

West Michigan Transportation Operations Center

Serving Motorists on West Michigan Freeways

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Fiscal Year 2013



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West Michigan TOC Control Room
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In the Spotlight

This Annual Performance Measure Report contains data collected by the WMTOC during Fiscal Year 2013, which is presented in the form of graphs, charts, maps and tables. Please refer to the WMTOC Fiscal Year 2013 Annual Report for a narrative related to the performance measure data and other WMTOC activities. Please contact Suzette Peplinski for further information regarding these performance measures.



Performance Measures Report

Compiled by:
URS

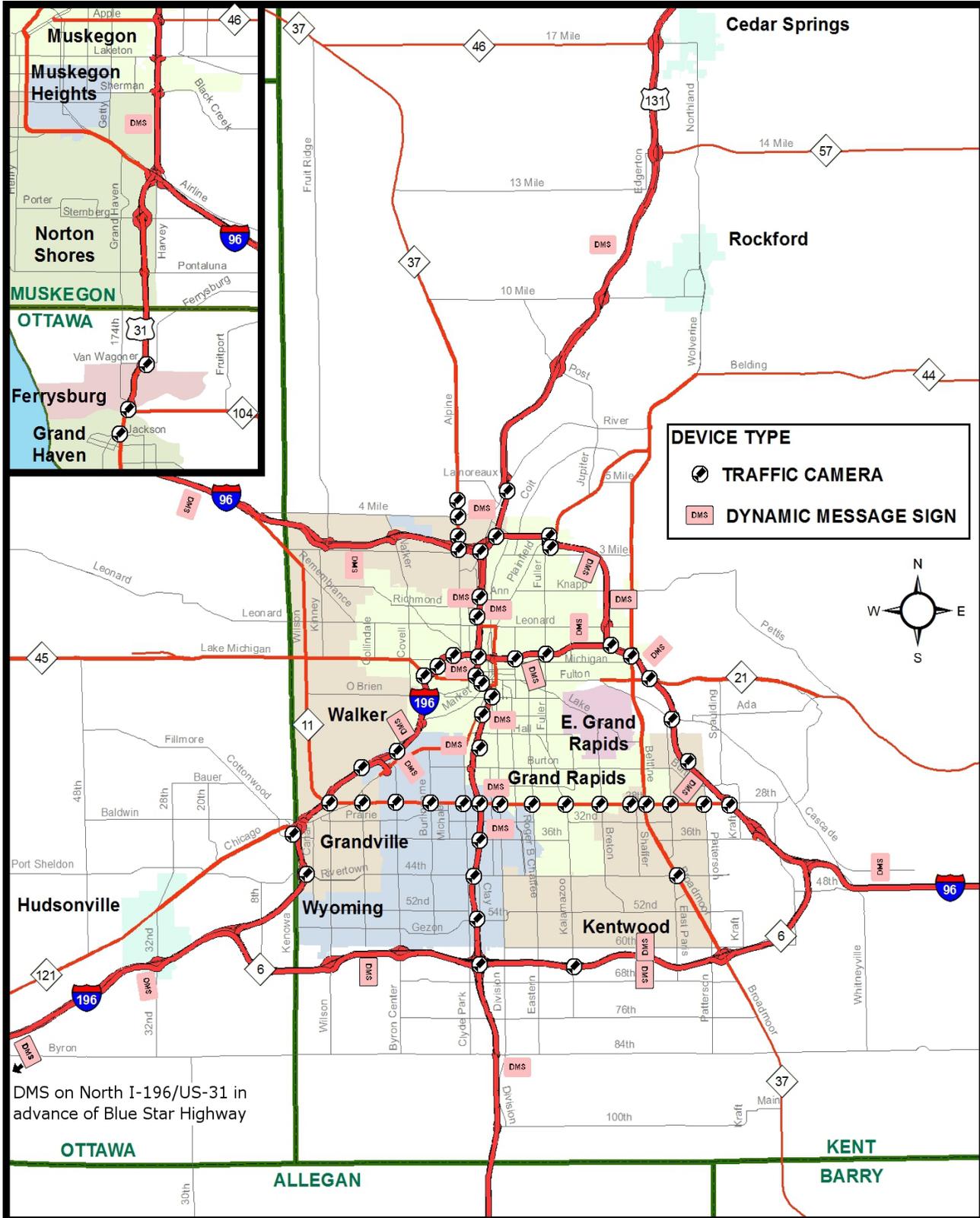
**WMTOC Control Room
Hours of Operation**

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

Control Room Contact Information

E-mail: MDOT-GR-TRAFFOPS@michigan.gov
 Main: 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

FY 2013

Communications Activity



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

Total Communication

Calls: 3,789
Emails: 4,092

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 97.3%
Content Correct 94.9%

Unplanned Incidents



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

Total Incidents

1,477

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

69

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: 86%
MVDS: 66%
DMS: 92%
VSS: 96%

***Incidents** include, but are not limited to, vehicle crashes, abandoned or disabled vehicles, and debris in the roadway.

