



# July 2016

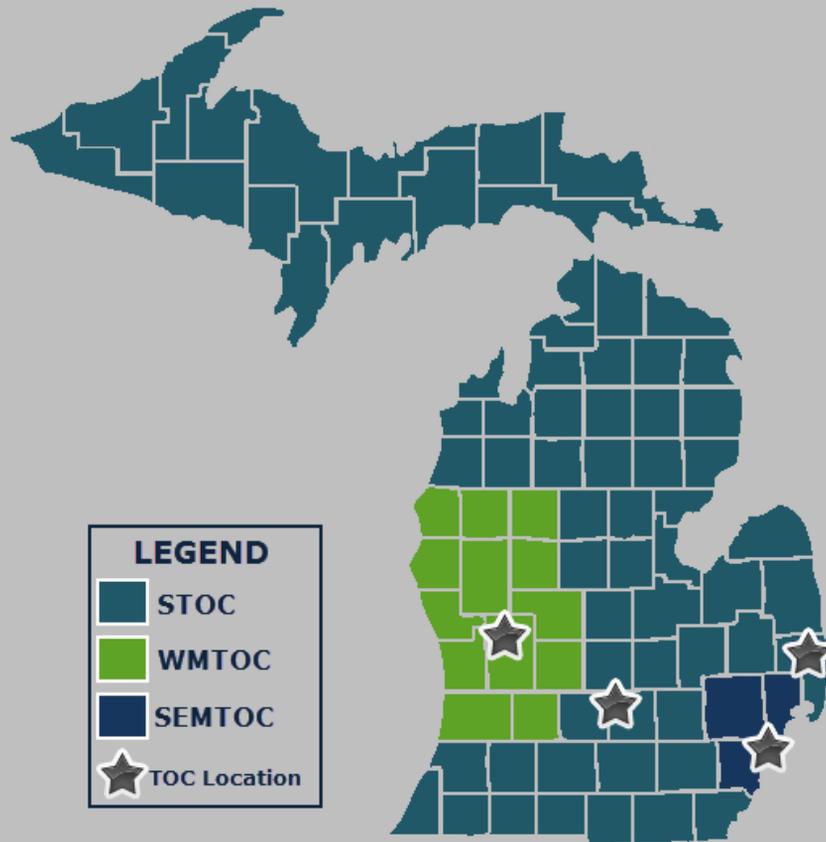
## PERFORMANCE MEASURES

### Statewide Transportation Operations Center

**AECOM**

 **MDOT**  
Michigan Department of Transportation

The Statewide Transportation Operations Center (STOC) operates 24 hours a day, seven (7) days a week to monitor and manage traffic along the roadway system throughout five (5) MDOT regions. STOC operators utilize closed-circuit television cameras (CCTVs), dynamic message signs (DMS) and various other communication resources in order to receive and disseminate real-time traffic conditions to the motoring public.



## Summary of Terminology

**Communication** – Any phone call, e-mail or radio transmission that comes into or goes out of the control room.

**CRO** – Control Room Operator

**Event** – A task in which a CRO is involved. Multiple categories of events exist (e.g., incident, construction, weather, or special event).

**FCP** – Freeway Courtesy Patrol

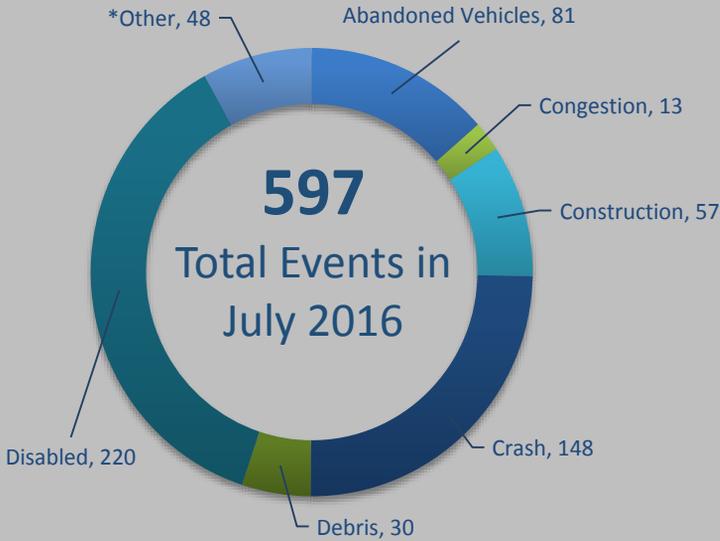
**FCP Assist** – Service provided to the motoring public for various incidents. Includes tire change, mechanical assist, provide gas, move debris, and traffic policing.

