



Southeast Michigan Transportation Operations Center

OCTOBER
2012

MONTHLY
PERFORMANCE
MEASURES

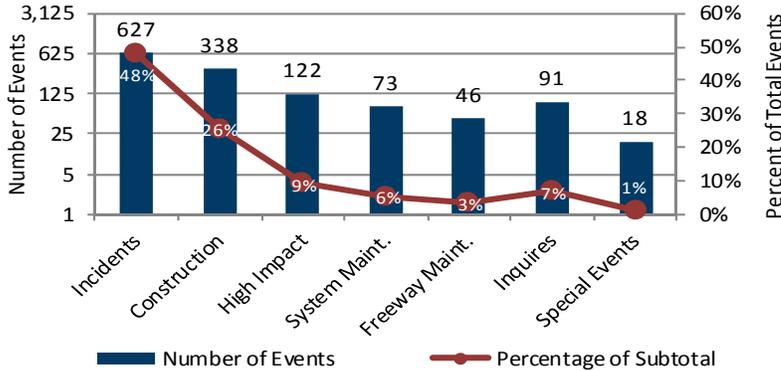


Oladayo Akinyemi, P.E.
1060 W. Fort Street
Detroit, MI 48226
AkinyemiO@michigan.gov

Report Compiled By **URS**

- Event:** A task in which the Control Room Operator is involved. Multiple categories of events exist (e.g., Incident, Construction, Special Event).
- Call:** Any phone call that comes into or goes out of the Control Room. Multiple calls may be associated with one event.
- Incident:** An event that impacts the shoulder, lane(s) or a ramp of a State of Michigan trunkline (e.g., accident, vehicle fire, debris or police situation).

Events by Type

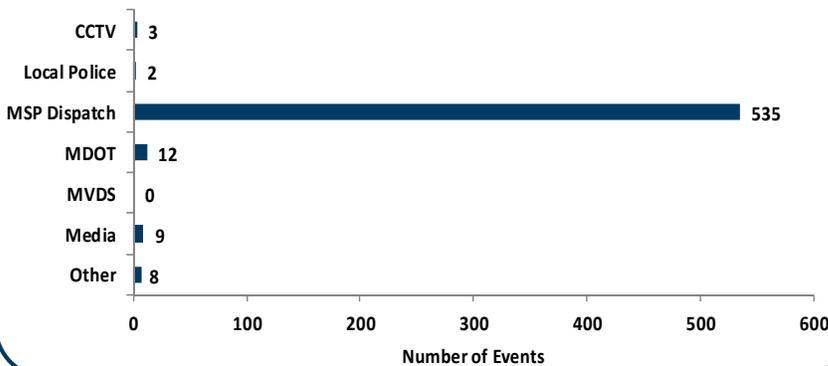


Control Room **events** consist of: construction, incidents, high impact (see definition on page 5), system maintenance (software and hardware), freeway maintenance (lighting, field equipment, potholes, sweeping, etc.), traffic inquiries (public and agencies), special event coordination and Freeway Courtesy Patrol (FCP) assists (excluded from this table and described on page 3).

Control Room Operators (CROs) logged **1,315 Events** along the freeways excluding FCP assists. The top **Event** categories are shown in the chart.

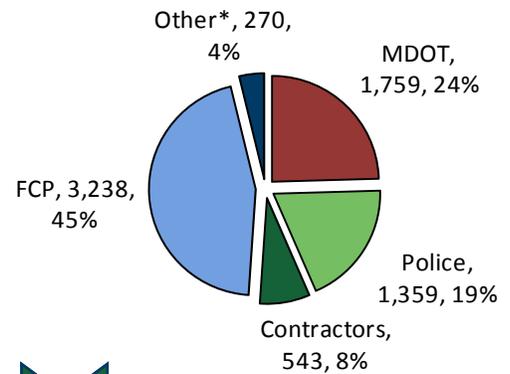
CROs rely on various sources to detect **Events** that occur along the freeways. When an **Event** is detected, the CRO is required to note which detection source was used. This not only ensures that the **Event** was detected by a reliable source, but also provides insight as to which sources are utilized most frequently.

