

# 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)

October 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



The West Michigan Traffic Management Center (WMTMC) became the West Michigan Transportation Operations Center (WMTOC) in October. The name change better reflects the work being accomplished at the center and will be consistent with the other centers across Michigan. Michigan will soon have four TOCs across the state: the Blue Water Bridge TOC in Port Huron, the Michigan ITS Center in Detroit (to be renamed next year), the Statewide TOC in Lansing (opening next year), and the WMTOC.

WMTOC control room operators managed 107 incidents in October, resulting in more than 40 lane closures, two ramp closures, and two freeway closures, similar to September. Incident "hot spots" were noted at four consecutive interchanges on US-131 between Burton Street and Wealthy Street. The hot spots represented more than 20 percent of the unplanned incidents that occurred in October in the WMTOC coverage area and nearly 30 percent of the unplanned incidents that occurred on US-131. Approximately two-thirds of unplanned incidents on US-131 occurred on the northbound freeway direction.

As of October, "The Fix on I-196" project is approximately 80 percent complete. Current work involves the I-196 ramps at the Ottawa/Ionia Avenue interchange, for which the WMTOC continues to message on the Dynamic Message Signs (DMS). In October, the WMTOC posted messages on numerous DMS to inform motorists of nightly and weekend lane closures, including short-term complete freeway closures.

Compiled by:  
**URS**

## Control Room Hours of Operation

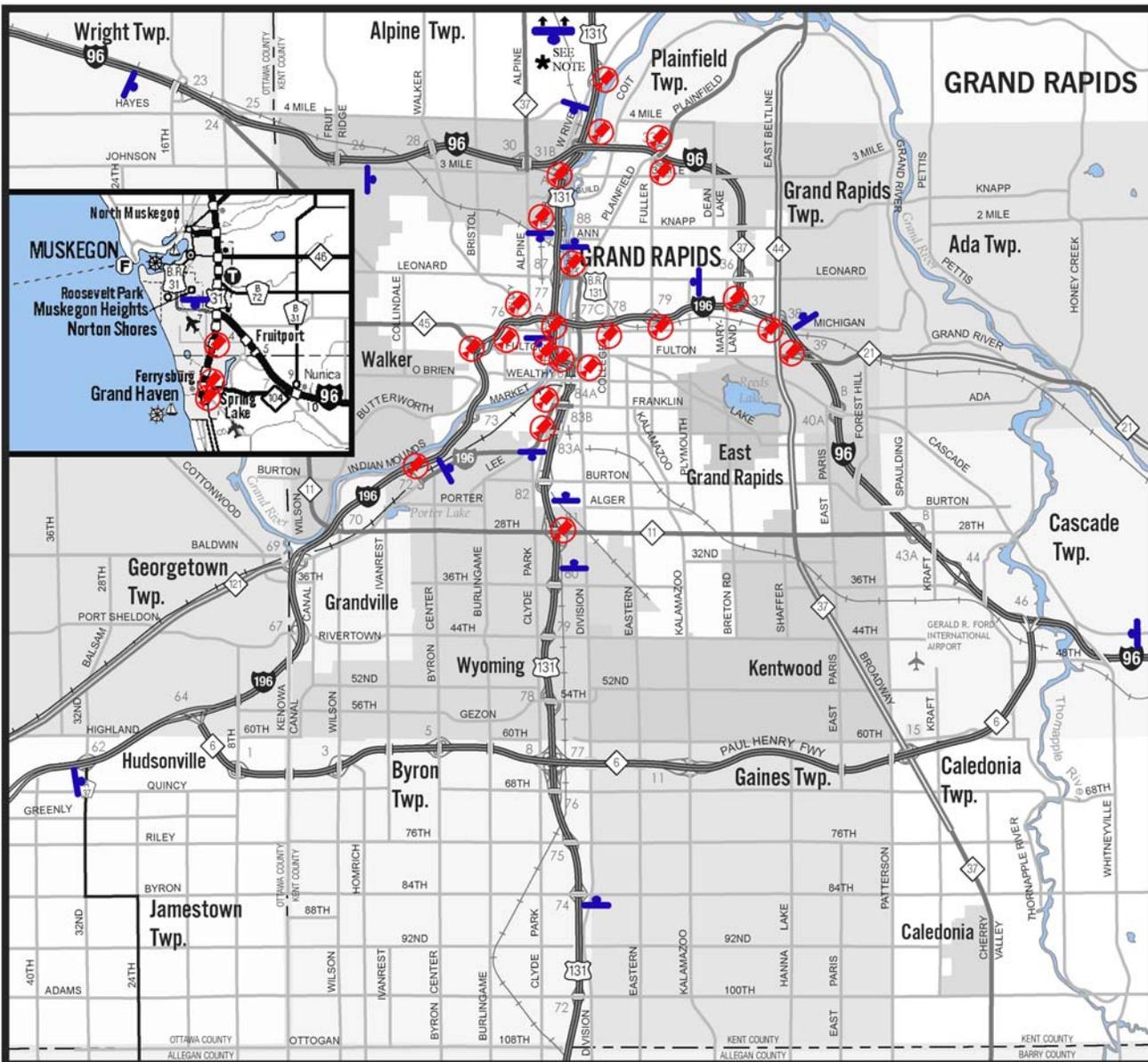
| Time Period                   | Days   | Hours           |
|-------------------------------|--|-----------------|
| October - April               | Monday - Friday  | 6 a.m. - 8 p.m. |
|                               | Saturday - Sunday  | Noon - 8 p.m.   |
| May - September               | Monday - 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  
 Cell: 616-262-6066  
 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