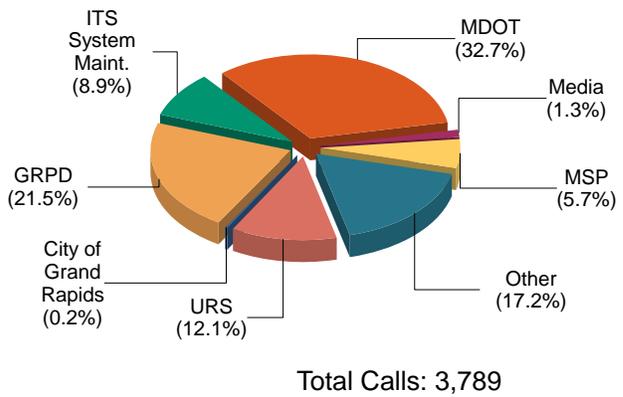
Note: Data included in this report is from MDOT FY 2013 (Oct. 1, 2012, through Sept. 30, 2013)

Communications by Agency

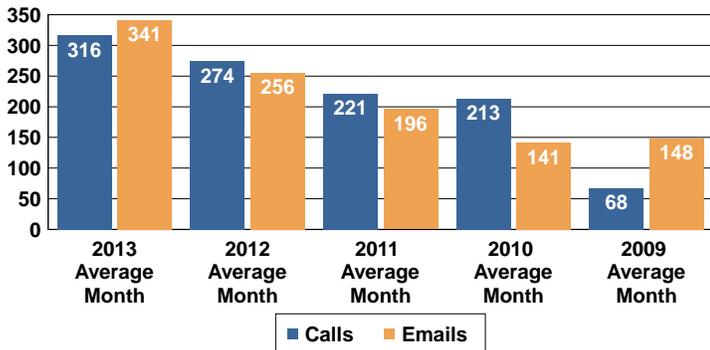


Agency	Calls			E-mails		
	In	Out	Total	In	Out	Total
Grand Rapids Police Department	80	738	818	0	0	0
MDOT, Traffic/ITS	78	736	814	261	84	345
URS Corporation	289	172	461	100	39	139
Other	296	160	456	871	23	894
ITS System Maintenance	207	131	338	220	31	251
MDOT, Maintenance	122	134	256	13	14	27
Michigan State Police	19	199	218	36	0	36
Kent County Road Commission	77	85	162	0	0	0
MDOT, Construction	59	44	103	250	12	262
MDOT, Other	31	36	67	420	59	479
Media	41	11	52	14	10	24
Kent County Sheriff	3	31	34	0	0	0
City of Grand Rapids	2	8	10	178	5	183
Listserv (Traffic Notifications)	0	0	0	560	397	957
Weather	0	0	0	252	0	252
Nixle	0	0	0	243	0	243
Annual Total	1,304	2,485	3,789	3,418	674	4,092

