QUICK FACTS

The FCP performed 35,064 assists along the Metro Detroit Freeway System with 2,631 assists involving vehicle accidents.

Receiving 60,597 calls throughout the year, the MITS Center is a major hub for surface transportation communications in the Metro Detroit area. As such a critical entity, a new facility with upgraded technology was designed in 2008 and construction began in 2009.

In continued efforts to keep the public informed, the Mi Drive Web site (www.michigan.gov/drive) received significant upgrades and, as a result, became a more popular source for traveler information with the most page views per day (52,654 page views) occurring on Aug. 26, 2009.

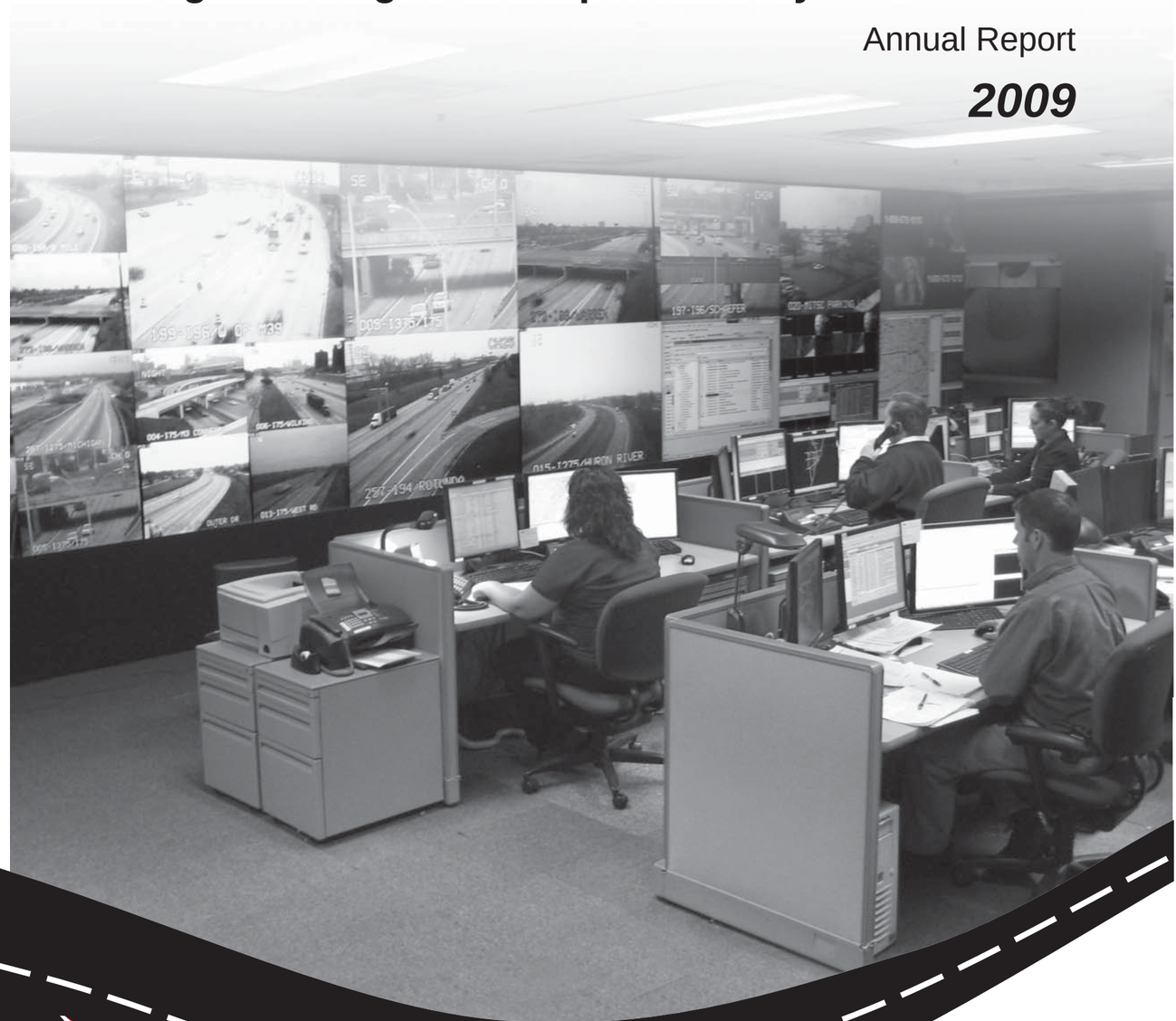
With continual preventive and corrective maintenance of the 72 DMS and 166 CCTV cameras, the MITS Center maintained an annual average of 91 percent equipment availability.