## October 2010

### Communications Activity



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

### Total Communication

**Calls: 278**  
**E-mails: 198**

### 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 95.8%**

### Unplanned Incidents



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

### Total Incidents

**107**

### 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

**2**

### 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

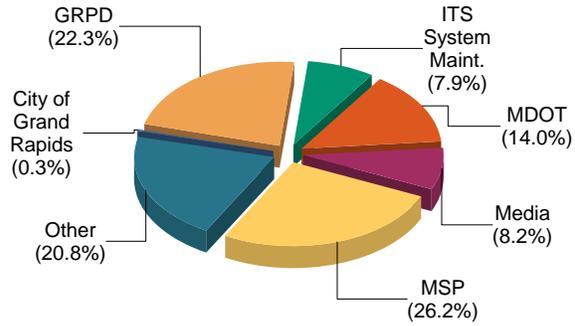
**CCTV: 93%**  
**DMS: 98%**  
**VSS: 100%**  
**MVDS: 83%**

## Calls and E-mails by Type



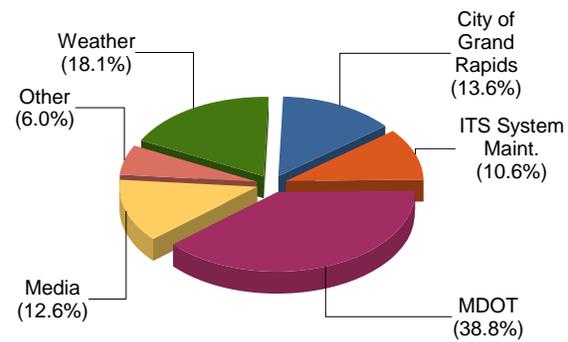
| Agency                         | Calls      |            |            | E-mails    |           |            |
|--------------------------------|------------|------------|------------|------------|-----------|------------|
|                                | In         | Out        | Total      | In         | Out       | Total      |
| City of Grand Rapids           | 1          | 0          | 1          | 27         | 0         | 27         |
| City of Wyoming                | 0          | 0          | 0          | 0          | 0         | 0          |
| Grand Rapids Police Department | 3          | 59         | 62         | 0          | 0         | 0          |
| ITS System Maintenance         | 9          | 13         | 22         | 18         | 3         | 21         |
| Kent County Road Commission    | 7          | 1          | 8          | 0          | 0         | 0          |
| Kent County Sheriff            | 0          | 0          | 0          | 0          | 0         | 0          |
| MDOT, Construction             | 14         | 13         | 27         | 37         | 0         | 37         |
| MDOT, Maintenance              | 0          | 2          | 2          | 23         | 1         | 24         |
| MDOT, Other                    | 5          | 1          | 6          | 1          | 1         | 2          |
| MDOT, Traffic/ITS              | 2          | 2          | 4          | 9          | 5         | 14         |
| Media                          | 22         | 1          | 23         | 0          | 25        | 25         |
| Michigan State Police          | 11         | 62         | 73         | 0          | 0         | 0          |
| Other                          | 35         | 15         | 50         | 10         | 2         | 12         |
| Weather                        | 0          | 0          | 0          | 36         | 0         | 36         |
| <b>Month Total</b>             | <b>109</b> | <b>169</b> | <b>278</b> | <b>161</b> | <b>37</b> | <b>198</b> |