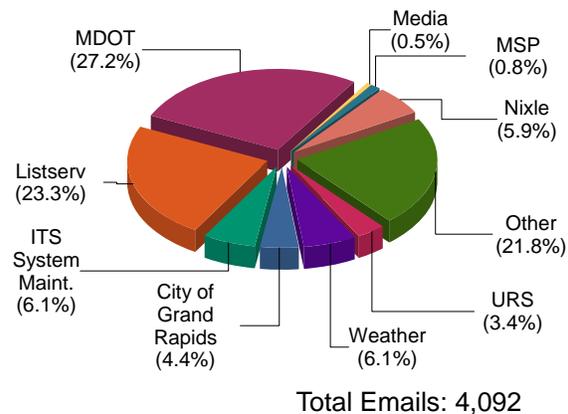
Calls by Type



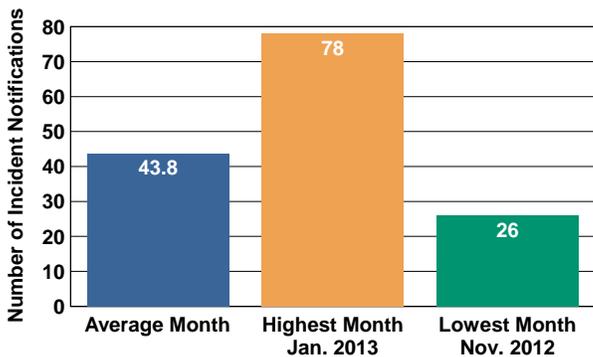
Annual Average Communication History



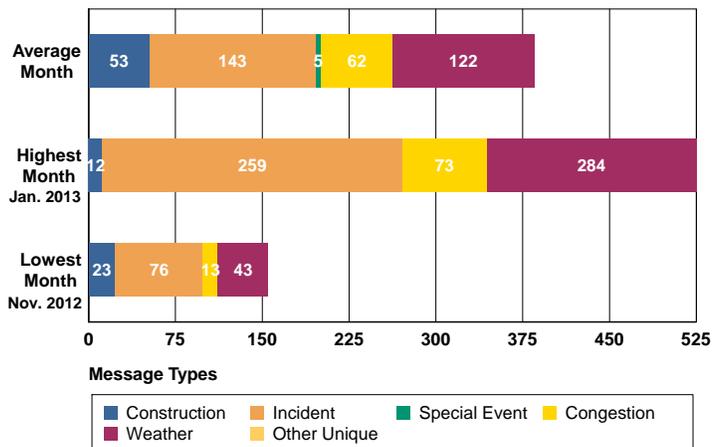
E-mails by Type



Incident Notification* History



DMS and VSS Messages by Type



Incident Notification* Communication Accuracy



	FY 2013 Average	FY 2012 Average
Format Correct	97.3%	99.0%
Content Correct	94.9%	96.3%

Secondary Crashes



Secondary Crashes/ Percentage of Total	Total Crashes
46 (5%)	904

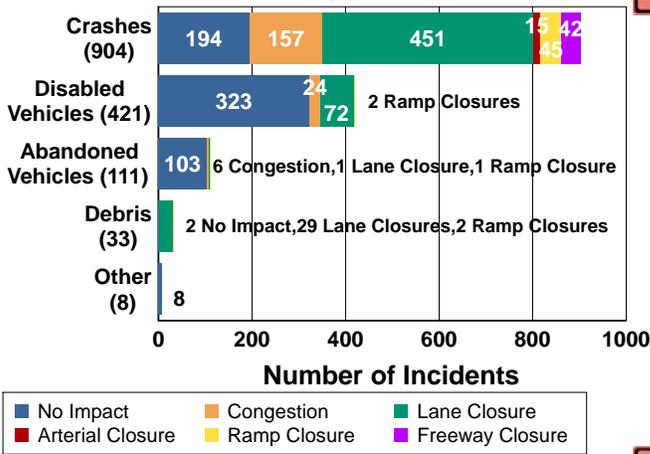
* Data limited to crashes within the WMTOC camera coverage area.

* Incident Notification e-mails are issued for high-impact incidents with an expected duration of 15 minutes or longer.

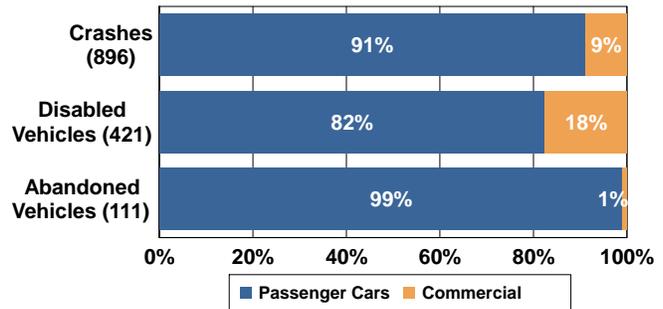
Sign up for e-mail from MDOT!



