

West Michigan Transportation Operations Center

Serving Motorists on West Michigan Roadways

www.michigan.gov/its

www.michigan.gov/drive

Fiscal Year 2014



In the Spotlight

This Annual Performance Measure Report contains data collected by the WMTOC during Fiscal Year 2014, which is presented in the form of graphs, charts, maps and tables. Please refer to the WMTOC Fiscal Year 2014 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



Suzette Peplinski, P.E.
1420 Front Avenue NW
Grand Rapids, MI 49504
PeplinskiS@michigan.gov

West Michigan TOC Control Room
E-mail: MDOT-GR-TRAFFOPS@michigan.gov
Main: 616-451-8329

Compiled by:
URS

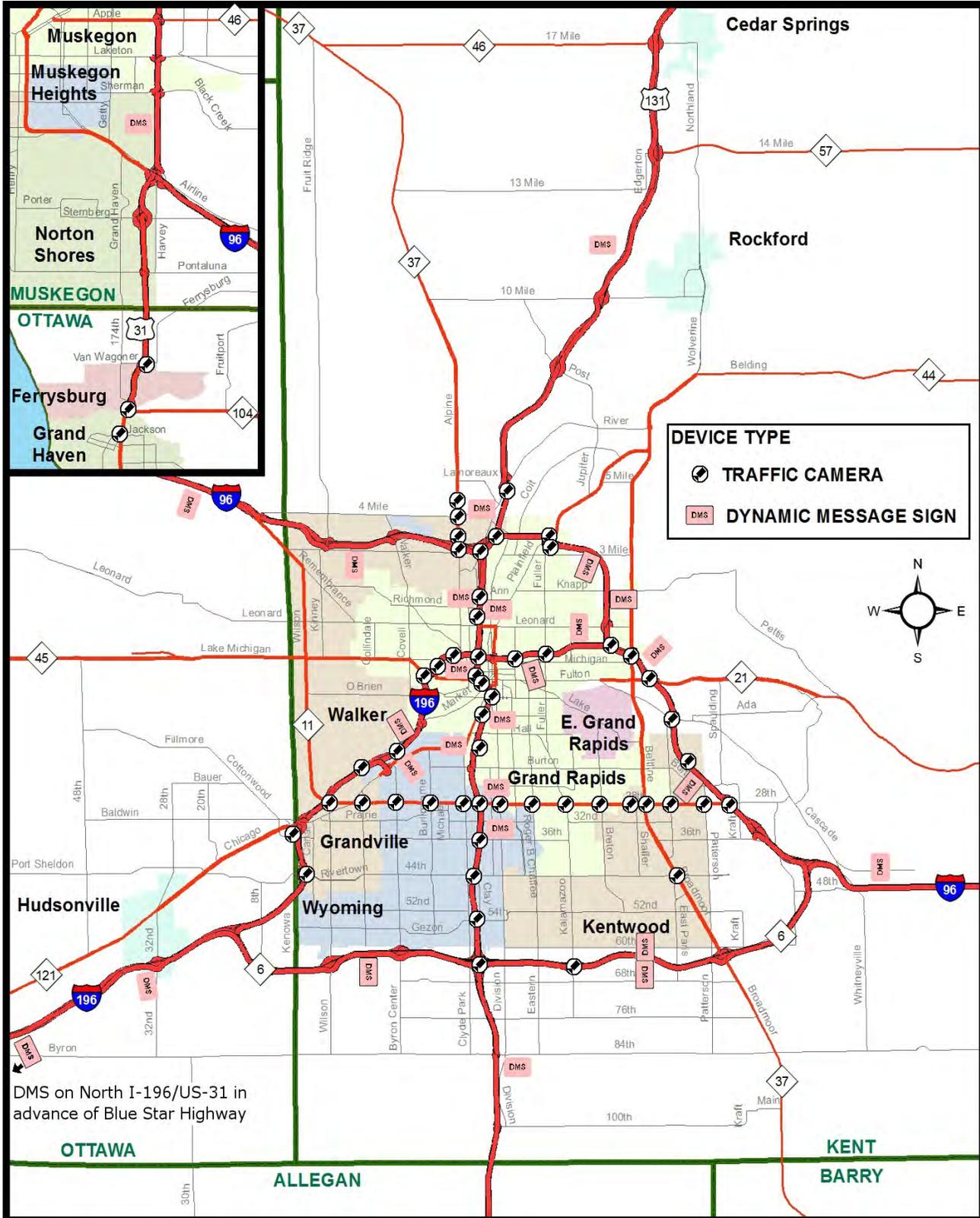
**WMTOC Control Room
Hours of Operation**

