

# West Michigan Transportation Operations Center

Serving Motorists on West 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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**West Michigan TOC Control Room**  
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Phone: 616-451-8329  
Fax: 616-774-9101

## In the Spotlight



Several snowfall events in January affected travel in the Grand Rapids area. On Saturday, Jan. 22, morning snowfall combined with single-digit temperatures created slippery road conditions throughout the Grand Rapids area. The WMTOC assisted with several incidents that day, including three incidents where lanes were blocked, three where a single bound of the freeway was closed, and one where a combination of incidents closed both bounds of I-196 at 44th Street. On average, single-bound freeway closures occur less than twice a month in Grand Rapids.

Although most of these incidents occurred outside of the freeway camera coverage area, the WMTOC staff provided support due to working relationships with local first responders and law enforcement personnel. First responders at the scene provided incident information to the on-duty WMTOC operator, and the operator utilized media contacts and DMS messages to inform motorists of the incidents. The WMTOC was able to assist with the incidents due to the weekend control room hours that were added for the winter months. In previous years, weekend control room hours were limited to the construction season.

In contrast to the incident characteristics in December, in January there was a "spike" in unplanned incidents during the afternoon peak period, in addition to the morning spike. During the 4 p.m. hour, there were 16 unplanned incidents compared with 23 unplanned incidents that occurred during the 7 a.m. hour.

Compiled by:  
**URS**

## Control Room Hours of Operation

Time Period	Days	Hours
October – April	Monday – Friday	6 a.m. – 8 p.m.
	Saturday – Sunday	Noon – 8 p.m.
May – September	Monday – Thursday	6 a.m. – 8 p.m.
	Friday	6 a.m. – 9 p.m.
	Saturday – Sunday	Noon – 8 p.m.
Special Events	All	As needed
Holidays and Holiday Weekends	New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving, Christmas	As needed