Traffic Impacts by Type

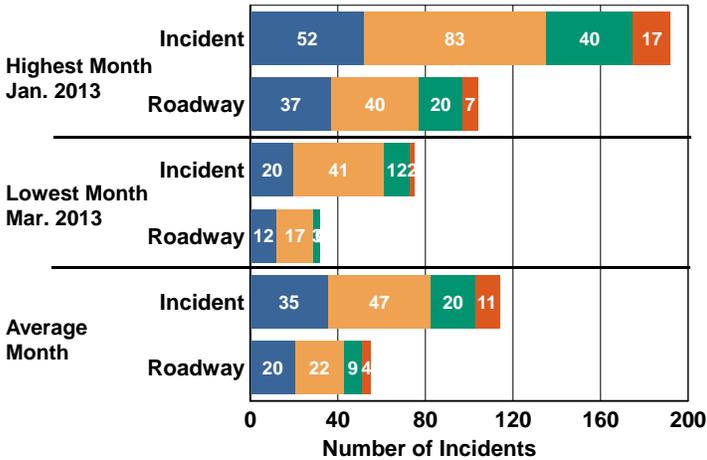


Vehicle Composition of Incidents*



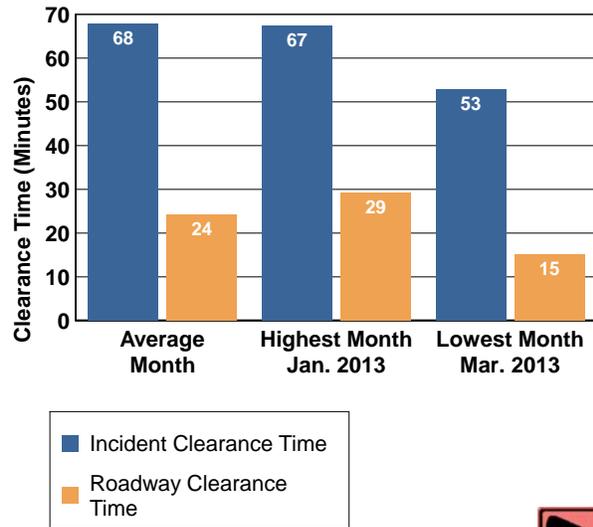
* Vehicle Composition of Incidents excludes incidents where vehicle types were not identified.

Incident Clearance Details*

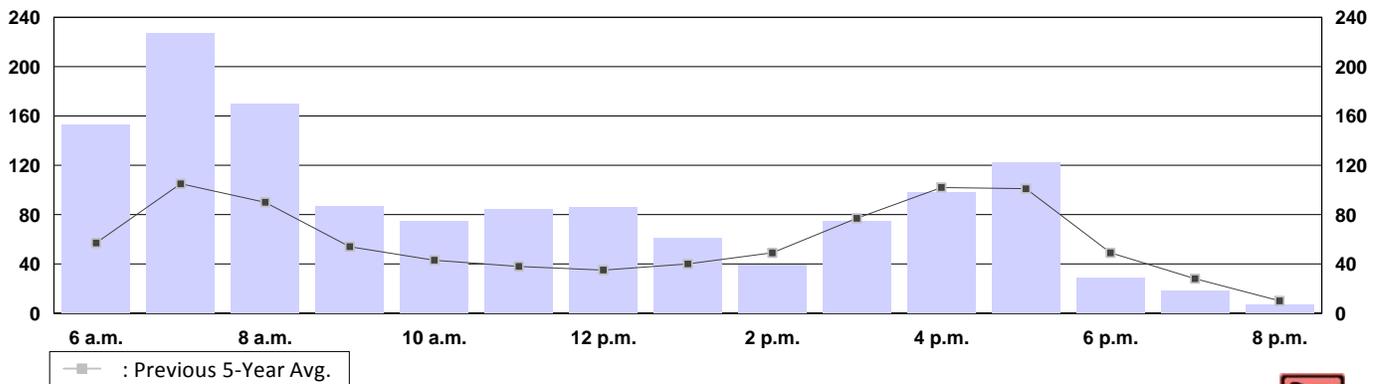


* Incident Clearance Details excludes abandoned vehicles.

