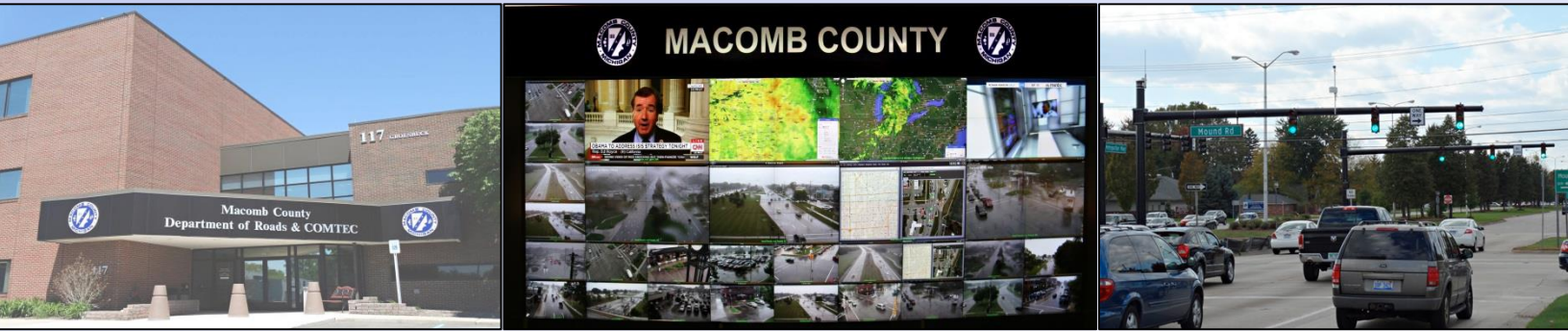


MACOMB COUNTY DEPARTMENT OF ROADS

TRAFFIC OPERATIONS CENTER

*"To provide and maintain a reliable real-time traffic operations system, in coordination with county stakeholders, that enables a safe, efficient, and informative travel experience."
- MCDR TOC Mission Statement*

PERFORMANCE MEASURES



May 2022

AECOM

WSP

**INTEGRAL
BLUE**



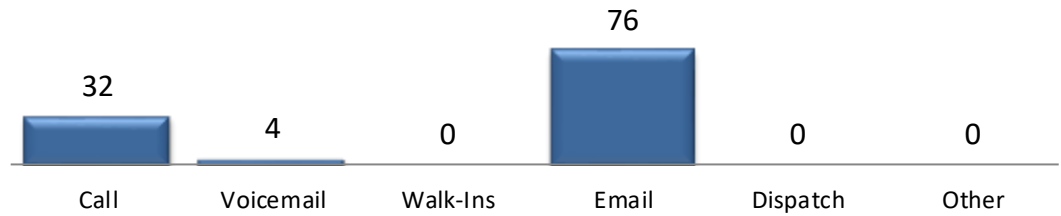
John Abraham, PhD, PE, PTOE
Director of Traffic & Operations
Macomb County Department of Roads
117 S Groesbeck Hwy
Mount Clemens, MI 48043
586-463-8671
JAbraham@RCMCWeb.org

MONTHLY TOC HIGHLIGHT

In May, the Macomb County Department of Roads (MCDR) Traffic Operations Center (TOC) supported the planned full closure of the I-94 freeway between M-59 and Metro Parkway. The closure was to help DTE upgrade the high-voltage transmission lines across I-94 on May 8th for 8 hours, starting at 6 AM. The TOC engineers anticipated the travel paths the freeway traffic may consider, coordinated with Southeast Michigan TOC (SEMTOC) about the messages on MDOT's Dynamic Message Signs, posted closure information to crowd-sourced platforms (such as Waze), and prepared special timings for 79 signals on short notice. Throughout the duration of the closure, TOC engineers monitored and managed the flow of traffic by making as-needed, real-time signal timing modifications.