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 2014

Communications Activity



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

Total Communication

Calls: 4,182
Emails: 6,499

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 92.2%
Content Correct 97.9%

Unplanned Incidents



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

Total Incidents

1,427

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

18

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), and Dynamic Message Signs (DMS).

System Availability

CCTV: 87%
MVDS: 82%
DMS: 92%

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

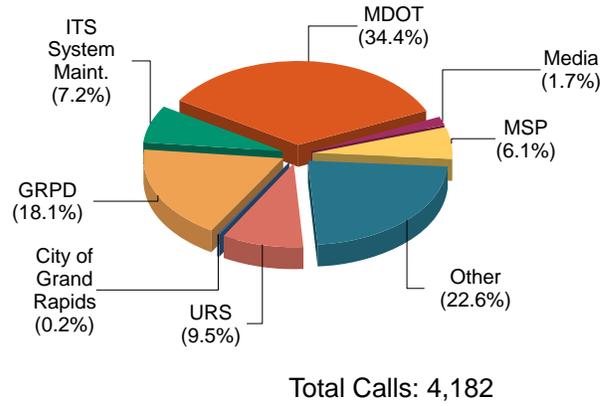
Note: Data included in this report is from MDOT FY 2014 (Oct. 1, 2013, through Sept. 30, 2014)

Communications by Agency

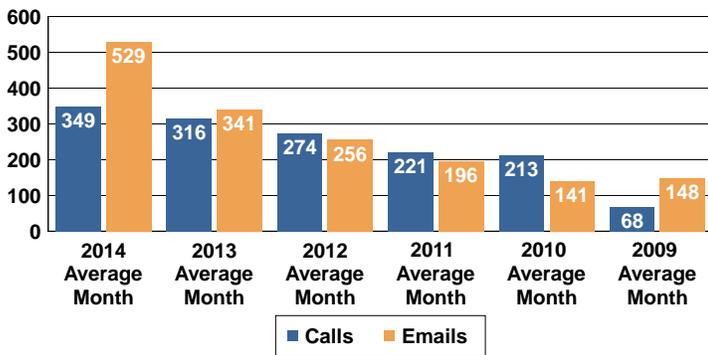


Agency	Calls			E-mails		
	In	Out	Total	In	Out	Total
MDOT	424	1017	1441	1660	399	2,059
Other	451	329	780	1353	37	1,390
GRPD	164	595	759	0	0	0
URS Corporation	304	94	398	182	161	343
ITS System Maintenance	175	127	302	344	40	384
MSP	21	234	255	46	0	46
KCRC	123	124	247	0	0	0
Weather	0	0	0	356	0	356
Nixle	0	0	0	476	0	476
GovDelivery	0	0	0	718	727	1,445
Annual Total	1,662	2,520	4,182	5,135	1,364	6,499

