

# 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 2012



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

## In the Spotlight



Construction coordination and incident management were high priority tasks for West Michigan Transportation Operations Center (WMTOC) operators during June. Two adjacent work zones on US-131 near Franklin Street transitioned to their respective second phases of construction, requiring a center-lane closure during the day and double-lane closures during nights and weekends. WMTOC and Statewide TOC operators implemented a construction message plan with MDOT construction staff and the Grand Rapids Police and Fire Dispatch Center to inform motorists of the change in traffic restrictions via dynamic message signs (DMS).

Crash hot spots were noted by operators on US-131 near the Leonard Street and Franklin Street interchanges, both inside and adjacent to the US-131 work zone. Four crashes were noted by operators near Leonard Street on southbound US-131 during the morning, consistent with the peak traffic volumes for the southbound direction. Seven crashes were noted by operators near Franklin Street, with two crashes occurring on southbound US-131 during the morning and four crashes occurring on northbound US-131 during the afternoon. The number of crashes in these areas is consistent with the average number of crashes noted by operators, but the impact to traffic is greater than average because of the lane closures associated with the US-131 work zone. Operators diligently monitor the work zone via traffic cameras and inform motorists and other stakeholders via e-mail and DMS when incidents occur.

Compiled by:  
**URS**

# WMTOC Control Room

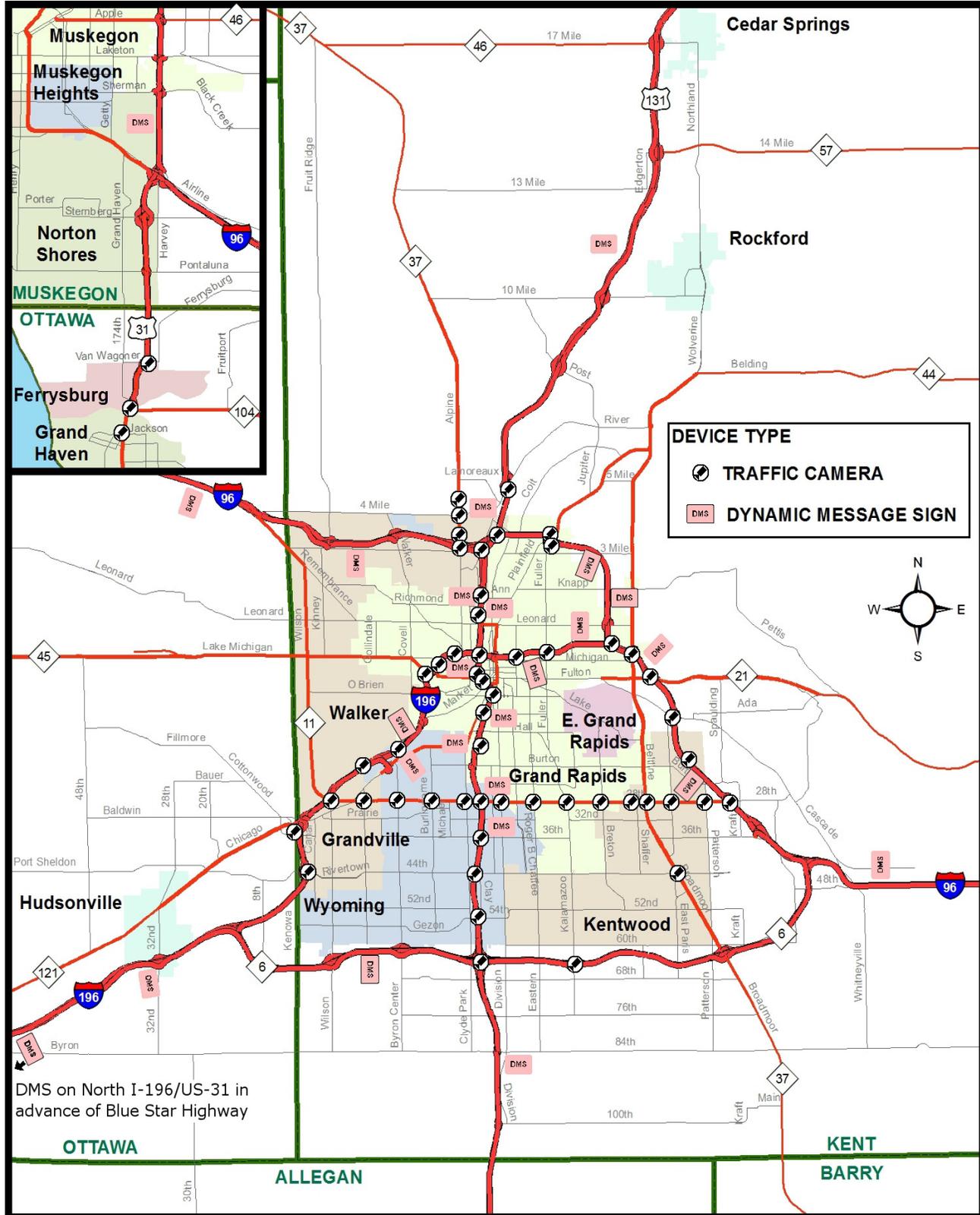
## Hours of Operation

Days	Hours
Monday – Thursday	6 a.m. – 8 p.m.
Friday	6 a.m. – 9 p.m.
Saturday – Sunday	Noon – 8 p.m.
Special Events and Holidays	As needed

## Contact Information

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

## ITS Device Locations and Coverage Area



DMS on North I-196/US-31 in advance of Blue Star Highway

# Summary

## Data Key

## June 2012

### WMTOC Communications Activity



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

### Total Communication

**Calls: 280**  
**E-mails: 296**

### 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 96.2%**

### 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

**9**

### 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: 97%**  
**MVDS: 84%**  
**DMS: 86%**  
**VSS: 100%**

#### PLEASE NOTE:

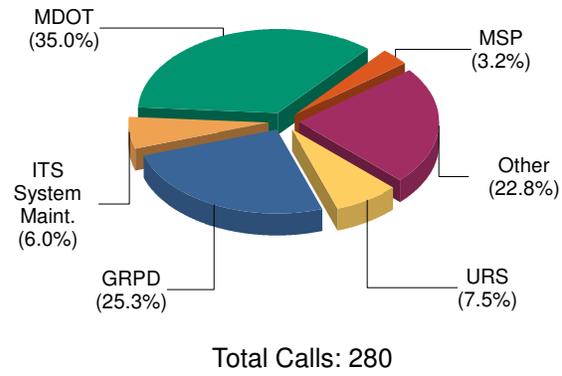
The following report is limited to data collected within the ITS device coverage area as seen on previous page.

