IOWA DOT

AUGUST 2017

This report contains statistical and operational data of activities at the Traffic Management Center(TMC) for the period Tuesday August 1st to Thursday August 31st.

TRAFFIC MANAGEMENT CENTER

Executive Summary

TOTAL INCIDENTS

The total number of incidents during a given period. An incident is defined as any event on the roadway which affects or can affect normal traffic flow. (Excludes roadwork)

Previous Month	Current
July 2017	August 2017
3475	3257

INCIDENTS WITH LANE BLOCKAGE

The total number of incidents which resulted in at least one blocked lane of travel. (Excludes roadwork)

Previous Month	Current
July 2017	August 2017
299	286

MULTI-VEHICLE INCIDENTS

The total number of multi-vehicle incidents during this period. A multi-vehicle incident is defined as any type of collision between two or more vehicles on a roadway.

Previous Month	Current
July 2017	August 2017
195	229

AVERAGE TIME TO CLEAR LANES

The average time for all lanes to be cleared for an incident. The time is calculated from the incident start time until all lanes are reopened. (Excludes roadwork)

Previous Month	Current
July 2017	August 2017
51 MIN.	51 MIN.

SECONDARY INCIDENTS

A secondary incident is defined as a collision that occurs within the incident scene or within the queue resulting from the original incident.

Previous Month	Current
July 2017	August 2017
12	14

TOTAL HIGHWAY HELPER INCIDENT RESPONSES

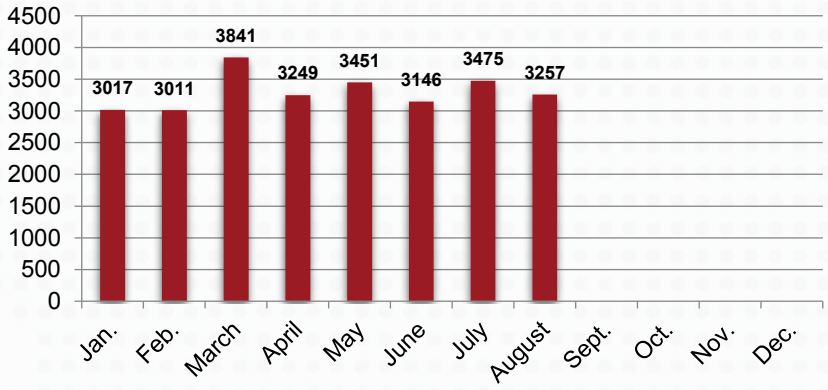
The total number of incidents Highway Helper responded to during the given period.

Previous Month	Current
July 2017	August 2017
1385	1473

TRAFFIC MANAGEMENT CENTER INCIDENT RESPONSE DASHBOARD

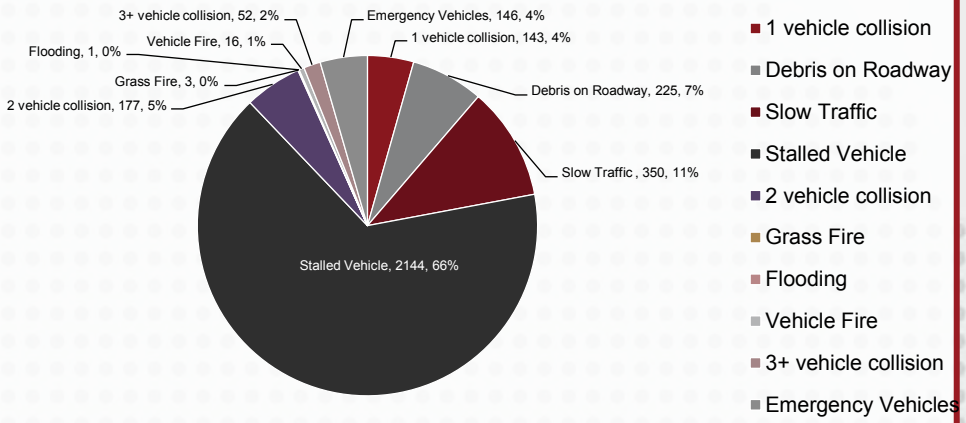
TOTAL INCIDENTS MANAGED BY THE TMC

The total number of incidents during a given period. An incident is defined as any event on the roadway which affects or can affect normal traffic flow.

