

# 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)

July 2011



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**West Michigan TOC Control Room**  
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Fax: 616-774-9101

## In the Spotlight

Five crashes near the I-196/Lake Michigan Drive interchange were documented by control room operators during July. All of the crashes occurred on eastbound I-196 with two affecting the right lane, two affecting the left lane, and one closing both lanes. Rainy weather or wet road conditions were noted by control room operators for four of the crashes.

In addition to the crashes at Lake Michigan Drive, three crashes were documented at the nearby I-196/Lane Avenue interchange, one of which had a significant impact on traffic. On July 27, a semi crashed through the guardrail on westbound I-196 near Lane Avenue, resulting in a spilled load and diesel fuel. In addition to the spills, the I-196 bridge over Garfield Avenue had to be checked for damage before I-196 could be fully reopened to traffic. Since the crash happened off the freeway, only the right lane needed to be closed; the crash took approximately three-and-a-half hours to clear.

On the evening of July 7, a police chase occurred on US-131 and I-96. The suspect vehicle crashed near the I-96/Plainfield Avenue interchange, and the resulting police situation closed the freeway in both directions until after midnight (approximately four-and-a-half hours). The WMTOC was able to provide live camera coverage of part of the police chase, which was broadcast on television by the local media, and also provided motorists with Dynamic Message Sign (DMS) messages related to the freeway closure.

The WMTOC was staffed until midnight on the evening of July 4 to monitor traffic associated with the Grand Rapids fireworks display. The on-duty operator coordinated with state and local law enforcement by providing DMS messages related to scheduled ramp closures, as well as instructing motorists not to stop along the freeway. Stopped traffic along the freeway was less prevalent than during the 2010 fireworks display.



Compiled by:  
**URS**

## Control Room Hours of Operation

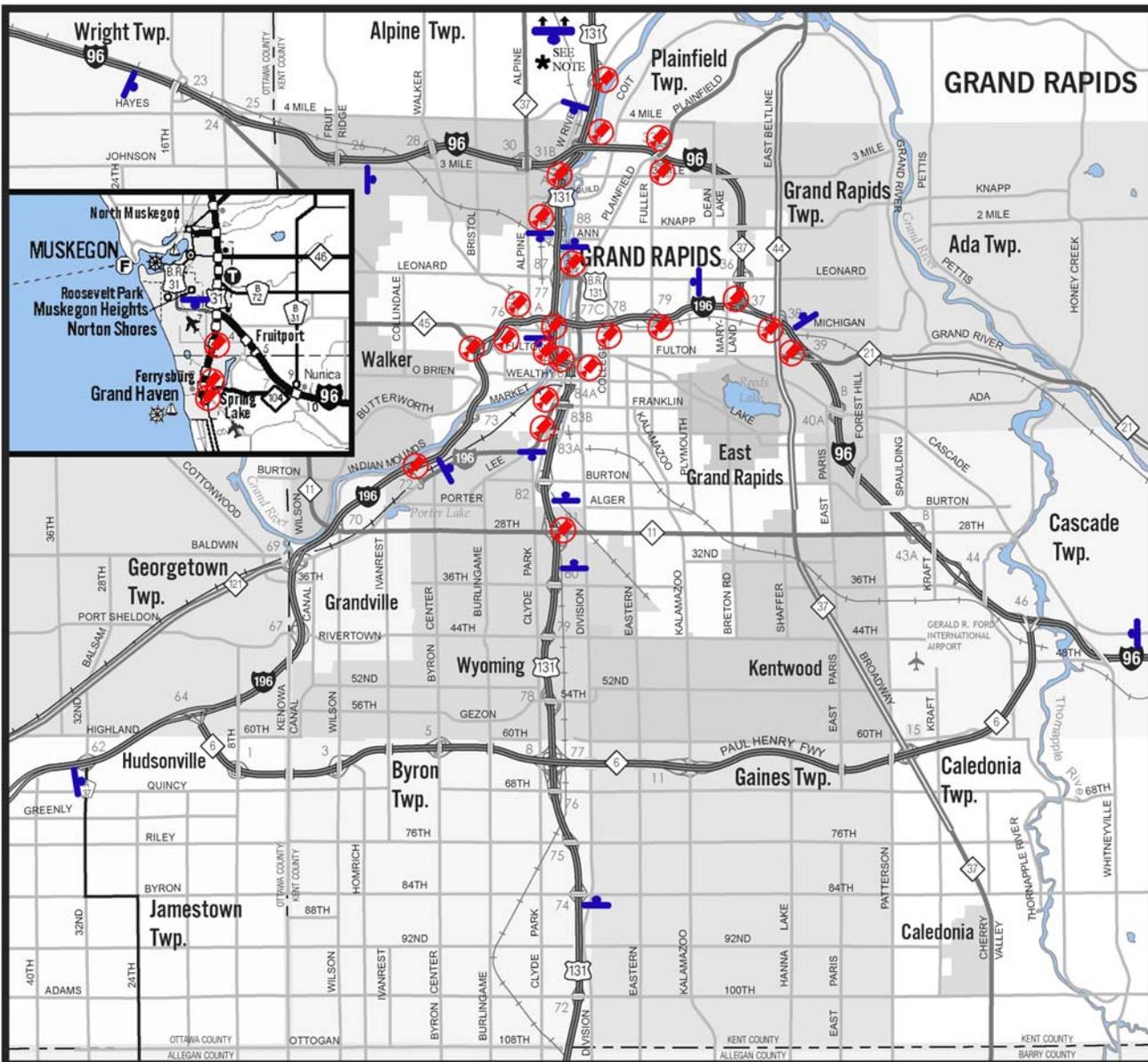
Time Period	Days	Hours
October - April	Monday - Friday	6 a.m. - 8 p.m.
	Saturday - Sunday	Noon - 8 p.m.
May - September	Monday - Thursday	6 a.m. - 8 p.m.
	Friday	6 a.m. - 9 p.m.
	Saturday - Sunday	Noon - 8 p.m.
Special Events	All	As needed
Holidays and Holiday Weekends	New Year's Day, Memorial Day, Independence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

