

West Michigan Transportation Operations Center

Serving Motorists Across West Michigan

www.michigan.gov/its

www.michigan.gov/drive

August 2012



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West Michigan TOC Control Room
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In the Spotlight



Using more than 50 traffic surveillance cameras, West Michigan Transportation Operations Center (WMTOC) operators monitor more than 55 miles of Grand Rapids and Grand Haven-area freeways and arterial routes every day. With this comprehensive camera coverage, incidents are detected more quickly, first responders are contacted earlier and motorists are informed about traffic issues.

Two cameras were constructed in 2009 at the I-96 and Plainfield Avenue (multiple cameras were needed due to the unique roadway geometry), with one camera providing coverage mainly to the west of the interchange and the second camera providing coverage to the east. The cameras also provide camera coverage on Plainfield Avenue. Prior to the camera construction, WMTOC operators were unable to view incidents on I-96 from US-131 to I-196.

Four crashes were noted by WMTOC operators at I-96 and Plainfield in August. Three crashes occurred on eastbound I-96, with two of three occurring during the morning peak period, including a single-vehicle roll-over crash that blocked the right eastbound lane. The crash resulted in a traffic backup of 3.5 miles, extending beyond the current camera coverage area. WMTOC operators monitored the crash and resulting congestion with various traffic cameras along I-96 and US-131 and posted messages to several dynamic message boards to alert motorists.

