

# West Michigan Transportation Operations Center

Serving Motorists on West Michigan Freeways

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

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November 2010



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**West Michigan TOC Control Room**  
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Main: 616-451-8329  
Cell: 616-262-6066  
Fax: 616-774-9101

## In the Spotlight



All lane and ramp closures associated with "The Fix on I-196" were removed on Nov. 13, marking the completion of the major work on the project. Some landscaping and bridge painting will be completed in spring of next year. Due to the completion of most construction activity around Grand Rapids in November, construction-related communication decreased approximately 40 percent from October. Construction-related Dynamic Message Sign (DMS) messages were approximately 25 percent less than in October.

The unplanned incident characteristics in November were similar to October in number. However the location and time of day of the incidents was different. Compared to October, the number of incidents on US-131 decreased by approximately 20 and incidents on I-196 increased by approximately 20. During an average month, the peak number of unplanned incidents usually occur during the afternoon peak hours. However, the peak number of unplanned incidents in November occurred during the morning peak hours.

The National Weather Service reported rain totals of 2.8 inches for November with approximately 1.4 inches falling on Nov. 22. Rainy weather and a thunderstorm in November had a significant impact on the number of DMS and Variable Speed Sign (VSS) messages. In November, 160 weather messages were posted on DMS, compared to 51 in October.

Compiled by:  
**URS**

## Control Room Hours of Operation

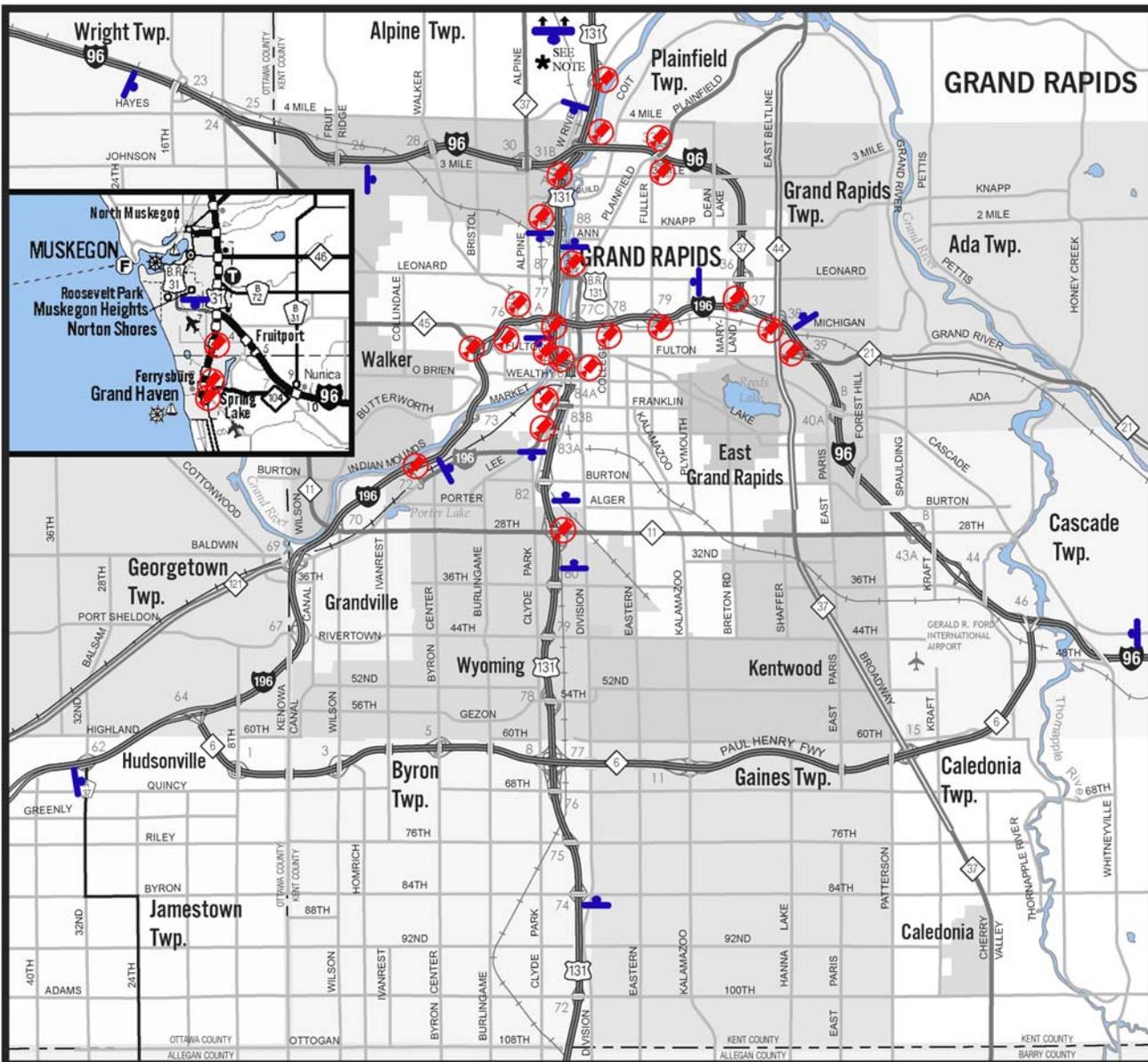
Time Period	Days	Hours
October - April	Monday - Friday	6 a.m. - 8 p.m.
	Saturday - Sunday	Noon - 8 p.m.
May - September	Monday - Thursday	6 a.m. - 8 p.m.
	Friday	6 a.m. - 9 p.m.
	Saturday - Sunday	Noon - 8 p.m.
Special Events	All	As needed
Holidays and Holiday Weekends	New Year's Day, Memorial Day, Independence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