## July 2011

### Communications Activity



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

### Total Communication

**Calls: 223**  
**E-mails: 257**

### 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 97.4%**  
**Content Correct 97.4%**

### Unplanned Incidents



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

### Total Incidents

**74**

### 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

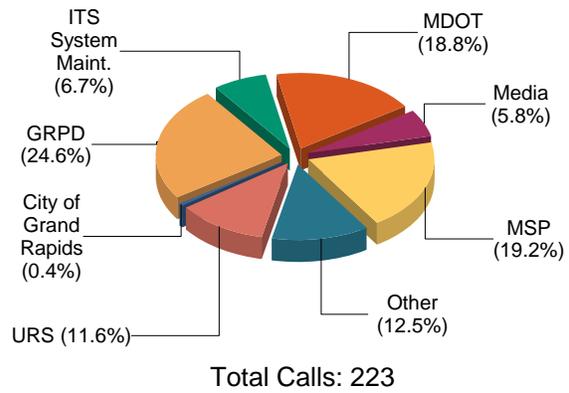
**CCTV: 93%**  
**MVDS: 70%**  
**DMS: 99%**  
**VSS: 96%**

## Calls and E-mails by Type

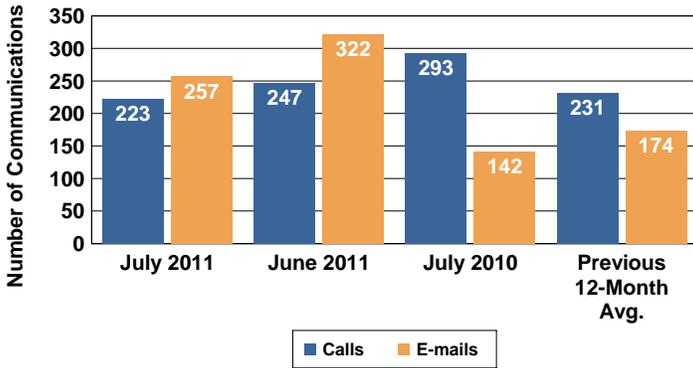


Agency	Calls			E-mails		
	In	Out	Total	In	Out	Total
City of Grand Rapids	1	0	1	28	0	28
Grand Rapids Police Department	0	55	55	0	0	0
ITS System Maintenance	13	2	15	0	1	1
Kent County Road Commission	8	5	13	0	0	0
Kent County Sheriff	0	0	0	0	0	0
Listserv (Traffic Notifications)	0	0	0	72	38	110
MDOT, Construction	4	11	15	21	1	22
MDOT, Maintenance	6	6	12	0	0	0
MDOT, Other	4	4	8	6	0	6
MDOT, Traffic/ITS	6	1	7	13	10	23
Media	10	3	13	4	2	6
Michigan State Police	14	29	43	0	0	0
Other	8	7	15	18	0	18
URS Corporation	17	9	26	9	4	13
Weather	0	0	0	30	0	30
<b>Month Total</b>	<b>91</b>	<b>132</b>	<b>223</b>	<b>201</b>	<b>56</b>	<b>257</b>