Compiled by:
URS

WMTOC Control Room

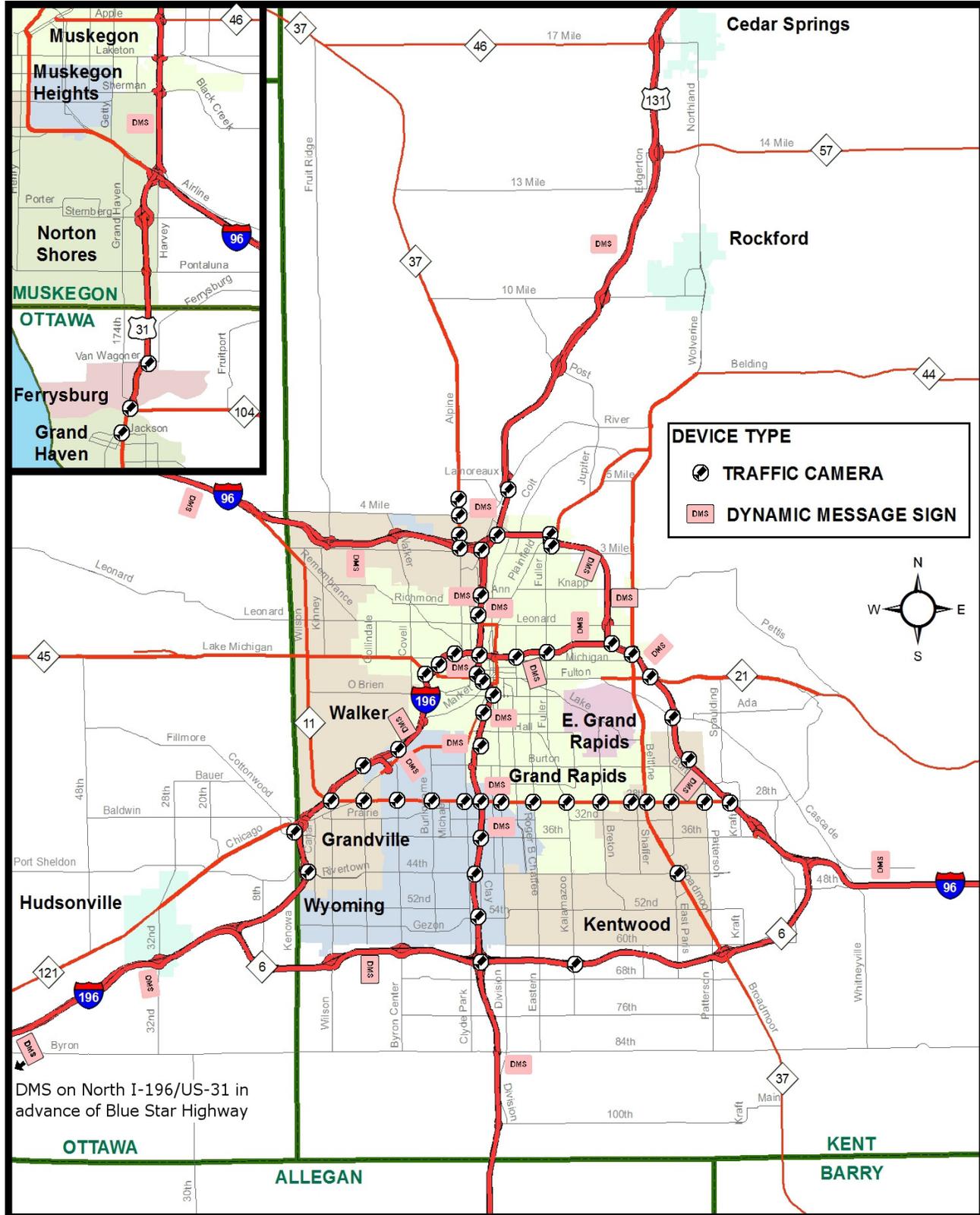
Hours of Operation

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

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ITS Device Locations and Coverage Area



Summary

Data Key

August 2012

WMTOC Communications Activity



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

Total Communication

Calls: 301
E-mails: 238

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 96.9%

Unplanned Incidents



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

Total Incidents

114

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: 96%
MVDS: 82%
DMS: 80%
VSS: 100%

PLEASE NOTE:

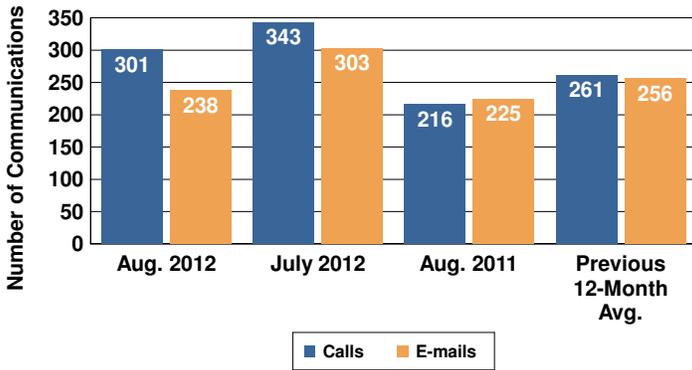
The following report is limited to data collected within the ITS device coverage area as seen on previous page.

Calls and E-mails by Type

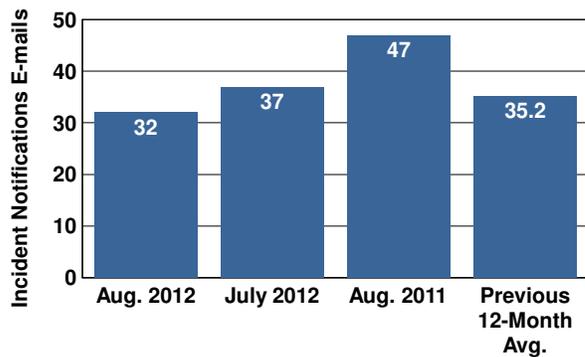


Agency	Calls			E-mails		
	In	Out	Total	In	Out	Total
City of Grand Rapids	0	0	0	24	0	24
Grand Rapids Police Department	2	70	72	0	0	0
ITS System Maintenance	12	12	24	12	1	13
Kent County Road Commission	4	5	9	0	0	0
Kent County Sheriff	0	0	0	0	0	0
Listserv (Traffic Notifications)	0	0	0	36	32	68
MDOT, Construction	4	2	6	42	0	42
MDOT, Maintenance	2	8	10	0	0	0
MDOT, Other	6	1	7	12	6	18
MDOT, Traffic/ITS	3	70	73	16	5	21
Media	3	4	7	0	0	0
Michigan State Police	0	11	11	0	0	0
Other	28	22	50	15	1	16
URS Corporation	19	13	32	4	9	13
Weather	0	0	0	23	0	23
Month Total	83	218	301	184	54	238