## Control Room Contact Information

E-mail: MDOT-GR-TRAFFOPS@michigan.gov  
 Main: 616-451-8329  
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 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

## November 2010

### Communications Activity



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

### Total Communication

**Calls: 219**  
**E-mails: 100**

### 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 100.0%**

### Unplanned Incidents



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

### Total Incidents

**102**

### 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, Dynamic Message Signs (DMS), Variable Speed Signs (VSS), and Microwave Vehicle Detector Systems (MVDS).

### System Availability

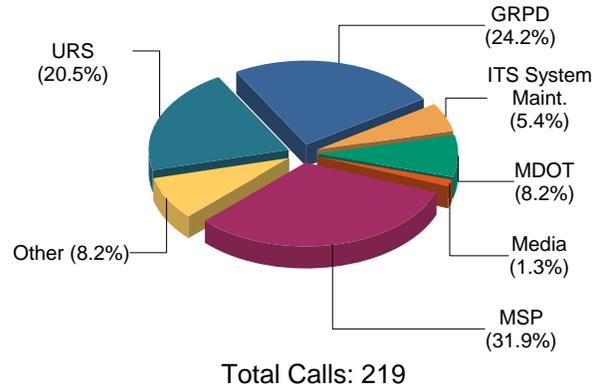
**CCTV: 97%**  
**DMS: 99%**  
**VSS: 100%**  
**MVDS: 82%**

## Calls and E-mails by Type

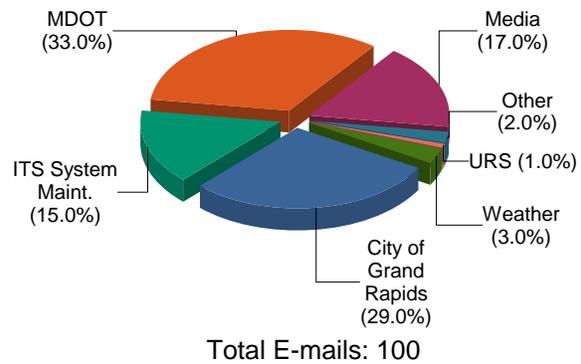


Agency	Calls			E-mails		
	In	Out	Total	In	Out	Total
City of Grand Rapids	0	0	0	29	0	29
Grand Rapids Police Department	4	49	53	0	0	0
ITS System Maintenance	4	8	12	12	3	15
Kent County Road Commission	5	3	8	0	0	0
Kent County Sheriff	1	0	1	0	0	0
MDOT, Construction	7	6	13	24	0	24
MDOT, Maintenance	0	0	0	0	2	2
MDOT, Other	1	3	4	0	0	0
MDOT, Traffic/ITS	1	0	1	5	2	7
Media	3	0	3	0	17	17
Michigan State Police	2	68	70	0	0	0
Other	8	1	9	2	0	2
URS Corporation	23	22	45	1	0	1
Weather	0	0	0	3	0	3
<b>Month Total</b>	<b>59</b>	<b>160</b>	<b>219</b>	<b>76</b>	<b>24</b>	<b>100</b>