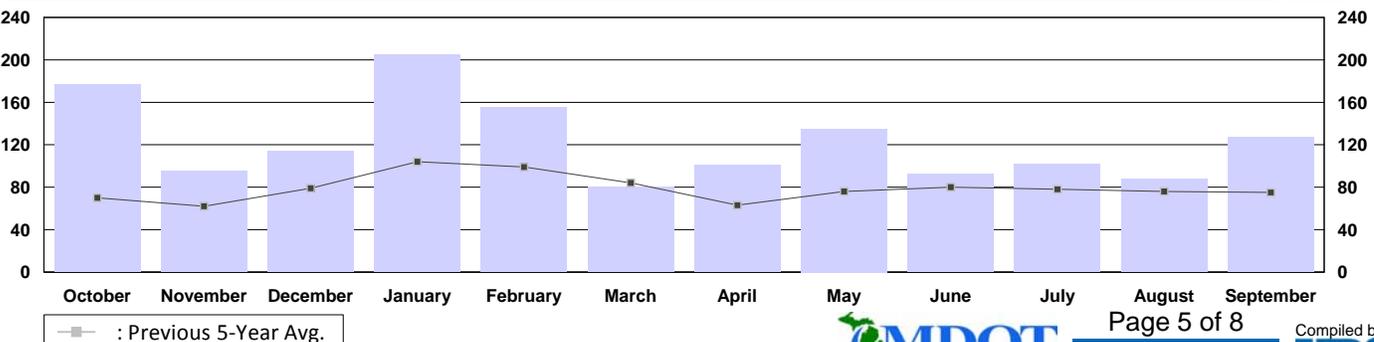
Incident/Roadway Average Clearance Times



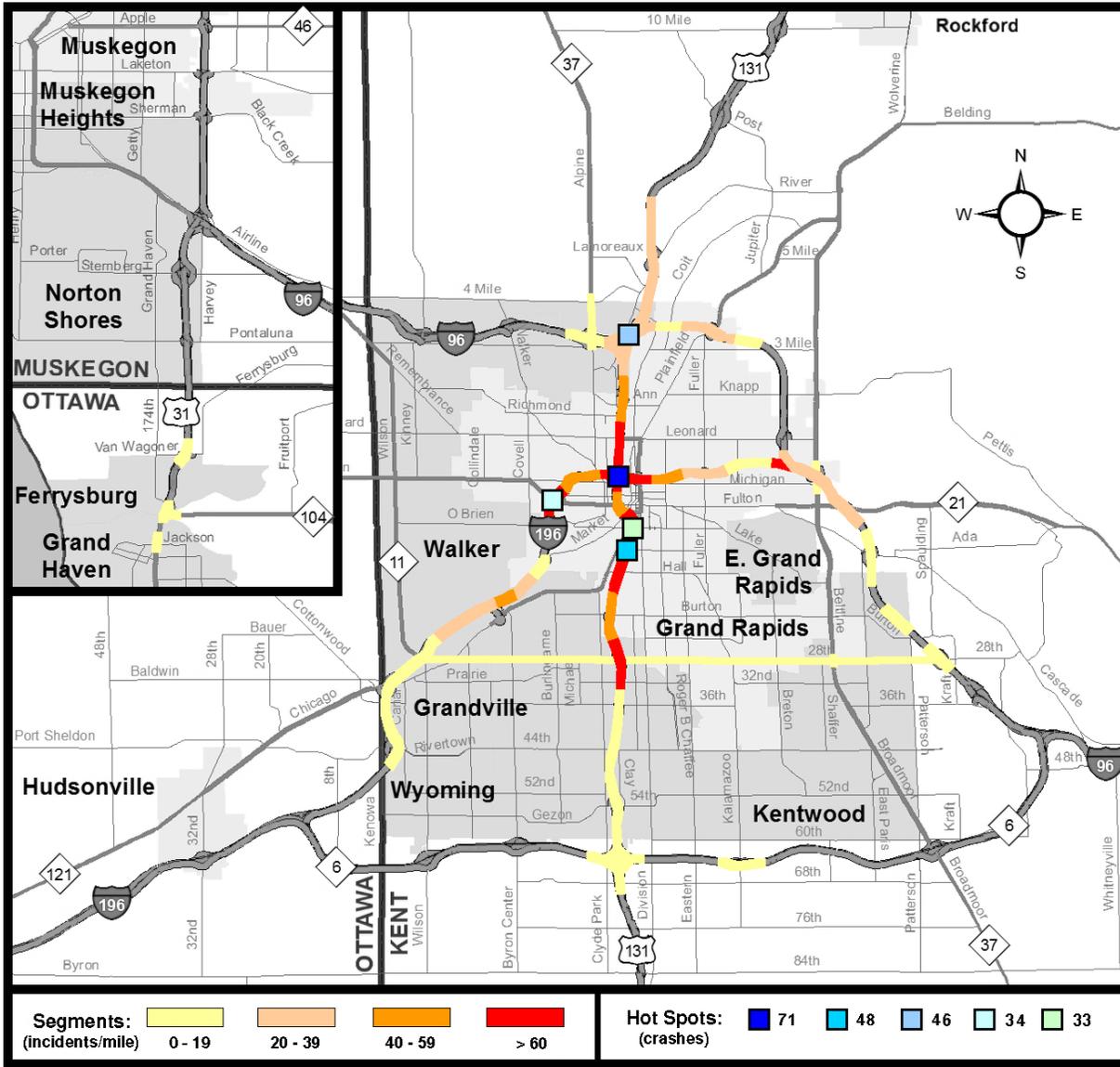
Total Unplanned Incidents per Weekday Hour