**High-Impact Incident** – Any incident that closes more than fifty percent of the freeway, closes both directions of an arterial, closes a freeway-to-freeway ramp, or a closure of less than fifty percent of the freeway/roadway but is also causing a significant delay.

**Incident** – An unplanned event that impacts the shoulder, lane(s) or a ramp of a state of Michigan trunkline (e.g., crash, vehicle fire, debris, or police situation).

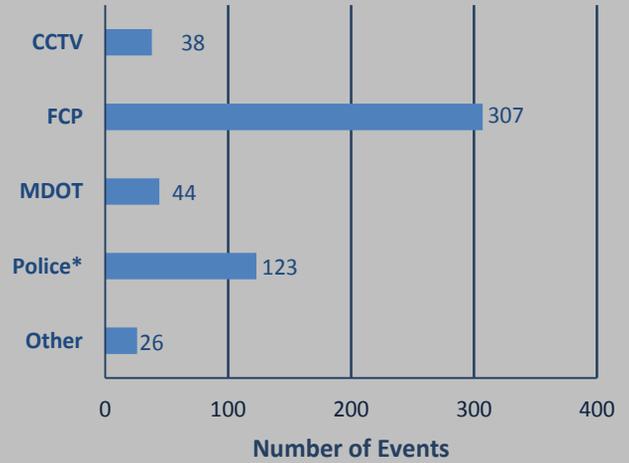
**Unique Message** – Any message posted to the dynamic messages signs (DMS) that relate to an incident, construction, special event, weather condition or an AMBER alert.

## Events by Type



\*Other includes police situations, damage to MDOT property, maintenance, weather, AMBER Alerts, fire, special events, and other traffic impediments.

## Incidents by Detection Source



Of the **538** incidents in July 2016, **57%** were detected by Freeway Courtesy Patrol. \*Includes notification from dispatch, Nixles, and Bay Alerts.

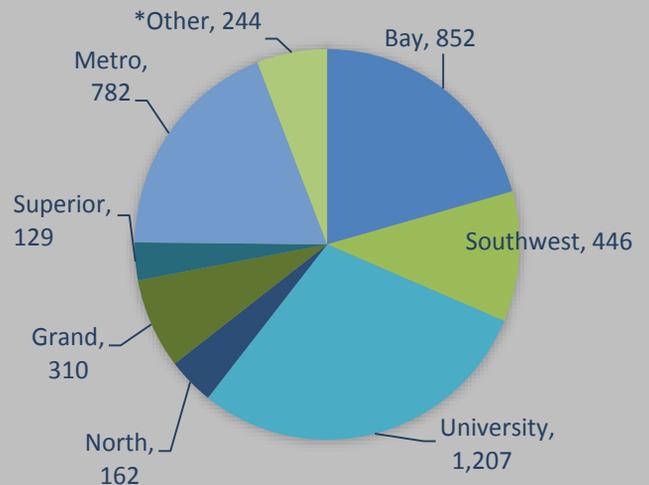
## Construction Events



STOC CROs monitored and managed **57** construction events in July 2016.

