

# West Michigan Traffic Management Center

Serving Motorists on West Michigan Freeways

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

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September 2010



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

## In the Spotlight



In September, the WMTMC began posting travel-time messages on the five outermost Dynamic Message Signs (DMS) leading into Grand Rapids. The DMS that are providing travel times in place of the standard safety messages are typically located before major interchanges, allowing motorists to make routing decisions based on the posted travel times. The travel times are updated on the DMS every five minutes between 5 a.m. and 11 p.m.

WMTMC control room operators managed a much higher number of incidents during September, compared to a typical month. The number of lane closures in September (43) was more than twice the number in August (18) and the previous 12-month average (21). Crash reports were obtained for several of the incidents on US-131 and most all described rear-end crashes that were associated with slowing or stop-and-go traffic. All of the crashes that were reviewed occurred during the morning or afternoon peak period.

US-131 had the highest rate of unplanned incidents during September (6.6 per mile), approximately twice as many per mile as I-96 (3.1 per mile). The US-131 unplanned incident rate was approximately 40 percent greater than the 12-month average, and the I-96 rate was approximately 120 percent greater than the 12-month average. The I-196 unplanned incident rate was the same as the 12-month average.

Compiled by:  
**URS**

## Control Room Hours of Operation

Time Period	Days	Hours
October - April	Monday - Friday	6 a.m. - 8 p.m.
	Saturday - Sunday	As needed
May - September	Monday - Thursday	6 a.m. - 8 p.m.
	Friday	6 a.m. - 9 p.m.
	Saturday	Noon - 6 p.m.
	Sunday	4 - 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