## Calls by Type



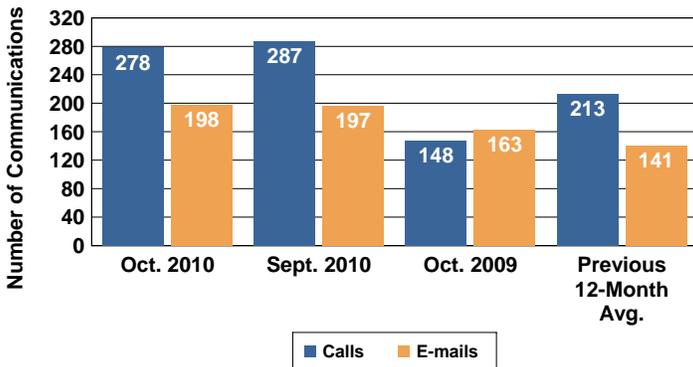
Total Calls: 278

## E-mails by Type

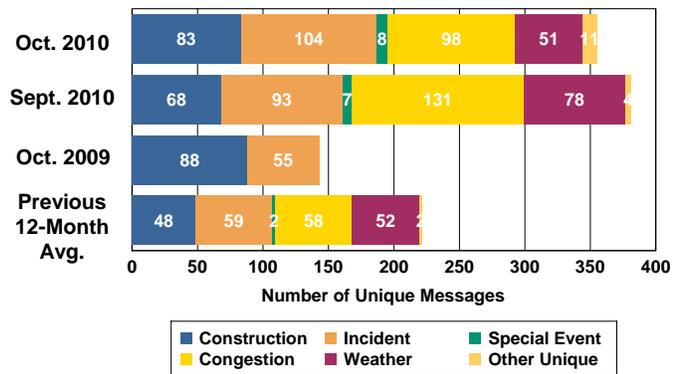


Total E-mails: 198

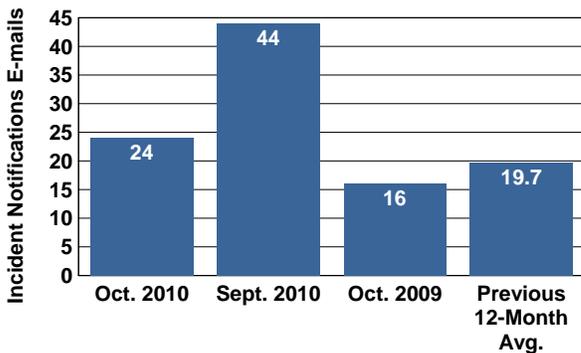
## Communication History



## DMS and VSS Messages by Type



## Incident Notification\* History



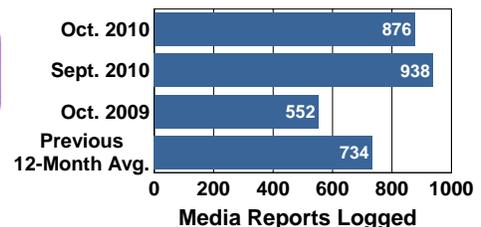
## Incident Notification\* Communication Accuracy