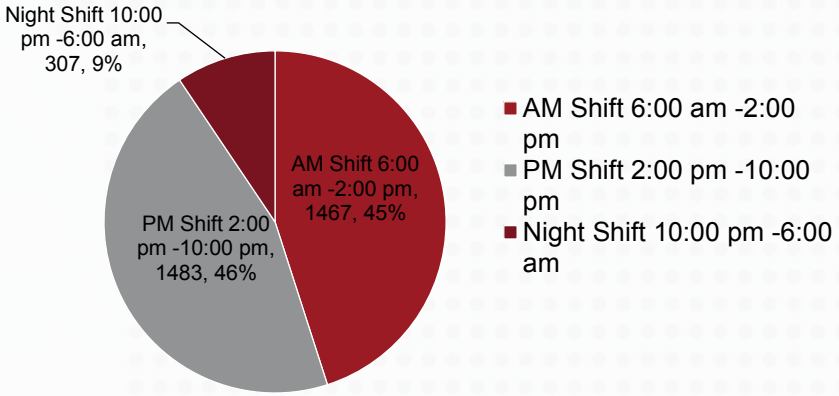


INCIDENT TYPES (3257)

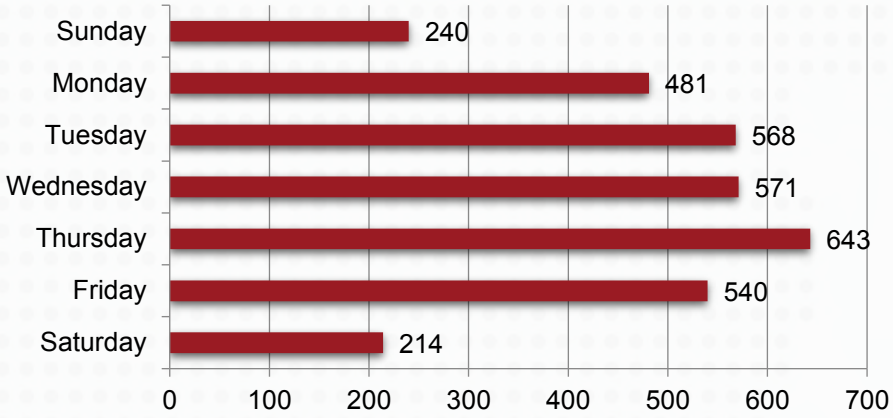
Represents the total amount of incidents categorized by Incident Type.



INCIDENTS MANAGED BY SHIFT (3257)



TOTAL INCIDENTS BY DAY OF THE WEEK (3257)



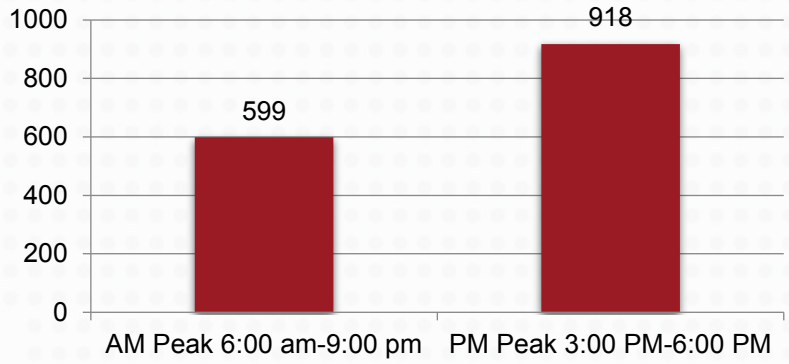
Prepared by kapsch

TRAFFIC MANAGEMENT CENTER INCIDENT RESPONSE DASHBOARD

INCIDENTS MANAGED DURING PEAK HOUR (1517)

(46% of Total Incidents)

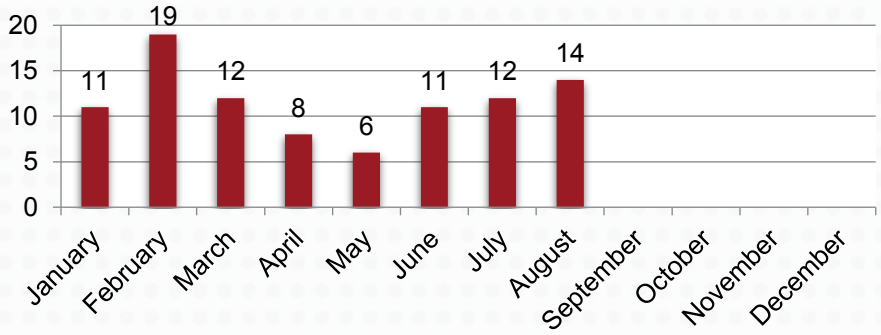
Peak Hours is defined as:
AM 6:00 am-9:00 am; PM 3:00 pm-6:00 pm



SECONDARY INCIDENTS

Secondary incidents can be more severe than the original incident, due to slow moving traffic or stopped queues on the roadway.