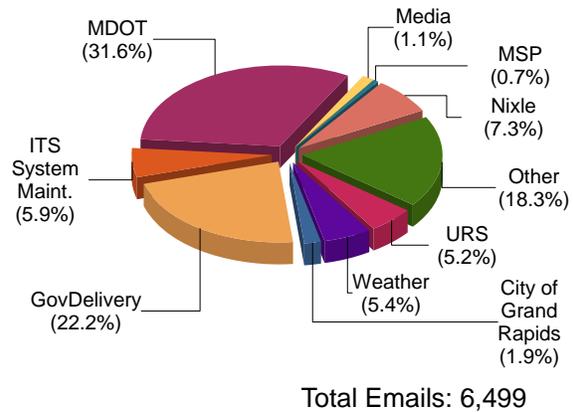
Calls by Type



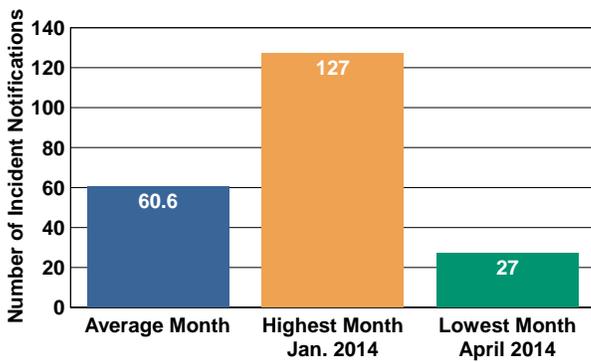
Annual Average Communication History



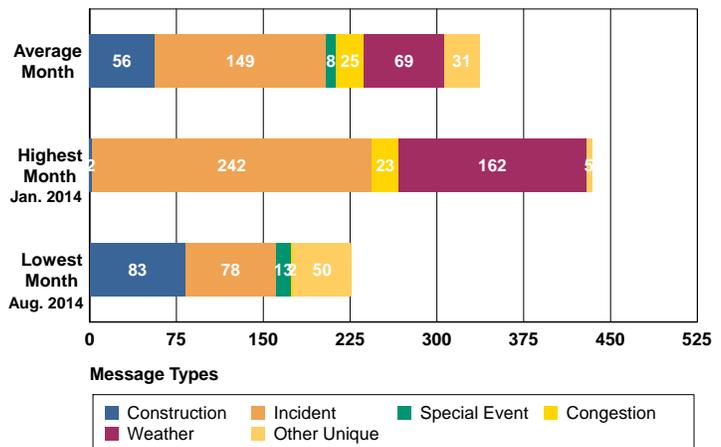
E-mails by Type



Incident Notification* History



DMS and VSS Messages by Type



Incident Notification* Communication Accuracy



	FY 2014 Average	FY 2013 Average
Format Correct	92.2%	96.8%
Content Correct	97.9%	94.3%

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

Secondary Crashes

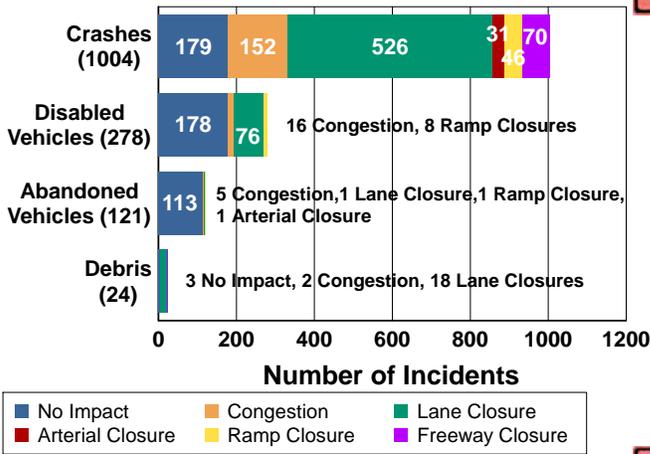


Secondary Crashes/ Percentage of Total	Total Crashes
46 (5%)	904

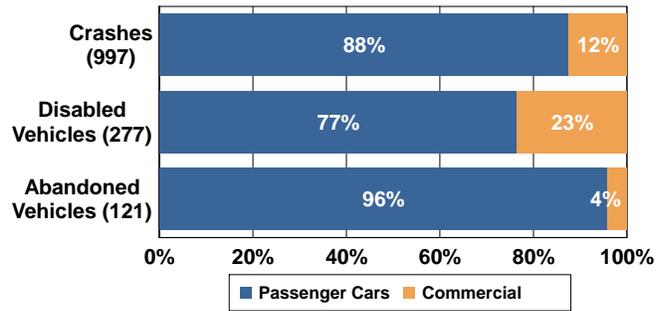
* Data limited to crashes within the WMTOC camera coverage area.