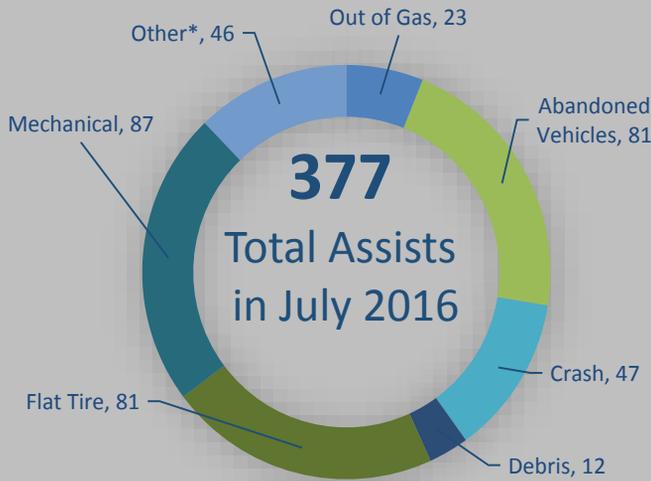
Note: CROs can manage multiple construction events, such as intermittent lane shifts and configuration changes, for each construction project managed by the TSCs.

## Communications by Region



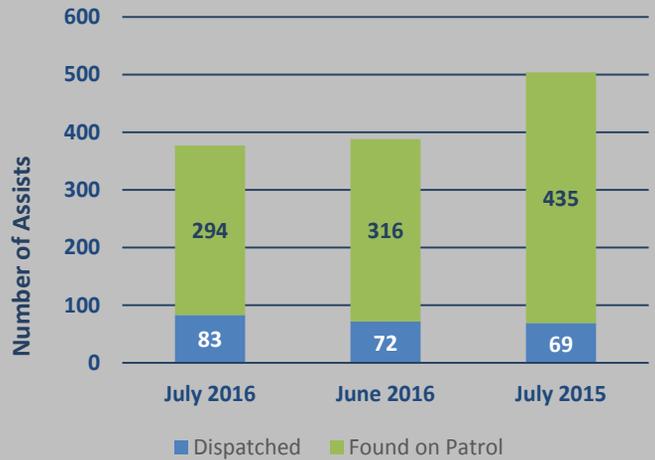
CROs managed **4,132** notifications (phone calls, e-mails, radio transmissions) in July 2016, with the largest percentage of all communications, **29%** (1,207) between the control room and **University Region**.

## Assists by Type



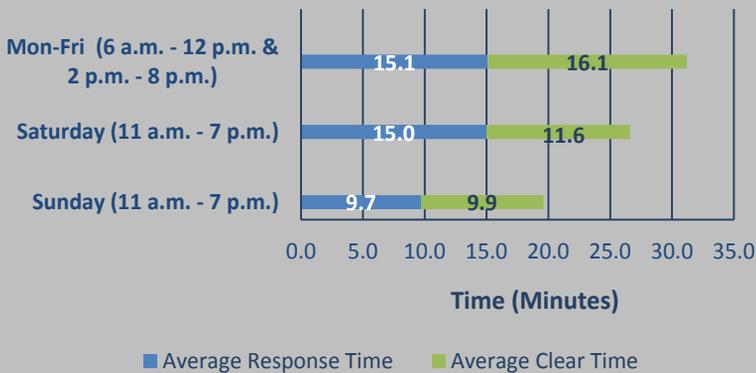
\*Other includes motorist sleeping, checking map, using cell phone, or medical emergency.

## Dispatched vs. Found on Patrol



Of the 377 assists in July 2016, **78%** (294) were found while FCP drivers patrolled their routes.

## Average Assist Times



The response and clear times for all FCP assists are logged by CROs. These numbers represent the average response and clear times for all drivers during the time periods shown.

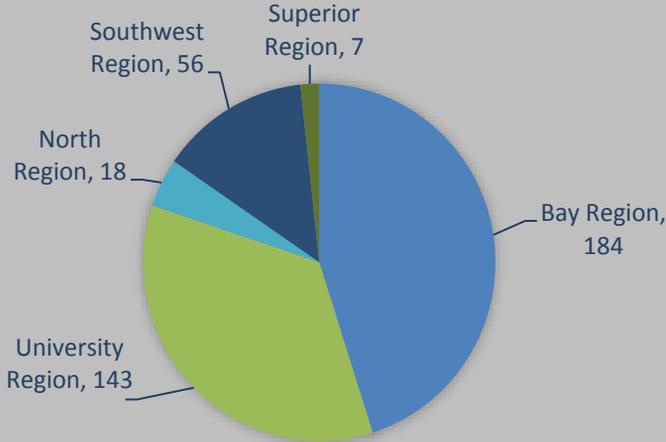
STOC has two FCP drivers working on two routes: one driver working in the Brighton area of I-96 and US-23 and the other driver working in the Ann Arbor area of I-94, US-23 and M-14.