Fourteen (14) incidents were classified as secondary.

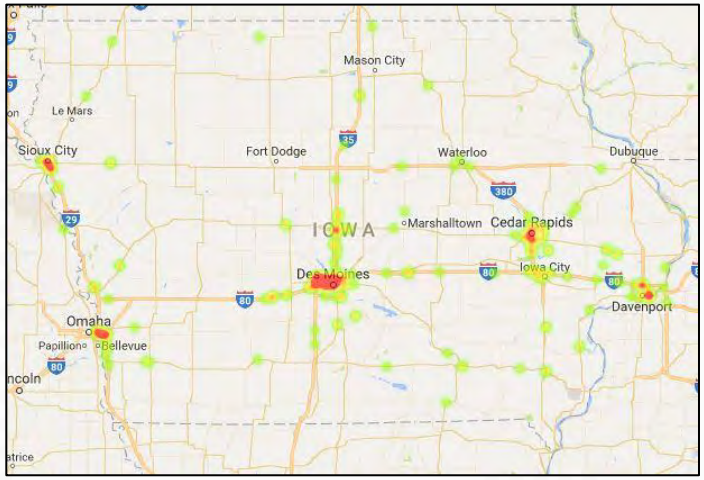


INCIDENTS BY LOCATION (EACH INCIDENT REPRESENTED BY ●)

286 Lane blocking incidents only – (excludes road work)

INCIDENT LOCATION DENSITY HEAT MAP

286 Lane blocking incidents only – (excludes road work)



TRAFFIC MANAGEMENT CENTER INCIDENT RESPONSE DASHBOARD

AVERAGE TIME TO CLEAR A LANE-BLOCKING INCIDENT
(ALL ROUTES)

Calculated from the incident start time until all lanes are reopened.

The Desired Trend is to decrease the time to clear incidents with increased Traffic Incident Management collaboration.

"ROADWAY CLEARANCE TIME"
(All lanes are reopened)
51 MIN.

"EVENT" CLEARANCE TIME
(All responders have left the incident scene)
69 MIN.

AVERAGE TIME TO CLEAR A LANE-BLOCKING INCIDENT
(INTERSTATES ONLY)

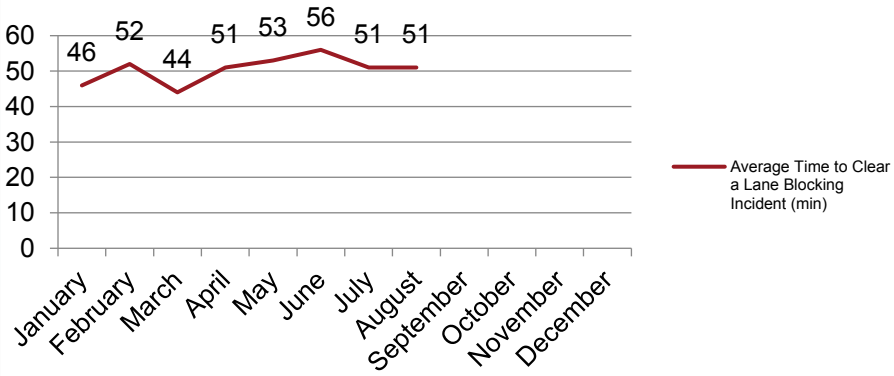
Calculated from the incident start time until all lanes are reopened.

The Desired Trend is to decrease the time to clear incidents with increased Traffic Incident Management collaboration.

"ROADWAY CLEARANCE TIME"
(All lanes are reopened)
41 MIN.

"EVENT" CLEARANCE TIME
(All responders have left the incident scene)
65 MIN.

AVERAGE TIME TO CLEAR A LANE-BLOCKING INCIDENT
(ALL ROUTES)



AVERAGE TIME TO CLEAR A LANE-BLOCKING INCIDENT
(NON-INTERSTATE ROUTES)-IOWA NUMBERED STATES ROUTES, US HIGHWAYS

Calculated from the incident start time until all lanes are reopened.