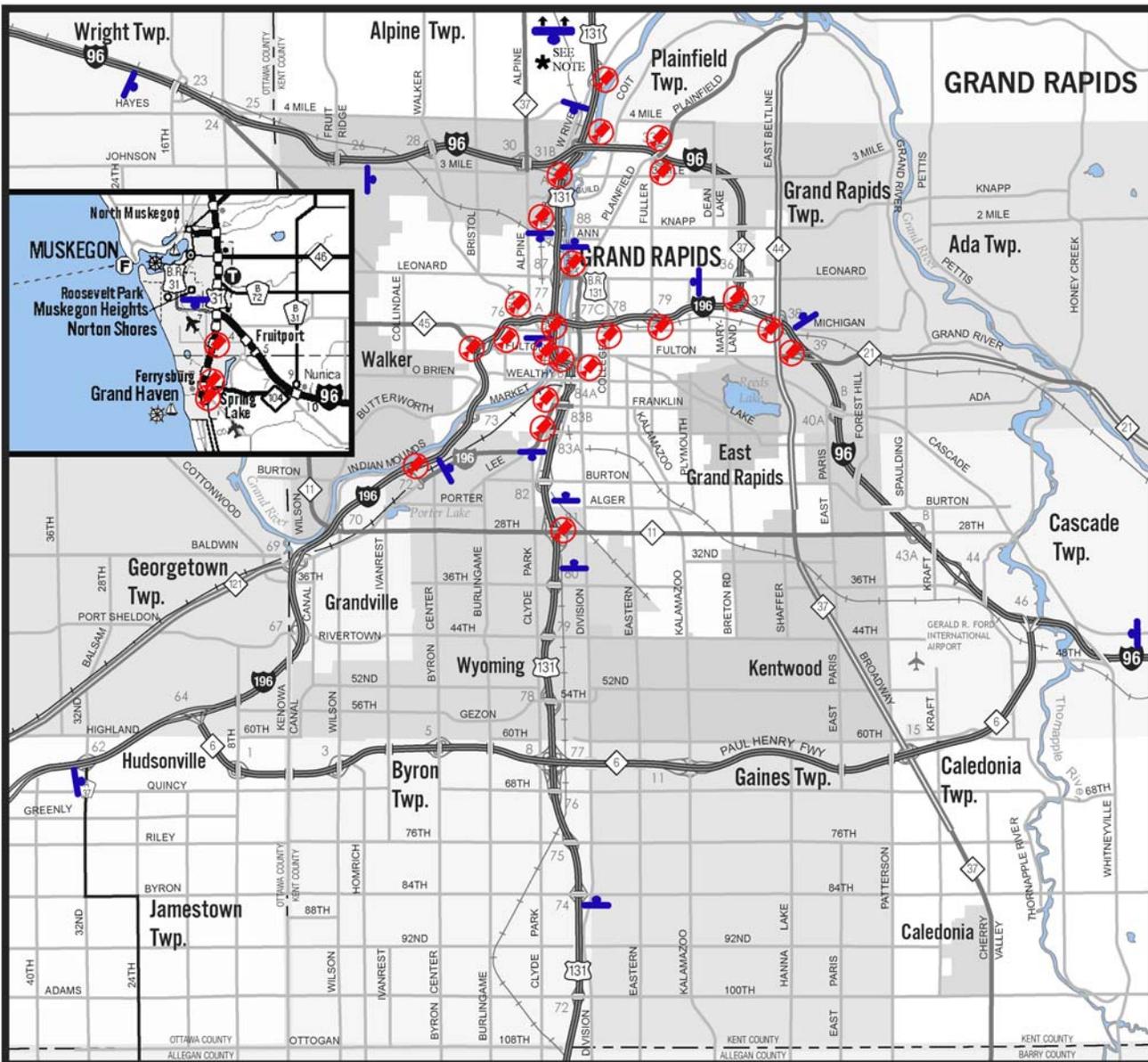
## Control Room Contact Information

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 the hours of operation for the control room.

## 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

## September 2010

### Communications Activity



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

### Total Communication

**Calls: 287**  
**E-mails: 197**

### 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 97.7%**

### Unplanned Incidents



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

### Total Incidents

**109**

### Construction Activity



Operators maintain a list of ongoing construction projects and contacts for these projects. This activity also includes maintenance operations.

### Incidents Occurring in Construction Zones

**3**

### 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

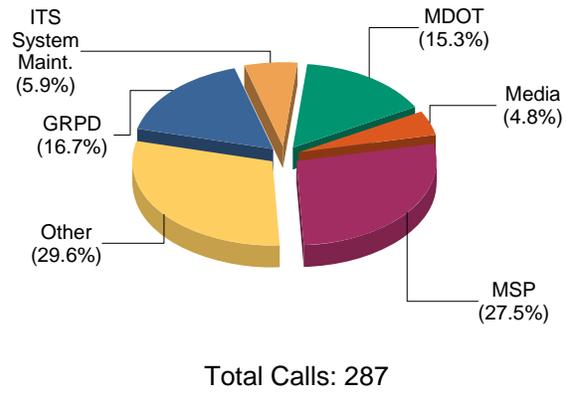
**CCTV: 86%**  
**DMS: 93%**  
**VSS: 94%**  
**MVDS: 68%**

## Calls and E-mails by Type

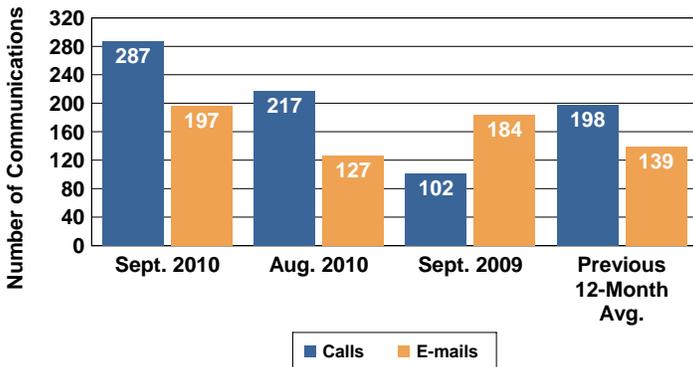


Agency	Calls			E-mails		
	In	Out	Total	In	Out	Total
City of Grand Rapids	0	0	0	26	0	26
City of Wyoming	0	0	0	0	0	0
Grand Rapids Police Department	6	42	48	0	0	0
ITS System Maintenance	13	4	17	0	0	0
Kent County Road Commission	3	8	11	0	0	0
Kent County Sheriff	0	0	0	0	0	0
MDOT, Construction	18	10	28	49	0	49
MDOT, Maintenance	0	2	2	30	1	31
MDOT, Other	4	0	4	1	0	1
MDOT, Traffic/ITS	8	2	10	6	2	8
Media	14	0	14	2	46	48
Michigan State Police	8	71	79	0	0	0
Other	54	20	74	8	0	8
Weather	0	0	0	26	0	26
<b>Month Total</b>	<b>128</b>	<b>159</b>	<b>287</b>	<b>148</b>	<b>49</b>	<b>197</b>