## Calls and E-mails by Type

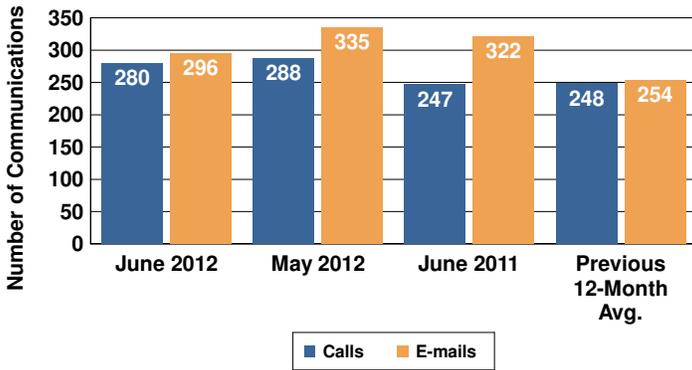


Agency	Calls			E-mails		
	In	Out	Total	In	Out	Total
City of Grand Rapids	0	0	0	15	0	15
Grand Rapids Police Department	4	67	71	0	0	0
ITS System Maintenance	8	9	17	29	0	29
Kent County Road Commission	2	7	9	0	0	0
Kent County Sheriff	0	0	0	0	0	0
Listserv (Traffic Notifications)	0	0	0	42	26	68
MDOT, Construction	2	6	8	49	0	49
MDOT, Maintenance	4	11	15	0	0	0
MDOT, Other	1	2	3	10	7	17
MDOT, Traffic/ITS	6	66	72	28	2	30
Media	0	0	0	1	1	2
Michigan State Police	2	7	9	0	0	0
Other	35	20	55	37	2	39
URS Corporation	11	10	21	8	1	9
Weather	0	0	0	38	0	38
<b>Month Total</b>	<b>75</b>	<b>205</b>	<b>280</b>	<b>257</b>	<b>39</b>	<b>296</b>