Communication History



Incident Notification* History



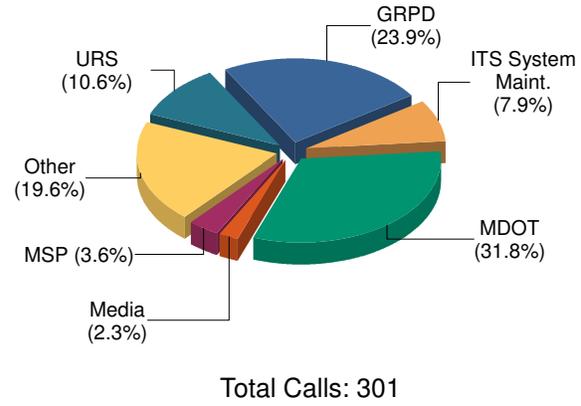
Incident Notification* Communication Accuracy



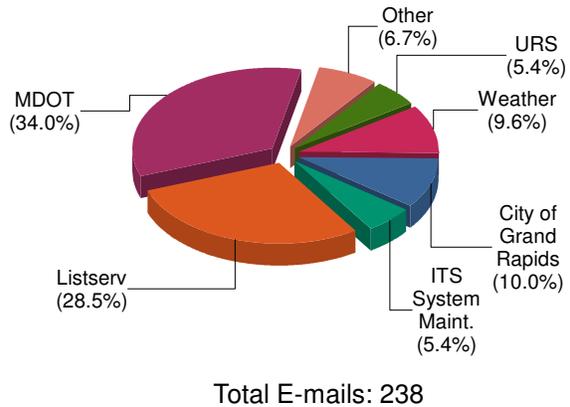
	Aug. 2012	July 2012	Aug. 2011	Previous 12 Months
Format Correct	100.0%	94.6%	95.7%	98.6%
Content Correct	96.9%	91.9%	95.7%	96.7%

* 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 at: <http://1.usa.gov/qZzuHo>.