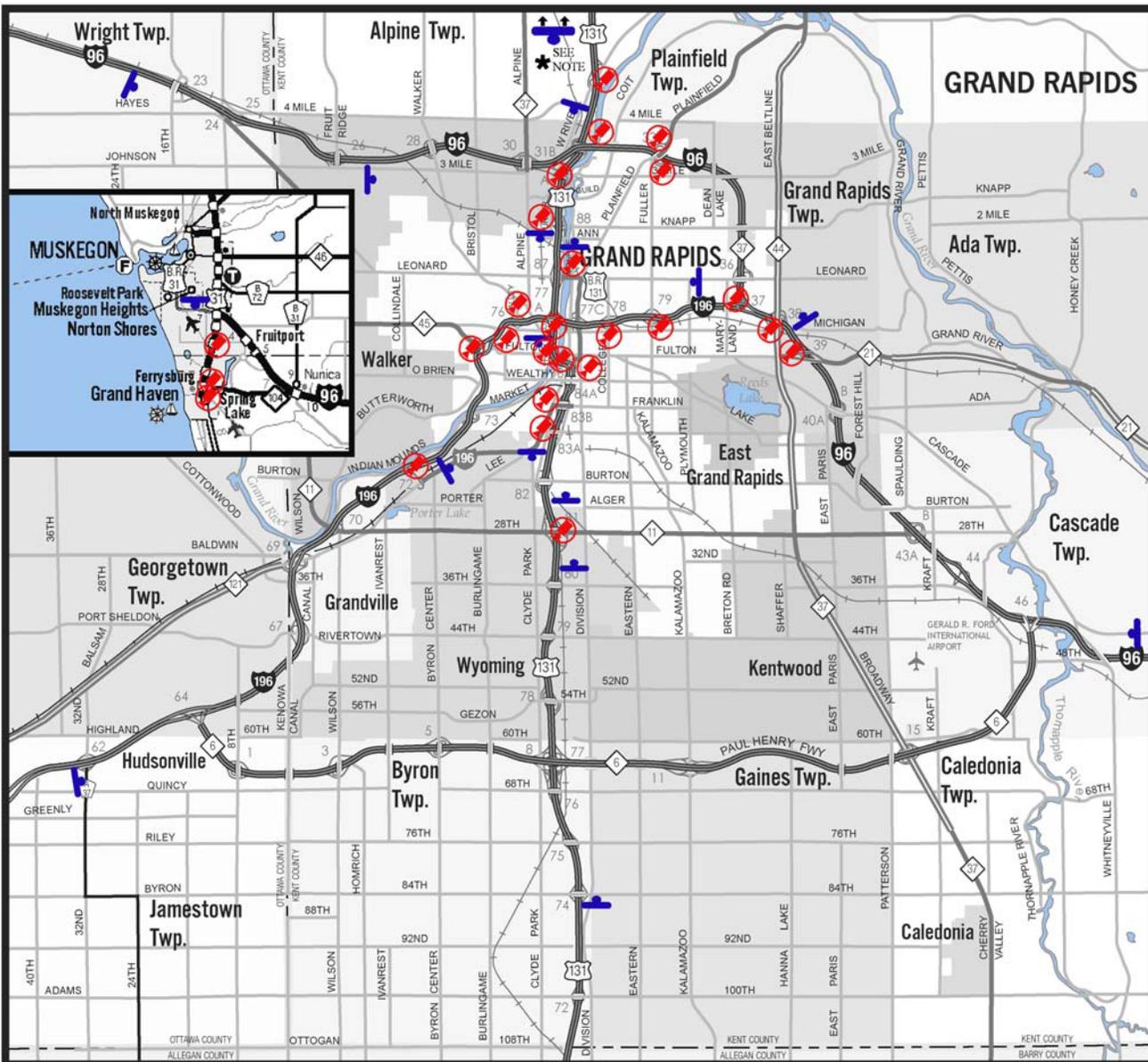
## Control Room Contact Information

E-mail: MDOT-GR-TRAFFOPS@michigan.gov  
 Phone: 616-451-8329  
 Fax: 616-774-9101

### PLEASE NOTE:

The following report is limited to data collected within the ITS device coverage area during control room operation hours.

## ITS Device Locations and Coverage Area



\* DMS on South US-131 at Rockford Rest Area

**Key:**  Closed-circuit Television Camera  
 Dynamic Message Sign

# Summary

## Data Key

## January 2011

### Communications Activity



Operators log all incoming and outgoing control room communications, engaging various incident responders and stakeholders.

### Total Communication

**Calls: 215**  
**E-mails: 165**

### Quality Assurance/Quality Control



Quality assurance and quality control audit of format and content for incident notification communication and media traffic reporting.

### Incident Notification

**Format Correct 100.0%**  
**Content Correct 91.7%**

### Unplanned Incidents



Operators log information about each unplanned incident including date/time, location, traffic impact, duration, and associated traveler information.

### Total Incidents

**126**

### Construction Activity



Operators maintain a list of ongoing construction projects and contacts for these projects. This activity also includes maintenance operations.

### Incidents Occurring in Work Zones

**0**

### Daily Shift Report



Operators track maintenance issues for all Intelligent Transportation Systems (ITS) equipment, including Closed-circuit Television (CCTV) cameras, Microwave Vehicle Detector Systems (MVDS), Dynamic Message Signs (DMS), and Variable Speed Signs (VSS).

### System Availability

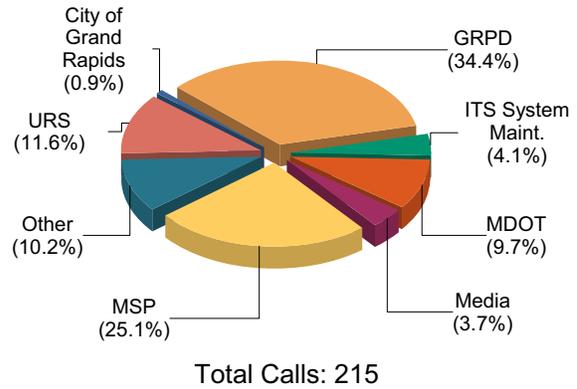
**CCTV: 90%**  
**MVDS: 71%**  
**DMS: 98%**  
**VSS: 93%**