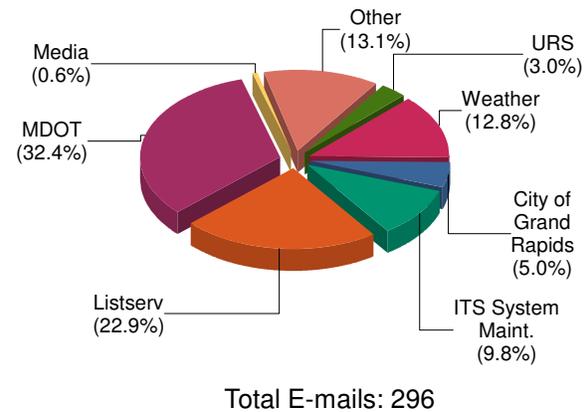
## Calls by Type



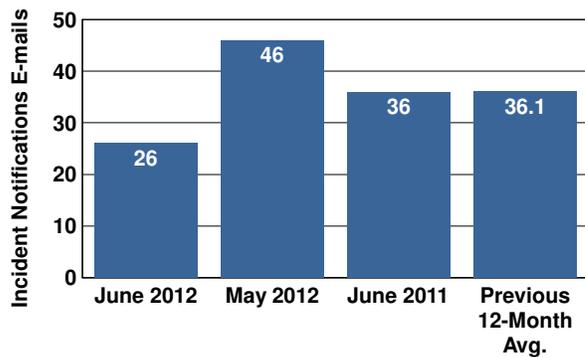
## Communication History



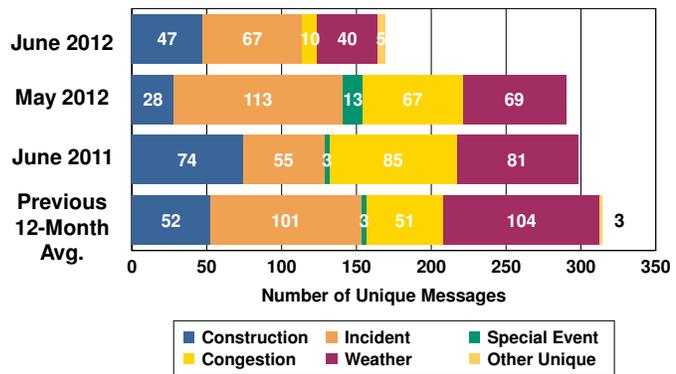
## E-mails by Type



## Incident Notification\* History



## DMS and VSS Messages by Type

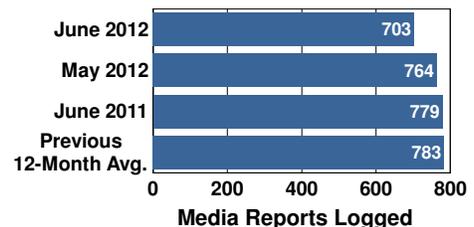


## Incident Notification\* Communication Accuracy



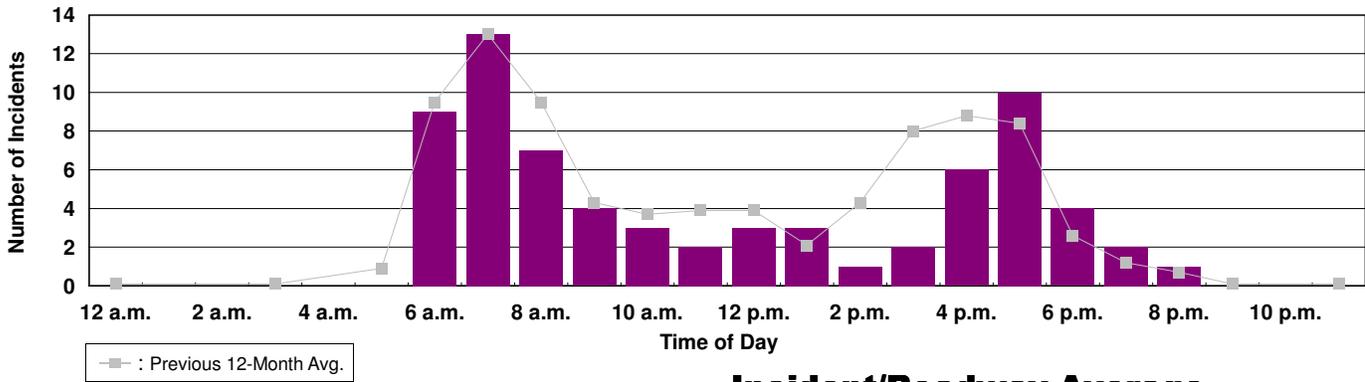
	June 2012	May 2012	June 2011	Previous 12 Months
