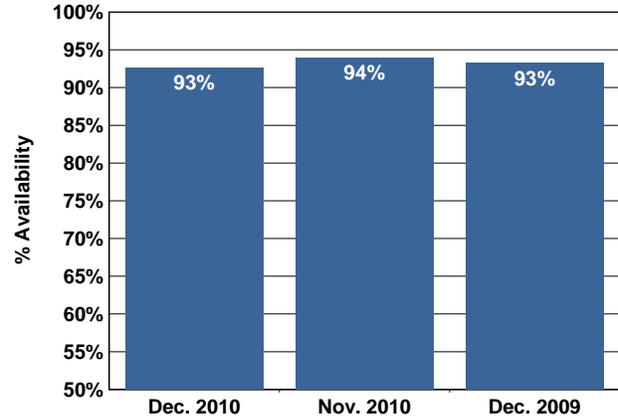
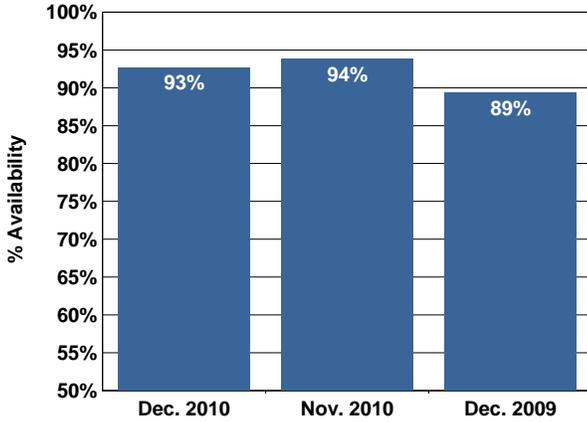


## CCTV Camera Availability



	Dec. 2010	Nov. 2010	Dec. 2009
Available	64	65	59
Not Available	5	4	7
<b>Total</b>	<b>69</b>	<b>69</b>	<b>66</b>

	Dec. 2010	Nov. 2010	Dec. 2009
Available	157	160	153
Not Available	13	10	11
<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