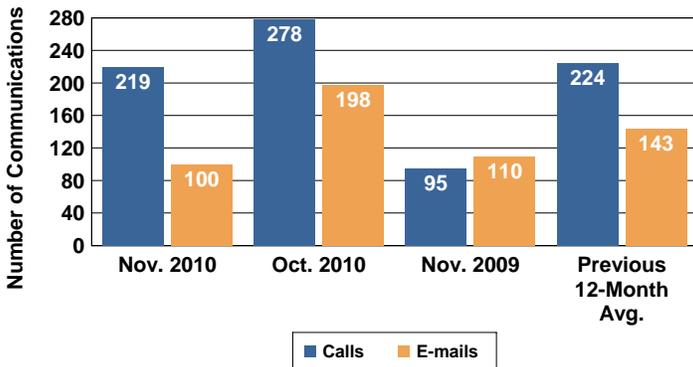
## Calls by Type



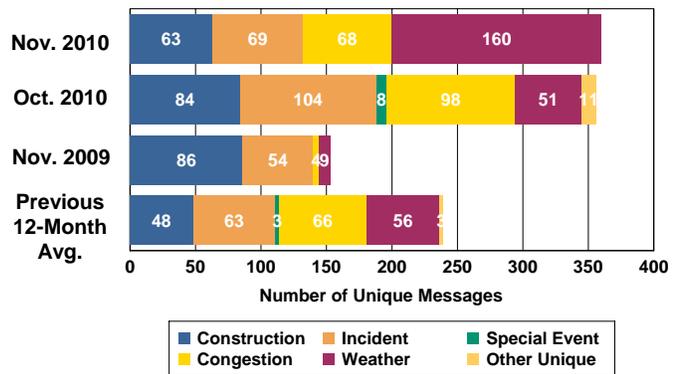
## E-mails by Type



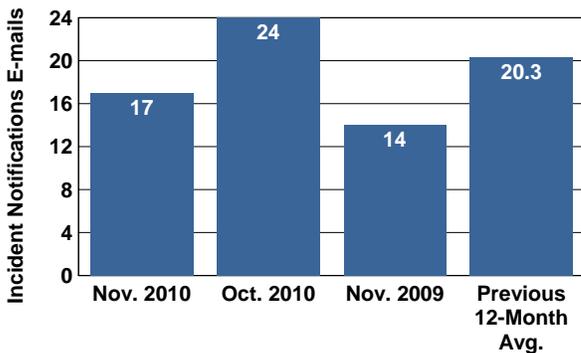
## Communication History



## DMS and VSS Messages by Type



## Incident Notification\* History

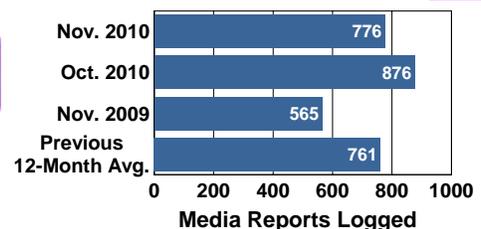


## Incident Notification\* Communication Accuracy



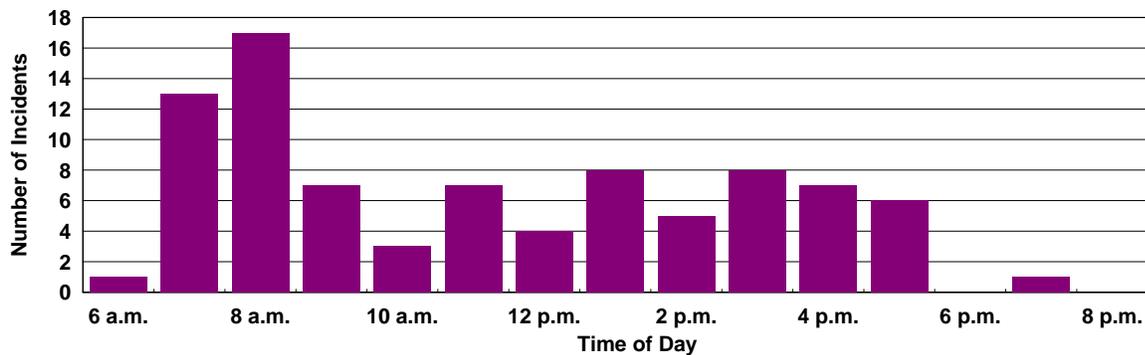
	Nov. 2010	Oct. 2010	Nov. 2009	Previous 12 Months
Format Correct	100.0%	100.0%	85.7%	98.0%
Content Correct	100.0%	95.8%	71.4%	93.9%