Format Correct	100.0%	97.8%	91.7%	98.2%
Content Correct	96.2%	95.7%	100.0%	97.5%

## Media Audits

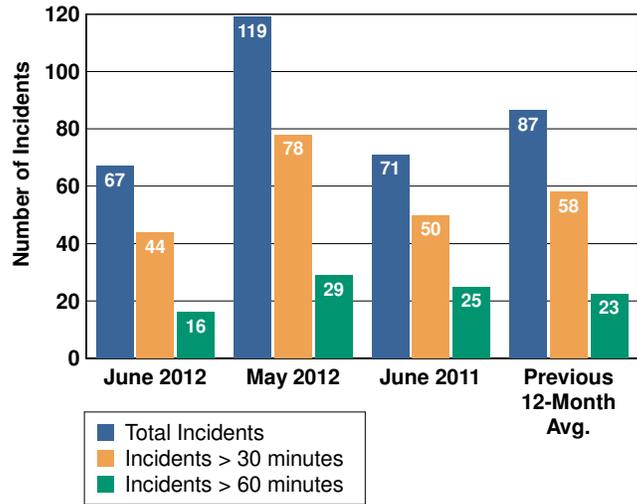


\* Incident Notification e-mails are issued for high-impact incidents with an expected duration of 15 minutes or longer. To subscribe to this list, please visit the MDOT listserv by following this link.

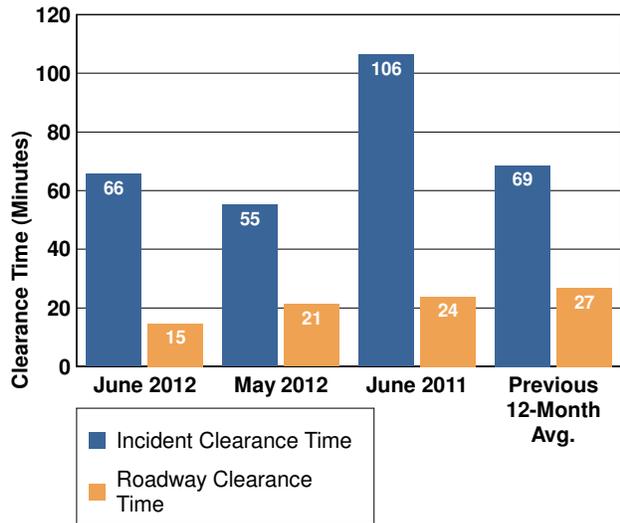
# Total of Unplanned Incidents per Weekday Hour