Traffic Impacts by Type

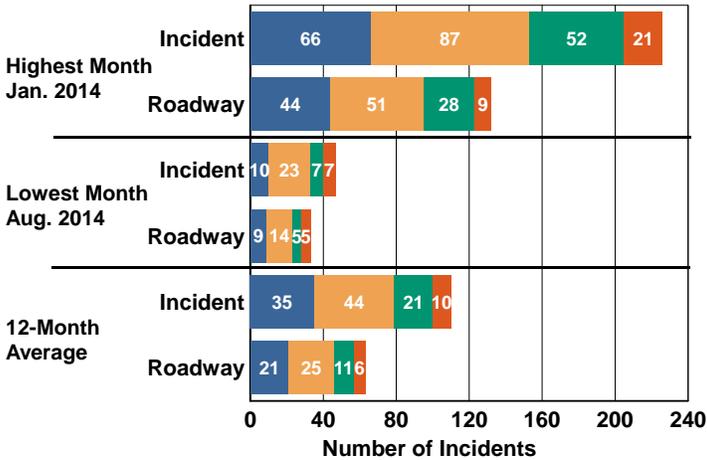


Vehicle Composition of Incidents*



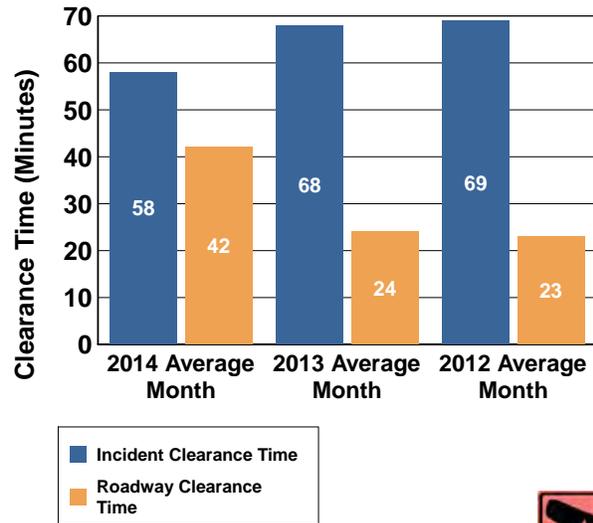
* Vehicle Composition of Incidents excludes incidents where vehicle types were not identified.

Incident Clearance Details*

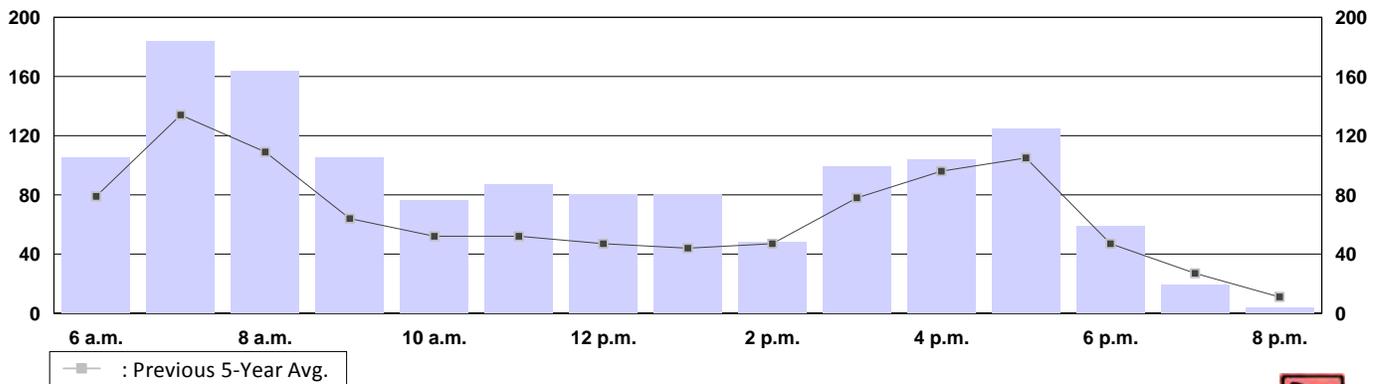


* Incident Clearance Details excludes abandoned vehicles.