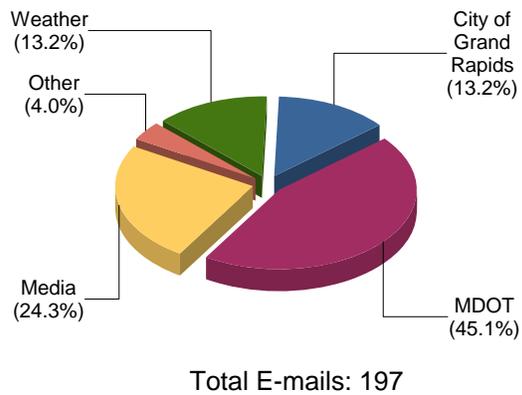
## Calls by Type



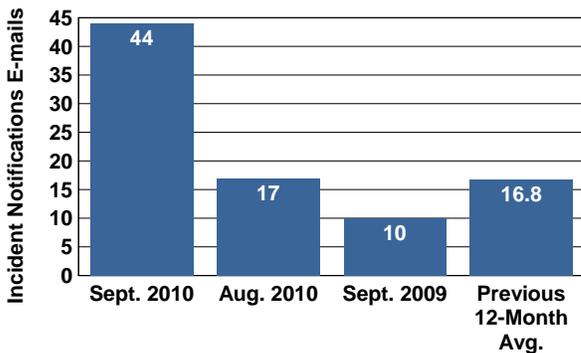
## Communication History



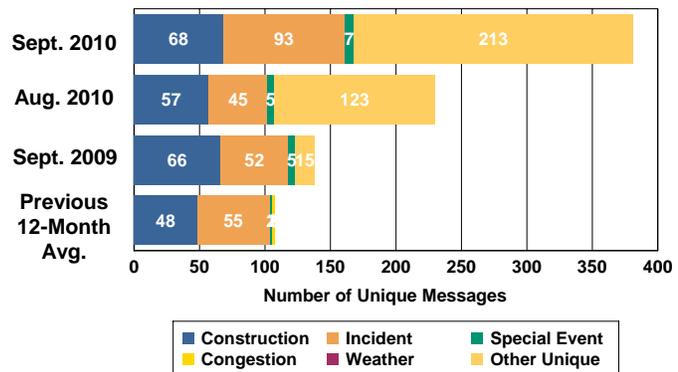
## E-mails by Type



## Incident Notification\* History



## DMS and VSS Messages by Type

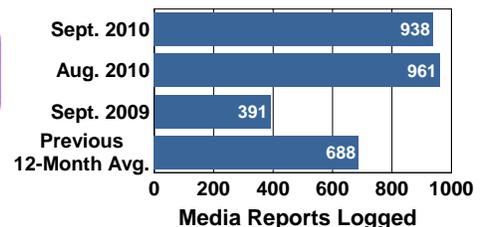


## Incident Notification\* Communication Accuracy



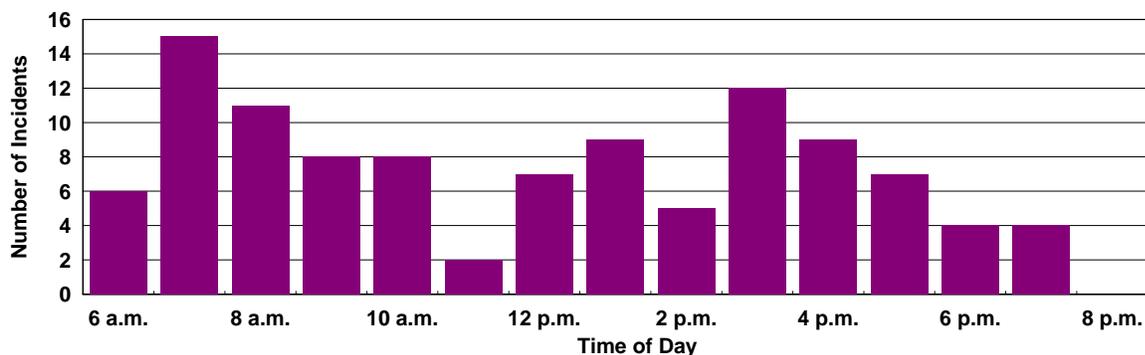
	Sept. 2010	Aug. 2010	Sept. 2009	Previous 12 Months
Format Correct	100.0%	100.0%	90.0%	96.5%
Content Correct	97.7%	94.1%	100.0%	93.6%

