

# 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)

June 2011



**Suzette Peplinski, P.E.**  
1420 Front Avenue NW  
Grand Rapids, MI 49504  
PeplinskiS@michigan.gov

**West Michigan TOC Control Room**  
E-mail: [MDOT-GR-TRAFFOPS@michigan.gov](mailto:MDOT-GR-TRAFFOPS@michigan.gov)  
Phone: 616-451-8329  
Fax: 616-774-9101

## In the Spotlight

Several construction projects are under way in the metro Grand Rapids area. The major projects are located on I-196 at Fuller Avenue, and US-131 at 36th Street and Hall Street, and include periodic off-peak lane closures, lane shifts, ramp closures, and single-lane closures (36th Street only). MDOT provided a significant amount of traveler information to motorists about the construction activity, including closure information on the Mi Drive website and DMS messages, and through work with the local news media. WMTOC operators have noted increased congestion in the vicinity of the various work zones, specifically during the morning and afternoon peak periods and when off-peak lane closures are in place.

Eight incidents were identified by control room operators as being within work zones this month. Three crashes and a disabled vehicle occurred within the Fuller Avenue bridge work zone on westbound I-196. The crashes occurred on consecutive days during which a single-lane closure was in place for construction activities. During the lane closures, traffic extended to the I-96/East Beltline Avenue interchange and traffic speeds were reduced to approximately 10 mph, based on data from the vehicle detector station near the Maryland Avenue bridge. WMTOC operators communicated with MDOT construction staff and a second portable message sign was used in order to give motorists additional notification of the construction lane closure.

Also in June, three crashes and a disabled vehicle occurred within the 36th Street bridge replacement work zone on southbound US-131. The incidents in the 36th Street work zone were at various times throughout the month and additional coordination between WMTOC operators and MDOT construction staff was not required.