The Desired Trend is to decrease the time to clear incidents with increased Traffic Incident Management collaboration.

"ROADWAY CLEARANCE TIME"
(All lanes are reopened)
68 MIN.

"EVENT" CLEARANCE TIME
(All responders have left the incident scene)
76 MIN.

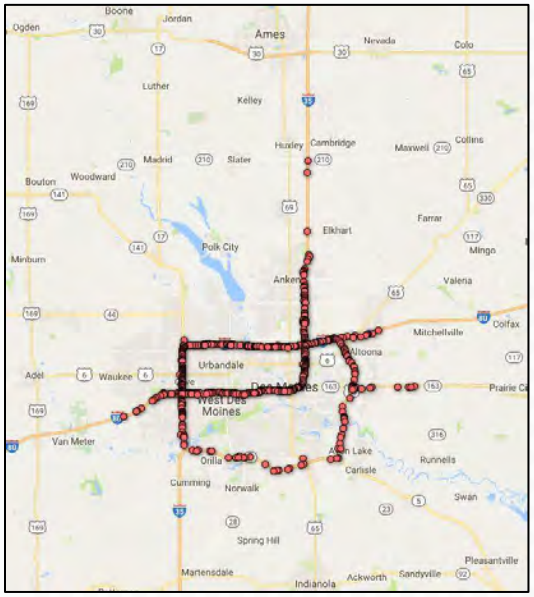
TRAFFIC MANAGEMENT CENTER INCIDENT RESPONSE DASHBOARD

HIGHWAY HELPER ASSIST BY LOCATION

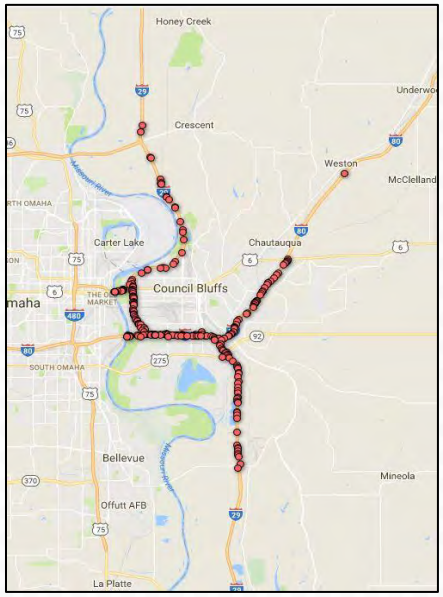
This represents the total amount of Highway Helper assists inputted into the ATMS system.

● = Highway helper detected incidents and response location.