## Calls and E-mails by Type

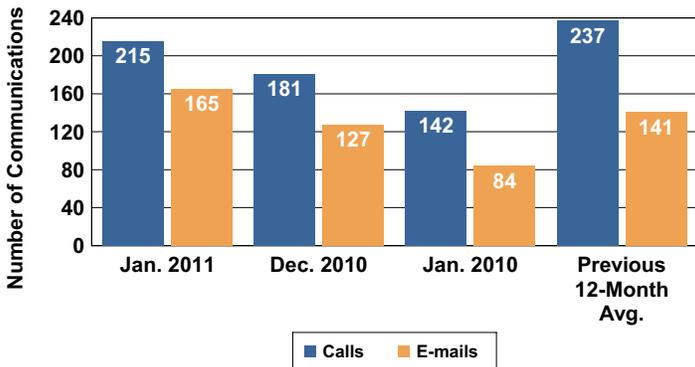


Agency	Calls			E-mails		
	In	Out	Total	In	Out	Total
City of Grand Rapids	1	1	2	9	0	9
Grand Rapids Police Department	16	58	74	0	0	0
ITS System Maintenance	1	8	9	5	0	5
Kent County Road Commission	4	1	5	0	0	0
Kent County Sheriff	2	0	2	0	0	0
MDOT, Construction	1	0	1	0	0	0
MDOT, Maintenance	2	8	10	1	2	3
MDOT, Other	4	5	9	8	2	10
MDOT, Traffic/ITS	0	1	1	3	1	4
Media	4	4	8	4	54	58
Michigan State Police	5	49	54	0	0	0
Other	10	5	15	11	0	11
URS Corporation	17	8	25	5	4	9
Weather	0	0	0	56	0	56
<b>Month Total</b>	<b>67</b>	<b>148</b>	<b>215</b>	<b>102</b>	<b>63</b>	<b>165</b>