Compiled by:  
**URS**

## Control Room Hours of Operation

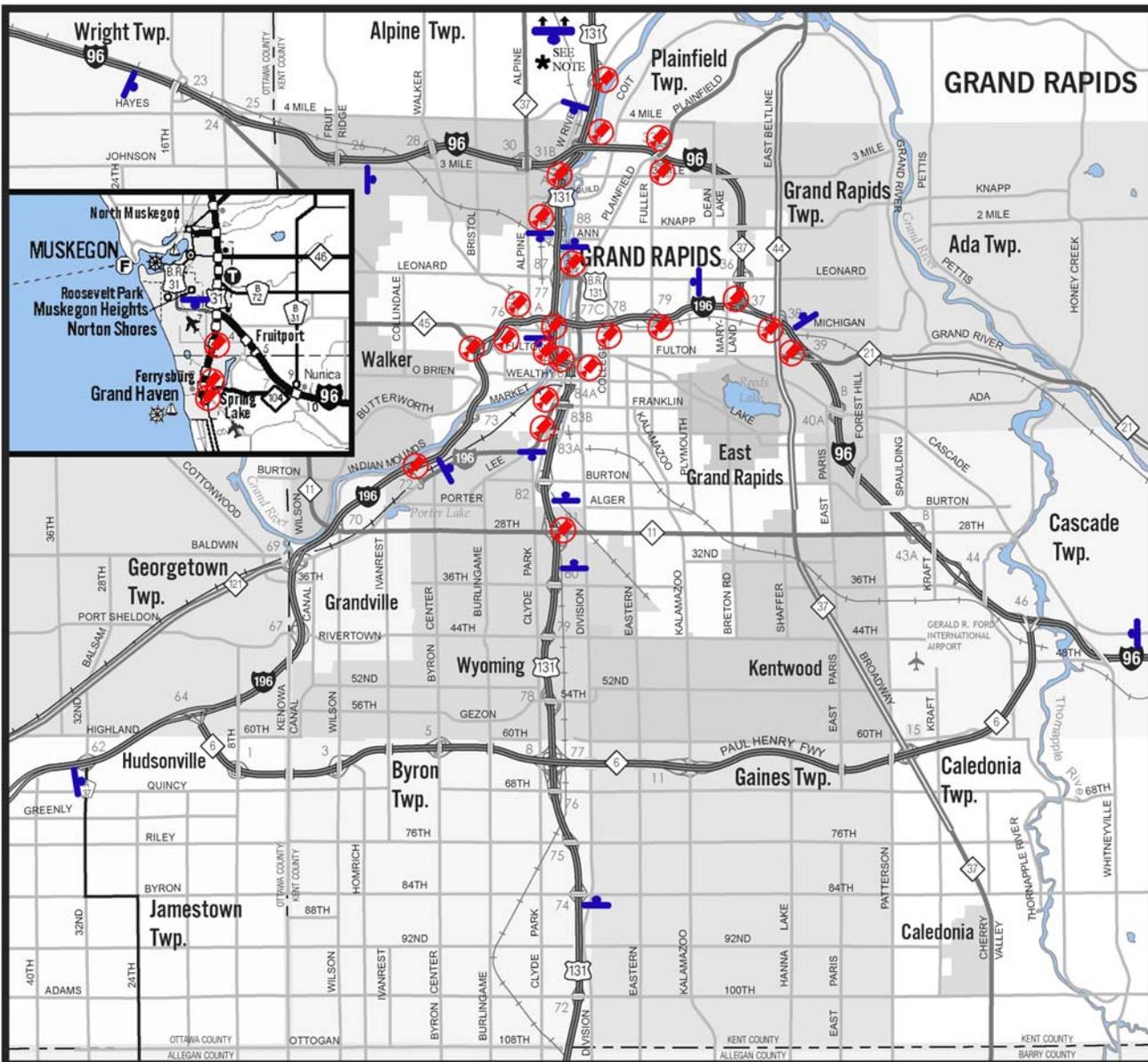
Time Period	Days	Hours
October - April	Monday - Friday	6 a.m. - 8 p.m.
	Saturday - Sunday	Noon - 8 p.m.
May - September	Monday - Thursday	6 a.m. - 8 p.m.
	Friday	6 a.m. - 9 p.m.
	Saturday - Sunday	Noon - 8 p.m.
Special Events	All	As needed
Holidays and Holiday Weekends	New Year's Day, Memorial Day, Independence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

## June 2011

### Communications Activity



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

### Total Communication

**Calls: 247**  
**E-mails: 322**

### 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 91.7%**  
**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

**81**

### 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

**8**

### 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

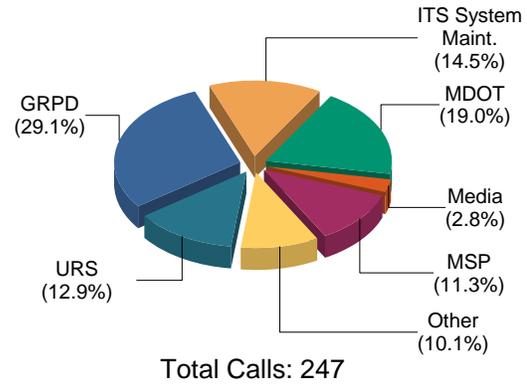
**CCTV: 98%**  
**MVDS: 72%**  
**DMS: 95%**  
**VSS: 100%**