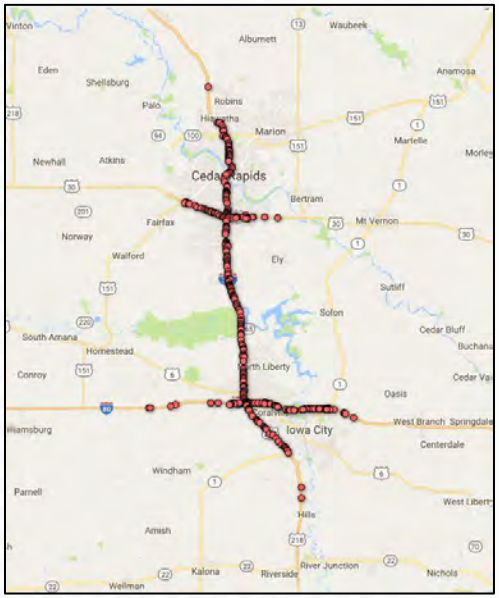
DES MOINES



COUNCIL BLUFFS

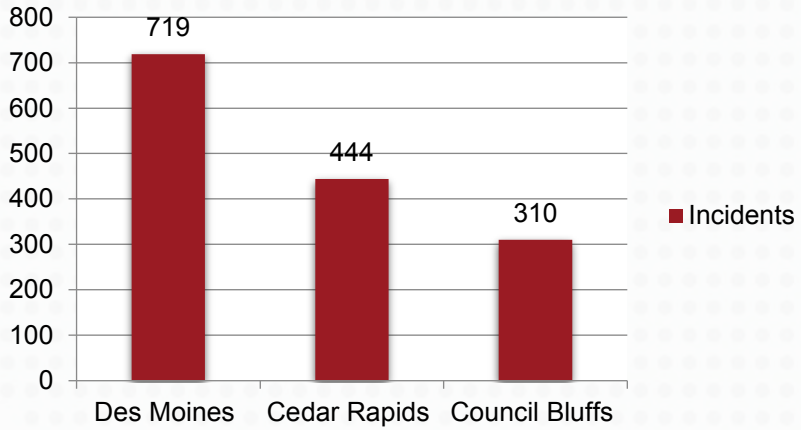


CEDAR RAPIDS/IOWA CITY

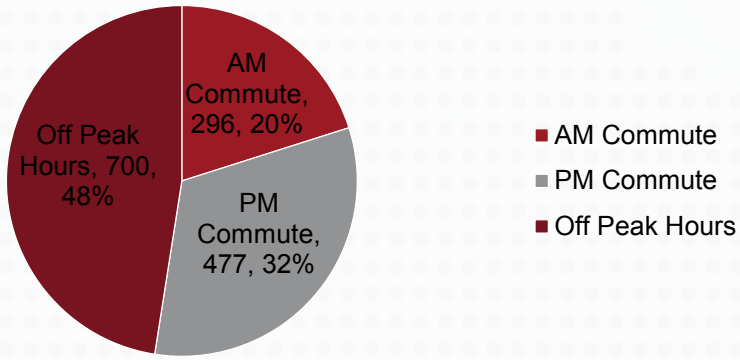


TRAFFIC MANAGEMENT CENTER INCIDENT RESPONSE DASHBOARD

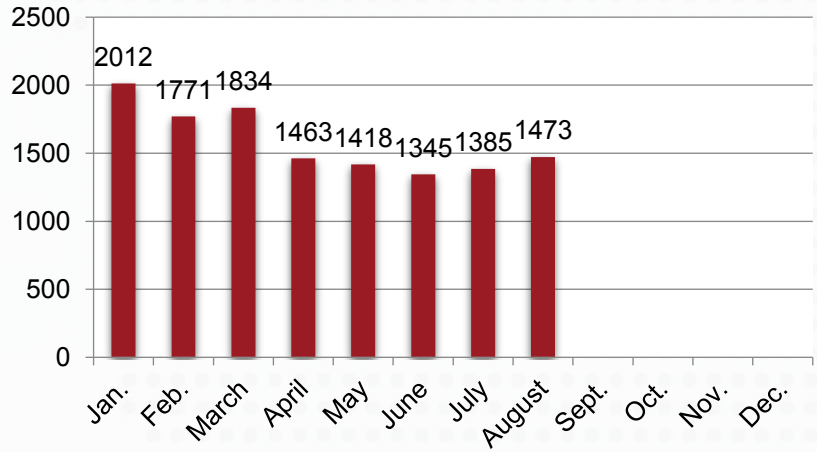
MONTHLY INCIDENTS RESPONDED TO BY AREA



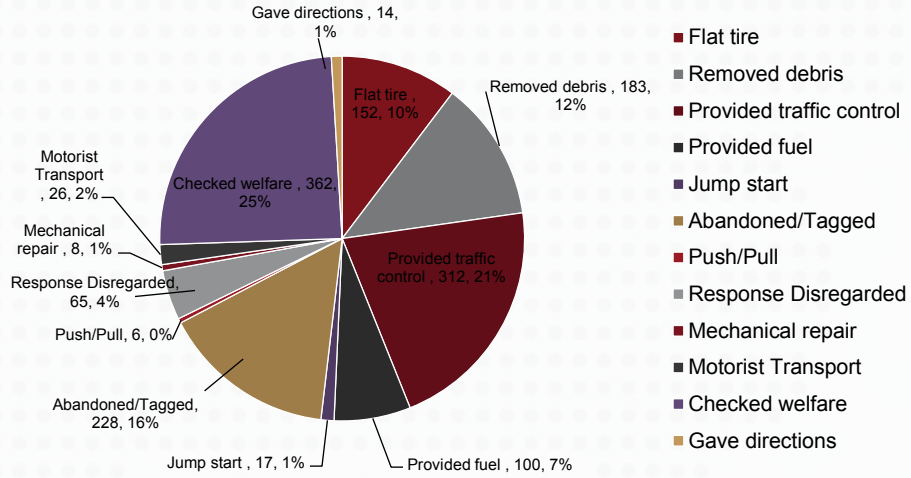
INCIDENT RESPONSE BY TIME OF DAY



TOTAL INCIDENTS RESPONDED TO BY HIGHWAY HELPER



HIGHWAY HELPER INCIDENT RESPONSE TYPE



TRAFFIC MANAGEMENT CENTER INCIDENT RESPONSE DASHBOARD

TOTAL PHONE COMMUNICATIONS BY THE TRAFFIC MANAGEMENT CENTER	TOTAL NUMBER OF EMERGENCY INCIDENT NOTIFICATIONS (EINS) DISTRIBUTED	TOTAL NUMBER OF 511 ENTRIES MADE BY THE TRAFFIC MANAGEMENT CENTER	% OF INCIDENTS DETECTED BY TMC OPERATOR ON CCTV
This number represents all calls outgoing and incoming into the Traffic Management center	(Statistic represents initial notification and doesn't represent updates.)	This number represents all entries and updates to 511 events (Includes roadwork)	(Desired Trend is to increase the amount of incidents located by operators through pro-active monitoring.)
4701	488	1950	55%

OPERATIONS STAFF SUMMARY

TMC Employee	# of Events entered in ATMS (Includes Roadwork)	# of EINS Created	Averaged Hours worked per week
Erik Castelline	780	34	40
Sarah Waters	767	31	40
Donovan Helm	715	23	40
Ellen Bonvillain	42	10	32
Tyrone Larry	284	11	40
Pennylee Harris	758	56	40
Andrew Gunn	1222	111	40
Tommy Howard	280	54	40
Loney Baugher	355	31	40
Sydney Link	1136	52	40
Chase Junk	180	26	40