Of the 5,342 incidents that the MITS Center responded to, 725 were high-impact incidents. All high-impact incidents underwent a quality assurance/quality control check and had an annual average accuracy of 97.8 percent.

Michigan Intelligent Transportation Systems Center

Annual Report

2009



Moving Operations Forward

MDOT
Michigan Department of Transportation

Providing the highest quality integrated transportation services for economic benefit and improved quality of life.

www.michigan.gov/mdot
www.michigan.gov/its

URS
Detroit - Southfield - Grand Rapids - Traverse City

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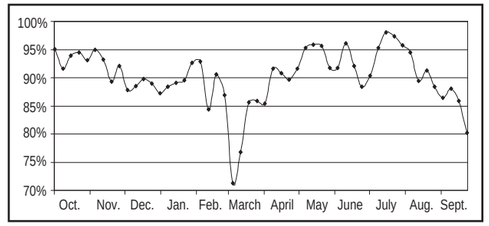
EQUIPMENT MAINTENANCE

EQUIPMENT AVAILABILITY

The 166 closed-circuit television (CCTV) cameras and 72 dynamic message signs (DMS) operated by the Michigan Intelligent Transportation Systems (MITS) Center receive preventive maintenance routinely. Control room operators are required to verify that equipment is operational each shift. When nonfunctioning equipment is identified, a prioritized work order is submitted and corrective maintenance repairs are scheduled.

As major weather events occur, the equipment may become non-operational. For example, the snow storm in March that caused power losses throughout the region resulted in MITS Center equipment to become non-operational. These kinds of situations cause more corrective maintenance work orders to be submitted.

AVERAGE WEEKLY PERCENT AVAILABLE



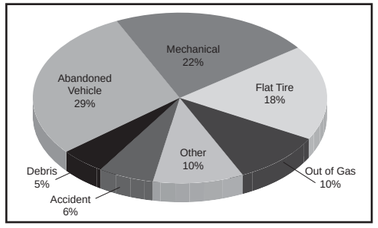
The preventive maintenance program for all MITS Center equipment extends the life of each device. This program improves MITS Center services by being able to display more messages on each sign and monitor more incidents with each camera.

FREEWAY COURTESY PATROL

FCP ASSISTANCE

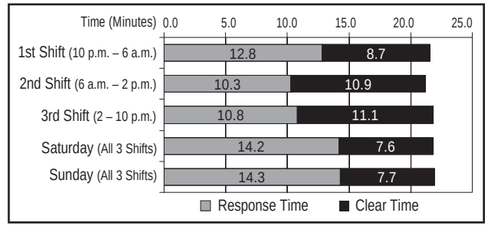
The Freeway Courtesy Patrol (FCP) performed 49,098 stops including 14,034 abandoned vehicles and 35,064 assists (occupied vehicles, debris, accidents, etc.). An FCP driver may find an assist during routine patrol or he may be dispatched to an assist by a control room operator. When the drivers are dispatched, response time (time to arrive on the scene) and clear time (time to complete the assist) are recorded to ensure that assists are executed in an efficient manner.

FCP ASSISTANCE BY TYPE



The weekday first shift, Saturday and Sunday average response times are generally longer than the response times during the weekday second and third shifts since there are fewer FCP drivers patrolling during nights and weekends.

FCP AVERAGE RESPONSE AND CLEAR TIMES



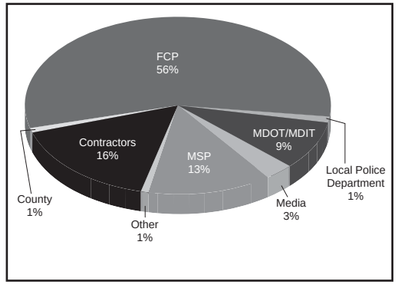
Throughout most of the year, FCP driver schedules were altered in order to accommodate the Gateway Project freeway closure of I-75. Altered schedules included having more FCP drivers on major detour routes during peak travel periods, while canceling FCP coverage between midnight and 5 a.m. After I-75 reopened, FCP resumed 24/7 operations.