## Calls and E-mails by Type

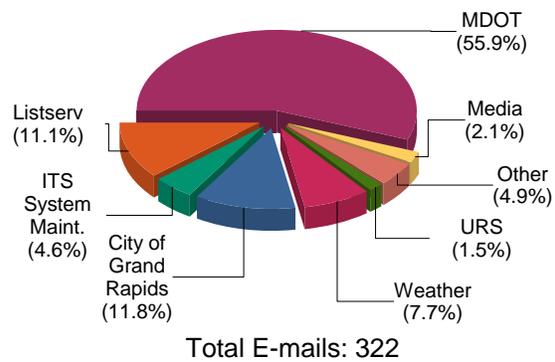


Agency	Calls			E-mails		
	In	Out	Total	In	Out	Total
City of Grand Rapids	0	0	0	38	0	38
Grand Rapids Police Department	4	68	72	0	0	0
ITS System Maintenance	14	22	36	11	4	15
Kent County Road Commission	3	6	9	0	0	0
Kent County Sheriff	0	1	1	0	0	0
Listserv (Traffic Notifications)	0	0	0	86	36	122
MDOT, Construction	10	4	14	40	16	56
MDOT, Maintenance	11	9	20	0	0	0
MDOT, Other	2	5	7	14	3	17
MDOT, Traffic/ITS	4	2	6	14	7	21
Media	4	3	7	3	4	7
Michigan State Police	8	20	28	0	0	0
Other	13	2	15	16	0	16
URS Corporation	22	10	32	4	1	5
Weather	0	0	0	25	0	25
<b>Month Total</b>	<b>95</b>	<b>152</b>	<b>247</b>	<b>251</b>	<b>71</b>	<b>322</b>