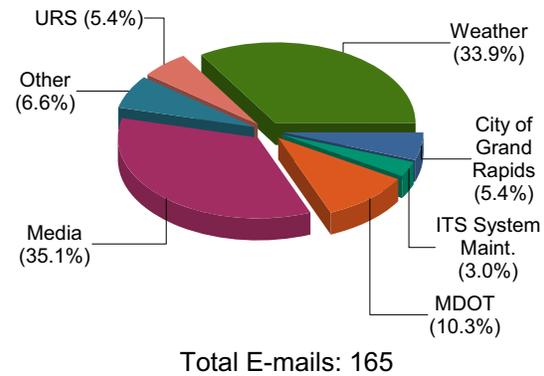
## Calls by Type



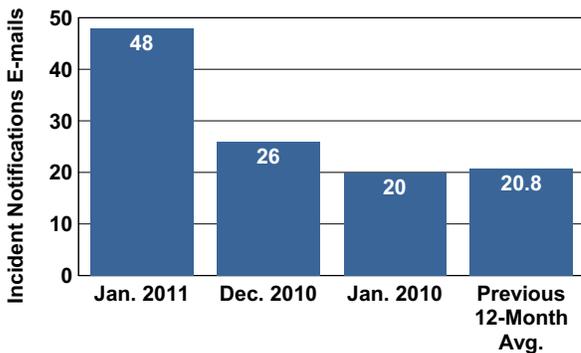
## Communication History



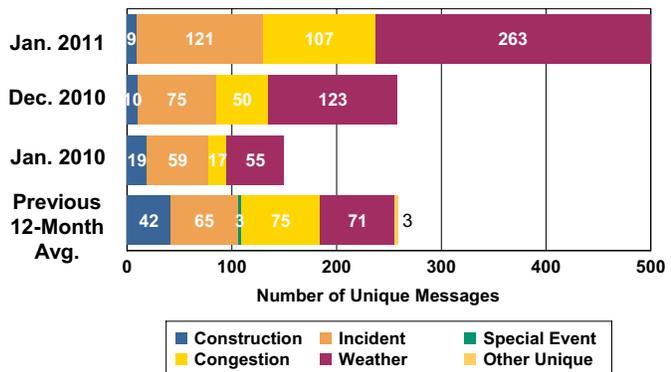
## E-mails by Type



## Incident Notification\* History



## DMS and VSS Messages by Type

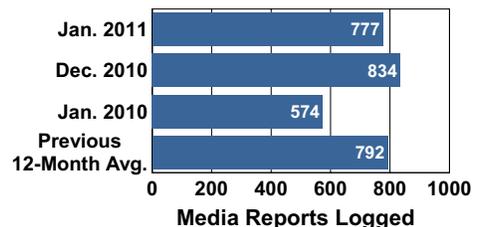


## Incident Notification\* Communication Accuracy



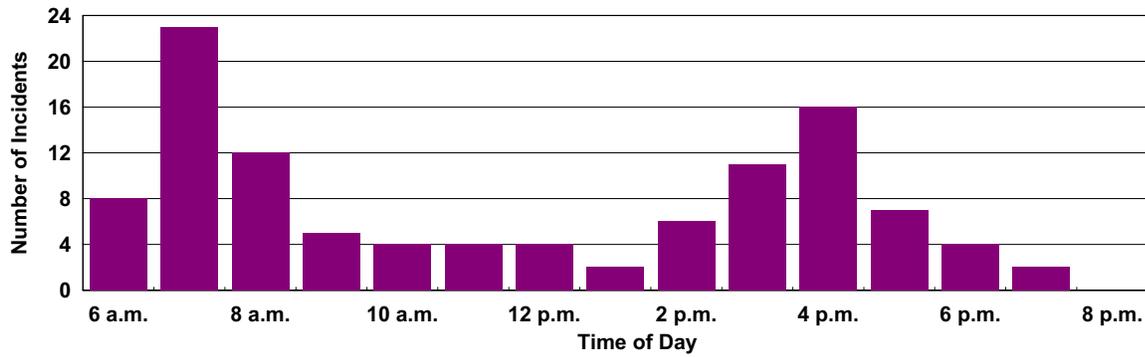
	Jan. 2011	Dec. 2010	Jan. 2010	Previous 12 Months
Format Correct	100.0%	100.0%	100.0%	99.6%
Content Correct	91.7%	96.2%	95.0%	95.6%

## Media Audits

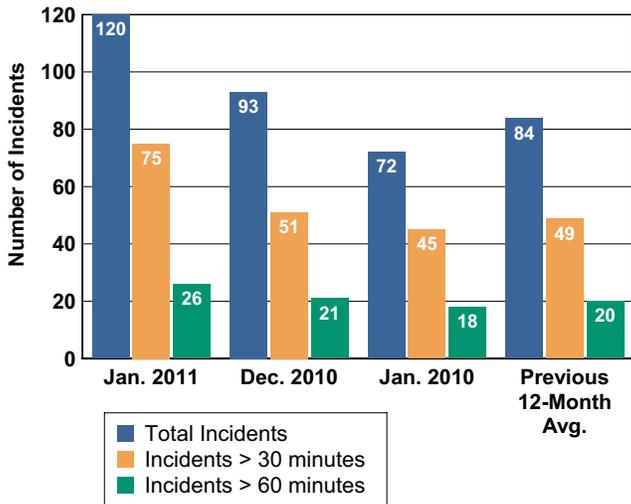


\*Incident Notification e-mails are issued for high-impact incidents with an expected duration of 15 minutes or greater. To subscribe to this list, please send an e-mail to [MDOT-GR-TRAFFOPS@michigan.gov](mailto:MDOT-GR-TRAFFOPS@michigan.gov).