## Incident Clearance Details\*

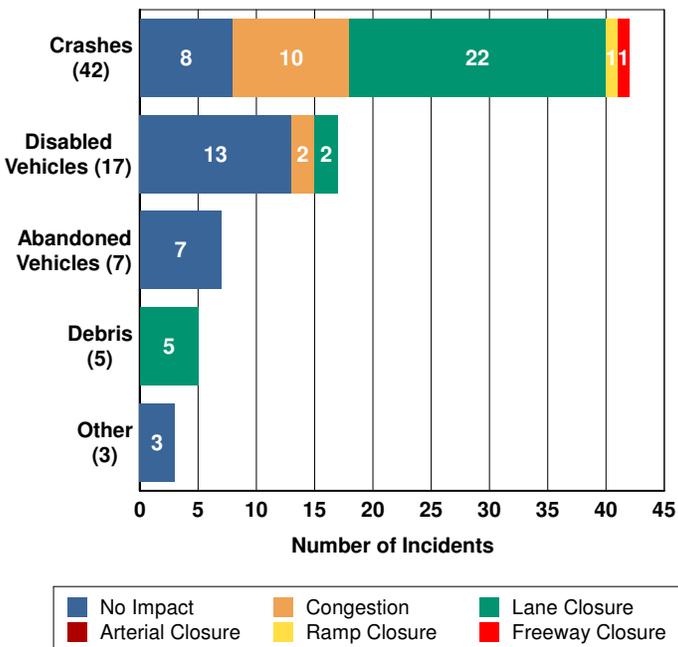


## Incident/Roadway Average Clearance Times

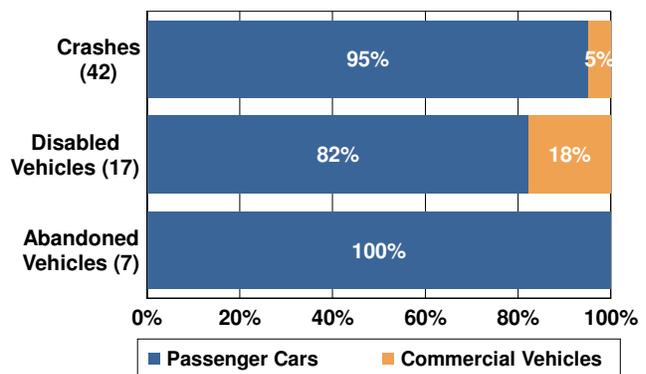


\*Incident Clearance Details excludes abandoned vehicles.