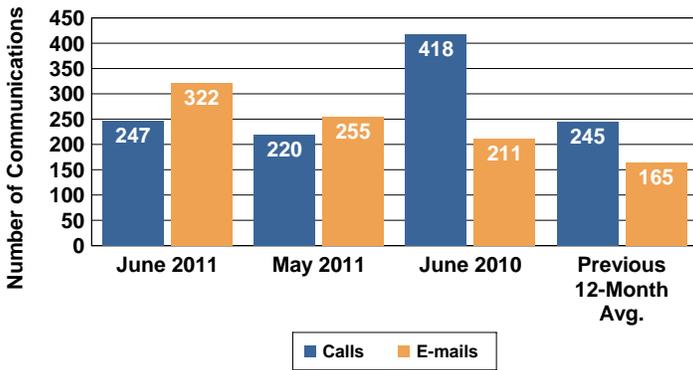
## Calls by Type



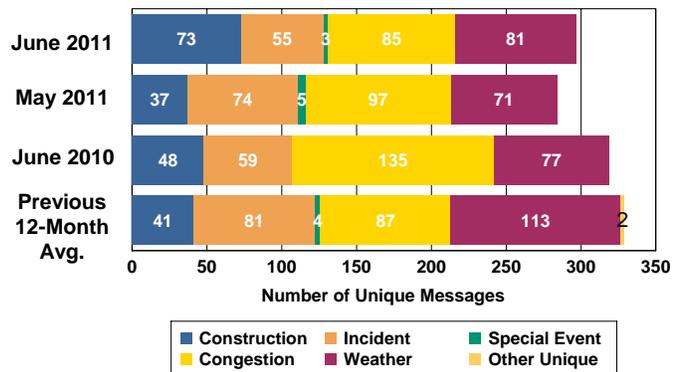
## E-mails by Type



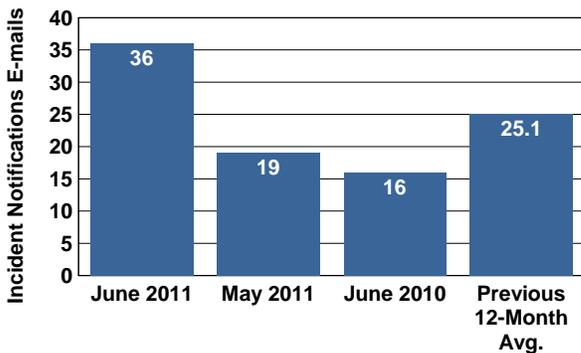
## Communication History



## DMS and VSS Messages by Type



## Incident Notification\* History

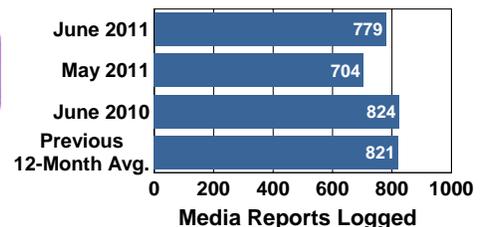


## Incident Notification\* Communication Accuracy



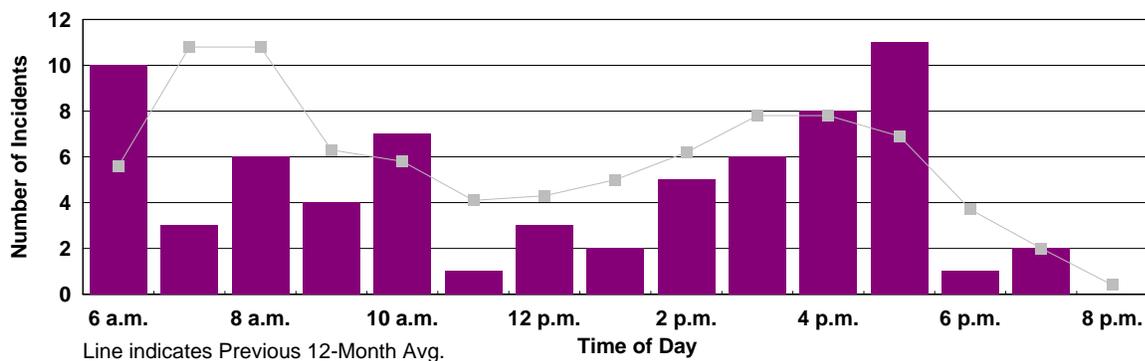
	June 2011	May 2011	June 2010	Previous 12 Months
Format Correct	91.7%	94.7%	100.0%	99.7%
Content Correct	100.0%	89.5%	87.5%	95.0%

## Media Audits

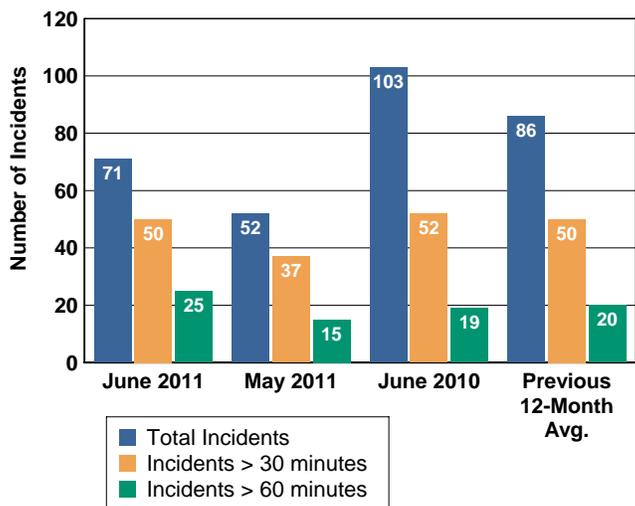


\* Incident Notification e-mails are issued for high-impact incidents with an expected duration of 15 minutes or greater. To subscribe to this list, please send an e-mail to [MDOT-GR-TRAFFOPS@michigan.gov](mailto:MDOT-GR-TRAFFOPS@michigan.gov).