Events by Detection Source



CROs are responsible for monitoring and managing traffic operations along the freeways, it is critical to know where construction activities are taking place and the impact that they may have on freeway operations. The Construction Coordinator maintains frequent communication with MDOT staff and Contractors to ensure that the CROs are kept up-to-date on the locations and impacts of construction project and permit work (local agencies working on State trunklines).

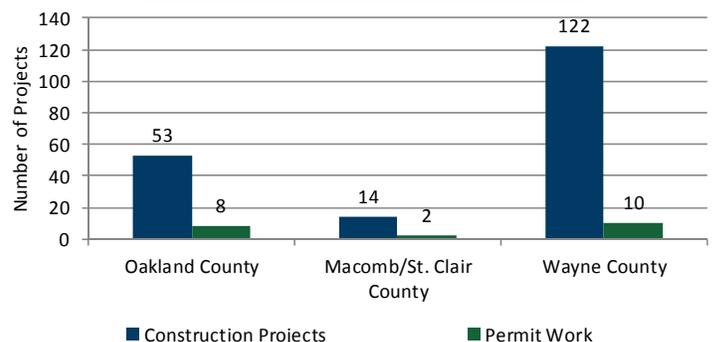
Calls by Agency



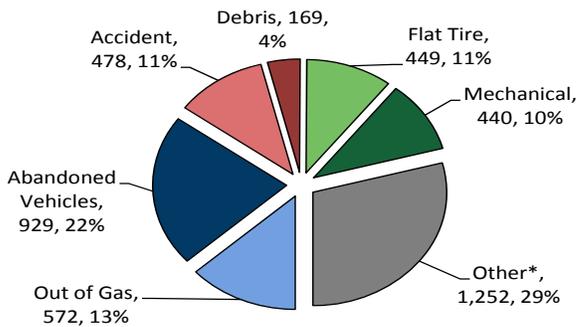
CROs managed **7,169 Calls** this month. The majority of all **Calls**, **45%**, were between the Control Room and the **Freeway Courtesy Patrol (FCP)**.

*Other includes Airport, Border, City of Detroit, Fire, Media, Special Event Venues and Transit agencies, DTMB, County

Construction Activities



Assists by Type

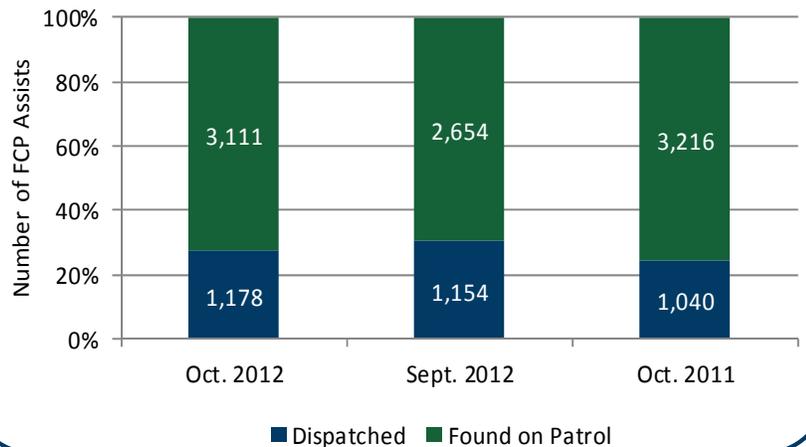


The FCP is a free service provided to the public to assist stranded motorists, provides traffic control for **Incidents** and improves mobility along the freeways by keeping travel lanes clear of debris and disabled vehicles. FCP had a total of **4,289** assists. The majority of the assists (**22%**) were identifying **Abandoned Vehicles**.