## Media Audits

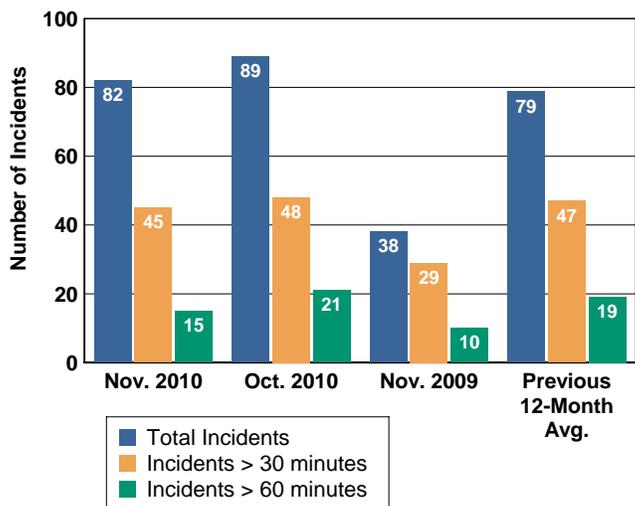


\* Incident Notification e-mails are issued for high-impact incidents with an expected duration of 15 minutes or greater. To subscribe to this list, please send an e-mail to [MDOT-GR-TRAFFOPS@michigan.gov](mailto:MDOT-GR-TRAFFOPS@michigan.gov).

## Total of Unplanned Incidents per Weekday Hour

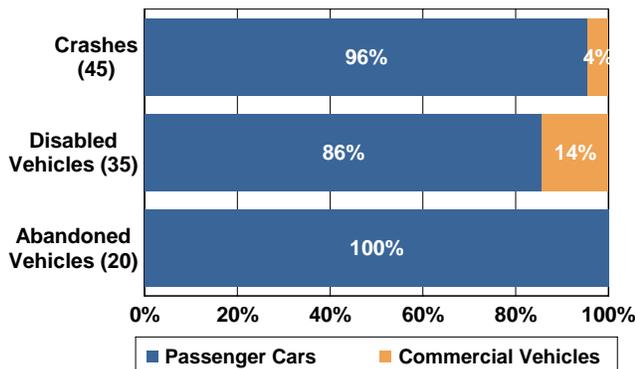


## Incident Duration History\*



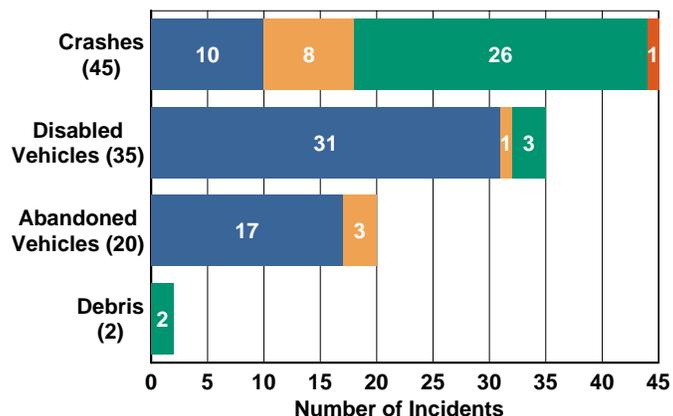
\*Incident Duration History excludes abandoned vehicles.