## Total of Unplanned Incidents per Weekday Hour

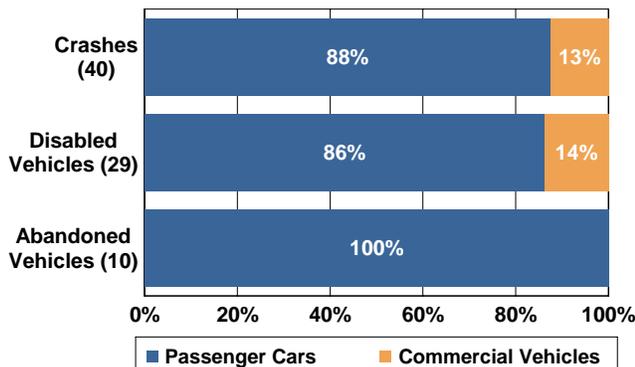


## Incident Duration History\*



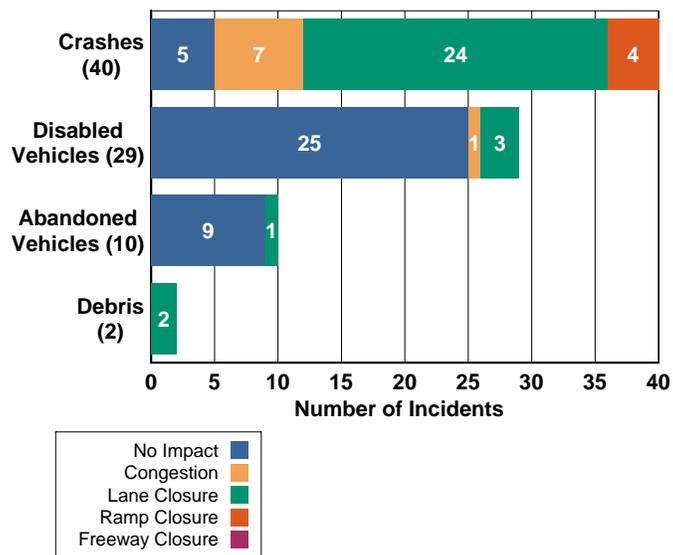
\*Incident Duration History excludes abandoned vehicles.

## Vehicle Composition of Incidents\*



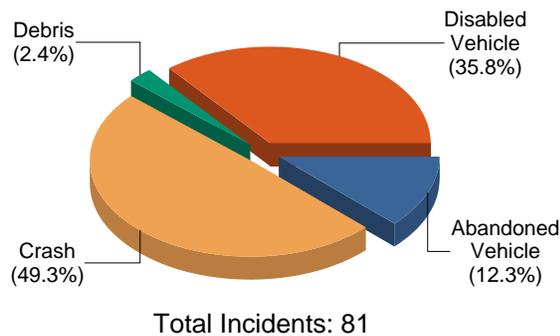
\*Vehicle Composition of Incidents excludes incidents where vehicle types were not identified.