Nick Glenn	304	23	32
Clay Harris	127	26	40
TOTAL	6959	488	

ON-RAMP TICKETS CREATED BY TMC OPERATORS

TMC Employee	# of On-Ramp Tickets
Erik Castelline	0
Sarah Waters	11
Donovan Helm	0
Ellen Bonvillain	0
Tyrone Larry	20
Pennylee Harris	5
Andrew Gunn	33
Tommy Howard	0
Loney Baugher	0
Sydney Link	1
Chase Junk	1
Nick Glenn	24
Clay Harris	0
TOTAL:	95

TRAFFIC MANAGEMENT CENTER INCIDENT RESPONSE DASHBOARD

OPERATOR TRAINING

On-going Training

- State Fair and Major Event Training

On-boarding Process and New Hire Training

- Kimberly Berry started August 14th
- McKenna Link started August 28th

Staffing Update

The current staffing levels are:

- Operations/Project Manager
- Nine (9) Full Time Operators
- Two (2) Trainees

Modified 4 Week On-Boarding

Week 1 — Facilities and Safety | ITS Theory | Geography | Camera Procedure | Regions | Incident Management Concepts I Traveler Information | EIN |DOT Divisions and Org Chart | Hands-On ATMS review | INRIX | Facility Tours

Week 2 — Kapsch Operator Training Modules 1-2 and Certification Testing, CARS, Daily Log, Highway Helper Dispatch, WeatherView, Event Management, Social Media, Phone Etiquette, Hands-On ATMS Training, Facility Tours

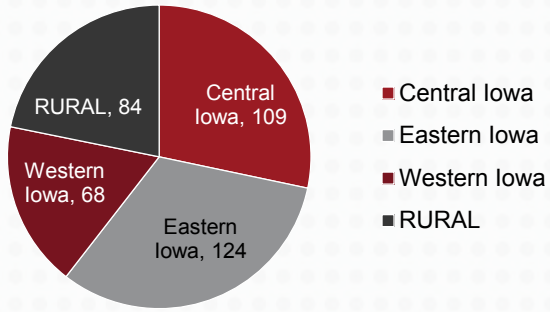
Week 3 — Policy and Procedure Review and Testing | Hands-On ATMS Training | Road Condition Reporting | Railroad Notifications | On-Ramp | Iowa One-Call | Scenario Training

Week 4 — Policy and Procedure Review and Testing | Hands-On ATMS Training | Scenario Training | Evaluate Re-training needs and prepare for 2nd Shift Job Shadow