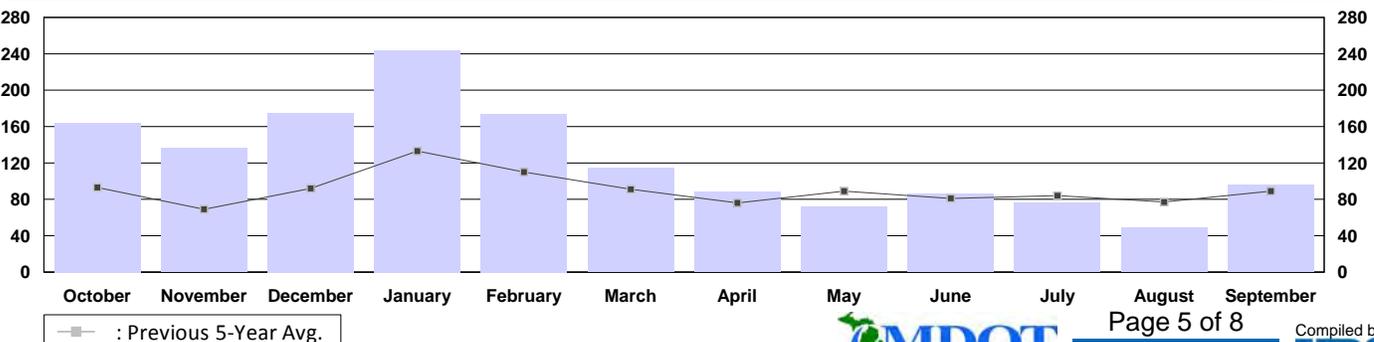
Incident/Roadway Average Clearance Times



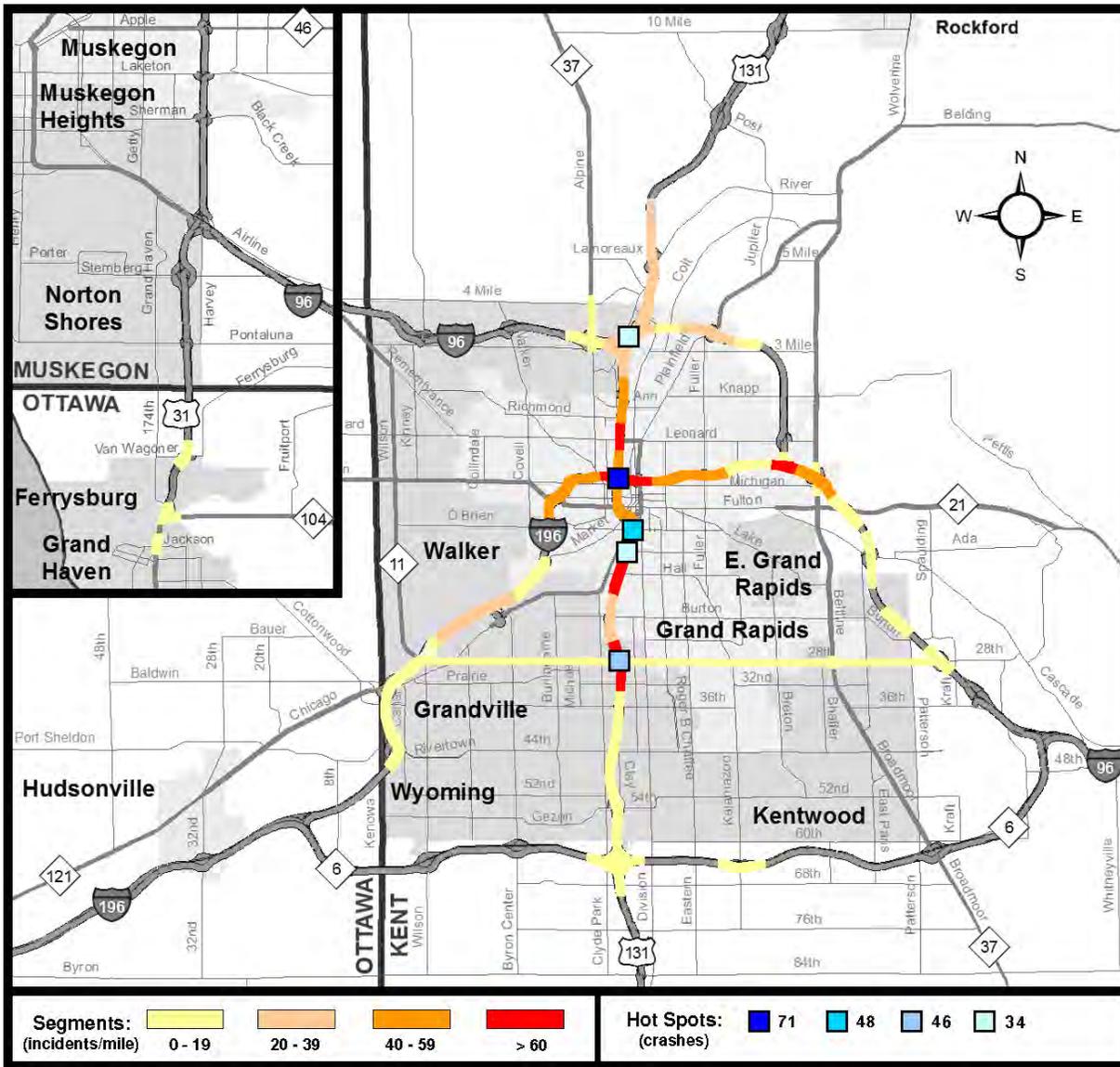
Total Unplanned Incidents per Weekday Hour