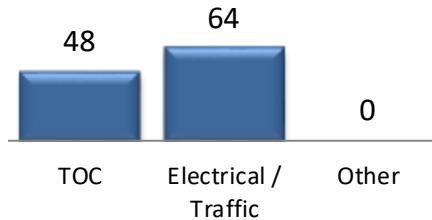
SERVICE REQUESTS

Service Request Source



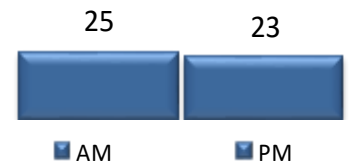
In the month of May, **112** incoming requests regarding traffic signals were received.

Service Request by Dept.

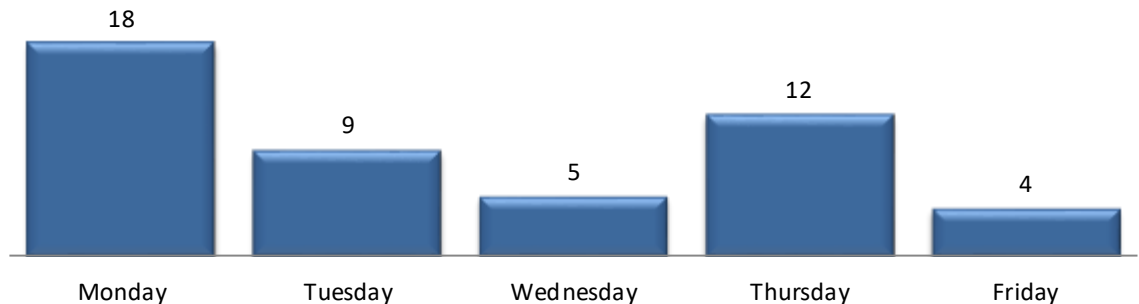


In the month of May, TOC engineers closed **45** service requests within an average of **6** business days.