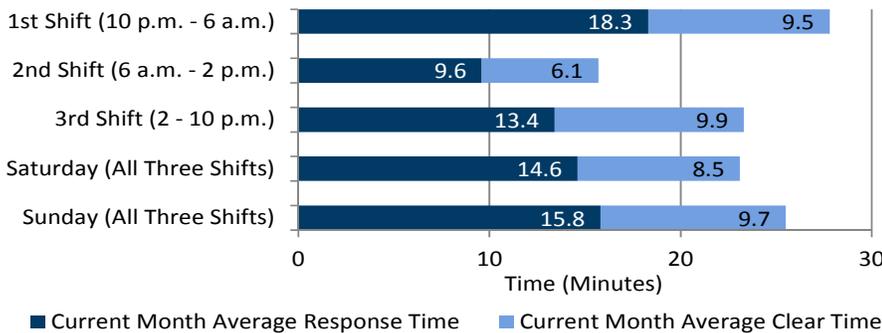
*Other includes Cellular Assists, Declined Service, Tow, Gave Directions, Gone on Arrival (GOA), Traffic Policing, Transport, Canceled/Disregarded Runs.

Freeway Courtesy Patrol (FCP) drivers are required to patrol their routes when not actively handling an assist. While on patrol, the driver may find an **Event** of which the Control Room is not yet aware. He/she will contact the Control Room via the 800 MHz radio system and the **Event** will be logged as "Found on Patrol." Likewise, if the Control Room Operator (CROs) detects an **Event** that may require FCP involvement, he/she will dispatch the driver to the **Event** location and log it as "Dispatched."

FCP Assists Dispatched vs. Found on Patrol



Average Assist Times



The response and clear times for all FCP assists are logged by CROs. The average response and clear times for the current month are depicted on the graph to the left.

Shift response times may differ greatly due to the number of drivers on duty and their coverage areas.

The FCP patrols more than **320** miles of freeway in Southeast Michigan. They provided the most assistance along **I-75 (1,016 assists)**. On **I-96** they experienced the highest assist density (**20.6 assists per mile**). The average response and average clear times for each freeway can be compared to the "Average Assist Times" graph which provides system-wide statistics by shift.

FCP Assists by Freeway

Freeway	Miles	Total Assists	Assist Density (assists per mile)	Avg. Response Time (minutes)	Avg. Clear Time (minutes)
I-75	87.6	1,016	11.6	14.2	8.2
I-94	60.7	901	14.8	13.1	10.3
I-96	34.0	699	20.6	15.0	9.8
I-275	37.5	278	7.4	15.5	7.1
I-696	28.7	529	18.4	14.3	6.0
M-59	24.0	87	3.6	11.8	11.4
I-375	1.2	5	4.2	10.4	10.9
M-10 (Lodge)	17.9	358	20.0	13.1	9.1
M-14	6.4	67	10.5	15.6	7.3
M-39 (Southfield)	14.2	271	19.1	13.2	10.2
M-5 (Grand River)	10.3	47	4.6	16.4	6.5
M-8 (Davison)	2.2	27	12.3	10.3	6.7