## Media Audits

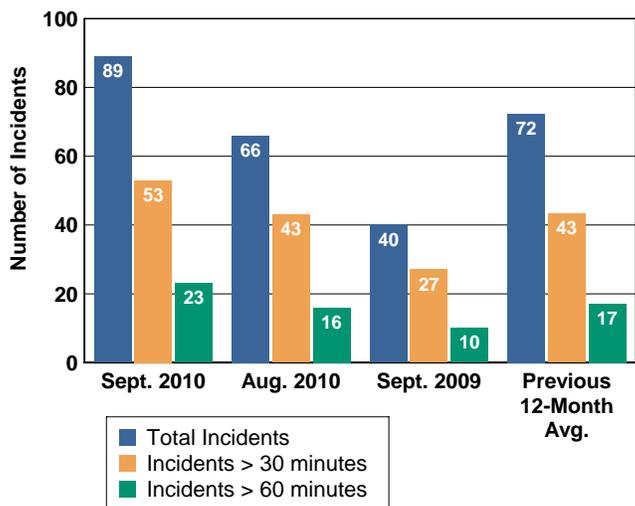


\* Incident Notification e-mails are issued for high-impact incidents with an expected duration of 15 minutes or greater. To subscribe to this list, please send an e-mail to [MDOT-GR-TRAFFOPS@michigan.gov](mailto:MDOT-GR-TRAFFOPS@michigan.gov).

## Total of Unplanned Incidents per Weekday Hour

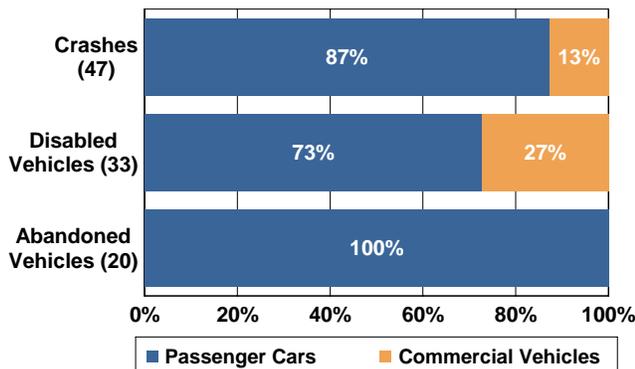


## Incident Duration History\*



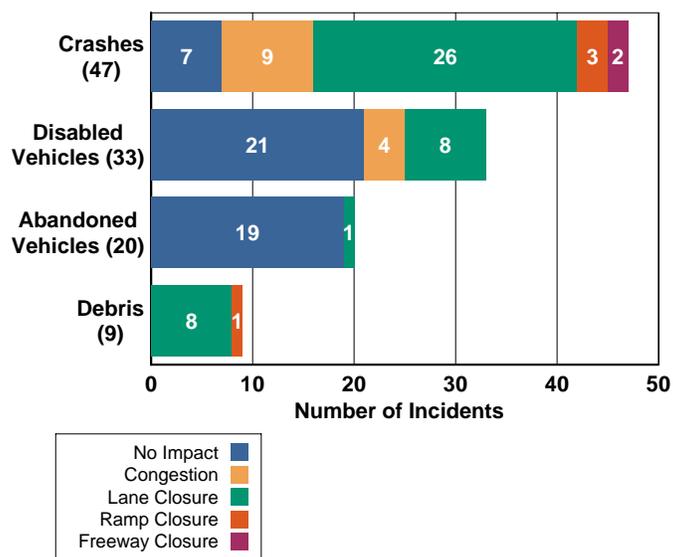
\*Incident Duration History excludes abandoned vehicles.