TOC by Time of Day



Service Request Per Day of Week



TRAFFIC OPERATIONS

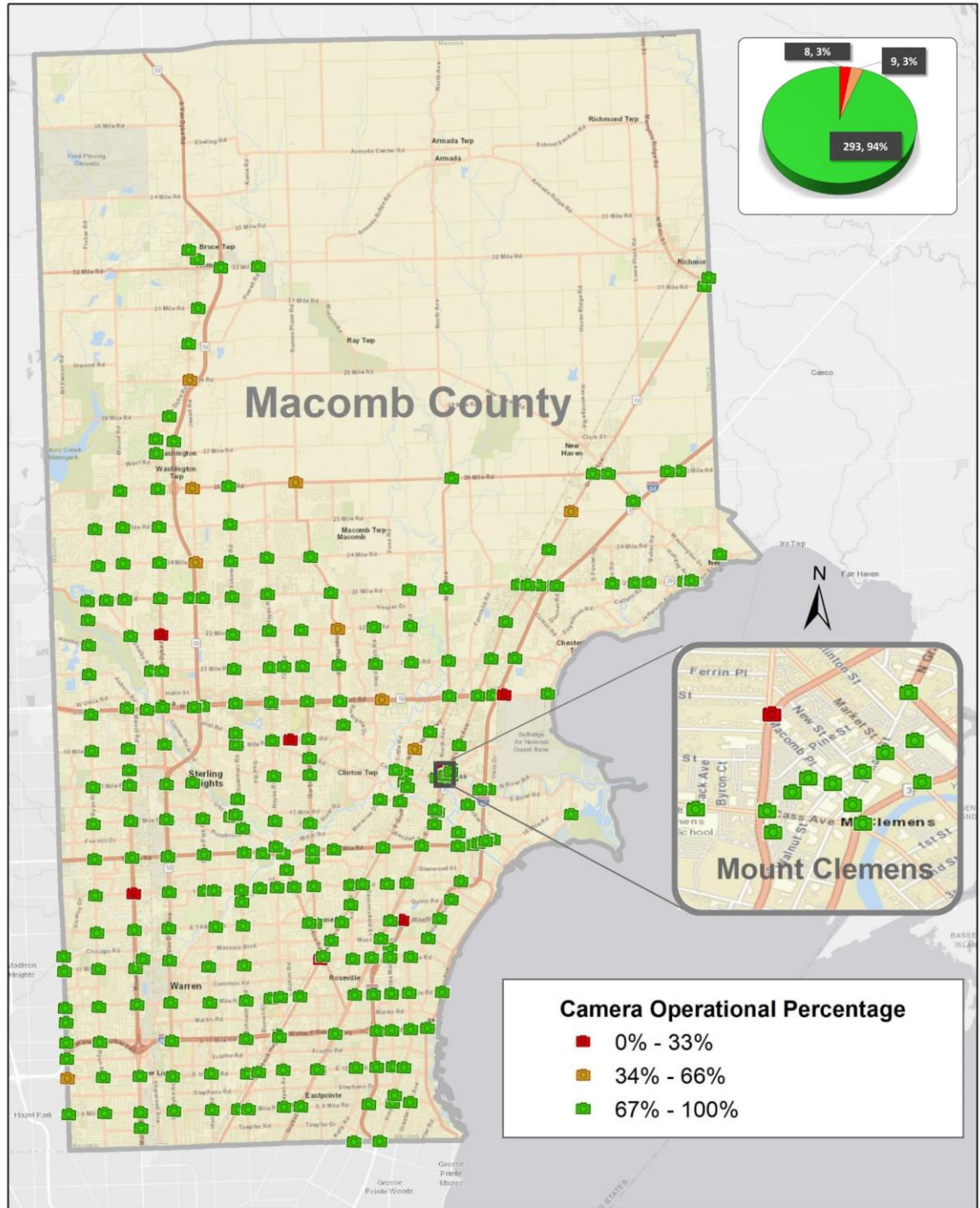
May 2022



CCTV TRAFFIC CAMERA SUMMARY

CAMERA COVERAGE

May 2022



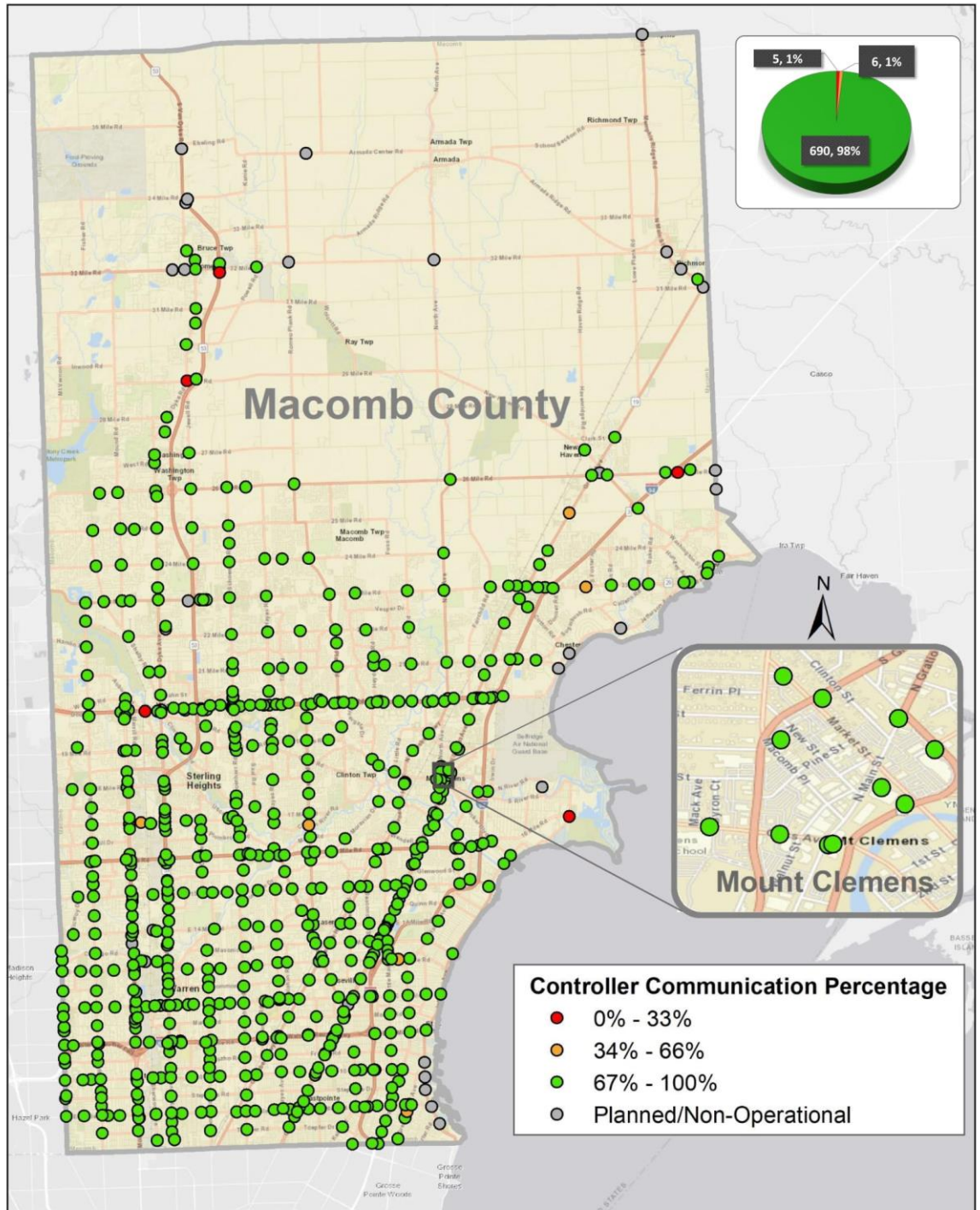
The map above represents the CCTV camera operational percentages for the month of May 2022.