CONTROL ROOM

TOTAL CONTROL ROOM CALLS

The MITS Center operates every day of the year, resulting in 60,597 calls to various entities throughout the Metro Detroit area regarding a variety of transportation-related events. Control room operators dispatch FCP drivers via an 800 MHz radio earning the "push-to-talk" calls record* of any one talk group in the state. Communication to contractors involves receiving construction and ITS device status updates. Michigan State Police Second District Regional Dispatch shares the same room with the control room and accounts for most of the incoming incident correspondence. Media partners also share the same building and receive live streaming video and traffic updates from control room operators. During the year, control room operators also began receiving MDOT answering service after-hours calls regarding system malfunctions. **According to the Michigan Public Safety Communications System.*

CALLS BY TYPE



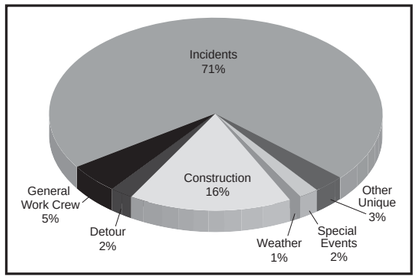
In June 2009, 16 seamless projection video cubes replaced 32 television monitors in the control room. The new video wall also required updated workspaces, which were furnished by the State of Michigan's surplus furniture warehouse. The new technology installed in the control room allows each operator more viewing options and enhanced video quality.

TRAVELER INFORMATION MANAGEMENT

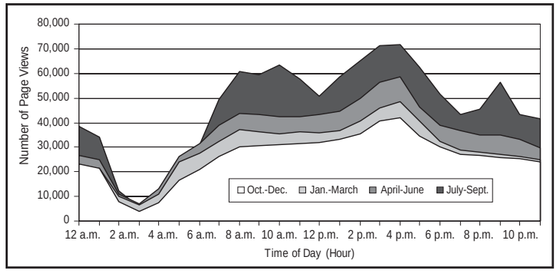
TOTAL UNIQUE MESSAGES

Control room operators are responsible for maintaining accurate and timely messages on the 72 DMS throughout the region. These messages may pertain to construction notices, traffic incidents that impact normal driving conditions or special event traffic routing, among others. The pie chart shows the distribution of these messages by type. While the "Incidents" group may constitute the largest percent of the unique messages, "Other Unique" messages, including safety messages that are neither time- nor location-specific, may be displayed more frequently or for longer periods of time. When an incident or event requires a message, operators send them to appropriate DMS based on the location of the incident or event. The messages are ranked in priority to determine which messages take precedence over others when there are more than one possible message for any given DMS at a single time.

UNIQUE DMS MESSAGES BY TYPE



TOTAL PAGE VIEWS* PER QUARTER



In addition to sending messages to DMS, incident alerts also are posted on the Mi Drive Web site for the public to view. The Web site is most viewed between 3 and 5 p.m., just before the evening rush hour. As the year progressed, the Mi Drive Web site was significantly enhanced to include more traffic data and site functionality. The Web site address, www.michigan.gov/drive, was posted on DMS and linked to various Web sites. The number of page views increased each quarter as a result.

**A page view is when a person clicks anywhere on the site, not when the browser refreshes the page.*

Over the previous 12 months, the MITS Center added nine new DMS to its network. With these additional signs and the use of the Mi Drive Web site, the MITS Center can disseminate more traffic information to a wider range of drivers, allowing them to alter their routes accordingly. This reduces driver delay and saves both time and money, getting the drivers where they need to be sooner.

INCIDENT MANAGEMENT

TOTAL INCIDENTS

The MITS Center responded to 5,342 incidents*. Fourteen percent of these incidents were categorized as high-impact incidents. A high-impact incident is an incident in which one of the following criteria is met:

- Freeway Closure: All lanes are blocked in one direction
- Multiple-lane Closure: Only one lane open in one direction
- Interchange Closure: Freeway-to-freeway ramp is closed

When an event occurs, MITS Center operators send messages to appropriate DMS, send incident alerts to the Mi Drive Web site and inform appropriate contacts of the event. All high-impact incidents underwent a Post Event quality assurance/quality control audit to ensure that all information was sent accurately and efficiently. The table shows the frequency of incidents along each freeway. **An incident is defined as an event occurring along a freeway blocking a shoulder or lane(s) of traffic.*

INCIDENT FREQUENCY ALONG FREEWAYS

Freeway	Average # Incidents per Month	Miles	Average # Incidents per Mile
I-75	100	87.6	1.14
I-94	110	60.7	1.81
I-696	68	28.7	2.37
I-96	52	34.0	1.53
M-10	34	17.9	1.90
M-39	44	14.2	3.10
I-275	36	37.5	0.96
I-375	1	1.2	0.83

The MITS Center held 21 Incident Responder Safety Workshops throughout the region. These workshops inform first responders (police and fire departments) how to quickly clear incidents from the freeway while following safe practices. Quick clearance during peak travel time is important because for every minute a lane is blocked, motorists suffer four minutes of delay after the incident is cleared, according to the National Traffic Incident Management Coalition.

KEEP MOVING FORWARD –
working with Intelligent Transportation Systems means always advancing and always finding a better way to operate the system. Look throughout this report for ways the MITS Center has moved operations forward.