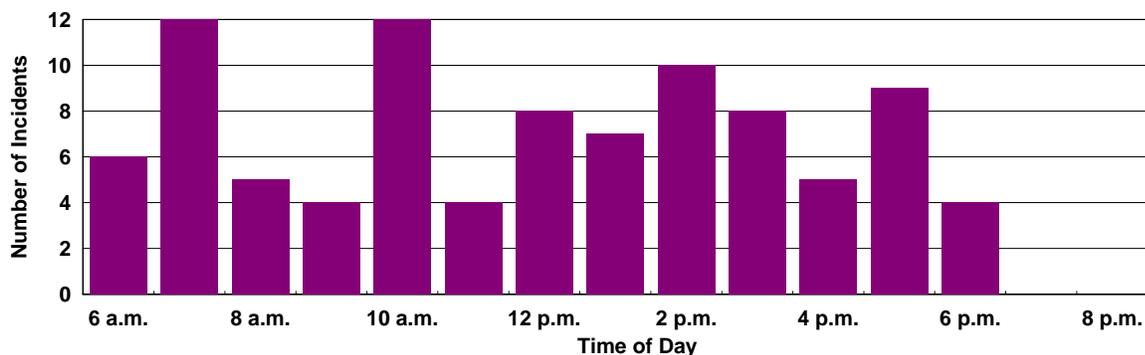
|                 | Oct. 2010 | Sept. 2010 | Oct. 2009 | Previous 12 Months |
|-----------------|-----------|------------|-----------|--------------------|
| Format Correct  | 100.0%    | 100.0%     | 93.8%     | 97.5%              |
| Content Correct | 95.8%     | 97.7%      | 100.0%    | 94.1%              |

\*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).