REGIONAL COMMUNICATIONS SUMMARY

ITS MAINTENANCE

May 2022



The map above represents the communication availability percentages of Traffic Signal Controllers for the month of May 2022.



HIGH IMPACT CORRIDOR COMMUNICATIONS AVAILABILITY

Corridor	Current Month	Previous Month	Change
9 Mile	99%	99%	0%
14 Mile	99%	97%	2%
15 Mile	99%	99%	0%
Metro Parkway	99%	99%	0%
Hall Rd(M-59)	97%	99%	-2%
Dequindre	99%	86%	13%
Ryan	99%	97%	2%
Mound	99%	99%	0%
Hoover	99%	96%	3%
Schoenherr	99%	98%	1%
Hayes	98%	99%	-1%
Gratiot(M-3)	99%	97%	2%
Harper	99%	99%	0%

The table above represents a one-time monthly snapshot of communications along major corridors in Macomb County.

FIELD WORK

77 sites visited by the IT/ITS Maintenance Technicians. 15 sites visited by the combined efforts of the IT/ITS Maintenance and MCDR Electrical crews.

SIGNAL TIMING CHANGES

Traffic signal changes performed by TOC engineers

Time of Signal change	Loc #	Intersection	Reason for signal change
05/04/2022 16:06	Gratiot (M-3)/21 Mile Road	185	Congestion
05/04/2022 16:07	Dequindre/Universal Mall	380	Incident
05/04/2022 16:07	I-94 EB Off Ramp/Little Mack	714	Traffic Study
05/04/2022 16:07	I-94 WB Off Ramp/Little Mack	713	Traffic Study
05/04/2022 16:07	Little Mack/Masonic	254	Traffic Study
05/04/2022 16:07	North Avenue/21 Mile Road	482	Incident
05/04/2022 16:07	Lorraine/10 Mile Road	390	Service Request
05/04/2022 16:07	14 Mile Road/Ryan	144	Service Request
05/04/2022 16:08	Hall Road WB (M-59)/Crossover East of Romeo Plank	763	Congestion
05/05/2022 10:43	Metropolitan Parkway WB/Crossover 550' E of Gratiot	648	Incident