Total Unplanned Incidents per Month



Incident Density and Hot Spots Map



Incident Management



High-impact Unplanned Incident Activity*



Incident	FY 2014			FY 2013		
	Average Month	Highest Month Jan. 2014	Lowest Month Aug. 2014	Average Month	Highest Month Jan. 2013	Lowest Month Nov. 2012
Lane Closure	52.0	104	26	46.2	92	28
Ramp Closure	4.6	14	1	4.2	3	1
Freeway Closure	5.9	12	4	3.5	7	2

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

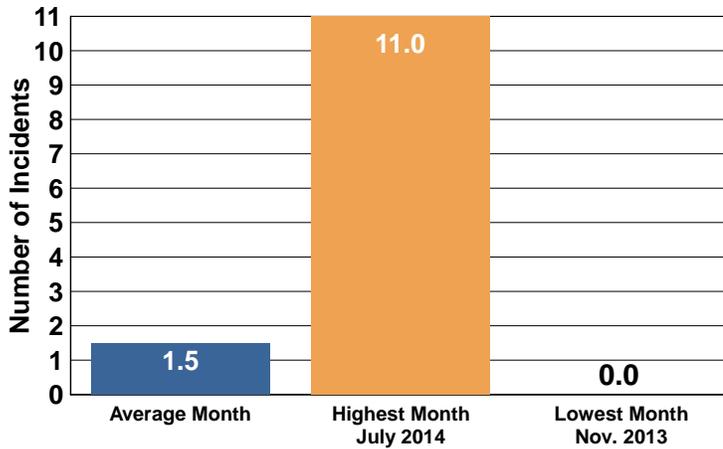
Unplanned Incidents by Roadway



Freeway	FY 2014						FY 2013					
	Average Month		Highest Month Jan. 2014		Lowest Month Aug. 2014		Average Month		Highest Month Jan. 2013		Lowest Month Mar. 2013	
	Total	per mi.	Total	per mi.	Total	per mi.	Total	per mi.	Total	per mi.	Total	per mi.
I-96 (10.6 mi.)	17	1.6	34	3.2	7	0.7	17	1.6	30	2.8	10	0.9
I-196 (12.1 mi.)	29	2.4	67	5.5	13	1.1	33	2.7	50	4.1	22	1.8
US-131 (15.2 mi.)	57	3.8	104	6.8	22	1.4	60	4.0	98	6.4	43	2.8
Total	103	2.7	205	5.4	42	1.1	111	2.9	178	4.7	75	2.0