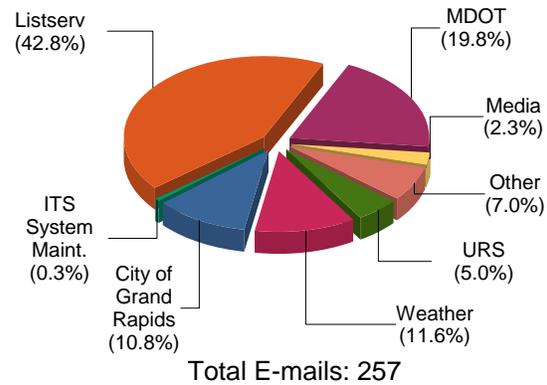
## Calls by Type



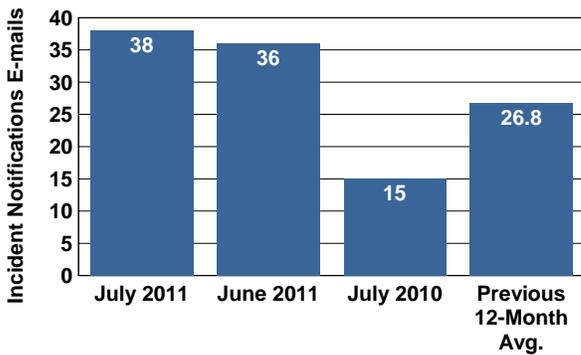
## Communication History



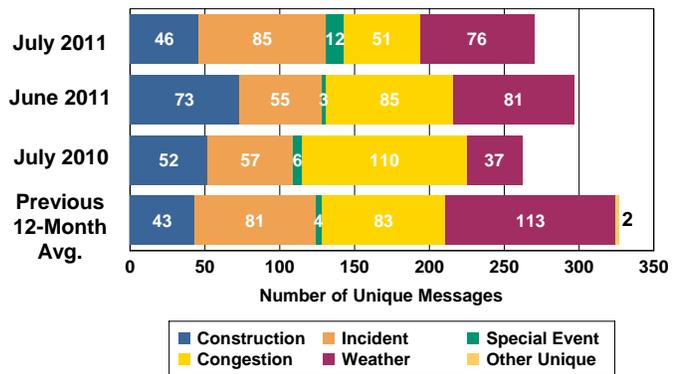
## E-mails by Type



## Incident Notification\* History



## DMS and VSS Messages by Type

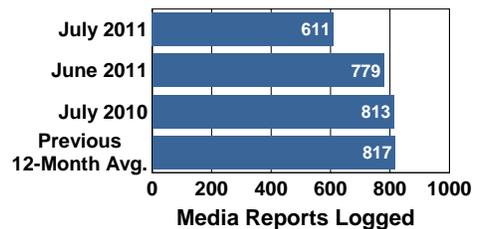


## Incident Notification\* Communication Accuracy



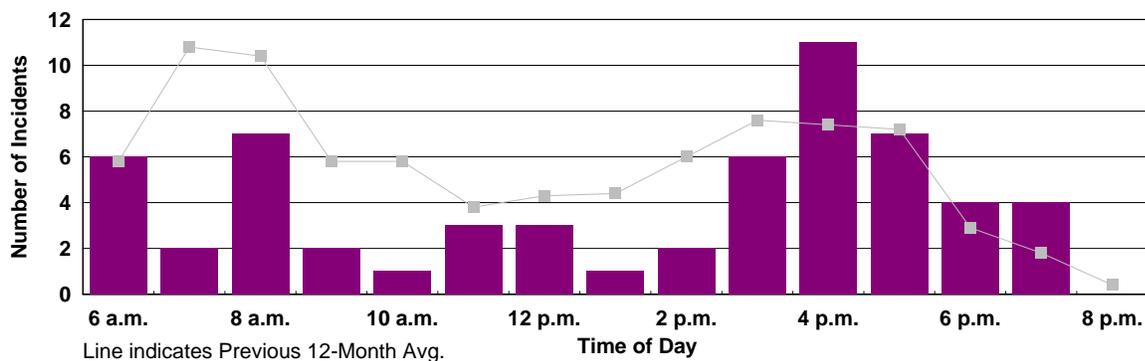
	July 2011	June 2011	July 2010	Previous 12 Months
Format Correct	97.4%	91.7%	100.0%	98.8%
Content Correct	97.4%	100.0%	100.0%	96.0%