MAINTENANCE

May 2022



SIGNAL TIMING CHANGES CONTINUED

MAINTENANCE

May 2022

Time of Signal change	Loc #	Intersection	Reason for signal change
05/05/2022 15:52	Hall Road (M-59)/Romeo Plank	211	Congestion
05/05/2022 16:18	Hall Road EB (M-59)/Crossover West of Romeo Plank	762	Congestion
05/09/2022 11:05	Hall Road WB (M-59)/Marketplace Boulevard	890	Special Event
05/09/2022 11:05	Hall Road WB (M-59)/Crossover East of Gratiot	811	Special Event
05/09/2022 11:05	Gratiot (M-3)/Hall Road (M-59)	162	Special Event
05/09/2022 11:05	Hall Road EB (M-59)/Crossover West of Gratiot	810	Special Event
05/09/2022 11:05	Gratiot (M-3)/Pankow Boulevard	818	Special Event
05/09/2022 11:05	Clair/Gratiot SB (M-3)	354	Special Event
05/09/2022 11:05	Gratiot SB (M-3)/Market	497	Special Event
05/09/2022 11:05	Gratiot SB (M-3)/North Avenue/Macomb St.	498	Special Event
05/09/2022 11:05	Cass/Gratiot SB (M-3)	499	Special Event
05/09/2022 11:05	Church/Gratiot SB (M-3)	502	Special Event
05/09/2022 11:05	Gratiot SB (M-3)/Robertson	501	Special Event
05/09/2022 11:05	Gratiot SB (M-3)/Wellington Crescent	168	Special Event
05/09/2022 11:05	Gratiot SB (M-3)/Harrington	163	Special Event
05/09/2022 11:05	Gratiot SB (M-3)/Remick	86	Special Event
05/09/2022 11:05	Gratiot SB (M-3)/Wendell	459	Special Event
05/09/2022 11:05	Gratiot (M-3)/Metropolitan Parkway	172	Special Event
05/09/2022 11:05	Metropolitan Parkway EB/Crossover 475' W of Gratiot	647	Special Event
05/09/2022 11:05	Gratiot SB (M-3)/Holly Street Crossover	601	Special Event
05/09/2022 11:05	Gratiot SB (M-3)/Crossover 530' N of 15 Mile Road	584	Special Event
05/09/2022 11:05	15 Mile Road/Gratiot	133	Special Event
05/09/2022 11:05	Gratiot SB (M-3)/Crossover North of Quinn	814	Special Event
05/09/2022 11:05	Gratiot SB (M-3)/Crossover 600' N of 14 Mile Road	531	Special Event
05/09/2022 11:05	14 Mile Road/Gratiot	142	Special Event
05/09/2022 11:05	Gratiot SB (M-3)/Crossover North of Voiland	752	Special Event
05/09/2022 11:05	Gratiot SB (M-3)/Macomb Mall	161	Special Event
05/09/2022 11:05	Gratiot (M-3)/Masonic	169	Special Event
05/09/2022 11:05	Gratiot NB (M-3)/I-94 EB Ramp	215	Special Event
05/09/2022 11:05	Gratiot SB (M-3)/Crossover 375' N of 13 Mile Road	374	Special Event
05/09/2022 11:05	Gratiot (M-3)/13 Mile Road	181	Special Event
05/09/2022 11:05	Gratiot NB (M-3)/Crossover 475' S of 13 Mile Road	375	Special Event
05/09/2022 11:05	Gratiot NB (M-3)/Crossover South of Masonic	749	Special Event
05/09/2022 11:05	Gratiot SB (M-3)/Crossover South of Waterbury	753	Special Event
05/09/2022 11:05	Gratiot NB (M-3)/Crossover 850' S of 14 Mile Road	532	Special Event
05/09/2022 11:05	Gratiot NB (M-3)/Crossover South of Quinn	815	Special Event
05/09/2022 11:05	Gratiot NB (M-3)/At Abraham	585	Special Event
05/09/2022 11:05	Gratiot NB (M-3)/Price Drive Crossover	602	Special Event
05/09/2022 11:05	Gratiot NB (M-3)/Schaefer	413	Special Event
05/09/2022 11:05	Broadway (M-3/NB Gratiot)/Iroquois	528	Special Event
05/09/2022 11:05	Broadway (M-3/NB Gratiot)/Harrington	64	Special Event
05/09/2022 11:05	Broadway (M-3/NB Gratiot)/Wellington Crescent	717	Special Event
05/09/2022 11:05	Gratiot NB (M-3)/Robertson	66	Special Event
05/09/2022 11:05	Cass (Crocker)/Gratiot NB (M-3)	63	Special Event
05/09/2022 11:05	Broadway (M-3/NB Gratiot)/Market	65	Special Event
05/09/2022 11:05	Gratiot NB (M-3)/Walnut	427	Special Event
05/09/2022 11:05	Gratiot NB (M-3)/Main/Welts	680	Special Event