Total Unplanned Incidents per Month



Incident Density and Hot Spots Map



Incident Management



High-impact Unplanned Incident Activity*



Incident	FY 2013			FY 2012		
	Average Month	Highest Month Jan. 2013	Lowest Month Nov. 2012	Average Month	Highest Month May 2012	Lowest Month June 2012
Lane Closure	46.2	92	28	38.3	52	28
Ramp Closure	4.2	3	1	2.8	4	1
Freeway Closure	3.5	7	2	2.4	7	1

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

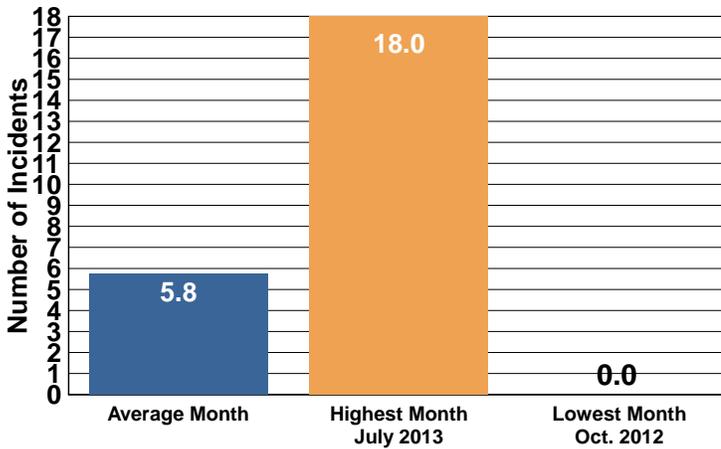
Unplanned Incidents by Roadway



Freeway	FY 2013						FY 2012					
	Average Month		Highest Month Jan. 2013		Lowest Month Mar. 2013		Average Month		Highest Month Jan. 2012		Lowest Month Nov. 2011	
	Total	per mi.	Total	per mi.	Total	per mi.	Total	per mi.	Total	per mi.	Total	per mi.
I-96 (10.6 mi.)	15	1.4	26	2.5	10	0.9	16	1.5	25	2.4	8	0.8
I-196 (12.1 mi.)	33	2.7	50	4.1	22	1.8	23	1.9	35	2.9	16	1.3
US-131 (15.2 mi.)	59	3.9	95	6.3	43	2.8	55	3.6	87	5.7	45	3.0
Total	107	2.8	171	4.5	75	2.0	94	2.5	147	3.9	69	1.8