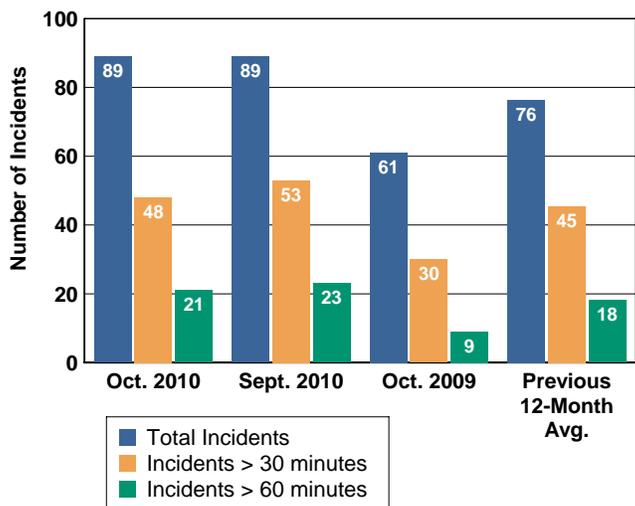
## Media Audits



## Total of Unplanned Incidents per Weekday Hour

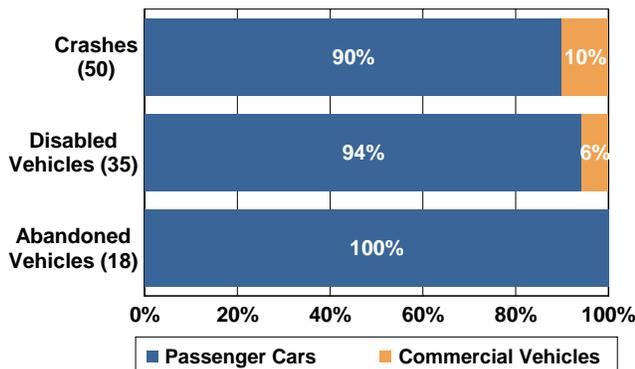


## Incident Duration History\*



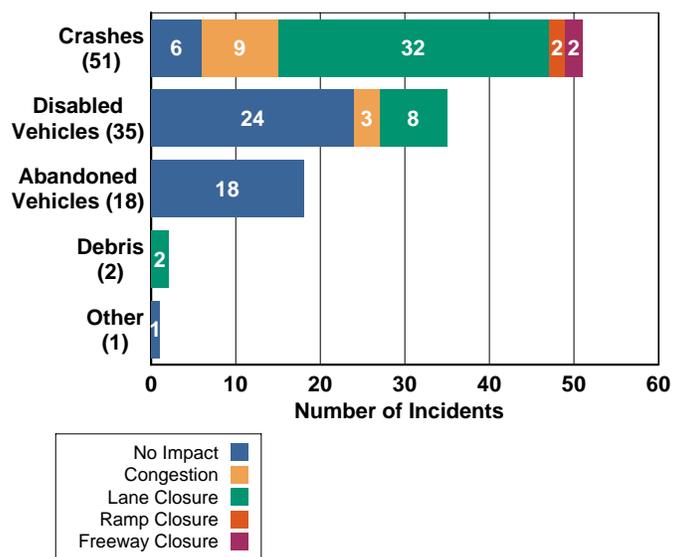
\*Incident Duration History excludes abandoned vehicles.

## Vehicle Composition of Incidents\*

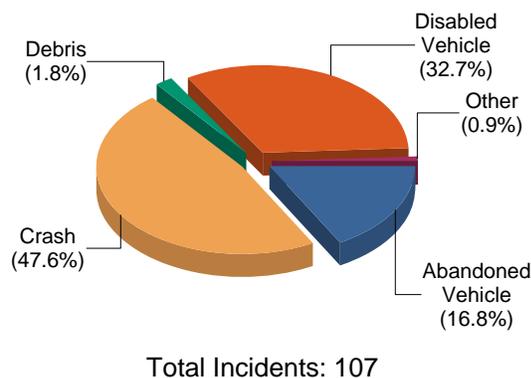


\*Vehicle Composition of Incidents excludes incidents where vehicle types were not identified.