## FCP Assists by Freeway

Freeway	Miles Patrolled	Total Assists	Assist Density (assists per mile)	Avg. Response Time (minutes)	Avg. Clear Time (minutes)
US-23	26.5	<b>167</b>	6.3	12.2	16.1
I-94	18	131	<b>7.3</b>	13.9	16
I-96	11	42	3.8	27.2	11.0
M-14	15.5	37	2.4	29.0	9.9
<b>Totals/Averages</b>	<b>71</b>	<b>377</b>	<b>5.3</b>	<b>15.1</b>	<b>16.1</b>

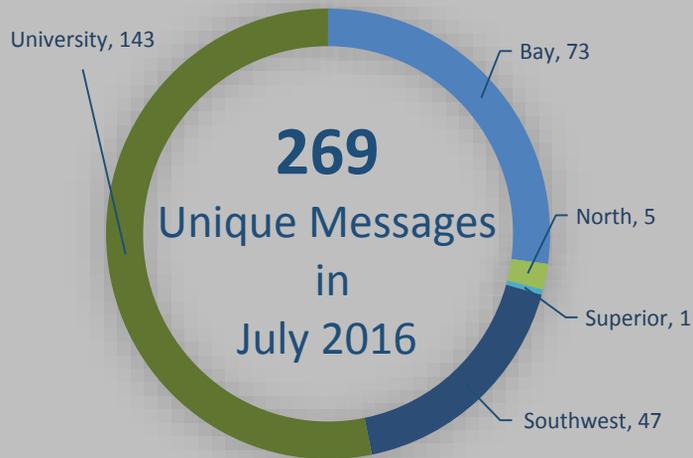
FCP provided the most assistance along **US-23** this month (**167 assists**). **I-94** experienced the highest assists per mile (**7.3 assists per mile**).

## Stuck in Traffic Notifications



Stuck in traffic notifications are sent to the Control Room via motorists using the Mi Drive mobile website or Mi Drive Application.

## DMS Messages by Region



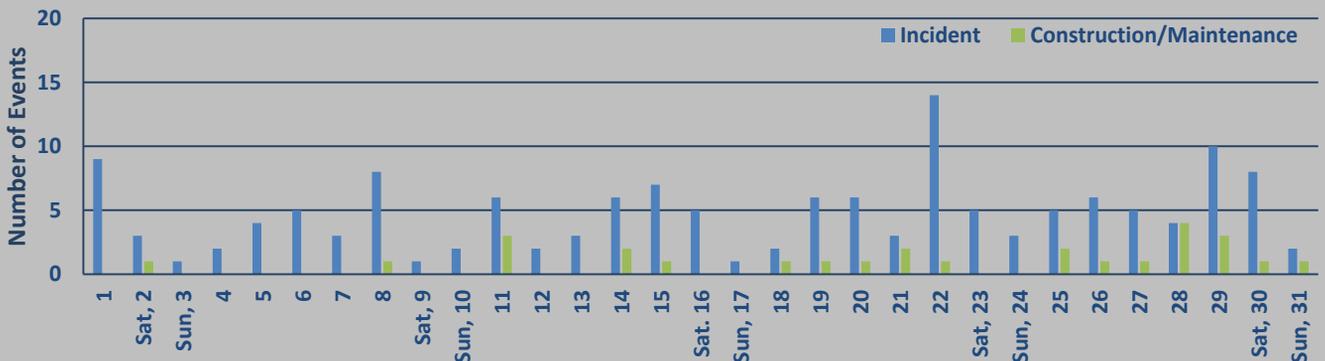
Of the **269** unique messages in July 2016, 53% of them were posted in the **University Region**.

## DMS Messages by Type



Once a CRO receives notification and confirmation from stakeholders regarding a specific event, a message specific to the event location and event type will be sent to appropriate dynamic message signs (DMS).