## Media Audits

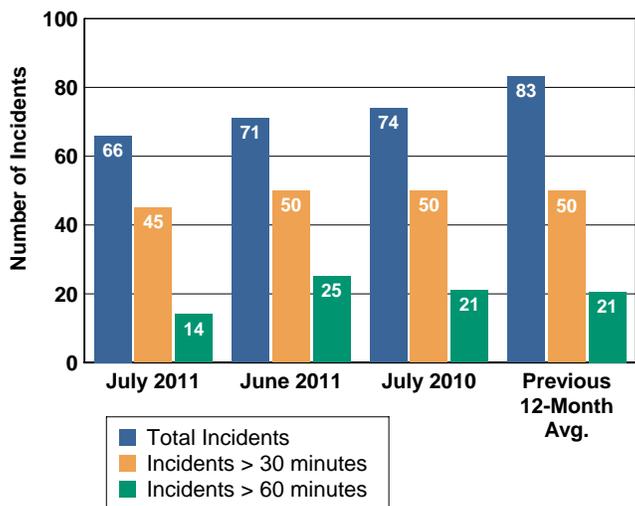


\*Incident Notification e-mails are issued for high-impact incidents with an expected duration of 15 minutes or greater. To subscribe to this list, please visit the MDOT listserv by following this link.

## Total of Unplanned Incidents per Weekday Hour

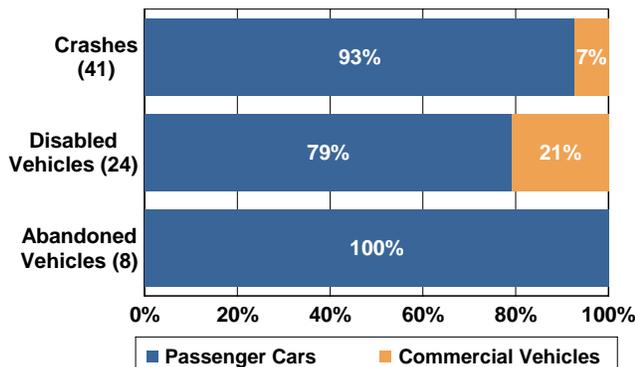


## Incident Duration History\*



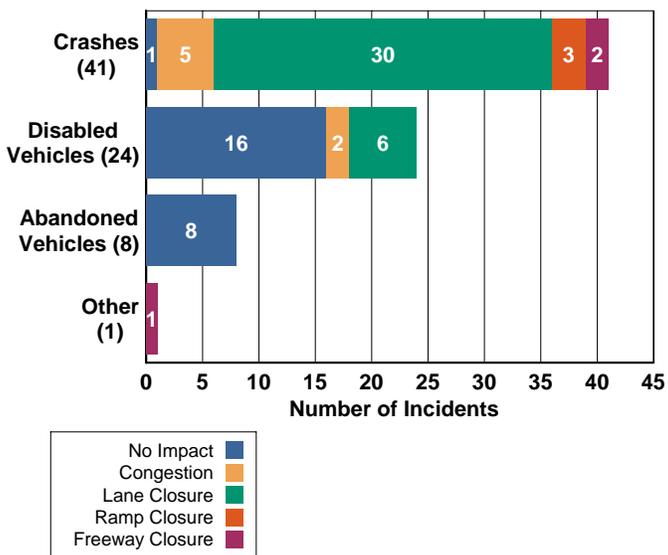
\*Incident Duration History excludes abandoned vehicles.

## Vehicle Composition of Incidents\*



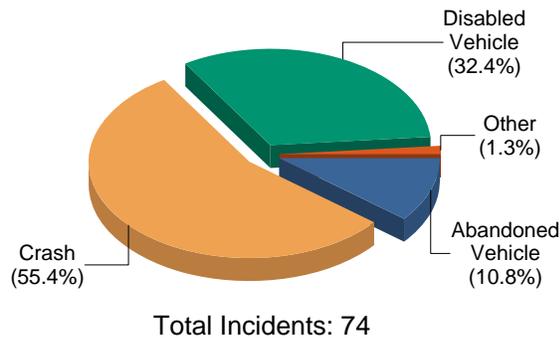
\*Vehicle Composition of Incidents excludes incidents where vehicle types were not identified.