## 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: 81

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

## Most Utilized DMS\*

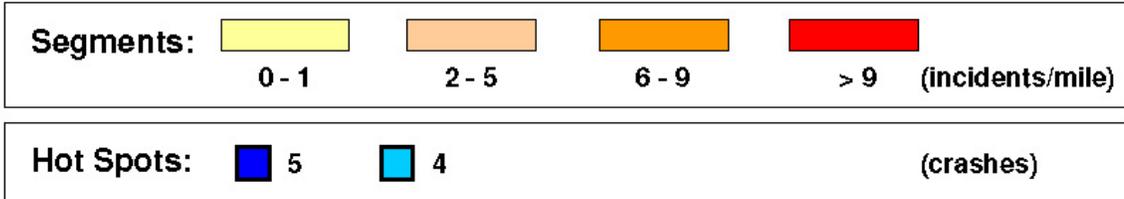
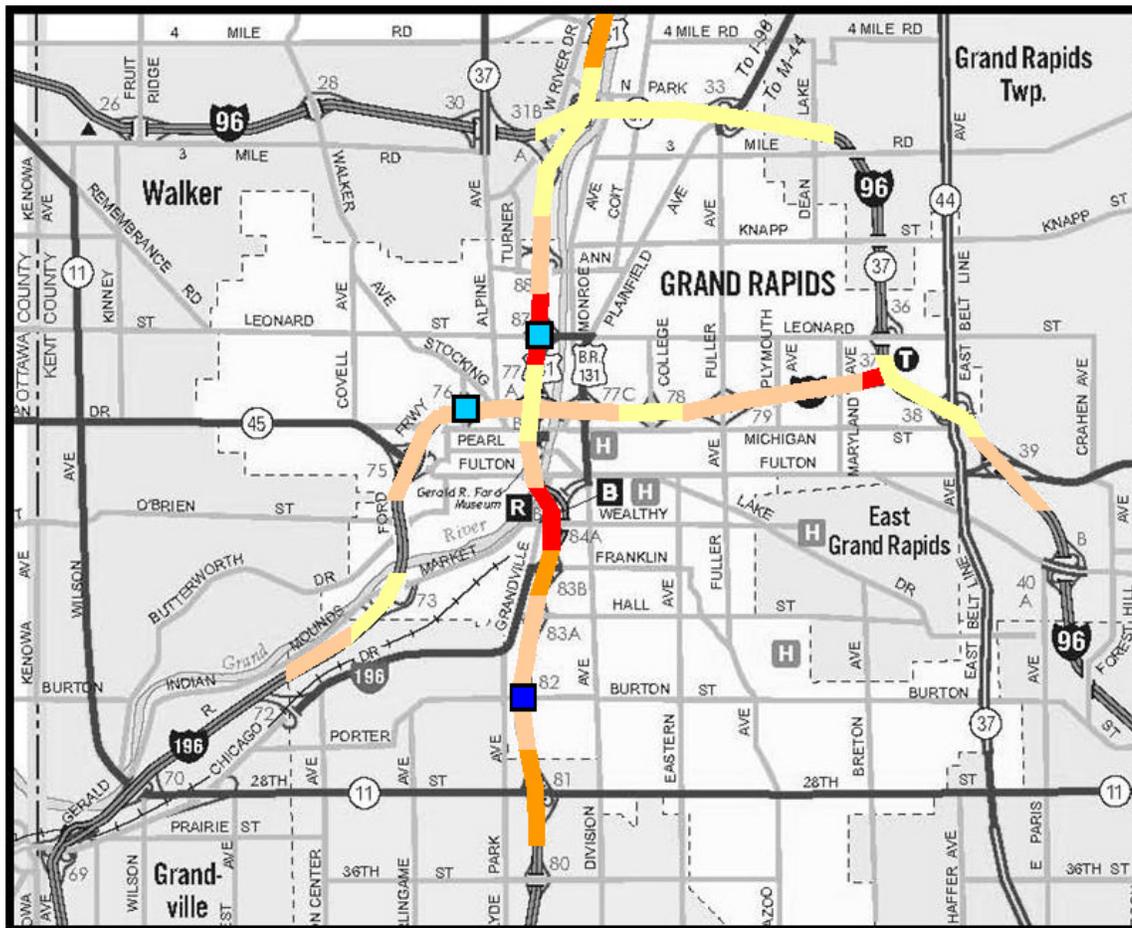


1. US-131 NB @ 28th St. (39)
2. US-131 NB @ 36th St. (36)
3. US-131 SB @ Ann St. (35)

\*Number of unique event messages.



# Incident Density and Hot Spots Map



Incident Management



## High-impact Unplanned Incident Activity\*



Incident Impact	June 2011	May 2011	June 2010	Previous 12-Month Avg.
Lane Closure	30	25	23	32
Ramp Closure	4	2	2	3.5
Freeway Closure	-	1	4	2.1

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

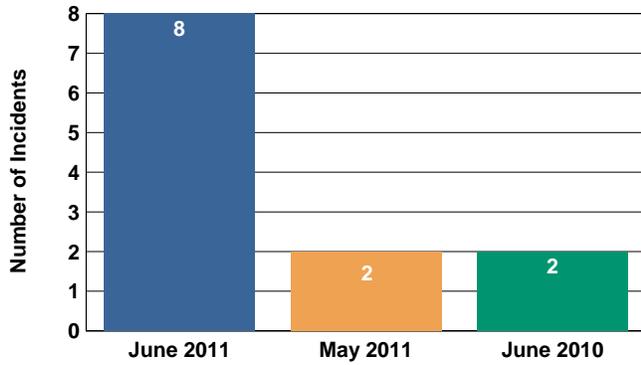
## Unplanned Incidents by Roadway



Freeway	June 2011		May 2011		June 2010		Previous 12-Month Avg.	
	Total	per mi.	Total	per mi.	Total	per mi.	Total	per mi.
I-96 (4.5 mi.)*	4	0.9	4	0.9	16	3.6	12.8	2.9
I-196 (8.5 mi.)*	22	2.6	10	1.2	13	1.5	18.8	2.2
US-131 (11 mi.)*	50	4.5	34	3.1	102	9.3	64.2	5.8
<b>Month Total</b>	<b>76</b>	<b>3.2</b>	<b>48</b>	<b>2.0</b>	<b>131</b>	<b>5.5</b>	<b>95.8</b>	<b>4.0</b>