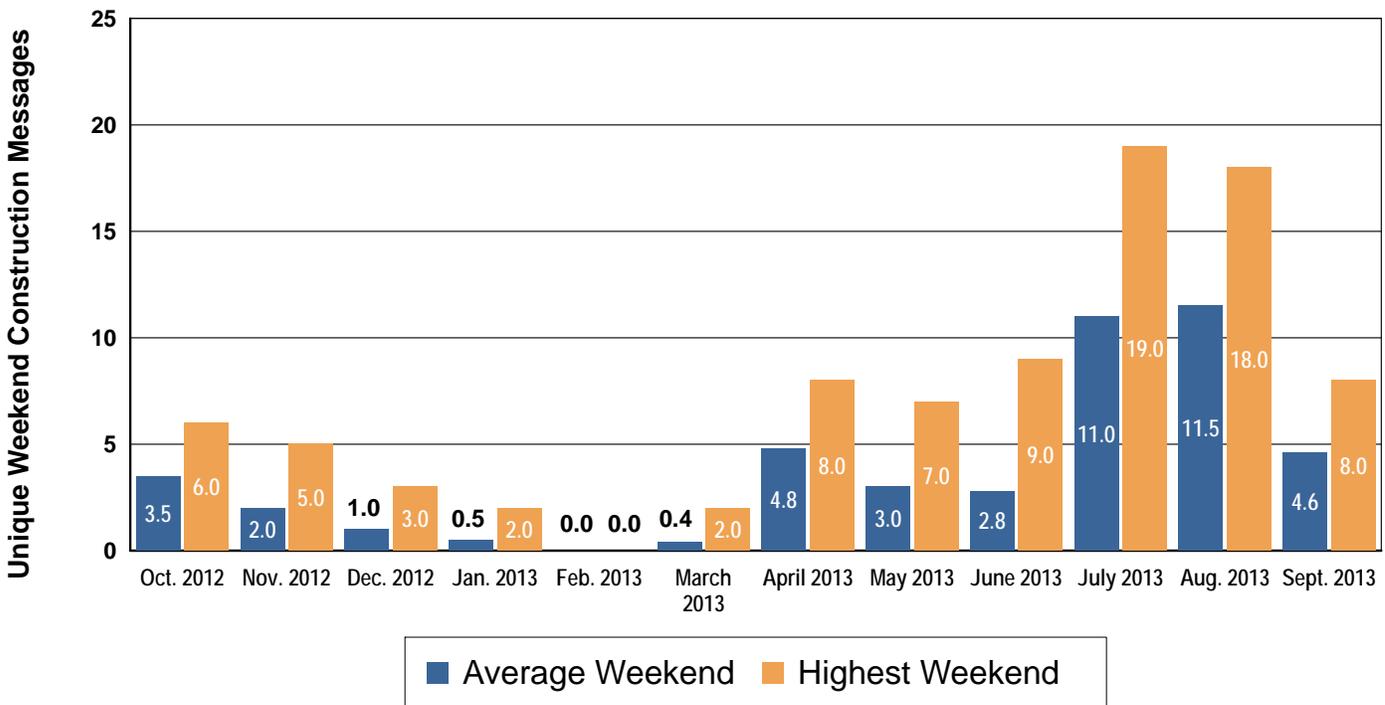
* Reflects roadway mileage within the current WMTOC camera coverage area.

Incidents Occurring in Work Zones



Highest Month Work Zone Incident Details:
 During the month of July, 18 incidents were identified by operators as being within work zones. Of these, 14 crashes occurred within the northbound US-131 auxiliary lane work zone (Pearl Street to I-96) and two occurred within the I-196 work zone over the Grand River.

Weekend* Construction DMS Message Activity

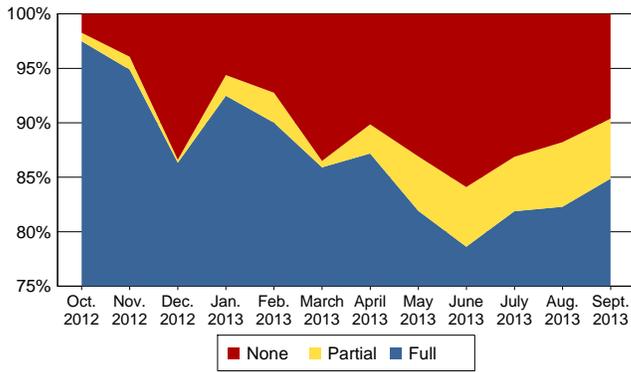


* Friday, Saturday and Sunday.