## Traffic Impacts by Type



## Incident Managed by Type



## Most Utilized DMS\*

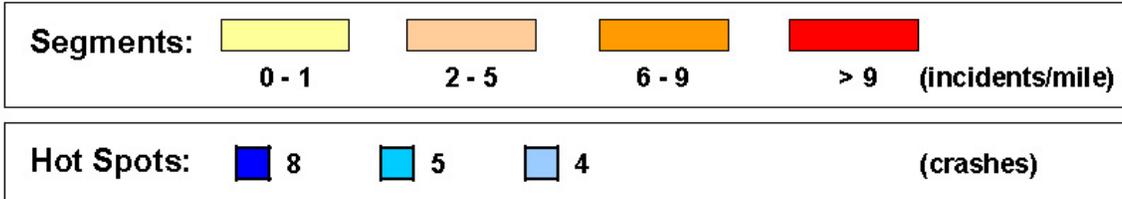
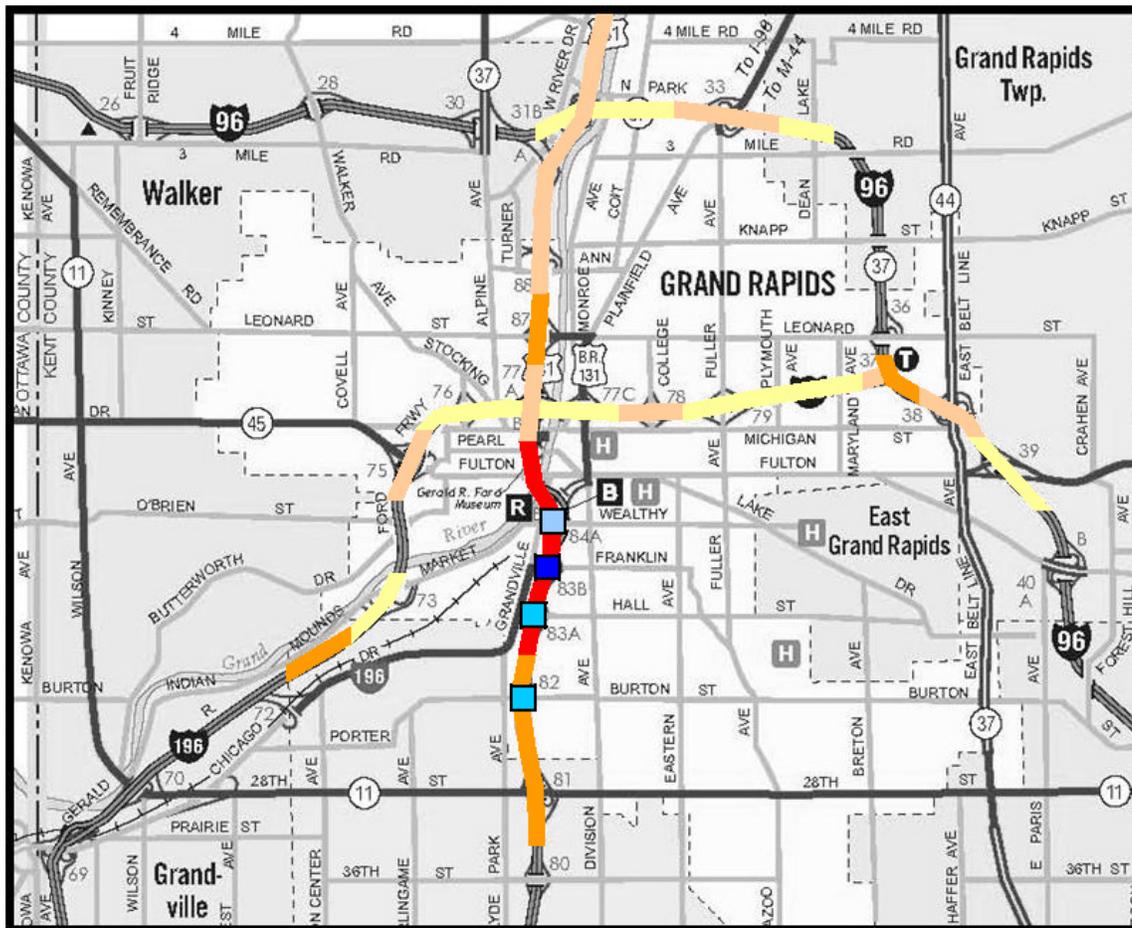


1. US-131 NB @ 28th St. (68)
2. US-131 NB @ 36th St. (66)
3. I-196 EB @ Chicago Dr. (31)

\*Number of unique event messages.



# Incident Density and Hot Spots Map



Incident Management



## High-impact Unplanned Incident Activity\*



| Incident Impact | Oct. 2010 | Sept. 2010 | Oct. 2009 | Previous 12-Month Avg. |
|-----------------|-----------|------------|-----------|------------------------|
| Lane Closure    | 42        | 43         | 27        | 23.2                   |
| Ramp Closure    | 2         | 4          | 1         | 2.8                    |
| Freeway Closure | 2         | 2          | 2         | 1.8                    |