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

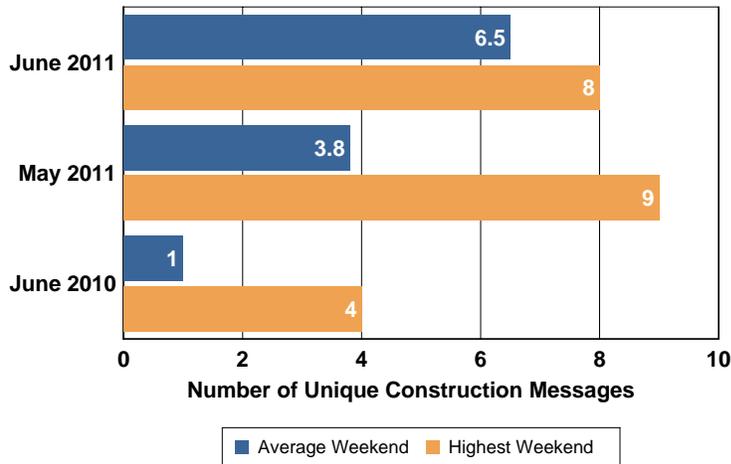
## Incidents Occurring in Work Zones



### Work Zone Incident Details:

During the month of June, there were eight incidents identified by operators as being within work zones. Three crashes and one disabled vehicle occurred on westbound I-196 within the Fuller Avenue bridge replacement work zone. Three crashes and one disabled vehicle also occurred on southbound US-131 within the US-131 at 36th Street bridge replacement work zone.

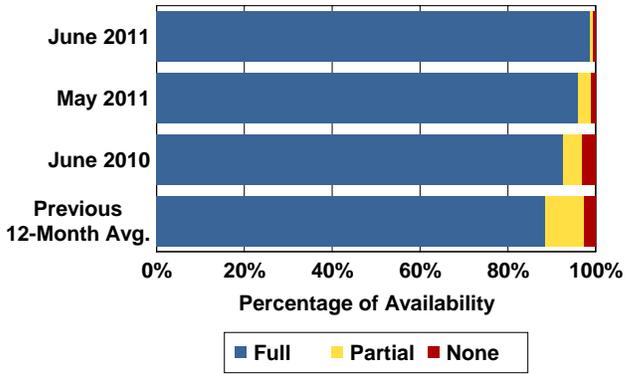
## Weekend\* Construction DMS Message Activity



\* Friday, Saturday and Sunday.



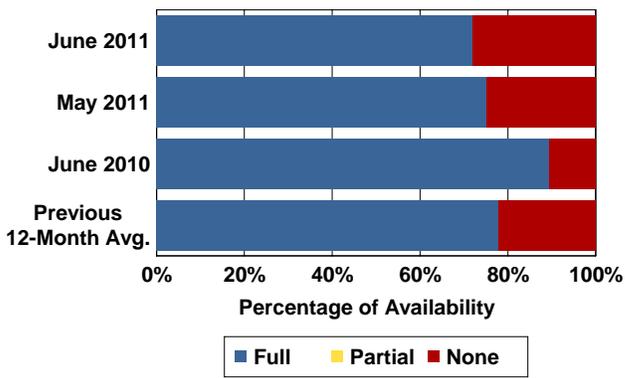
## Overall CCTV Camera Availability



## Individual CCTV Camera Availability

CCTV Cameras Below 95% Availability			
Location	Full	Partial	None
1. I-196 @ Fuller Ave.	86%	13%	1%
2. I-96 @ I-196	91%	3%	7%