## Total of Unplanned Incidents per Weekday Hour

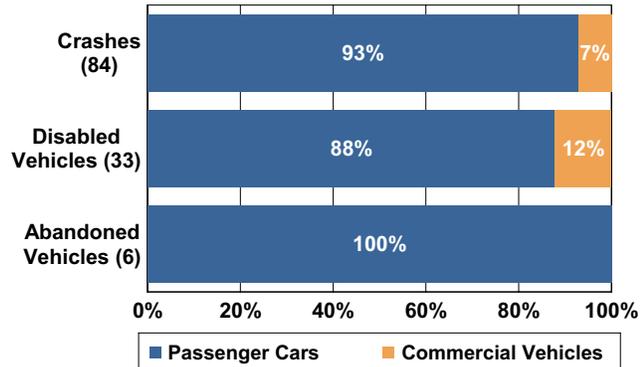


## Incident Duration History\*



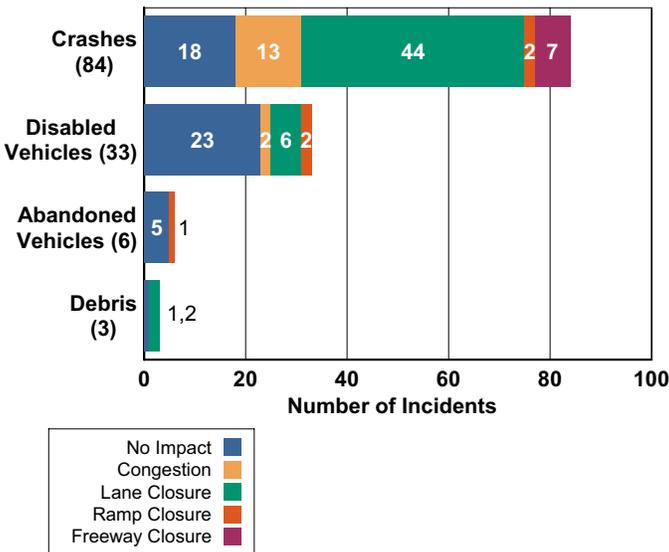
\*Incident Duration History excludes abandoned vehicles.

## Vehicle Composition of Incidents\*



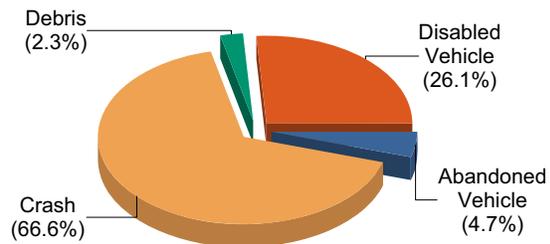
\*Vehicle Composition of Incidents excludes incidents where vehicle types were not identified.

## Traffic Impacts by Type\*



\* Traffic Impacts by Type may include incidents outside of the current WMTOC camera coverage area.

## Incident Managed by Type\*



Total Incidents: 126

\* Incidents Managed by Type may include incidents outside of the current WMTOC camera coverage area.