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

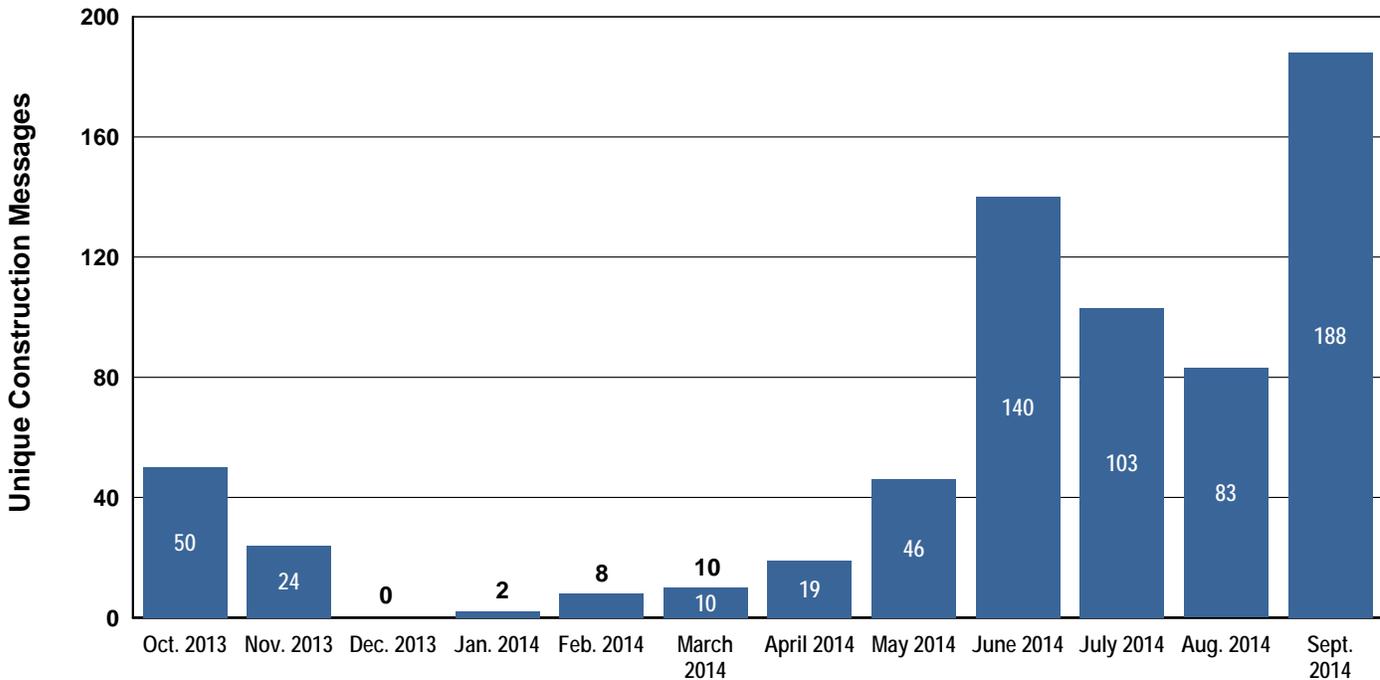
Incidents Occurring in Work Zones



Highest Month Work Zone Incident Details:

During the month of July, 11 incidents were identified by operators as being within work zones. All 11 crashes occurred within the southbound US-131 bridge repair work zone from Wealthy Street to I-196.

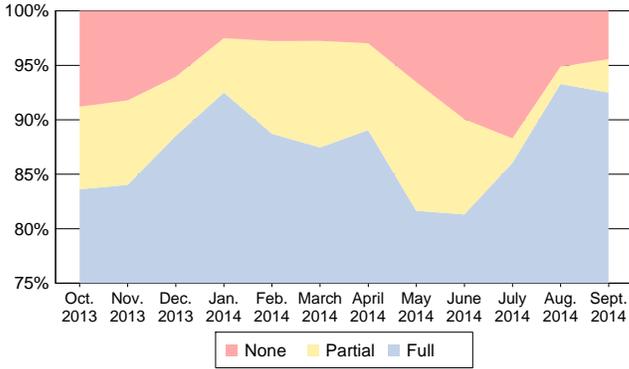
Monthly Construction DMS Message Activity