## Vehicle Composition of Incidents\*

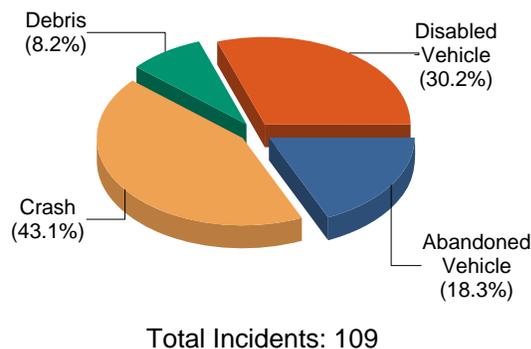


\*Vehicle Composition of Incidents excludes incidents where vehicle types were not identified.

## Traffic Impacts by Type



## Incident Managed by Type



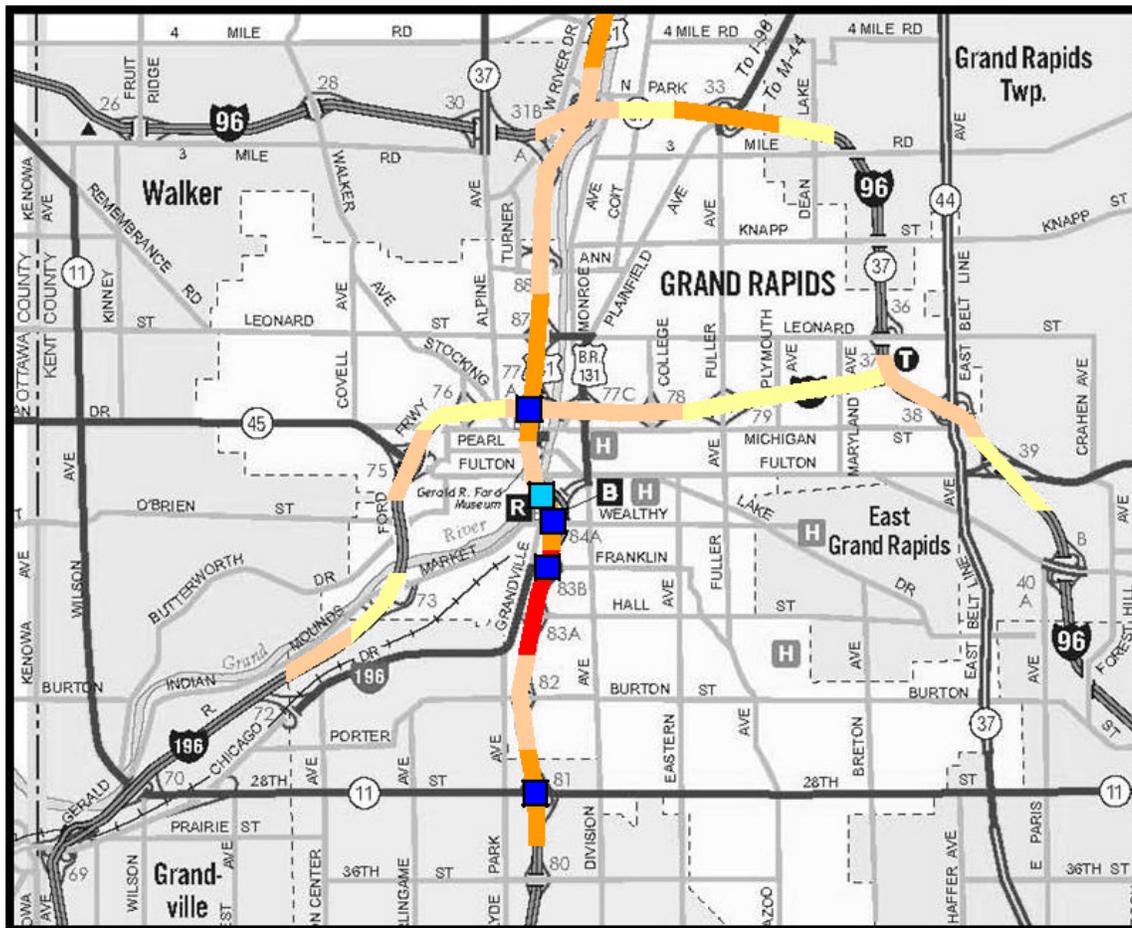
## Most Utilized DMS



1. US-131 NB @ 28th St. (38)
2. US-131 NB @ 36th St. (38)
3. US-131 NB @ Leonard St. (32)



# Incident Density and Hot Spots Map



Incident Management



**Segments:** [Color key for incident density]

**Hot Spots:** [Color key for crash counts]

## High-impact Unplanned Incident Activity\*



Incident Impact	Sept. 2010	Aug. 2010	Sept. 2009	Previous 12-Month Avg.
Lane Closure	43	18	18	21.2
Ramp Closure	4	2	-	2.4
Freeway Closure	2	3	1	1.8