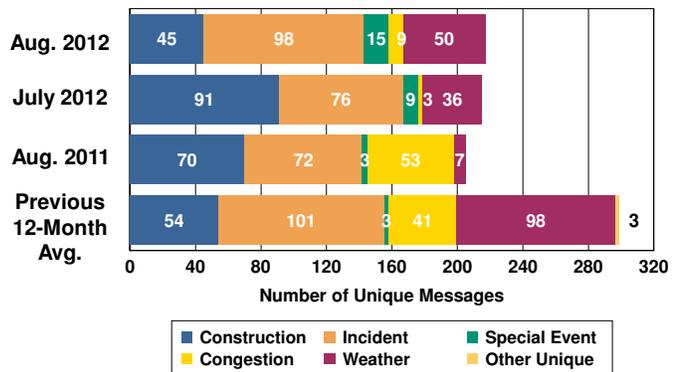
Calls by Type



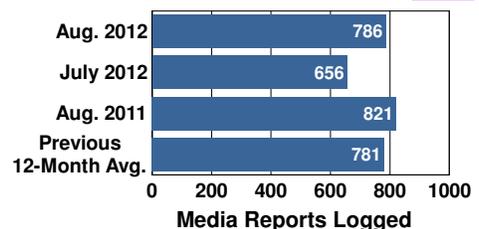
E-mails by Type



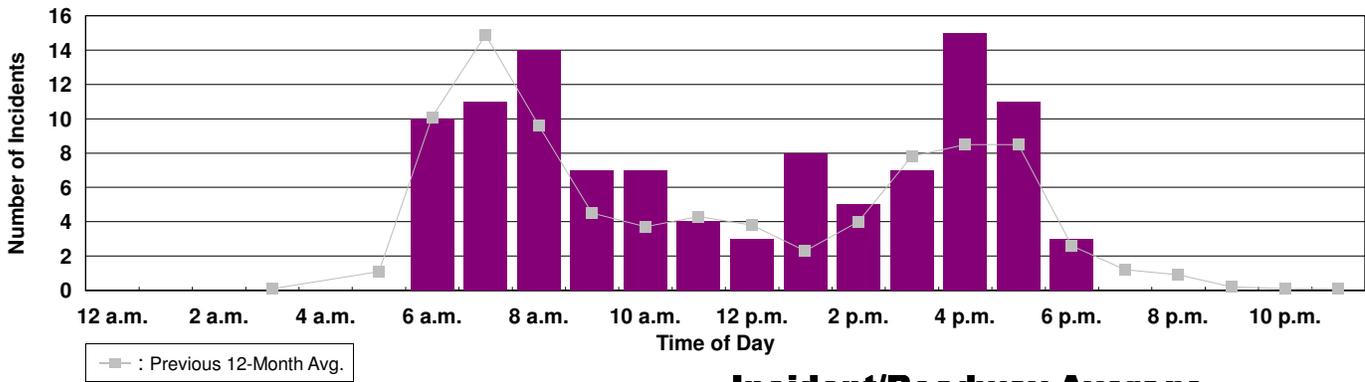
DMS and VSS Messages by Type



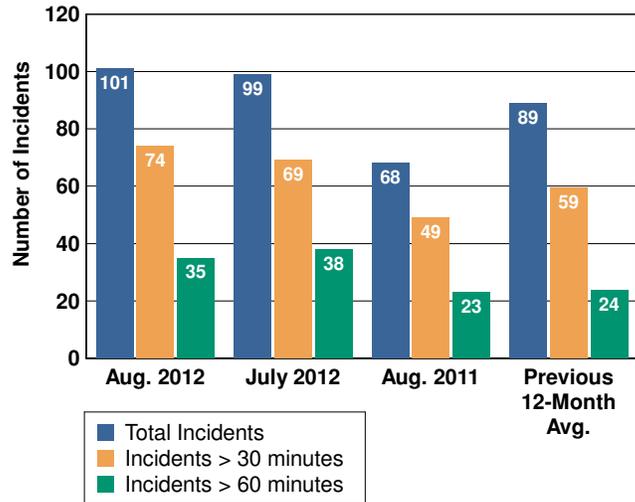
Media Audits



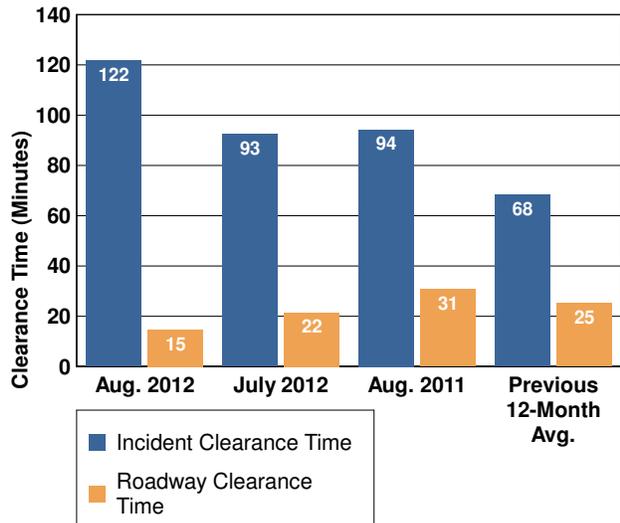
Total of Unplanned Incidents per Weekday Hour