Construction Activity



Overall CCTV Camera Availability

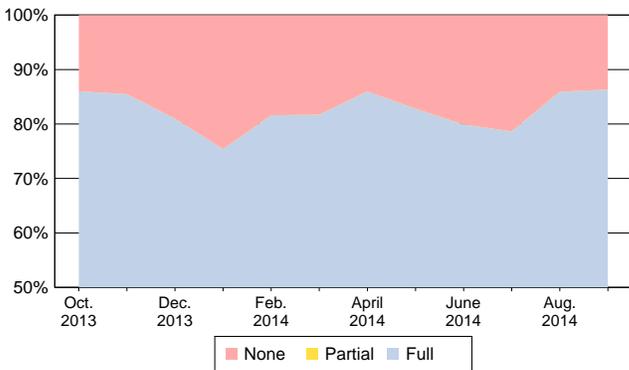


Individual CCTV Camera Availability



CCTV Cameras Below 95% Availability			
Location	Full	Partial	None
1. US-31 @ Jackson Ave	19%	67%	14%
2. US-31 @ Van Wagoner St	20%	66%	14%
3. I-196 @ M-11 (28th St.)	28%	8%	64%
4. US-31 @ M-104	46%	45%	9%
5. I-196 @ Jackson St.	71%	-	29%
6. I-196 @ Bike Path	72%	-	28%
7. I-96 Conn. to US-131	73%	-	27%
8. I-196 @ Chicago Dr. Conn.	81%	2%	17%
9. I-96 @ I-196	82%	18%	-
10. I-96 EB @ Plainfield Ave.	83%	14%	4%
11. I-96 @ E. Beltline Ave.	83%	12%	5%
12. M-6 @ Kalamazoo Ave.	86%	-	14%
13. I-96 EB @ M-37 (Alpine Ave.)	88%	12%	-
14. I-196 @ Lane Ave.	90%	10%	-
15. I-196 @ Chicago Dr.	93%	-	7%
16. I-196 @ College Ave.	95%	5%	-

Overall MVDS Availability

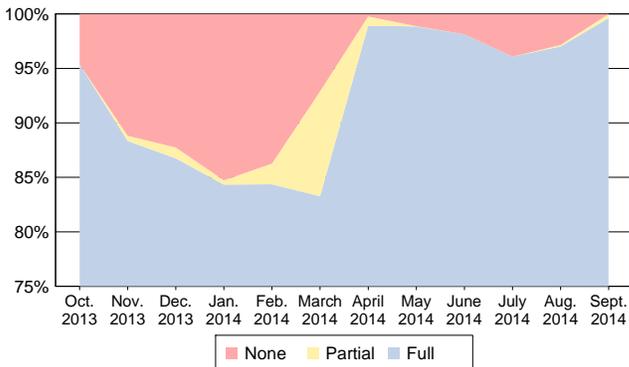


Individual Detector Availability



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. 229 - US-131 @ I-96	13%	-	87%
6. 124 - I-196 EB @ I-96 Merge	39%	-	61%
7. 220 - I-196 @ US-131	48%	-	52%
8. 205 - US-131 NB N of 28th	57%	-	43%
9. 125 - I-96 EB @ E. Beltline	68%	-	32%

Overall DMS Availability



Individual DMS Availability



DMS Below 95% Availability			
Location	Full	Partial	None
1. I-196 WB @ Chicago Dr. Conn.	61%	3%	36%
2. I-96 WB @ M-21 (Fulton St.)	63%	-	37%
3. US-131 NB @ 84th St.	65%	-	35%
4. M-6 EB @ Ivanrest Ave.	78%	6%	16%
5. US-131 SB @ 12 Mile Rd.	86%	-	13%
6. I-96 WB @ Knapp St.	88%	-	12%
7. I-96 WB @ Quiggle Ave.	90%	10%	-
8. I-96 EB @ Dean Lake Ave.	93%	6%	1%
9. I-96 EB @ Forest Hill Ave.	94%	5%	1%