## Vehicle Composition of Incidents\*

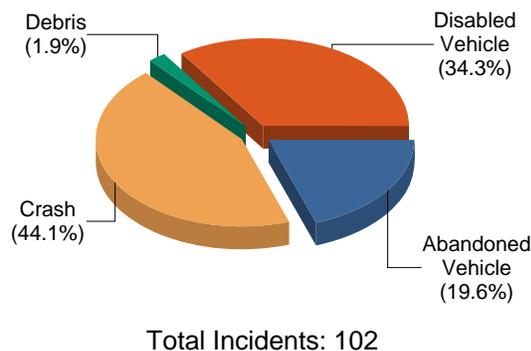


\*Vehicle Composition of Incidents excludes incidents where vehicle types were not identified.

## Traffic Impacts by Type



## Incident Managed by Type



## Most Utilized DMS\*

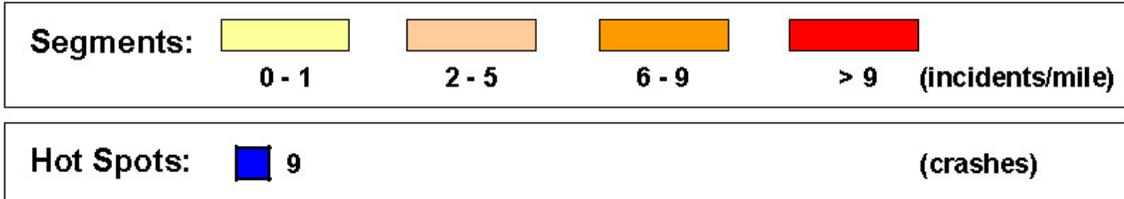
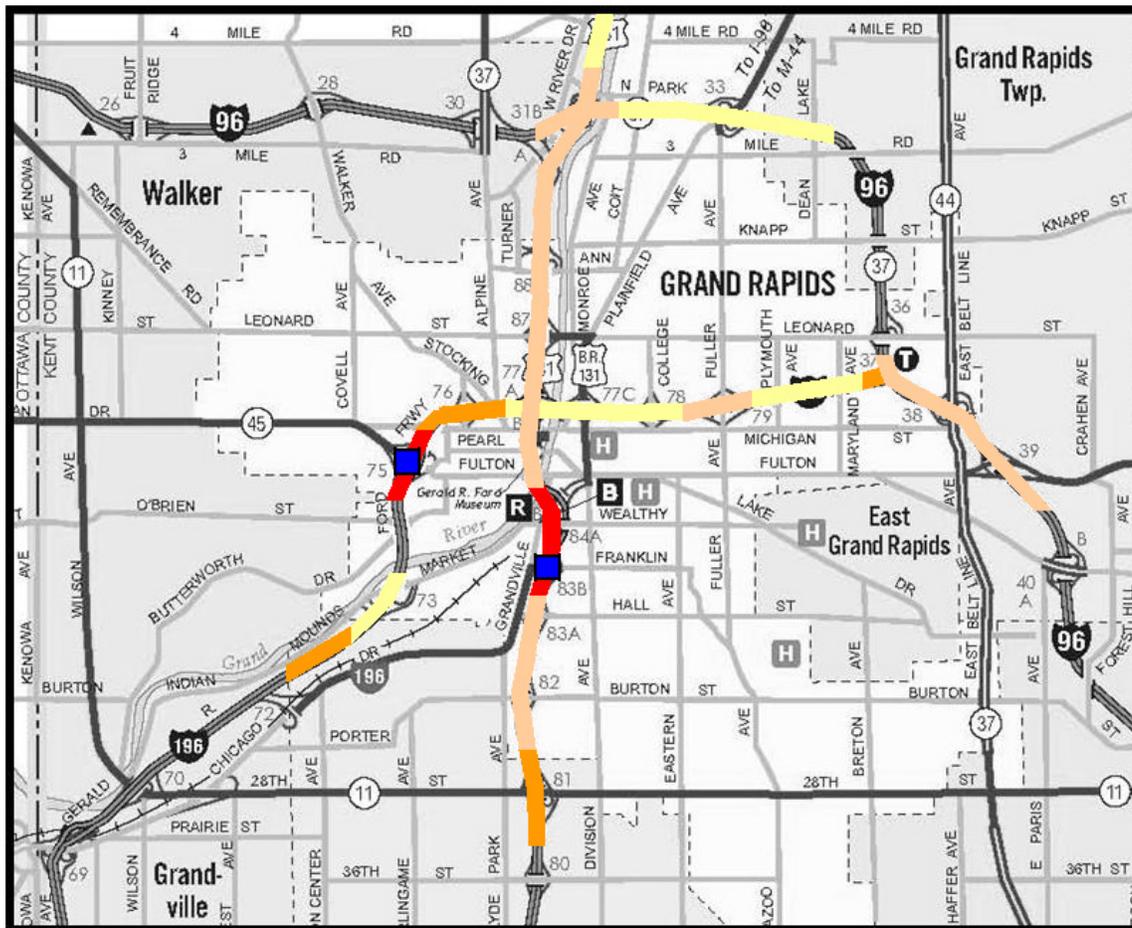