Incident Clearance Details*

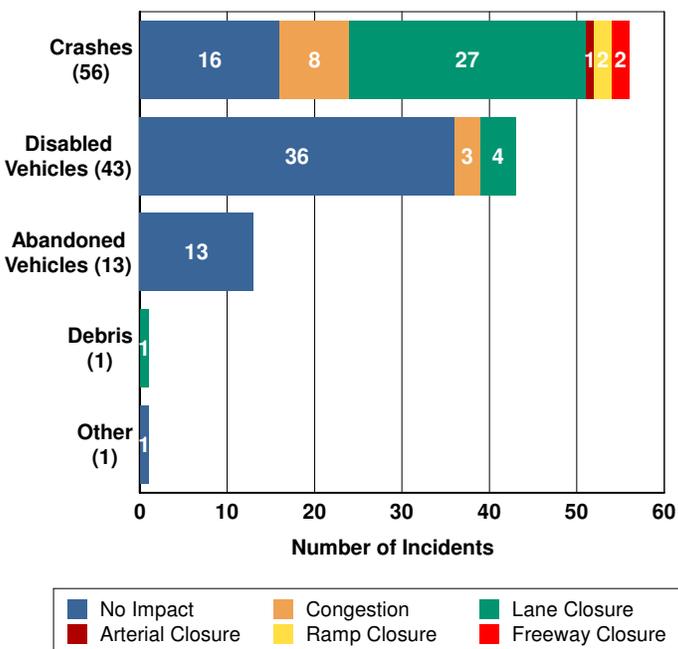


Incident/Roadway Average Clearance Times

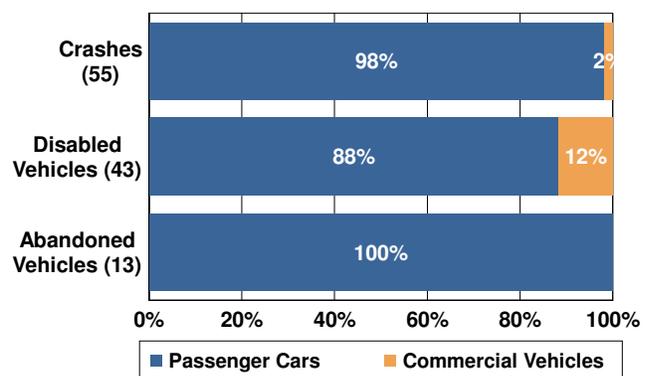


*Incident Clearance Details excludes abandoned vehicles.