## Traffic Impacts by Type



## Vehicle Composition of Incidents\*



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

## Secondary Crashes

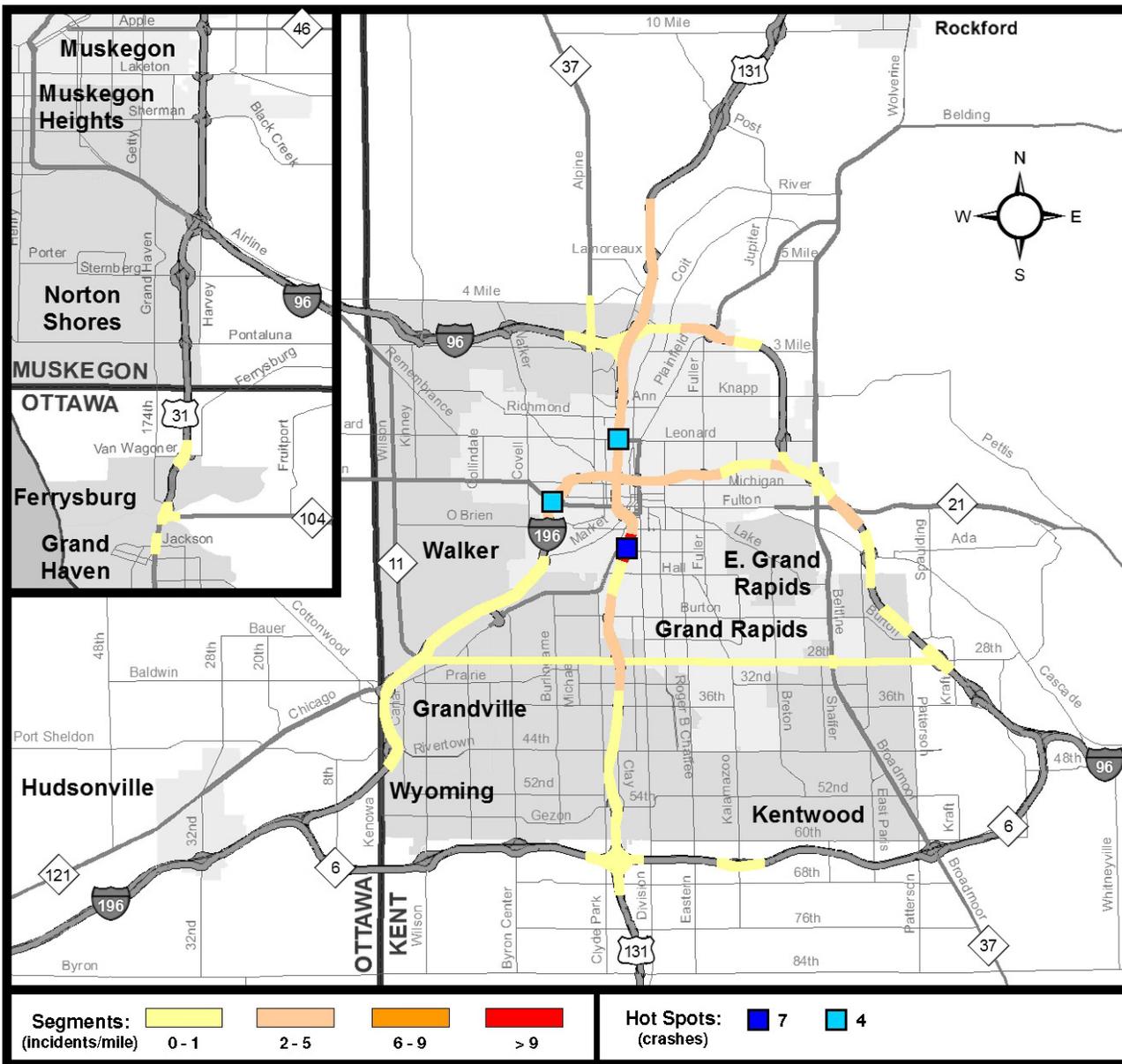


Month	Secondary Crashes	Total Crashes
June 2012	4 (10%)	42

**Note:** Data from Oct. 2010 to Sept. 2011 is not directly comparable with current data due to differences in TOC coverage area.



# Incident Density and Hot Spots Map



Incident Management



## High-impact Unplanned Incident Activity\*



Incident Impact	June 2012	May 2012	June 2011	Previous 12-Month Avg.
Lane Closure	29	52	30	39.2
Ramp Closure	1	4	4	3.1
Freeway Closure	1	7	-	2.2

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

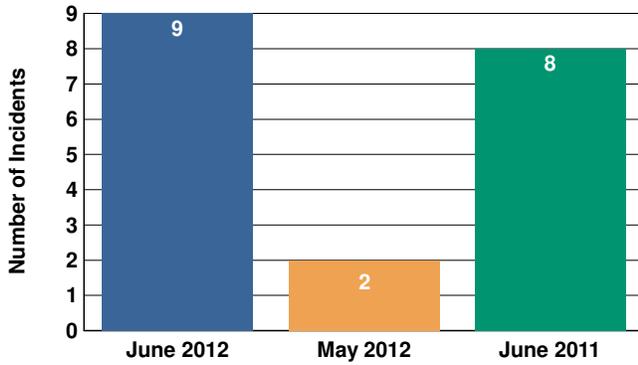
## Unplanned Incidents by Roadway within Coverage Area