## STOC Events Displayed on the Mi Drive Website

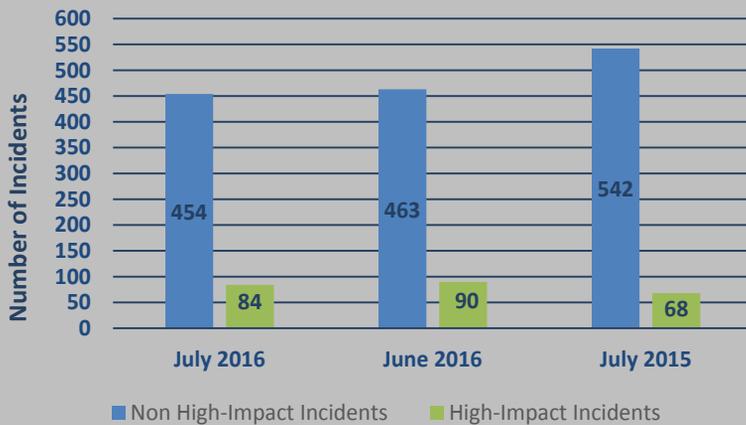


## Incidents by Freeway

Freeway	Miles	July 2016			June 2016			July 2015		
		Total Incidents	Incidents per Mile	Average Duration	Total Incidents	Incidents per Mile	Average Duration	Total Incidents	Incidents per Mile	Average Duration
I-475	17	1	0.06	<b>218.0</b>	0	0.00	0.0	0	0.00	<b>0.0</b>
I-496	12	4	0.33	41.5	3	0.25	24.3	3	0.25	146.0
I-675	7	0	0.00	0.0	1	0.14	45.0	0	0.00	0.0
I-69	178	8	0.04	119.5	10	0.06	172.6	4	0.02	50.3
I-75 *	288	25	0.09	210.2	19	0.07	105.2	21	0.07	57.3
I-94 *	187	162	0.87	28.4	151	0.81	26.6	179	0.96	30.1
I-96 *	76	49	0.64	37.7	62	0.82	23.9	70	0.92	24.6
M-14 *	23	37	1.61	14.5	57	<b>2.48</b>	18.1	68	<b>2.96</b>	17.3
US-127	165	9	0.05	55.6	15	0.09	81.8	5	0.03	52.2
US-131 *	91	5	0.05	62.8	1	0.01	<b>205.0</b>	4	0.04	<b>153.5</b>
US-23	93	<b>173</b>	<b>1.86</b>	21.3	<b>162</b>	1.74	20.3	<b>221</b>	2.38	22.9
US-31 *	85	0	0.00	0.0	2	0.02	183.5	0	0.00	0.0
Total/Averages	1,222	473	0.39	38.2	483	0.40	32.0	575	0.47	27.9

\*These figures are discounted and do not include incidents on stretches of freeway managed by WMTOC, SEMTOC or BWBTOC.

## Total Incidents



There were a total of **538 Incidents** in the month of July, **16 percent** of these were classified as high-impact.

A high-impact **Incident** is one that closes more than fifty percent of the freeway, closes both directions of an arterial, closes a freeway-to-freeway ramp, or closes less than fifty percent of the freeway/roadway but is also causing a significant delay.