1. US-131 NB @ 28th St. (52)
2. US-131 NB @ 36th St. (49)
3. I-196 EB @ Chicago Dr. (27)

\*Number of unique event messages.



# Incident Density and Hot Spots Map



Incident Management



## High-impact Unplanned Incident Activity\*



Incident Impact	Nov. 2010	Oct. 2010	Nov. 2009	Previous 12-Month Avg.
Lane Closure	31	42	16	24.5
Ramp Closure	1	2	3	2.8
Freeway Closure	-	2	1	1.8

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

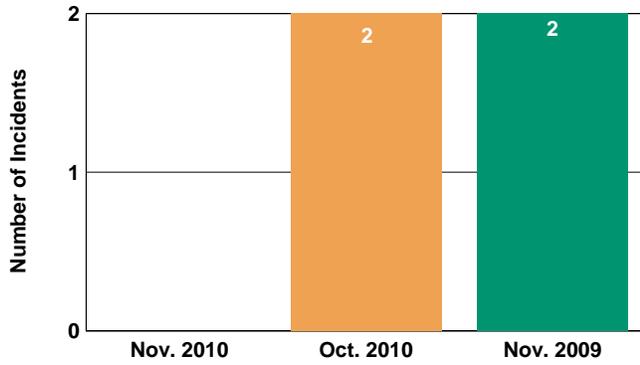
## Unplanned Incidents by Roadway



Freeway	Nov. 2010		Oct. 2010		Nov. 2009		Previous 12-Month Avg.	
	Total	per mi.	Total	per mi.	Total	per mi.	Total	per mi.
I-96 (4.5 mi.)*	16	3.6	13	2.9	2	0.4	8.5	1.9
I-196 (8.5 mi.)*	32	3.8	12	1.4	12	1.4	17.2	2.0
US-131 (11 mi.)*	52	4.7	74	6.7	23	2.1	59.6	5.4
<b>Month Total</b>	<b>100</b>	<b>4.2</b>	<b>99</b>	<b>4.1</b>	<b>37</b>	<b>1.5</b>	<b>85.3</b>	<b>3.6</b>

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

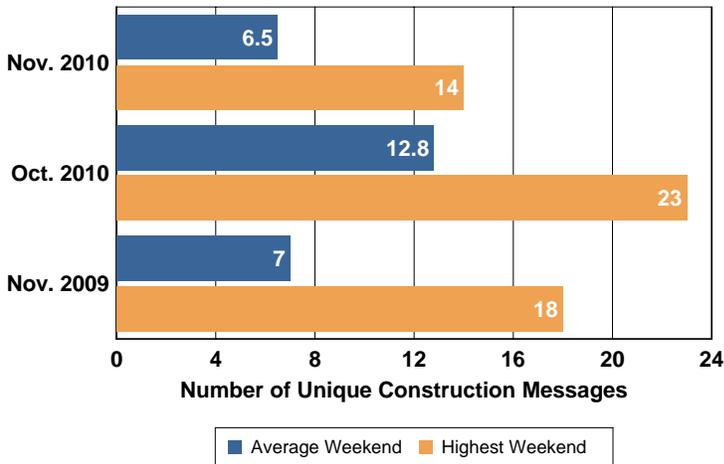
## Incidents Occurring in Work Zones



### Work Zone Incident Details:

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

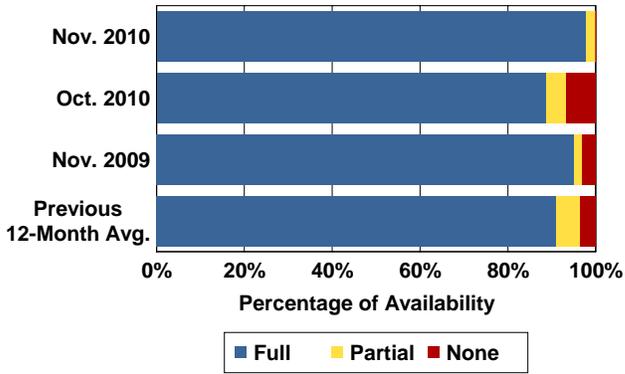
## Weekend\* Construction DMS Message Activity