## Most Utilized DMS\*

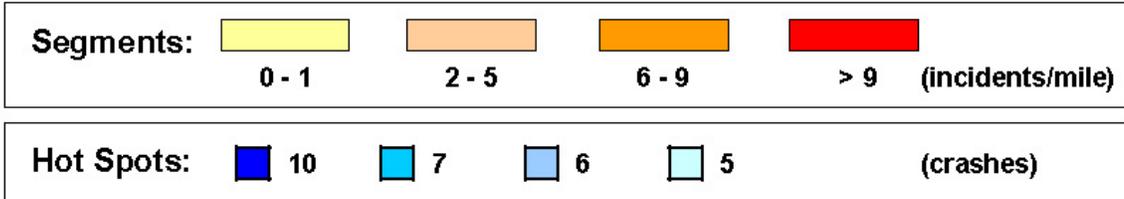
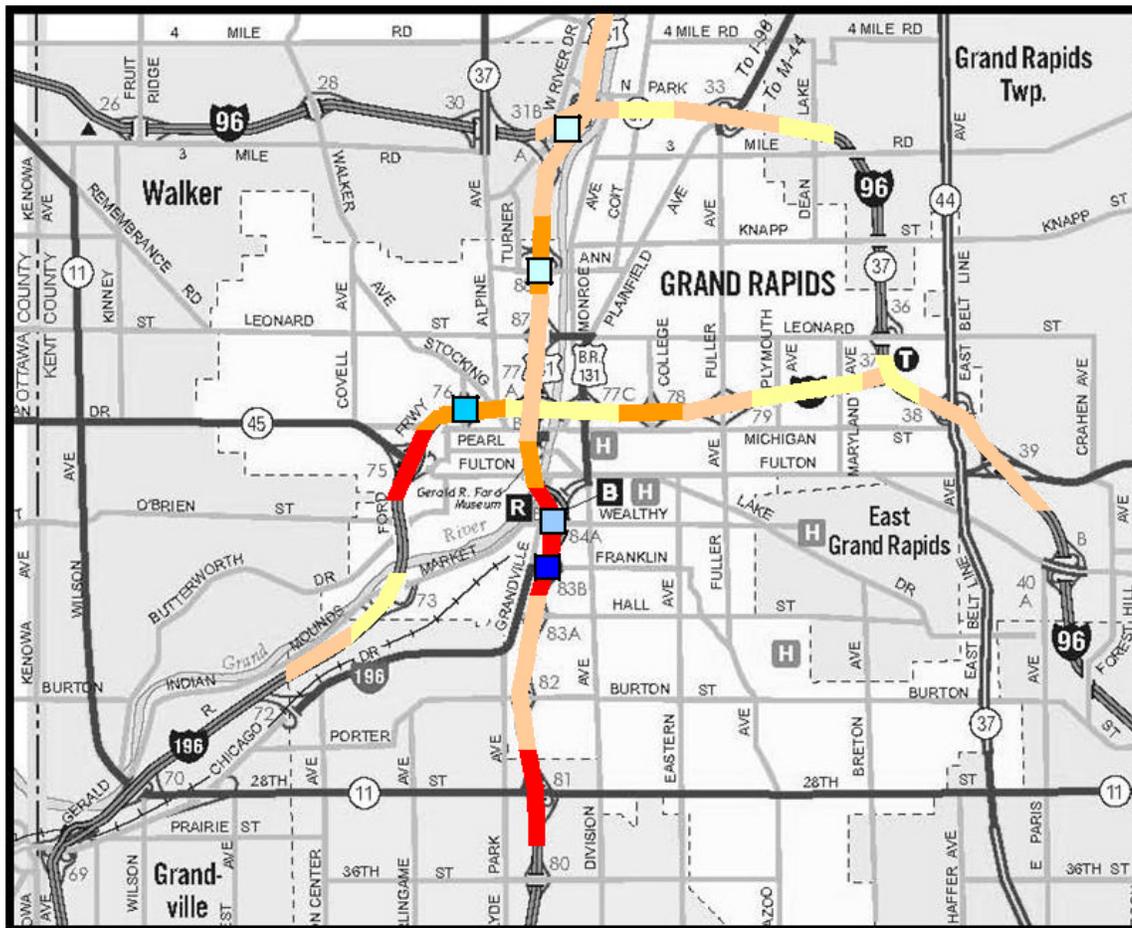


1. US-131 NB @ 28th St. (67)
2. US-131 NB @ 36th St. (63)
3. US-131 SB @ Ann St. (40)

\*Number of unique event messages.



# Incident Density and Hot Spots Map



## High-impact Unplanned Incident Activity\*



Incident Impact	Jan. 2011	Dec. 2010	Jan. 2010	Previous 12-Month Avg.
Lane Closure	52	23	26	25.5
Ramp Closure	5	3	2	2.7
Freeway Closure	7	2	1	1.8

\*High-impact Unplanned Incident Activity includes unplanned incidents resulting in closures.