## Traffic Impacts by Type\*



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

## Incident Managed by Type\*



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

## Most Utilized DMS\*

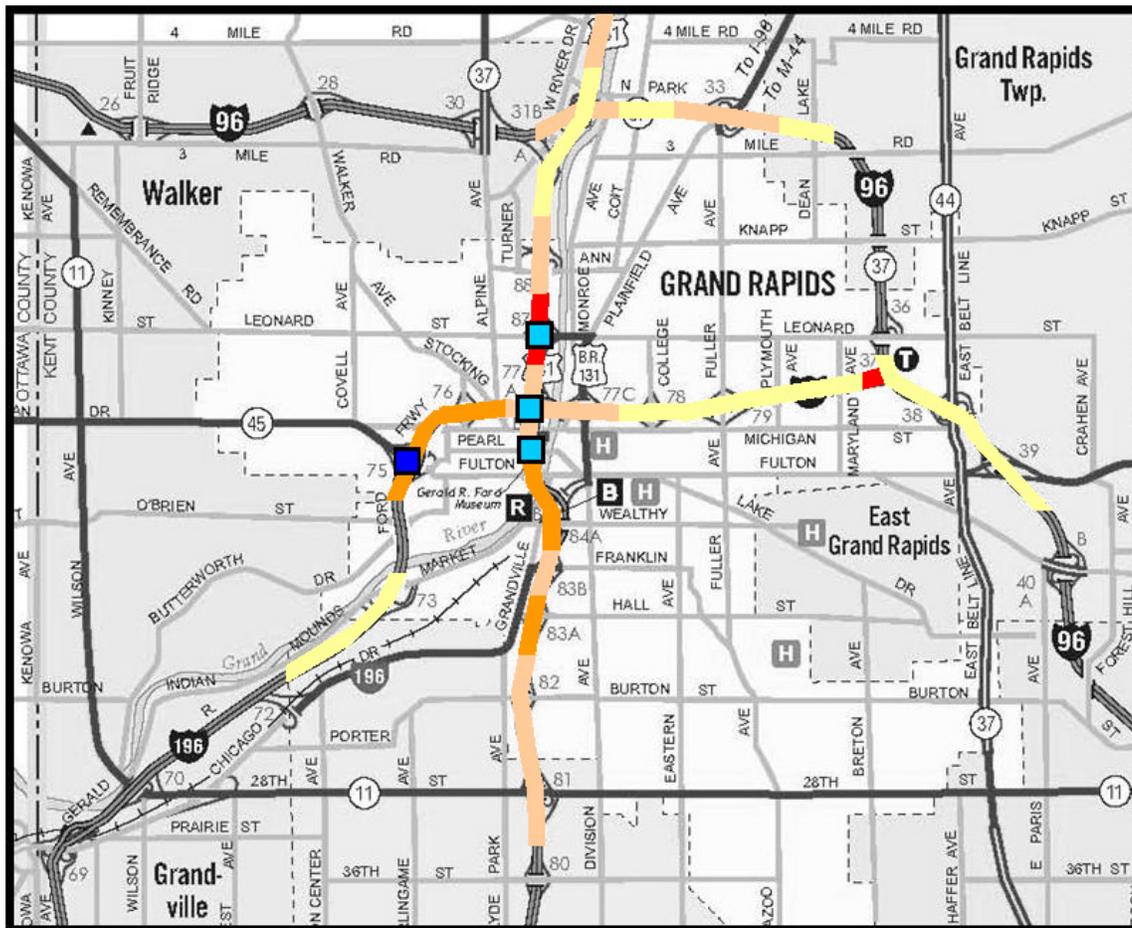


1. I-196 EB @ Chicago Dr. (39)
2. US-131 NB @ 28th St. (32)
3. US-131 SB @ Ann St. (30)

\*Number of unique event messages.