Freeway/Arterial	June 2012		May 2012		June 2011		Previous 12-Month Avg.	
	Total	per mi.	Total	per mi.	Total	per mi.	Total	per mi.
I-96 (10.6 mi.)	7	0.7	15	1.4	4	0.4	12.6	1.2
I-196 (12.1 mi.)	18	1.5	39	3.2	22	1.8	23.4	1.9
US-131 (15.2 mi.)	45	3.0	62	4.1	52	3.4	51.2	3.4
US-31 (1.7 mi.)	0	0	2	1.2	-	-	0.8	0.5
M-6 (4 mi.)	0	0	1	0.2	1	0.2	0.9	0.2
M-11 (11.5 mi.)	0	0	0	0	-	-	0.5	0
<b>Month Total</b>	<b>70</b>	<b>1.3</b>	<b>119</b>	<b>2.2</b>	<b>79</b>	<b>1.4</b>	<b>89.4</b>	<b>1.6</b>

**Note:** Data from Oct. 2010 to Sept. 2011 is not directly comparable with current data due to differences in TOC coverage area.

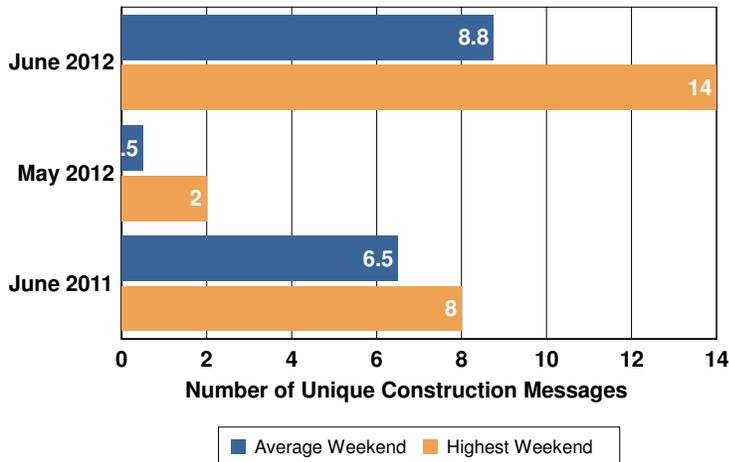
## Incidents Occurring in Work Zones



### Work Zone Incident Details:

During the month of June, nine incidents were identified by operators as being within work zones. All nine incidents were crashes that occurred within the US-131 work zone under Franklin Street on dry pavement. On northbound US-131, three crashes occurred at M-11 (28th Street), one crash occurred at Hall Street, and one crash occurred at Franklin Street. On southbound US-131, two crashes occurred at Franklin Street and one crash occurred at US-131 BR (Leonard Street).

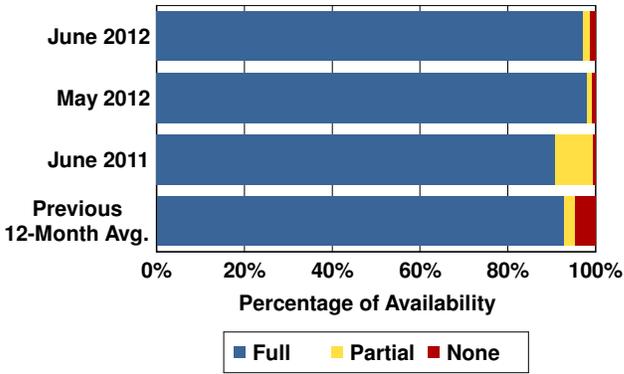
## Weekend\* Construction DMS Message Activity



\* Friday, Saturday and Sunday.