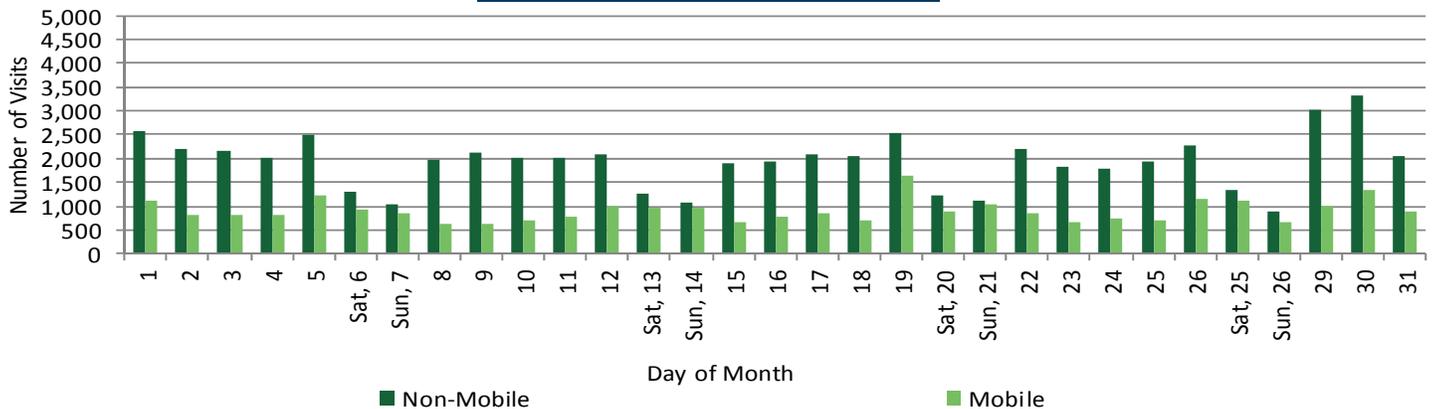
Most Utilized DMS for Unique Messages

Location	# Unique Messages	% of Total Unique Messages
WB I-696@ Ryan	88	4%
SB M-10 @ Mt. Vernon	80	4%
EB I-94 @ Central	74	3%
SB I-275 @ N of 7 Mile	69	3%
EB I-96 @ E of Joy	63	3%

There were **2,136** unique messages displayed throughout the ITS network. A "unique message" may be an **Incident**, AMBER Alert, construction or special event message.

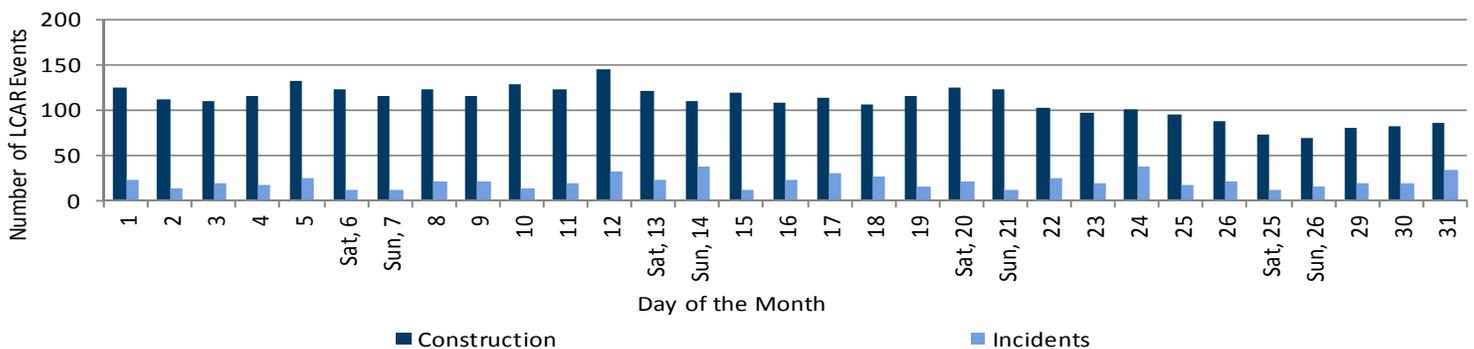
Travel time messages are routinely displayed when unique messages are not active. Travel times are updated every six (6) minutes.

Mi Drive Web Site Visits



A "visit" is counted each time a user accesses the www.michigan.gov/drive Web site, regardless of the number of pages viewed within the site. "Mobile" visits are those where the site is accessed using a mobile device, while "Non-Mobile" visits are those where the Web site is accessed from a computer.

LCAR Posts Sent to the Web Site



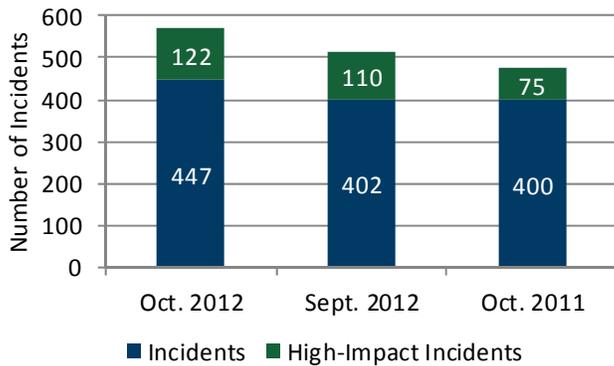
Control Room Operators (CROs) are able to post construction and **Incident** information to the Mi Drive Web site using the Lane Closure and Restrictions (LCAR) tool. Each post that was sent to the Web site is shown in the chart above.