Traffic Impacts by Type



Vehicle Composition of Incidents*



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

Secondary Crashes

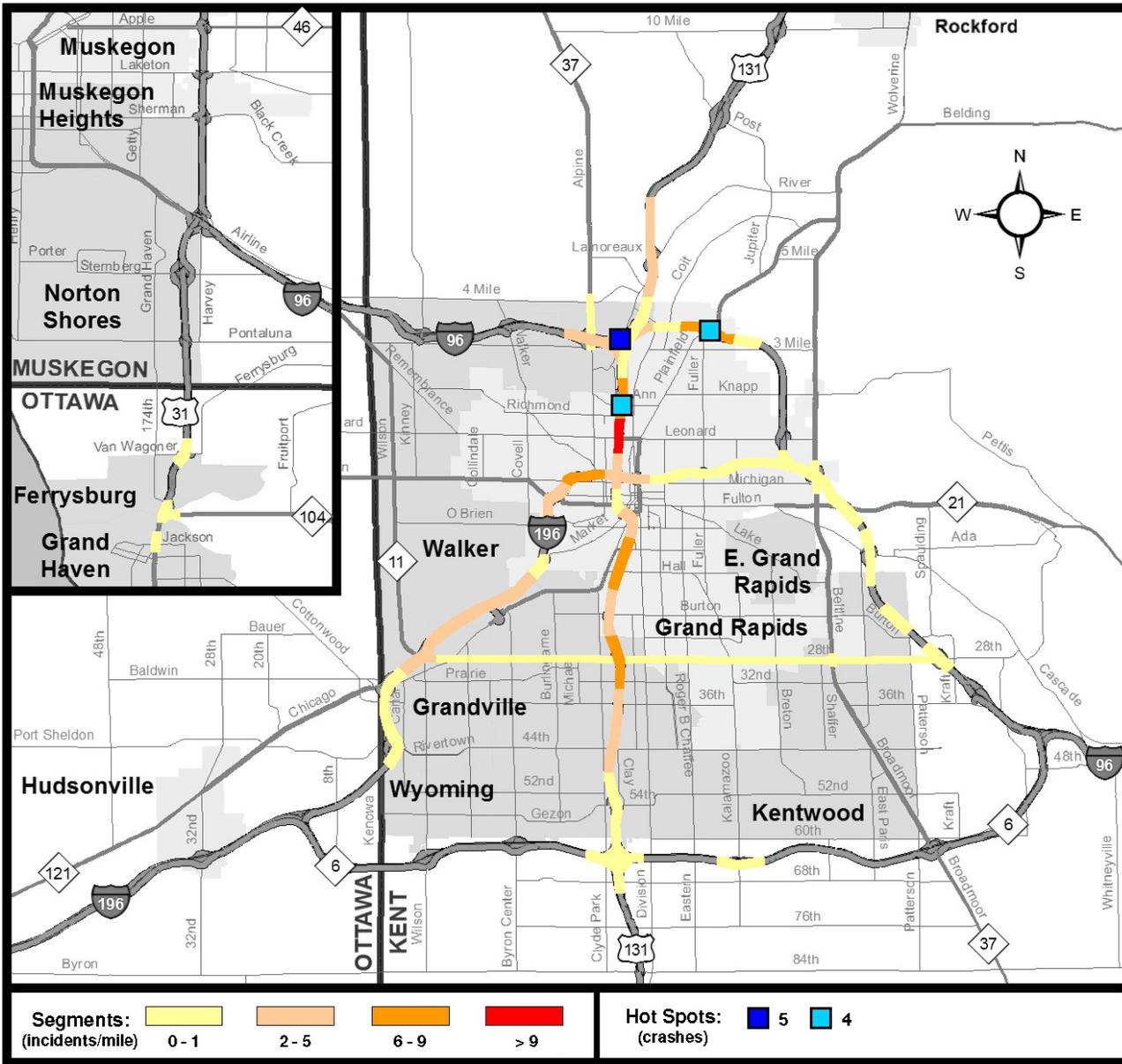


Month	Secondary Crashes	Total Crashes
August 2012	2 (4%)	56

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	Aug. 2012	July 2012	Aug. 2011	Previous 12-Month Avg.
Lane Closure	33	29	32	38.5
Ramp Closure	2	3	-	2.8
Freeway Closure	2	5	1	2.5

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

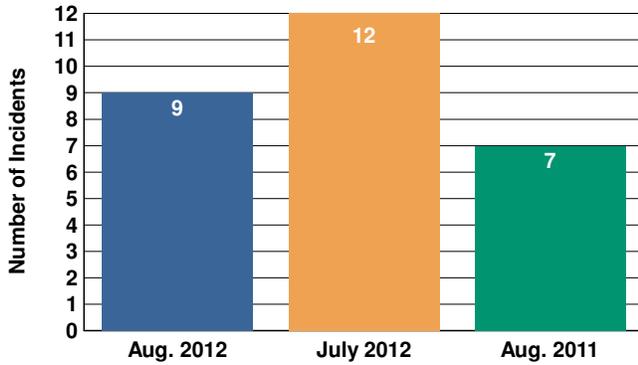
Unplanned Incidents by Roadway within Coverage Area