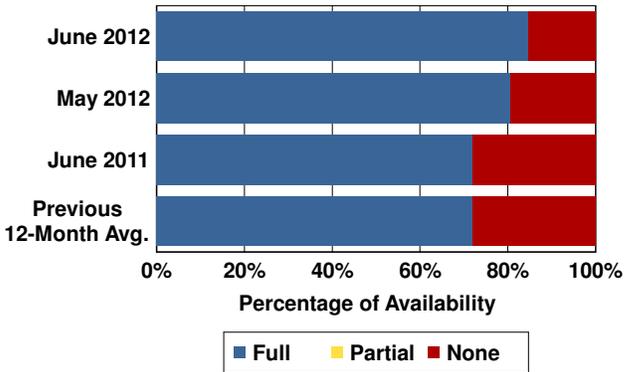
## Overall CCTV Camera Availability



## Individual CCTV Camera Availability

CCTV Cameras Below 95% Availability			
Location	Full	Partial	None
1. I-96 EB @ Plainfield Ave.	51%	49%	-
2. I-96 @ Cascade Rd.	73%	-	27%
3. I-196 @ Lake Michigan Dr.	86%	14%	-
4. I-196 @ College Ave.	86%	11%	3%
5. I-96 Conn. to US-131	93%	-	7%
6. US-131 @ 44th St.	93%	-	7%

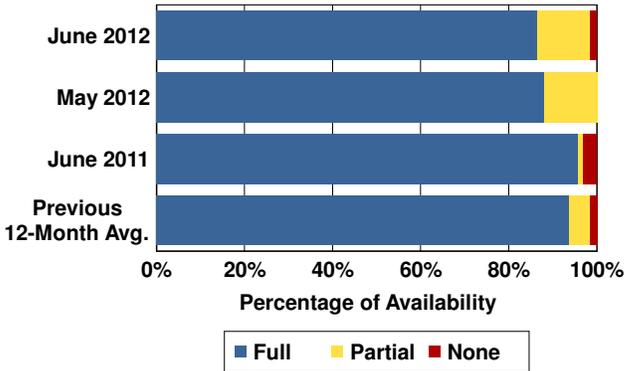
## Overall Detector Availability



## Individual Detector Availability

Vehicle Detectors Below 95% Availability			
Location	Full	Partial	None
1. 114N - I-196 WB @ Monroe	-	-	100%
2. 114S - I-196 EB @ Ottawa	-	-	100%
3. 124 - I-196 EB @ I-96 Merge	-	-	100%
4. 201 - US-131 NB S of 36th	-	-	100%
5. 204 - US-131 NB S of 28th	-	-	100%
6. 227 - US-131 NB @ I-96 WB	-	-	100%
7. 102 - I-196 @ Market	68%	-	33%
8. 226 - US-131 SB @ I-96 WB	76%	-	24%

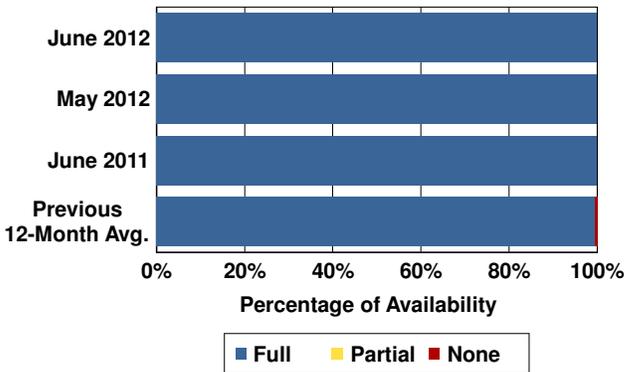
## Overall DMS Availability



## Individual DMS Availability

DMS Below 95% Availability			
Location	Full	Partial	None
1. I-96 EB @ Dean Lake Ave.	-	100%	-
2. I-196 WB @ Plymouth Ave.	-	100%	-
3. I-196 EB @ Chicago Dr. Conn.	-	100%	-
4. M-6 EB @ Ivanrest Ave.	83%	-	17%
5. I-96 EB @ Forest Hill Ave.	90%	-	10%
6. US-131 SB @ West River Dr.	90%	-	10%

## Overall VSS Availability



## Individual VSS Availability

VSS Below 95% Availability			
Location	Full	Partial	None
None.			