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

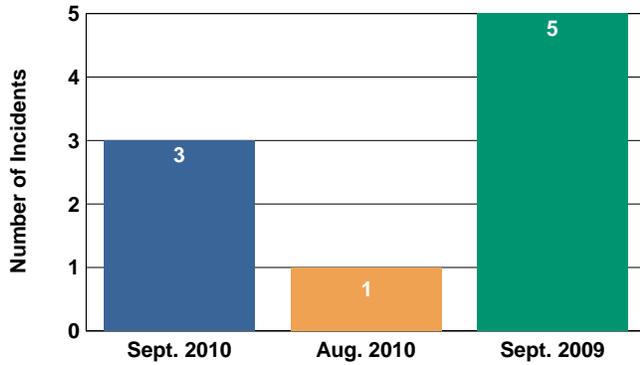
## Unplanned Incidents by Roadway



Freeway	Sept. 2010		Aug. 2010		Sept. 2009		Previous 12-Month Avg.	
	Total	per mi.	Total	per mi.	Total	per mi.	Total	per mi.
I-96 (4.5 mi.)*	14	3.1	9	2.0	-	-	6.5	1.4
I-196 (8.5 mi.)*	17	2.0	10	1.2	8	0.9	17.0	2.0
US-131 (11 mi.)*	73	6.6	64	5.8	33	3.0	53.1	4.8
<b>Month Total</b>	<b>104</b>	<b>4.3</b>	<b>83</b>	<b>3.5</b>	<b>41</b>	<b>1.7</b>	<b>76.6</b>	<b>3.2</b>

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

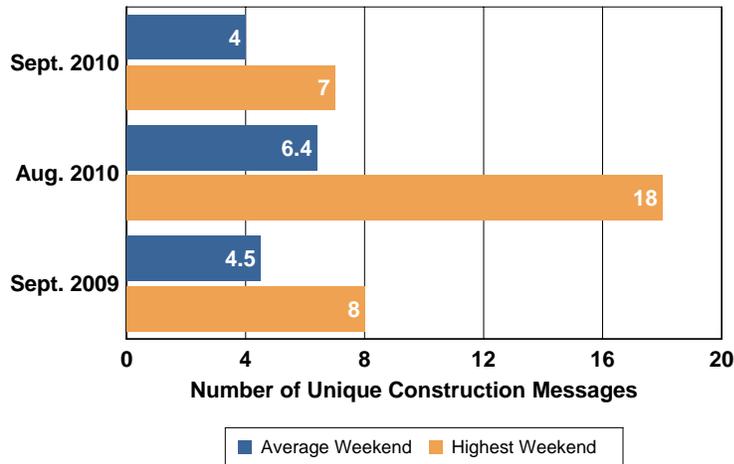
## Incidents Occurring in Construction Zones



### Construction Zone Incident Details:

During the month of September, there were three crashes that were identified by operators as being within "The Fix on I-196" work zone. On Sept. 8, a disabled passenger vehicle on eastbound I-196 at College Avenue blocked the right lane, resulting in a two-hour right-lane closure. On Sept. 15, a two-vehicle crash on westbound I-196 at Fuller Avenue occurred, resulting in a 20-minute shoulder closure. On Sept. 24, a disabled passenger vehicle on eastbound I-196 at Ottawa Avenue blocked the left lane, resulting in a 20-minute left-lane closure.

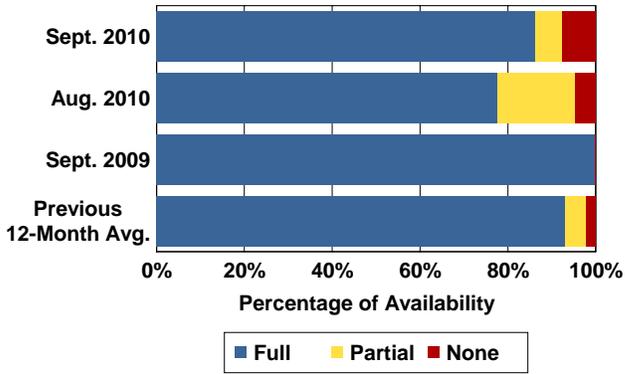
## Weekend\* Construction DMS Message Activity



\* Friday, Saturday and Sunday.