AM Operators (6:00 am-2:30 pm)	PM Operators (2:00 pm-10:30 pm)	3rd Shift /Overnight (10:00 pm-6:30 am)	Trainees
Sarah Waters	Erik Castelline	Donovan Helm	Kimberly Berry
Sydney Link	Pennylee Harris	Tyrone Larry	McKenna Link
Tommy Howard	Andrew Gunn	Nick Glenn	

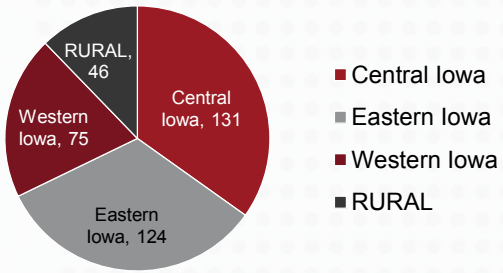
TRAFFIC MANAGEMENT CENTER INCIDENT RESPONSE DASHBOARD

ALL IOWA CAMERAS



Total Cameras: 385

ALL IOWA SENSORS



Total Sensors: 376

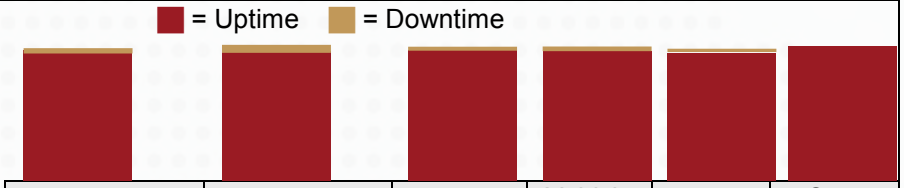
Year	Project	Description
1992-97	Initial Urban Area use of DMS	16 locations in Cedar Rapids, Des Moines and Quad Cities
2002	Iowa's 511 system Launched	
2003-05	I-235 Reconstruction-Des Moines	DMS, HAR, CCTV, and Detection. Highway Helpers
2005	First Statewide Deployment of DMS	13 locations
2006-08	I-80-Iowa City	DMS, HAR, CCTV, and Detection
2006-08	I-74-Bettendorf to Moline	DMS, HAR, CCTV, and Detection
2008	I-380 Extension	DMS, CCTV, and Detection
2008	TMC starts 24/7 Operations	
2009-11	Council Bluffs Reconstruction	DMS, HAR, CCTV, and Detection
2009-11	Sioux City Reconstruction	DMS, HAR, CCTV, and Detection
2012-13	I-380/US 20 Waterloo Reconstruction	DMS, CCTV, and Detection
2012	I-35/US 30 Ames	DMS, CCTV, and Detection
2012	I-380 Cedar Rapids	DMS, CCTV, and Detection
2012	I-80 Davenport	DMS, CCTV, and Detection
2012	Office of Traffic Operations Created	TSMO activities previously spread across organization in Research and Maintenance Offices
2013	I-80 Newton	DMS, CCTV, and Detection
2014-15	Fiber Construction from Ames to Des Moines to Iowa City to Cedar Rapids	Partnership with Iowa Communications Network (ICN)
2014	Statewide use of Probe Data	Data subscription service for link level travel speeds – supports enhanced monitoring of intercity corridors
2015	Highway Helpers Service-Council Bluffs and Cedar Rapids/Iowa City	Expansion of service from Des Moines area to other metro areas
2015	TMC Relocation from Ames to Ankeny	Relocation to a new, larger space in the MVD Building
2015	TSMO Strategic and Program Plans	
By 2022	Council Bluffs Interstate Reconstruction	New Color DMS, CCTV, RWIS, and Detection
By 2024	I-74 Mississippi River Bridge Replacement	Arterial DMS, CCTV, Fiber, and Detection

TRAFFIC MANAGEMENT CENTER INCIDENT RESPONSE DASHBOARD

Digital Traffic Systems Inc. – Monthly ITS Maintenance Overview

Device Type	Count (Active Sites)
CCTV	359
DMS – Overhead	76
DMS – Portable	82
DMS – Rest Area	34
DMS – Sidemount	54
Vehicle Sensors	304
RWIS	71
Grand Total	980