## Unplanned Incidents by Roadway



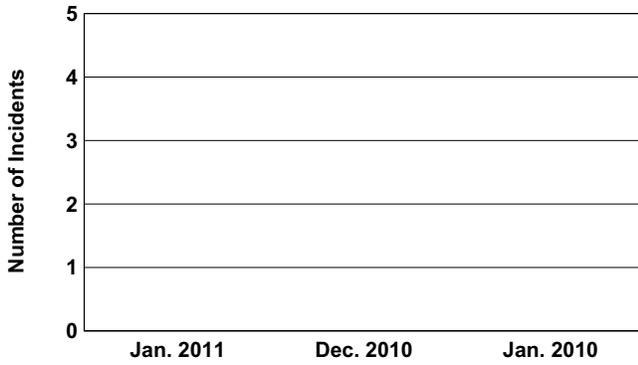
Freeway	Jan. 2011		Dec. 2010		Jan. 2010		Previous 12-Month Avg.	
	Total	per mi.	Total	per mi.	Total	per mi.	Total	per mi.
I-96 (4.5 mi.)*	15	3.3	11	2.4	12	2.7	13.7	3.0
I-196 (8.5 mi.)*	31	3.6	37	4.4	25	2.9	20.2	2.4
US-131 (11 mi.)*	64	5.8	69	6.3	38	3.5	63.8	5.8
<b>Month Total</b>	<b>110</b>	<b>4.6</b>	<b>117</b>	<b>4.9</b>	<b>75</b>	<b>3.1</b>	<b>97.7</b>	<b>4.1</b>

\* Reflects roadway mileage within the current WMTOC camera coverage area.

Incident Management



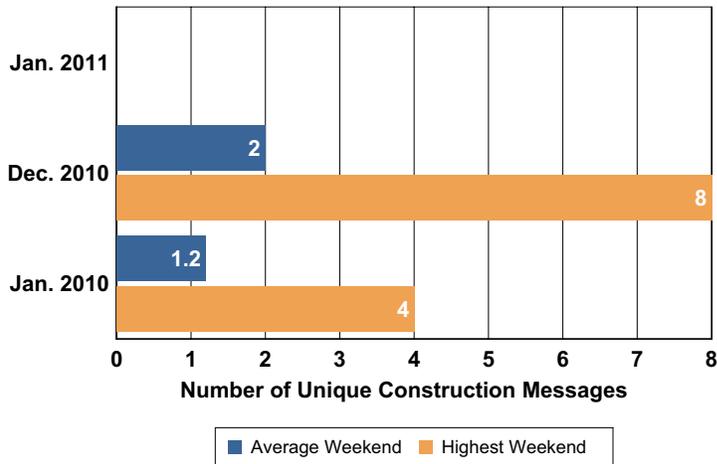
## Incidents Occurring in Work Zones



### Work Zone Incident Details:

During the month of January, there were no incidents identified by operators as being within work zones.

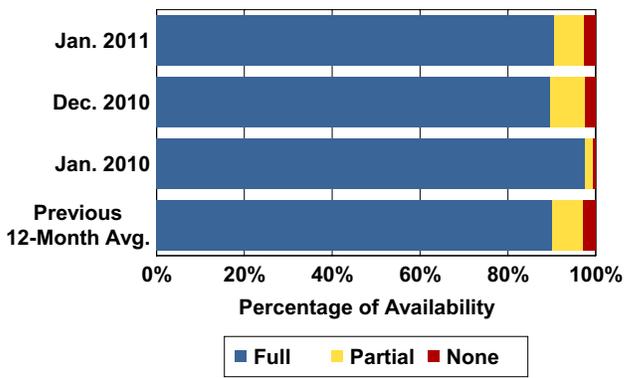
## Weekend\* Construction DMS Message Activity



\* Friday, Saturday and Sunday.