# Incident Density and Hot Spots Map



Incident Management



**Segments:** 0-1 2-5 6-9 > 9 (incidents/mile)

**Hot Spots:** 5 4 (crashes)

## High-impact Unplanned Incident Activity\*



Incident Impact	July 2011	June 2011	July 2010	Previous 12-Month Avg.
Lane Closure	36	30	23	32.6
Ramp Closure	3	4	2	3.7
Freeway Closure	3	-	1	1.8

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

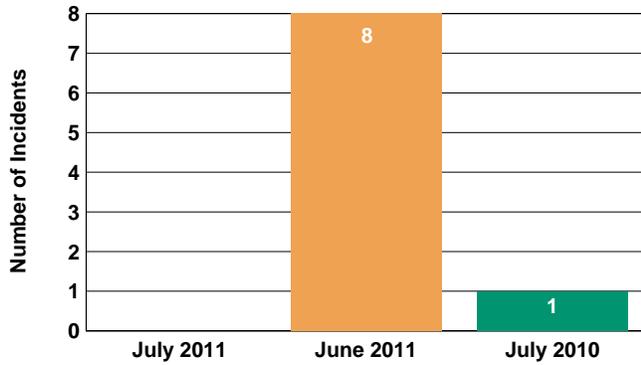
## Unplanned Incidents by Roadway



Freeway	July 2011		June 2011		July 2010		Previous 12-Month Avg.	
	Total	per mi.	Total	per mi.	Total	per mi.	Total	per mi.
I-96 (4.5 mi.)*	7	1.6	4	0.9	19	4.2	11.8	2.6
I-196 (8.5 mi.)*	20	2.4	22	2.6	10	1.2	19.6	2.3
US-131 (11 mi.)*	42	3.8	50	4.5	70	6.4	59.9	5.4
<b>Month Total</b>	<b>69</b>	<b>2.9</b>	<b>76</b>	<b>3.2</b>	<b>99</b>	<b>4.1</b>	<b>91.3</b>	<b>3.8</b>

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

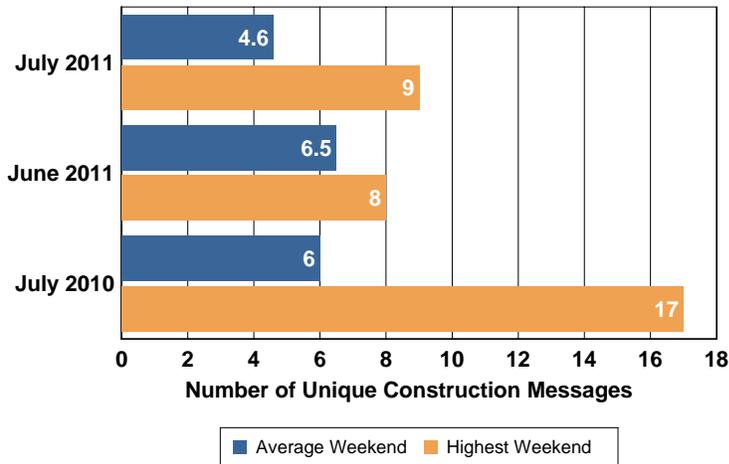
## Incidents Occurring in Work Zones



### Work Zone Incident Details:

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

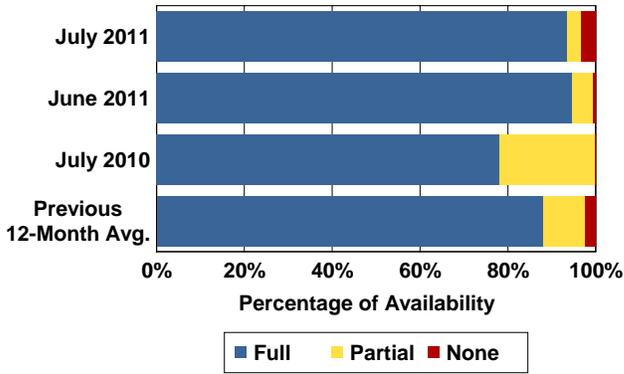
## Weekend\* Construction DMS Message Activity



\* Friday, Saturday and Sunday.