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

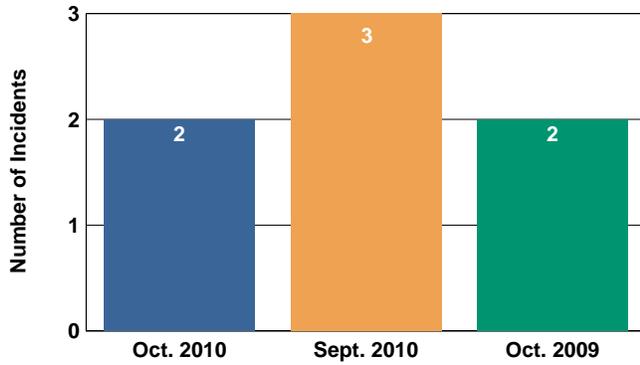
## Unplanned Incidents by Roadway



| Freeway            | Oct. 2010 |            | Sept. 2010 |            | Oct. 2009 |            | Previous 12-Month Avg. |            |
|--------------------|-----------|------------|------------|------------|-----------|------------|------------------------|------------|
|                    | Total     | per mi.    | Total      | per mi.    | Total     | per mi.    | Total                  | per mi.    |
| I-96 (4.5 mi.)*    | 13        | 2.9        | 14         | 3.1        | 3         | 0.7        | 7.7                    | 1.7        |
| I-196 (8.5 mi.)*   | 12        | 1.4        | 17         | 2.0        | 19        | 2.2        | 17.8                   | 2.1        |
| US-131 (11 mi.)*   | 74        | 6.7        | 73         | 6.6        | 36        | 3.3        | 56.4                   | 5.1        |
| <b>Month Total</b> | <b>99</b> | <b>4.1</b> | <b>104</b> | <b>4.3</b> | <b>58</b> | <b>2.4</b> | <b>81.9</b>            | <b>3.4</b> |

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

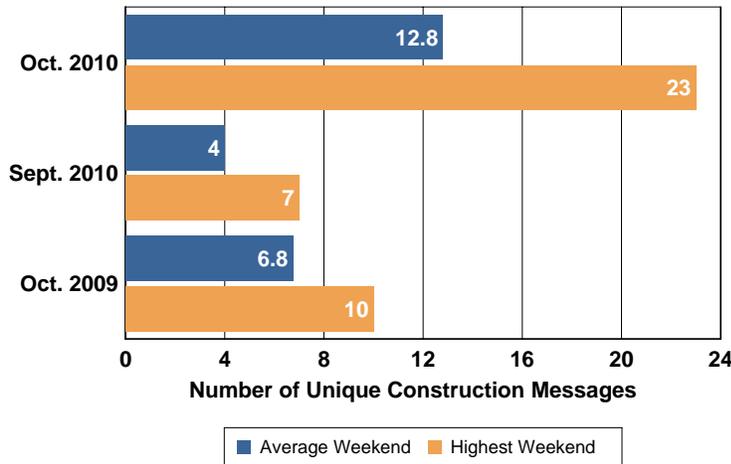
## Incidents Occurring in Work Zones



### Work Zone Incident Details:

During the month of October, there were two incidents identified by operators as being within work zones. The first incident was a crash that occurred within "The Fix on I-196" work zone. On Oct. 2, a multiple passenger vehicle crash occurred on westbound I-196 at the Coit Avenue overpass. The freeway was closed as a result for one hour followed by a 20-minute left-shoulder closure. The second incident occurred in a cable guardrail work zone on eastbound I-96 near Plainfield Avenue. On Oct. 18, a passenger vehicle blocked the left shoulder for 30 minutes, resulting in backups.

## Weekend\* Construction DMS Message Activity

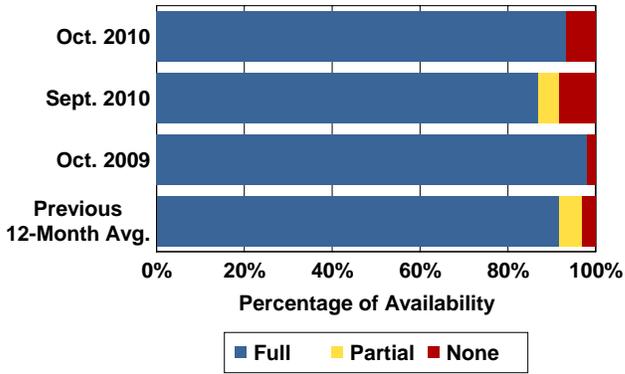


\* Friday, Saturday and Sunday.