SIGNAL TIMING CHANGES CONTINUED

MAINTENANCE

May 2022

Time of Signal change	Loc #	Intersection	Reason for signal change
05/09/2022 11:05	Clair (Joy)/Gratiot NB (M-3)	165	Special Event
05/09/2022 11:05	Hall Road EB (M-59)/Crossover W. of Marketplace	891	Special Event
05/09/2022 11:05	Hall Road WB (M-59)/I-94 EB ON Ramp	813	Special Event
05/09/2022 11:05	I-94 EB Off Ramp/Little Mack	714	Special Event
05/09/2022 11:05	I-94 WB Off Ramp/Little Mack	713	Special Event
05/09/2022 11:05	Little Mack/Masonic	254	Special Event
05/09/2022 11:05	15 Mile Road/Harper/Klix	210	Special Event
05/09/2022 11:05	Fierz (Harper)/King	736	Special Event
05/09/2022 11:05	I-94 Ramp B/Metropolitan Parkway EB	597	Special Event
05/09/2022 11:05	I-94 Ramp D/Metropolitan Parkway WB	596	Special Event
05/09/2022 11:05	Metropolitan Parkway/Union Lake	981	Special Event
05/09/2022 11:05	Metropolitan Parkway WB/Crossover 295' E of Harper	650	Special Event
05/09/2022 11:05	Harper/Metropolitan Parkway	218	Special Event
05/09/2022 11:05	Metropolitan Parkway EB/Crossover 300' W of Harper	649	Special Event
05/09/2022 11:05	Metropolitan Parkway WB/Crossover 550' E of Gratiot	648	Special Event
05/09/2022 11:05	Crocker/Metropolitan Parkway	92	Special Event
05/09/2022 11:05	Harper/Wellington Crescent	433	Special Event
05/09/2022 11:05	Avery (Crocker)/Harper	51	Special Event
05/09/2022 11:05	M-3 (Gratiot Ave.)/Market place	1076	Special Event
05/09/2022 11:05	Gratiot (M-3)/21 Mile Road	185	Special Event
05/09/2022 11:05	I-94 WB Off Ramp/21 Mile Road	345	Special Event
05/09/2022 11:05	Gratiot (M-3)/22 Mile Road	27	Special Event
05/09/2022 11:05	Cotton/Gratiot (M-3/M-59)	848	Special Event
05/09/2022 11:05	Gratiot (M-3)/23 Mile Road	186	Special Event
05/09/2022 11:05	23 Mile Road/Waterside Market Place	973	Special Event
05/09/2022 11:05	I-94 WB Off Ramp/23 Mile Road	836	Special Event
05/09/2022 11:05	Fairchild/21 Mile Road	387	Special Event
05/09/2022 11:05	Cass/Groesbeck (M-97)	72	Special Event
05/09/2022 11:05	Church/Groesbeck (M-97)	884	Special Event
05/09/2022 11:05	Groesbeck (M-97)/Harrington	195	Special Event
05/10/2022 14:40	Chicago Road/Van Dyke	80	Construction
05/10/2022 15:20	Chicago Road/Van Dyke	80	Incident
05/10/2022 15:21	Gratiot (M-3)/Hall Road (M-59)	162	Construction
05/10/2022 15:43	15 Mile Road/Schoenherr	396	Service Request
05/10/2022 15:43	Dodge Park/15 Mile Road	382	Service Request
05/10/2022 16:42	Hall Road EB (M-59)/Crossover West of Gratiot	810	Congestion
05/11/2022 17:47	15 Mile Road/Groesbeck (M-97)	134	Congestion
05/11/2022 17:48	Gratiot (M-3)/Hall Road (M-59)	162	Construction
05/11/2022 17:48	Hall Road WB (M-59)/Crossover East of Gratiot	811	Construction
05/13/2022 11:19	Hall Road (M-59)/Elizabeth	632	Construction
05/13/2022 11:19	Hall Road EB (M-59)/Crossover West of Groesbeck	808	Construction
05/13/2022 11:19	Groesbeck (M-97)/Hall Road (M-59)	193	Construction