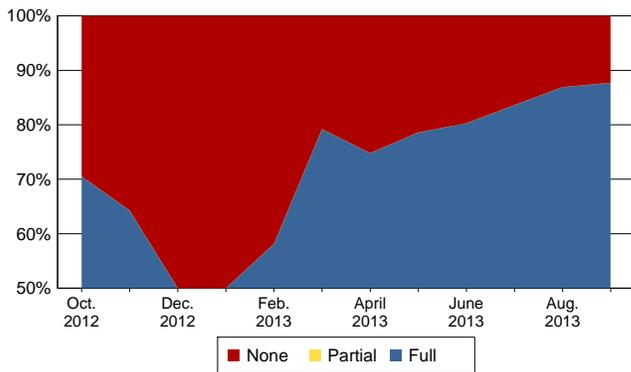
Construction Activity



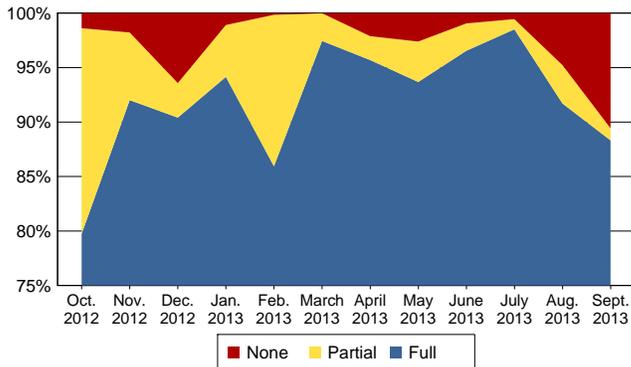
Overall CCTV Camera Availability



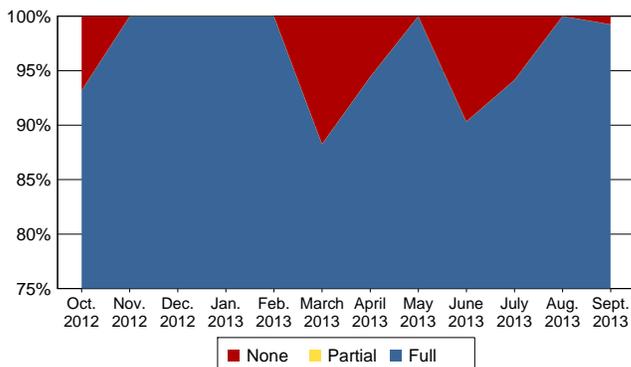
Overall MVDS Availability



Overall DMS Availability



Overall VSS Availability



Individual CCTV Camera Availability



CCTV Cameras Below 95% Availability			
Location	Full	Partial	None
1. I-96 @ Forest Hill Ave.	33%	-	67%
2. US-131 @ Wealthy St.	38%	-	62%
3. I-96 Conn. to US-131	51%	-	49%
4. US-31 @ Van Wagoner St	54%	44%	1%
5. US-31 @ M-104	54%	46%	-
6. I-96 EB @ Plainfield Ave.	56%	1%	43%
7. I-96 WB @ Plainfield Ave.	57%	-	43%
8. I-96 @ M-11 (28th St.)	64%	22%	15%
9. US-131 @ I-96	69%	1%	30%
10. I-96 @ Chicago Dr.	85%	-	15%
11. US-131 @ 44th St.	88%	-	12%
12. I-96 @ Bike Path	93%	-	7%
13. US-131 @ 36th St.	93%	6%	1%
14. I-96 @ 44th St.	93%	-	7%
15. I-96 WB @ M-37 (Alpine Ave.)	94%	-	6%
16. I-96 @ Cascade Rd.	94%	-	6%

Individual Detector Availability



MVDS Below 75% Availability			
Location	Full	Partial	None
1. 227 - US-131 NB @ I-96 WB	-	-	100%
2. 114S - I-196 EB @ Ottawa	-	-	100%
3. 114N - I-196 WB @ Monroe	-	-	100%
4. 114 -	-	-	100%
5. 124 - I-196 EB @ I-96 Merge	19%	-	81%
6. 229 - US-131 @ I-96	22%	-	78%
7. 212 - US-131 N of Franklin	38%	-	62%
8. 201 - US-131 NB S of 36th	40%	-	60%
9. 102 - I-196 @ Market	42%	-	58%
10. 113 - I-196 @ US-131 SB	44%	-	56%
11. 204 - US-131 NB S of 28th	59%	-	41%
12. 220 - I-196 @ US-131	65%	-	35%
13. 211 - US-131 S of Franklin	65%	-	35%
14. 226 - US-131 SB @ I-96 WB	65%	-	35%
15. 230E - I-96 @ US-131	68%	-	32%

Individual DMS Availability



DMS Below 95% Availability			
Location	Full	Partial	None
1. I-96 EB @ Forest Hill Ave.	71%	22%	8%
2. M-6 EB @ Ivanrest Ave.	76%	24%	-
3. I-196 EB @ Chicago Dr. Conn.	76%	20%	4%
4. US-131 NB @ M-11 (28th St.)	82%	17%	1%
5. I-196 WB @ Chicago Dr. Conn.	82%	8%	10%
6. US-131 NB @ Franklin St.	86%	4%	11%
7. I-196 EB @ Eastern Ave.	89%	11%	-
8. I-96 WB @ M-21 (Fulton St.)	89%	-	11%
9. I-96 EB @ Dean Lake Ave.	89%	10%	1%
10. M-6 WB @ Hanna Lake Ave.	90%	8%	2%
11. I-96 EB @ 24th Ave.	91%	-	9%
12. I-196 EB @ Blue Star Hwy.	91%	9%	-
13. M-6 EB @ Hanna Lake Ave.	92%	6%	2%

Individual VSS Availability



VSS Below 97% Availability			
Location	Full	Partial	None
1. Pearl SB Speed Limit	94%	-	6%