Construction Activity



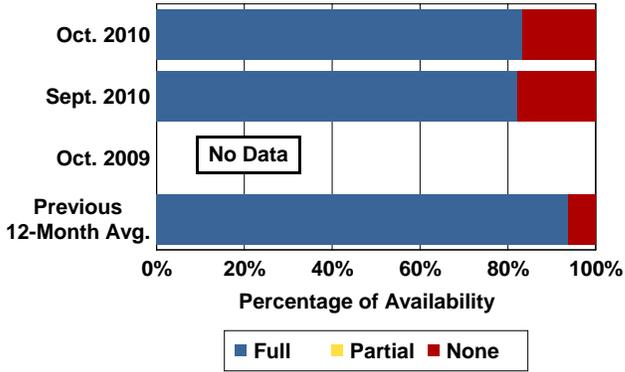
## Overall CCTV Camera Availability



## Individual CCTV Camera Availability

| CCTV Cameras Below 95% Availability |      |         |      |
|-------------------------------------|------|---------|------|
| Location                            | Full | Partial | None |
| 1. I-96 @ M-21 (Fulton St.)         | 7%   | -       | 93%  |
| 2. I-96 Conn. to US-131             | 60%  | -       | 40%  |
| 3. I-96 @ I-196                     | 82%  | -       | 18%  |

## Overall Detector Availability

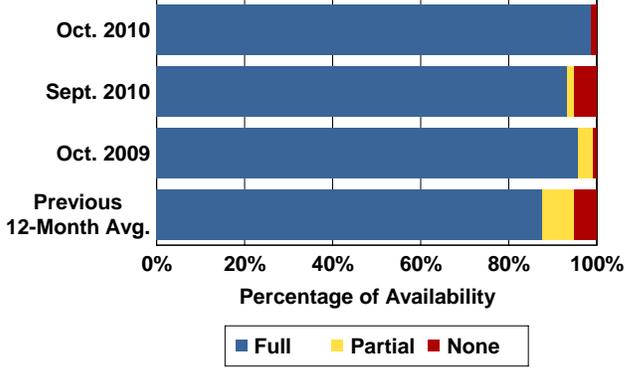


## Individual Detector Availability

| Vehicle Detectors Below 95% Availability |      |         |       |
|--|------|---------|-------|
| Location                                 | Full | Partial | None  |
| 1. DS 114N                               | -    | -       | 100%  |
| 2. DS 114S                               | -    | -       | 100%  |
| 3. DS 115                                | -    | -       | 100%* |
| 4. DS 116                                | -    | -       | 100%* |
| 5. DS 119                                | -    | -       | 100%* |
| 6. DS 205                                | -    | -       | 100%  |
| 7. DS 105                                | 85%  | -       | 15%   |
| 8. DS 120                                | 85%  | -       | 15%   |
| 9. DS 123                                | 85%  | -       | 15%   |
| 10. DS 124                               | 85%  | -       | 15%   |
| 11. DS 125                               | 85%  | -       | 15%   |

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

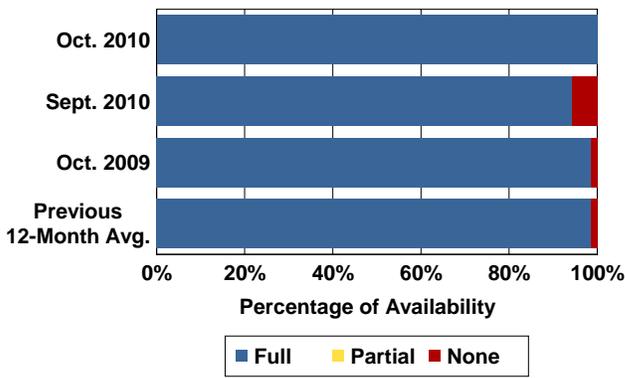
## Overall DMS Availability



## Individual DMS Availability

| DMS Below 95% Availability |      |         |      |
|----------------------------|------|---------|------|
| Location                   | Full | Partial | None |
| 1. US-31 @ Broadway Ave.   | 87%  | -       | 13%  |
| 2. US-131 SB @ Rest Area   | 93%  | -       | 7%   |

## Overall VSS Availability



## Individual VSS Availability

| VSS Below 95% Availability |      |         |      |
|----------------------------|------|---------|------|
| Location                   | Full | Partial | None |
| None.                      |      |         |      |