SIGNAL TIMING CHANGES CONTINUED

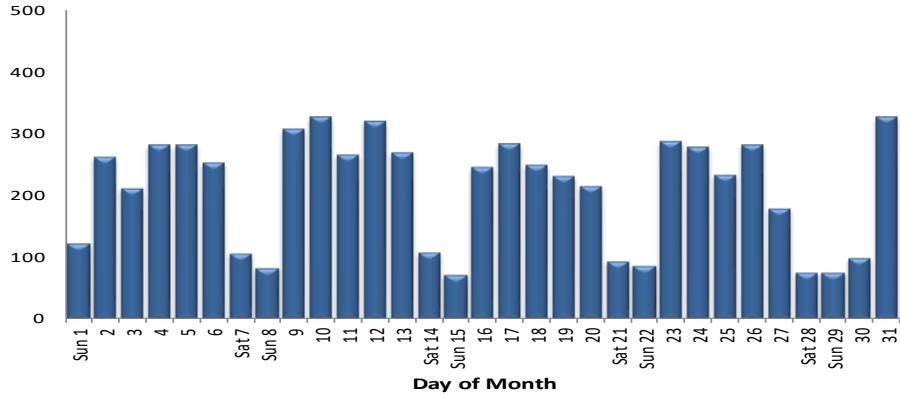
MAINTENANCE

May 2022

Time of Signal change	Loc #	Intersection	Reason for signal change
05/13/2022 11:19	Hall Road WB (M-59)/Crossover East of Groesbeck	809	Construction
05/13/2022 11:19	Hall Road EB (M-59)/Crossover West of Gratiot	810	Construction
05/13/2022 11:19	Gratiot (M-3)/Hall Road (M-59)	162	Construction
05/16/2022 16:35	Hall Road (M-59)/Romeo Plank	211	Congestion
05/17/2022 15:43	Romeo Plank/24 Mile Road	719	Service Request
05/18/2022 8:12	Utica Road/Van Dyke	325	Service Request
05/20/2022 14:22	26 Mile Road/Meijer Drive (E. of I-94)	974	Traffic Study
05/20/2022 14:22	I-94 EB Off Ramp/26 Mile Road	851	Traffic Study
05/20/2022 14:22	I-94 WB Off Ramp/26 Mile Road	852	Traffic Study
05/23/2022 17:47	Romeo Plank/23 Mile Road	517	Service Request
05/24/2022 10:57	Hall Road WB (M-59)/Marketplace Boulevard	890	Construction
05/24/2022 10:58	15 Mile Road/Van Dyke	139	Incident
05/24/2022 10:58	Van Dyke NB (M-53)/Crossover 610' S of 15 Mile Road	666	Incident
05/24/2022 14:44	Mound/19 Mile Road	594	Construction
05/24/2022 15:35	14 Mile Road/1550' W. of Van Dyke	364	Traffic Study
05/24/2022 15:52	Hall Road (M-59)/Elizabeth	632	Construction
05/24/2022 15:52	Gratiot (M-3)/Hall Road (M-59)	162	Construction
05/24/2022 15:52	Groesbeck (M-97)/Hall Road (M-59)	193	Construction
05/24/2022 16:55	15 Mile Road/Hayes	827	Construction
05/25/2022 16:57	14 Mile Road/Schoenherr	339	Incident
05/27/2022 9:12	Hall Road EB (M-59)/Crossover West of Schoenherr	766	Incident
05/27/2022 9:12	Hall Road (M-59)/Schoenherr	207	Incident
05/27/2022 9:12	Hall Road WB (M-59)/Crossover East of Schoenherr	767	Incident
05/31/2022 10:30	Metropolitan Parkway EB/Crossover 535' W of Garfield	642	Incident
05/31/2022 10:30	Garfield/Metropolitan Parkway	157	Incident
05/31/2022 10:30	Metropolitan Parkway WB/Crossover 635' E of Garfield	643	Incident