Freeway/Arterial	Aug. 2012		July 2012		Aug. 2011		Previous 12-Month Avg.	
	Total	per mi.	Total	per mi.	Total	per mi.	Total	per mi.
I-96 (10.6 mi.)	22	2.1	11	1.0	5	0.5	13.2	1.2
I-196 (12.1 mi.)	22	1.8	30	2.5	23	1.9	23.9	2.0
US-131 (15.2 mi.)	56	3.7	55	3.6	35	2.3	51.6	3.4
US-31 (1.7 mi.)	1	0.6	0	0	-	-	0.8	0.4
M-6 (4 mi.)	1	0.2	2	0.5	-	-	1.0	0.2
M-11 (11.5 mi.)	2	0.2	0	0	1	0.1	0.6	0.1
Month Total	104	1.9	98	1.8	64	1.2	91.1	1.7

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

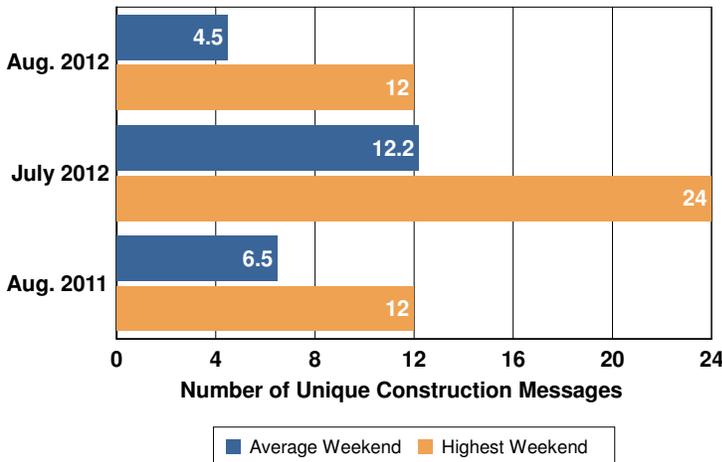
Incidents Occurring in Work Zones



Work Zone Incident Details:

Nine incidents occurred in work zones in August, all within the US-131 work zone under I-196 Business Spur (Franklin Street), with two incidents occurring on wet pavement. On northbound US-131, two disabled vehicles and one crash were reported at Franklin Street, and one disabled vehicle and one crash was reported at Hall Street. A disabled vehicle was reported on southbound US-131, while another was reported at I-196. One crash occurred at Pearl Street, one crash was reported at Franklin Street, and one disabled vehicle was reported at Hall Street.

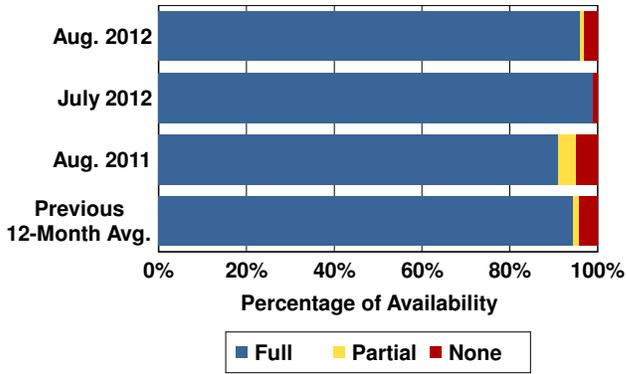
Weekend* Construction DMS Message Activity



* Friday, Saturday and Sunday.