\* Friday, Saturday and Sunday.



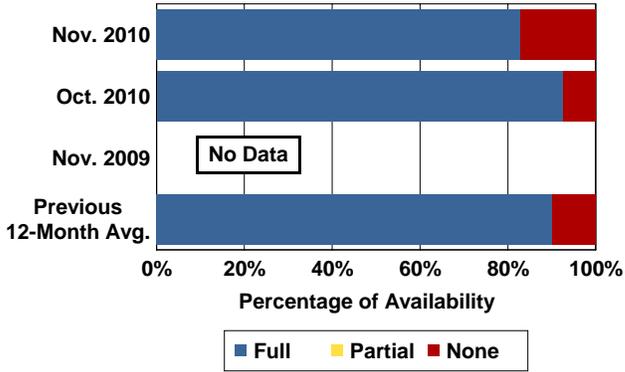
## Overall CCTV Camera Availability



## Individual CCTV Camera Availability

CCTV Cameras Below 95% Availability			
Location	Full	Partial	None
1. US-131 @ Wealthy St.	51%	49%	-

## Overall Detector Availability

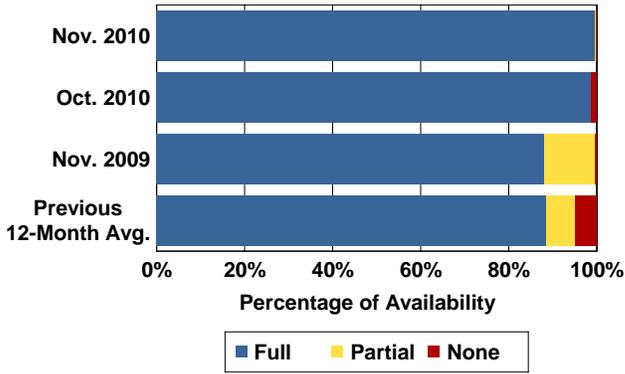


## Individual Detector Availability

Vehicle Detectors Below 95% Availability			
Location	Full	Partial	None
1. DS 114N	-	-	100%
2. DS 114S	-	-	100%
3. DS 119	-	-	100% *
4. DS 205	-	-	100%
5. DS 115	25%	-	75% *
6. DS 116	25%	-	75% *
7. DS 201	51%	-	49%
8. DS 120	63%	-	38%
9. DS 123	63%	-	38%
10. DS 124	63%	-	38%
11. DS 117	86%	-	14%

\* Detector Sites 115, 116 and 119 were unavailable during November due to construction on I-196.

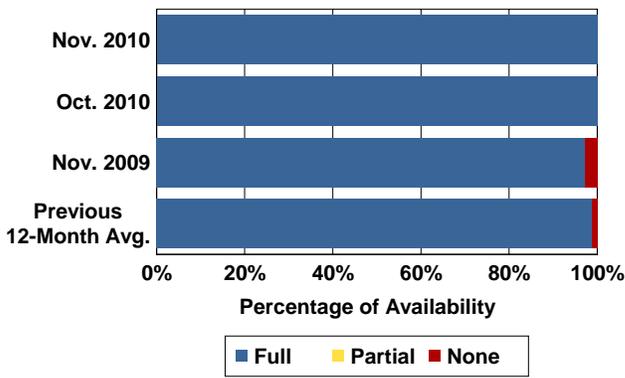
## Overall DMS Availability



## Individual DMS Availability

DMS Below 95% Availability			
Location	Full	Partial	None
None.			

## Overall VSS Availability



## Individual VSS Availability

VSS Below 95% Availability			
Location	Full	Partial	None
None.			

Equipment Maintenance