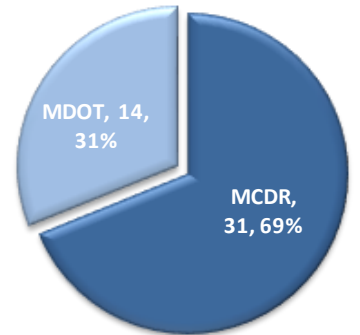
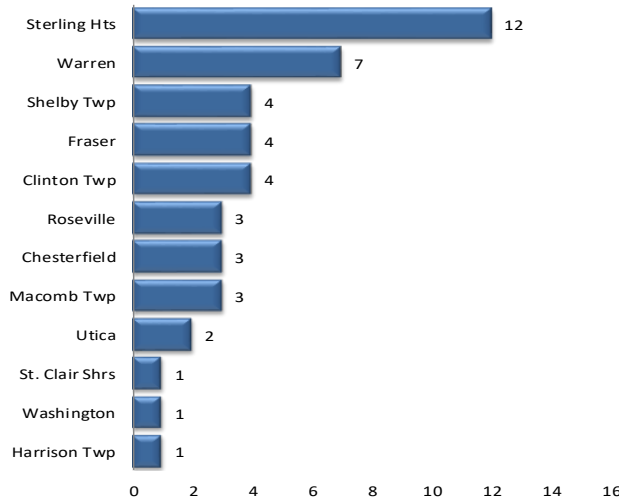


MCDR WEBSITE HITS



A total of **6,450** hits were accrued at <http://roads.macombgov.org/>.

SERVICE REQUESTS PER MUNICIPALITY

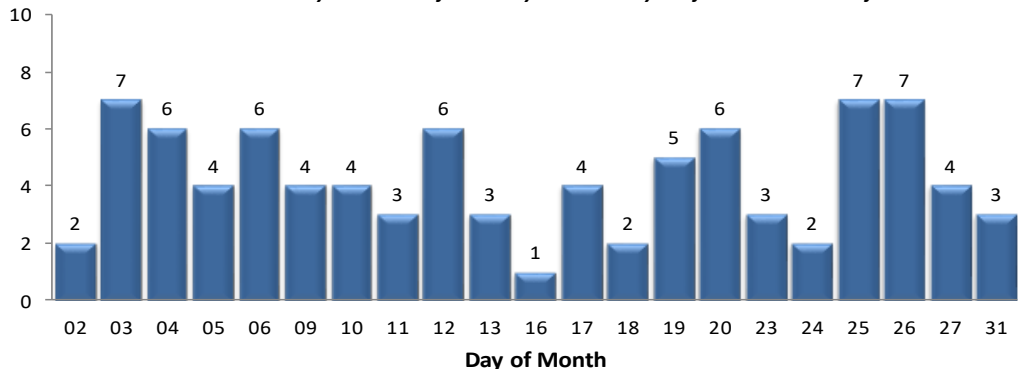


The chart to the left shows how many requests were created per traffic signal location under municipality jurisdiction. The chart to the right shows breakdown of the requests created under MDOT or MCDR / local municipality jurisdiction.

GOVDELIVERY NOTIFICATIONS

In the month of May, the TOC sent out **89** GovDelivery notifications, and increased the number of recipients from **3,347** to **3,396** receiving notifications.

Note: The chart below only shows data for the days GovDelivery notifications were sent from the TOC.



GovDelivery is a tool to notify Macomb County motorists of any incident blocking at least one lane of traffic or causing traffic issues. The notifications are sent after an incident has been verified.

 [Sign up for incident notifications on weekdays from 6 a.m. to 6 p.m. causing lane or roadway closures on major Macomb County arterials.](#)

MOTORIST EXPERIENCE

May 2022



AECOM