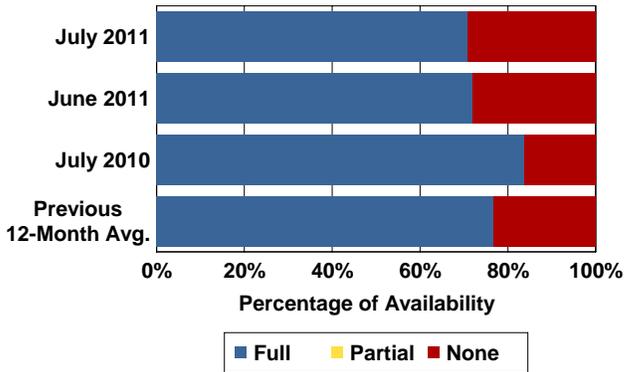
## Overall CCTV Camera Availability



## Individual CCTV Camera Availability

CCTV Cameras Below 95% Availability			
Location	Full	Partial	None
1. US-131 @ Wealthy St.	11%	34%	55%
2. US-31 @ M-104	76%	24%	-
3. US-31 @ Van Wagoner St	79%	21%	-
4. I-96 @ I-196	94%	-	6%
5. I-96 @ M-21 (Fulton St.)	94%	-	6%
6. I-196 @ College Ave.	94%	-	6%
7. I-196 @ Fuller Ave.	94%	-	6%
8. I-196 @ Chicago Dr.	95%	2%	3%

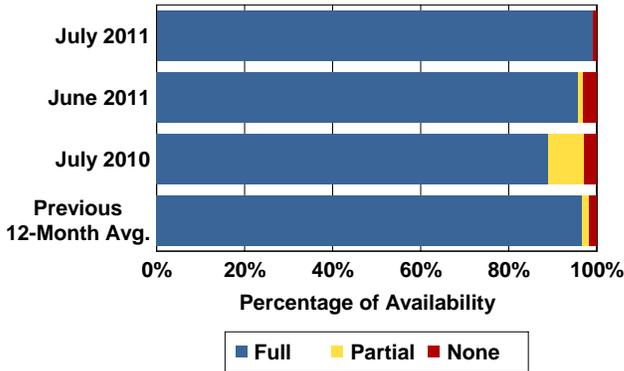
## Overall Detector Availability



## Individual Detector Availability

Vehicle Detectors Below 95% Availability			
Location	Full	Partial	None
1. 114N - I-196 @ Monroe	-	-	100%
2. 114S - I-196 EB @ Ottawa	-	-	100%
3. 119 -	-	-	100%
4. 120 - I-196 E of Fuller	-	-	100%
5. 124 - I-196 @ I-96 Merge	-	-	100%
6. 125 - I-96 @ E. Beltline	-	-	100%
7. 201 - US-131 S of 36th	-	-	100%
8. 204 - US-131 S of 28th	-	-	100%
9. 205 - US-131 N of 28th	-	-	100%
10. 220 - W I-196 to N US-131	-	-	100%
11. 227 - US-131 @ I-96 WB	-	-	100%

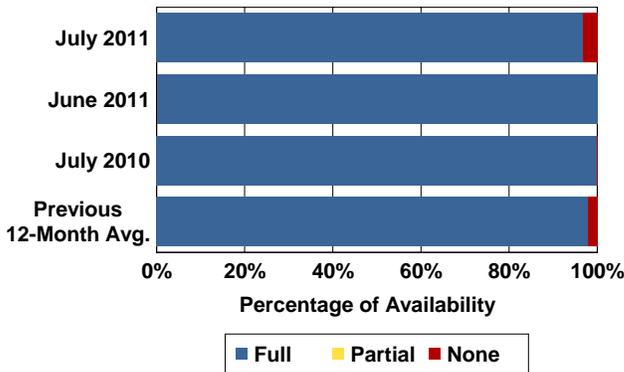
## Overall DMS Availability



## Individual DMS Availability

DMS Below 95% Availability			
Location	Full	Partial	None
1. I-96 WB @ M-21 (Fulton St.)	94%	-	6%
2. I-196 WB @ Plymouth Ave.	95%	-	5%

## Overall VSS Availability



## Individual VSS Availability

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



# Grand Rapids Area Construction Map - August 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**

- US-131, I-196 to Ann St lighting upgrades
- Nightly and weekend lane closures
- DMS used: I-96 @ Fruit Ridge, US-131 @ Ann St, US-131 @ West River

**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

**MDOT**

- I-196, Market Ave to Lane Ave concrete pavement repair
- Nightly and weekend lane closures
- DMS used: EB I-196 @ Chicago Dr, WB I-96 @ Plymouth Ave, SB US-131 @ Ann St

**City of Kentwood**

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

**MDOT**

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

**MDOT**

- Burton St over US-131 deck 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