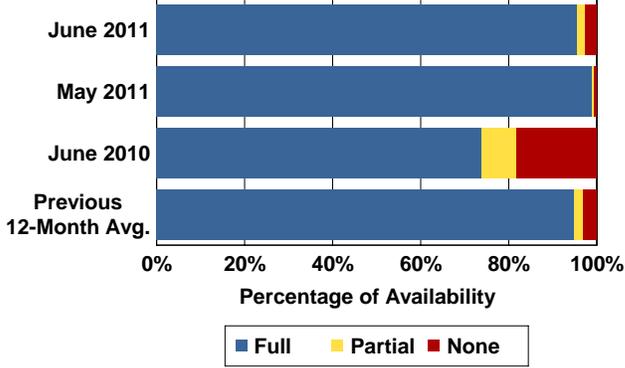
## Overall Detector Availability



## Individual Detector Availability

Vehicle Detectors Below 95% Availability			
Location	Full	Partial	None
1. 114N - I-196 @ Monroe	-	-	100%
2. 114S - I-196 @ Ottawa	-	-	100%
3. 119 -	-	-	100%
4. 125 - I-96 @ E. Beltline	-	-	100%
5. 201 - US-131 S of 36th	-	-	100%
6. 204 - US-131 S of 28th	-	-	100%
7. 205 - US-131 N of 28th	-	-	100%
8. 220 - W I-196 to N US-131	-	-	100%
9. 224 - US-131 @ Ann	-	-	100%
10. 227 - US-131 @ I-96	-	-	100%
11. 229 - S US-131 to E I-96	-	-	100%

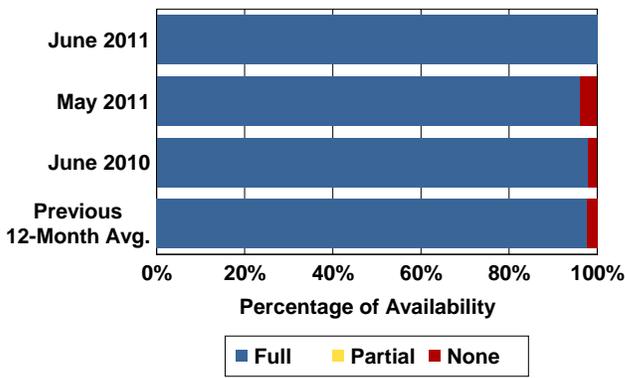
## Overall DMS Availability



## Individual DMS Availability

DMS Below 95% Availability			
Location	Full	Partial	None
1. I-96 WB @ M-21 (Fulton St.)	79%	9%	12%
2. I-196 WB @ Plymouth Ave.	79%	9%	12%

## Overall VSS Availability



## Individual VSS Availability

VSS Below 95% Availability			
Location	Full	Partial	None
None.			



# Grand Rapids Area Construction Map - July 2011



\*Includes construction projects on or near freeways and state trunklines.

**MDOT**

- I-96, Bristol Ave to M-11 (28th St) pavement sealing
- Nightly lane closures
- DMS used: EB I-96 @ Fruit Ridge, WB I-96 @ Fulton St

**MDOT**

- M-37, I-96 to Lake Eastbrook Blvd concrete joint repairs
- Lane closures
- DMS used: None

**MDOT**

- Fuller Ave over I-196 bridge replacement
- Closures on Fuller Ave and ramp closures
- DMS used: EB I-196 @ Chicago Dr, WB I-96 @ Fulton St, SB US-131 @ Ann St

**City of Kentwood**

- Forest Hill Ave, Burton St to Cascade Rd reconstruction
- Total closure
- DMS used: None

**MDOT**

- Hall St over US-131 bridge replacement
- Lane closures on US-131
- DMS used: NB US-131 @ 28th St, NB US-131 @ 36th St, SB US-131 @ Pearl St, SB US-131 @ Ann St

**MDOT**

- 36th St over US-131 bridge replacement
- Lane closures on US-131 and ramp closures
- DMS used: NB US-131 @ 84th St, SB US-131 @ Hall St

**MDOT**

- I-96 over 28th St bridge replacement
- Intermittent lane closures on I-96 and 28th St
- DMS used: WB I-96 @ Quiggle St