Incidents by Freeway

Freeway	Miles	Oct. 2012			Sept. 2012			Oct. 2011		
		Total Incidents	Incidents per Mile	Average Duration	Total Incidents	Incidents per Mile	Average Duration	Total Incidents	Incidents per Mile	Average Duration
I-75 (Chrysler/Fisher)	87.6	186	2.12	47.3 min	110	1.26	55.9 min	117	1.34	56.1 min
I-94 (Ford)	60.7	123	2.03	52.3 min	124	2.04	46.2 min	118	1.94	44.8 min
I-696 (Ruether)	28.7	89	3.10	48.7 min	74	2.58	62.4 min	64	2.23	50.2 min
I-96 (Jeffries)	34	95	2.79	43.3 min	76	2.24	62.7 min	74	2.18	58.4 min
M-10 (Lodge)	17.9	42	2.35	44.4 min	35	1.96	37.9 min	24	1.34	49.5 min
M-39 (Southfield)	14.2	33	2.32	52.1 min	26	1.83	44.5 min	21	1.48	42.5 min
M-8 (Davison)	2.2	2	0.91	33.0 min	0	0.00	0.00	1	0.45	85.0 min
I-275	37.5	44	1.17	49.4 min	47	1.25	57.2 min	37	0.99	62.2 min
I-375	1.2	0	0.00	0	2	1.67	57.2 min	0	0.00	0
M-14	6.4	11	1.72	57.2 min	5	0.78	69.0 min	9	1.41	81.9 min
M-59	24	1	0.04	37.0 min	2	0.08	24 min	1	0.04	7.0 min
Total Average		57	2	42.2 min.	46	1	49.3 min.	42	1	48.9 min.

I-75 experienced the highest total **Incidents**; however, **I-696** had the greatest incident per mile rate. The longest average incident duration occurred along **M-14**.

Total Incidents



There were a total of **569** total **Incidents**, **21%** of which were high-impact. A **high-impact incident** is one that results in a total freeway closure in one direction, a freeway-to-freeway ramp closure or a closure of all lanes with only one lane open.

The majority, **15%**, of high-impact incidents occurred along **I-75**. Each time a high-impact incident occurs, CROs are required to provide e-mail notifications to a pre-defined distribution list of individuals and organizations. The notifications include the location of the incident, degree of closure, reason for the closure, the source that verified the incident and any other pertinent information related to traffic operations.