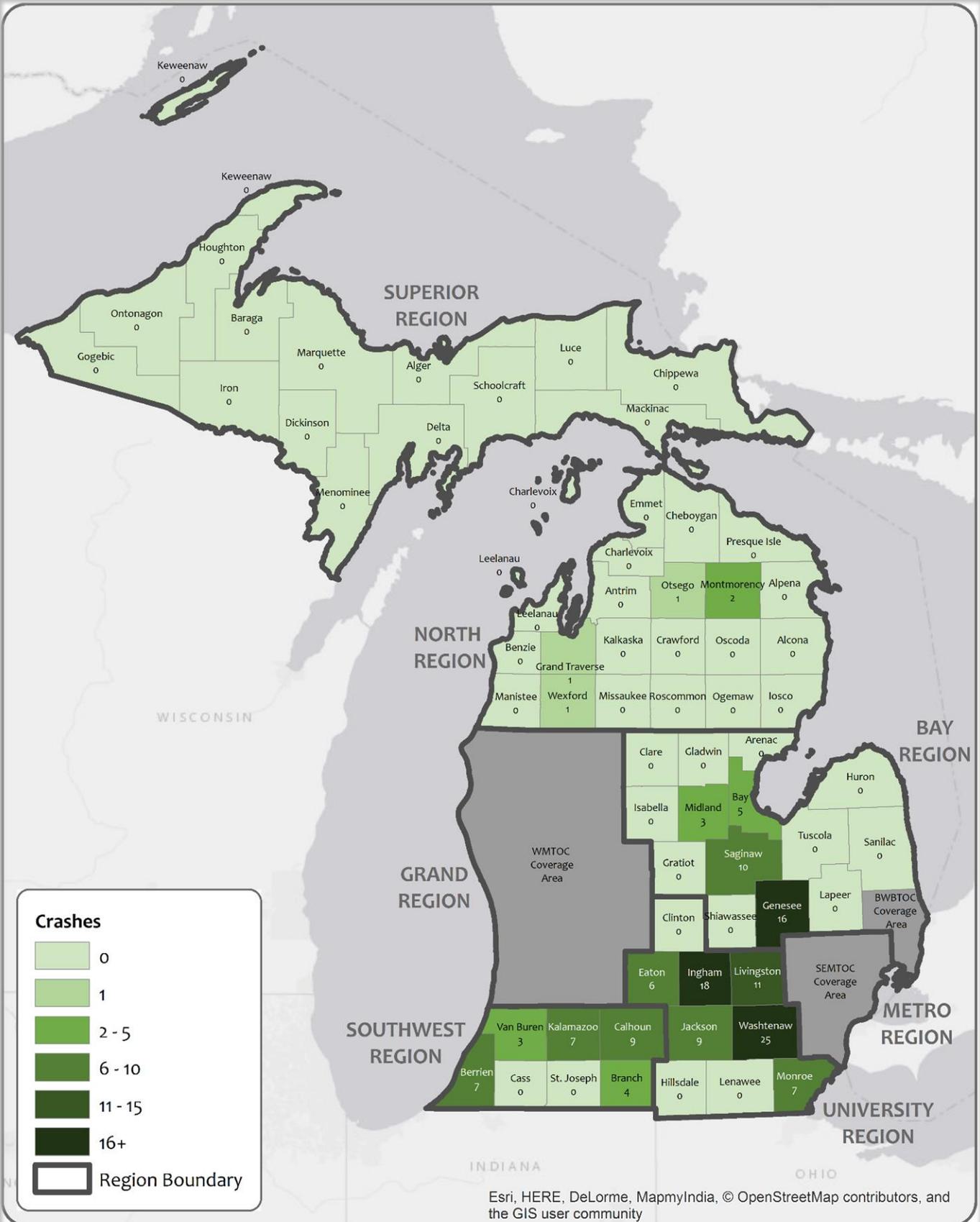
## Longest Duration Incidents

Location	County	Day	Duration	Details
EB & WB BL I-94 at 20th Street	Calhoun	Sunday, July 17	938 Minutes	Car vs Pedestrian
EB & WB US-12 at Platt Road	Washtenaw	Thursday, July 21	698 Minutes	Semi Crash/Downed Power
EB & WB BL I-94 at First Street	Washtenaw	Monday, July 25	651 Minutes	Downed Power Lines
NB I-75 after Dixie Highway	Monroe	Tuesday, July 5	627 Minutes	Semi Crash
EB I-94 after Grand Mere Road	Berrien	Friday, July 15	548 Minutes	Emergency Bridge Repair

The top duration **Incident** this month occurred along **EB & WB BL I-94** and lasted **938 minutes**, compared to the average duration of **44.8 minutes** (average of all STOC managed events).

# NUMBER OF INCIDENTS PER COUNTY

July 2016



Esri, HERE, DeLorme, MapmyIndia, © OpenStreetMap contributors, and the GIS user community