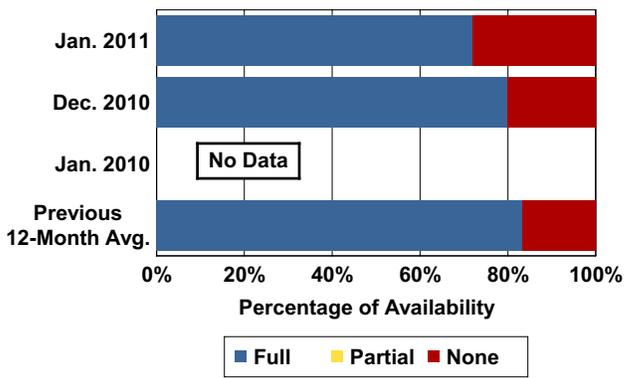
## Overall CCTV Camera Availability



## Individual CCTV Camera Availability

CCTV Cameras Below 95% Availability			
Location	Full	Partial	None
1. US-131 @ Wealthy St.	-	74%	26%
2. I-96 Conn. to US-131	12%	79%	9%
3. I-96 EB @ Plainfield Ave.	87%	-	13%
4. I-96 WB @ Plainfield Ave.	87%	-	13%

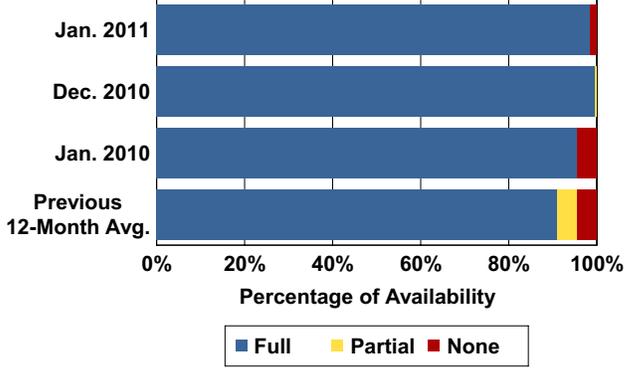
## Overall Detector Availability



## Individual Detector Availability

Vehicle Detectors Below 95% Availability			
Location	Full	Partial	None
1. DS 114N	-	-	100%
2. DS 114S	-	-	100%
3. DS 119	-	-	100%
4. DS 125	-	-	100%
5. DS 201	-	-	100%
6. DS 204	-	-	100%
7. DS 205	-	-	100%
8. DS 220	-	-	100%
9. DS 224	25%	-	75%
10. DS 219E	64%	-	36%
11. DS 219W	64%	-	36%

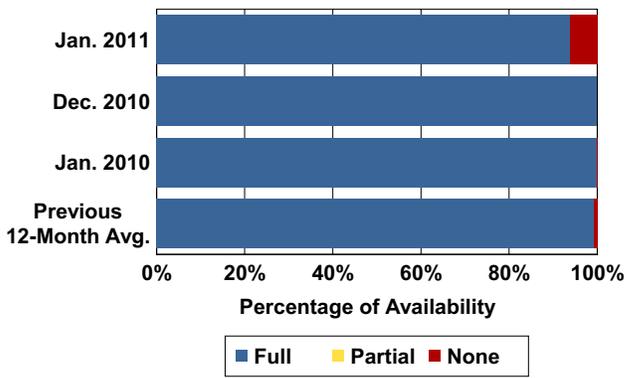
## Overall DMS Availability



## Individual DMS Availability

DMS Below 95% Availability			
Location	Full	Partial	None
1. US-131 SB @ Pearl St.	94%	-	6%
2. US-131 SB @ Hall St.	94%	-	6%
3. US-131 NB @ 28th St.	94%	-	6%
4. US-131 NB @ 36th St.	94%	-	6%

## Overall VSS Availability



## Individual VSS Availability

VSS Below 95% Availability			
Location	Full	Partial	None
1. Pearl SB Speed Limit	94%	-	6%
2. Ionia NB Speed Limit	94%	-	6%
3. Market SB Speed Limit	94%	-	6%
4. Market NB Speed Limit	94%	-	6%

Equipment Maintenance