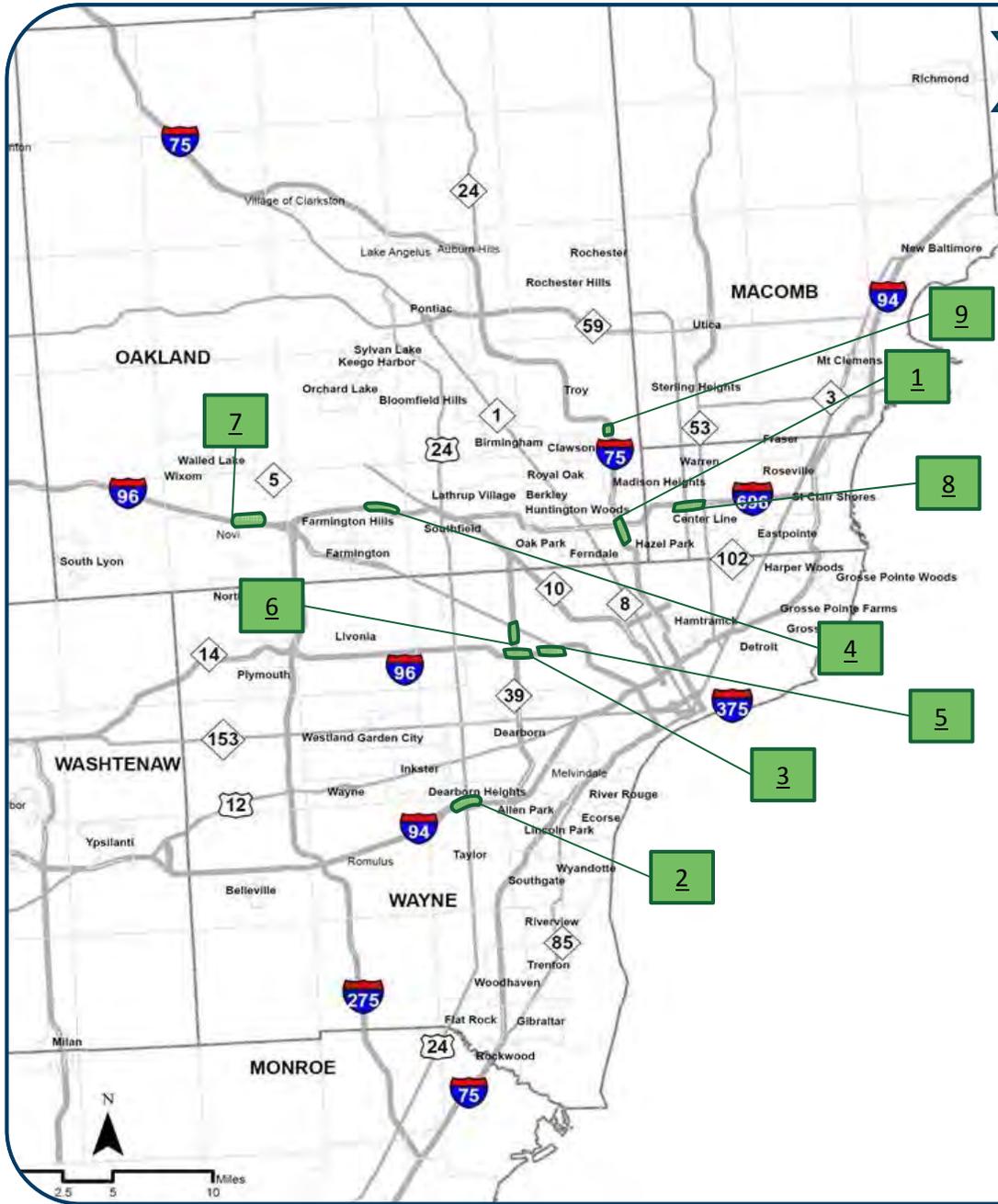
High-Impact Incident Activity

	Oct. 2012	Sept. 2012	Oct. 2011
Freeway Closures			
All Lanes Closed in One Direction	20	16	17
Lane Closures			
Only One Lane Open	79	75	49
Ramp Closures			
Freeway-to-Freeway	23	19	9
Total	122	110	75

Top Duration Incidents

Location	Date/Duration	Details
EB I-94 @ 21 Mile	10.14.2012/451 min.	Crash
NB I-75 @ M-39	10.29.2012/368 min.	Crash
NB I-75 @ Clark	10.26.2012/244 min.	Crash
WB I-696 @ Van Dyke	10.17.2012/242 min.	Crash
WB I-94 @ 26 Mile Rd	10.24.2012/212 min.	Crash

The top duration **Incident** occurred along **I-94** and lasted **451** minutes, compared to the average incident duration along **I-94** of **52.3** minutes.



The top **Event** locations for the month are identified on the map. Each month the locations and **Event** types may change. Hot spot **Events** may include accidents, debris or weather-related events. Details for each location depicted on the map can be found in the “Hot Spot Activity” table below.

The hot spots depicted on the map are described in this table. The number of hot spot **Event** locations may vary each month depending on the threshold used for categorizing the location as a “top” hot spot. The threshold is chosen after analyzing the data and identifying the logical gap where the “top” and “normal” activity levels fall. This month, a threshold of **24 Events** was used.

Hot Spot Activity

Location Number	Event Type	Location	Number of Incidents	Percent of Incident Total
1	Accident	NB I-75 Between Woodward Hghts. And 11 Mile	43	8%
2	Accident	WB I-94 Between Monroe and Beech Daly	38	7%
3	Accident	WB I-96 Between Greenfield and Evergreen	33	7%
4	Accident	WB I-696 Between Middlebelt and Farmington	31	5%
5	Accident	WB I-96 Between Grand River and Southfield	28	5%
6	Accident	NB M-39 Between Plymoth and Outer Dr.	27	5%
7	Accident	WB I-96 Between Meadowbrook and Beck	26	5%
8	Accident	WB I-696 Between Van Dyke and 11 Mile	25	4%
9	Accident	NB I-75 Between 13 Mile and Rochester	24	4%