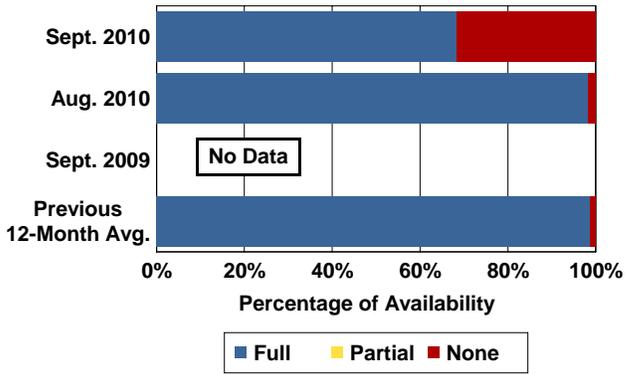
## Overall CCTV Camera Availability



## Individual CCTV Camera Availability

CCTV Cameras Below 95% Availability			
Location	Full	Partial	None
1. I-96 @ M-21 (Fulton St.)	-	-	100%
2. US-131 @ Wealthy St.	20%	63%	17%
3. I-96 Conn. to US-131	27%	46%	27%

## Overall Detector Availability

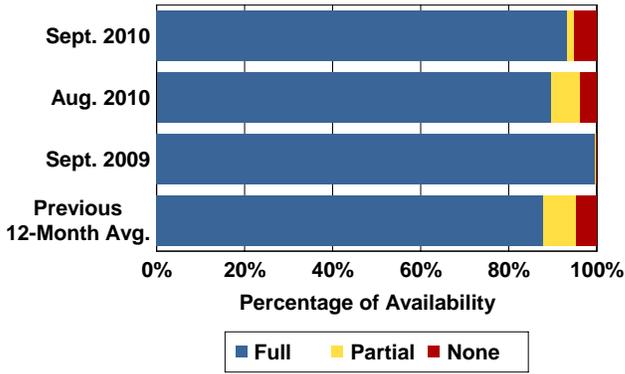


## Individual Detector Availability

Vehicle Detectors Below 95% Availability			
Location	Full	Partial	None
1. DS 105	-	-	100%
2. DS 114N	-	-	100%
3. DS 114S	-	-	100%*
4. DS 115	-	-	100%*
5. DS 116	-	-	100%*
6. DS 119	-	-	100%
7. DS 120	-	-	100%
8. DS 123	-	-	100%
9. DS 124	-	-	100%
10. DS 125	-	-	100%
11. DS 126	-	-	100%

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

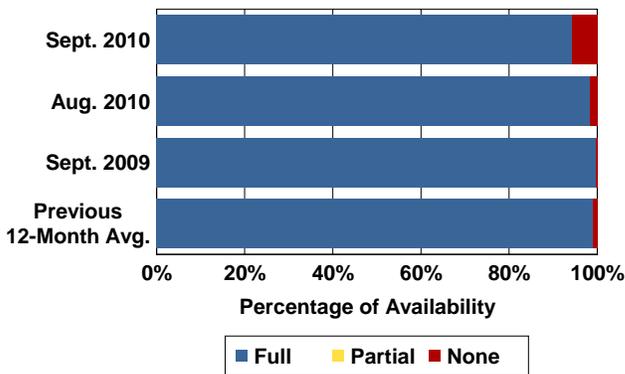
## Overall DMS Availability



## Individual DMS Availability

DMS Below 95% Availability			
Location	Full	Partial	None
1. US-131 NB @ 28th St.	63%	21%	15%
2. I-96 WB @ Quiggle Ave.	83%	-	17%
3. US-131 NB @ 36th St.	84%	-	16%
4. US-131 SB @ Hall St.	85%	-	15%
5. US-131 SB @ West River Dr.	94%	-	6%
6. US-131 SB @ Ann St.	94%	-	6%
7. US-131 NB @ Leonard St.	94%	6%	-

## Overall VSS Availability



## Individual VSS Availability

VSS Below 95% Availability			
Location	Full	Partial	None
1. Ionia NB Speed Limit	82%	-	18%