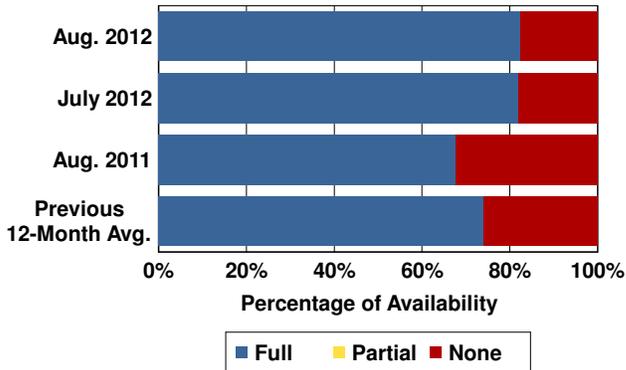
Overall CCTV Camera Availability



Individual CCTV Camera Availability

CCTV Cameras Below 95% Availability			
Location	Full	Partial	None
1. I-96 @ M-21 (Fulton St.)	-	-	100%
2. US-131 @ Ann St.	92%	7%	1%
3. US-131 @ Hall St.	93%	7%	-
4. US-131 @ Leonard St.	93%	7%	-
5. US-131 @ I-96	93%	6%	2%
6. I-96 EB @ Plainfield Ave.	94%	-	6%
7. I-96 WB @ Plainfield Ave.	94%	-	6%

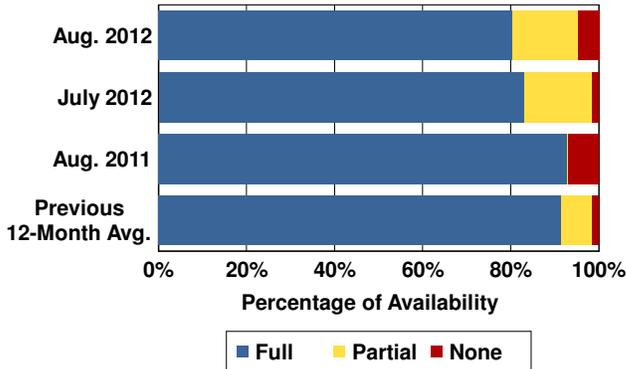
Overall Detector Availability



Individual Detector Availability

Vehicle Detectors Below 95% Availability			
Location	Full	Partial	None
1. 102 - I-196 @ Market	-	-	100%
2. 114N - I-196 WB @ Monroe	-	-	100%
3. 114S - I-196 EB @ Ottawa	-	-	100%
4. 124 - I-196 EB @ I-96 Merge	-	-	100%
5. 201 - US-131 NB S of 36th	-	-	100%
6. 204 - US-131 NB S of 28th	-	-	100%
7. 227 - US-131 NB @ I-96 WB	-	-	100%
8. 126 - I-96 W of E. Beltline	49%	-	51%

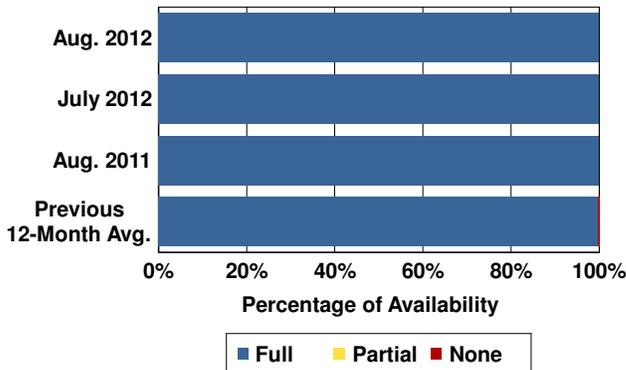
Overall DMS Availability



Individual DMS Availability

DMS Below 95% Availability			
Location	Full	Partial	None
1. US-131 NB @ M-11 (28th St.)	-	100%	-
2. I-96 EB @ Dean Lake Ave.	-	100%	-
3. I-196 WB @ Plymouth Ave.	-	100%	-
4. I-196 EB @ Chicago Dr. Conn.	-	100%	-
5. I-96 WB @ Knapp St.	60%	-	40%
6. I-196 EB @ Eastern Ave.	79%	-	21%
7. M-6 EB @ Ivanrest Ave.	81%	-	19%
8. I-96 EB @ Forest Hill Ave.	81%	-	19%
9. I-196 WB @ Chicago Dr. Conn.	81%	-	19%

Overall VSS Availability



Individual VSS Availability

VSS Below 95% Availability			
Location	Full	Partial	None
None.			