Month Average Availability

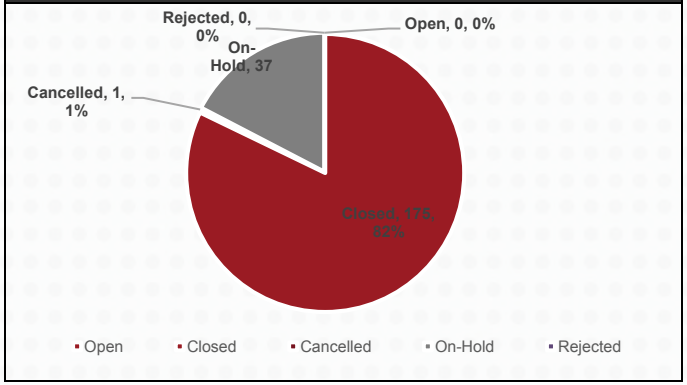


	Entire Network	DMS	CCTV	Vehicle Sensor	RWIS	Core Network
Downtime	2.25%	4.54%	1.88%	1.88%	1.46%	0.00%
Uptime	97.75%	95.46%	98.12%	98.12%	98.54%	100.00%

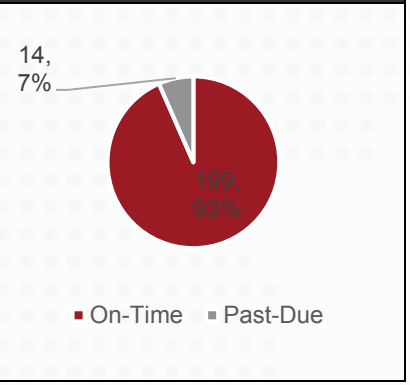
	Corrective Maintenance		Preventative Maintenance*	
Open	0	*0.00%*	0	*0.00%*
Closed	175	*87.61%*	332	*98.52%*
Cancelled	1	*0.44%*	5	*1.48%*
On-Hold	37	*11.95%*	0	*0.00%*
Rejected	0	*0.00%*	0	*0.00%*
Totals	**213**		**337**	

Past-Due	*6.57%*		*4.82%*	
On-Time	*93.43%*		*95.18%*	

Corrective Maintenance Ticket Status



Corrective Maintenance On-Time Performance



Average availability: Refers to the ability to communicate with a particular device.
Corrective Maintenance: Refers to when a device is not working properly and DTS is required to fix it,
Preventative Maintenance: is track to verify that DTS is meeting the requirements for scheduled maintenance.

*This page was created by DTS Inc. If you have any questions regarding or would like the full ITS monthly report or any other issues related to the ITS network contact Tony Taylor in the Office of Traffic Operations.

TRAFFIC MANAGEMENT CENTER INCIDENT RESPONSE DASHBOARD

TRAFFIC CRITICAL PROJECTS	
Number of Active Traffic Critical Projects	Number of Traffic Critical Projects with Intelligent Work Zones or Traffic Incident Management
(Data Source https://sites.google.com/site/iowatcp/tcp-list)	(71% of Total Ongoing TC Projects) (Data Source https://sites.google.com/site/iowatcp/tcp-list)
28	20

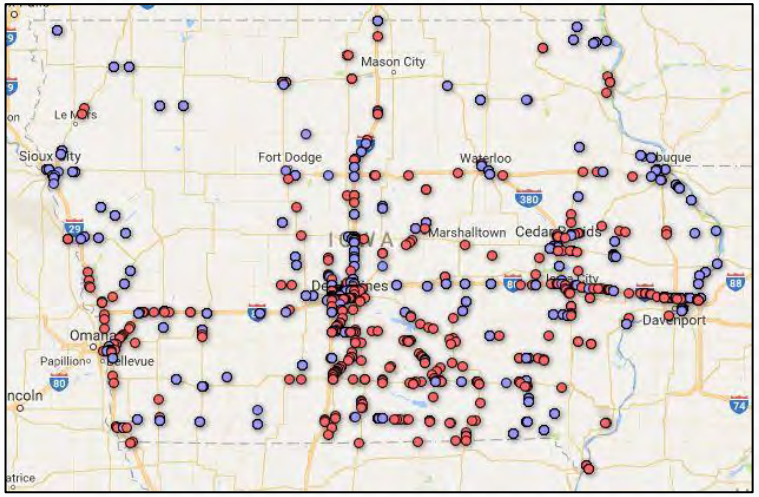
CONSTRUCTION AND MAINTENANCE
Number of Work Zones entered into the ATMS, (Includes all roadwork, short term maintenance and construction projects)
(Represents 53% of total events entered into the ATMS for July)
3702

WORK ZONE CRASHES
Number of Crashes in Work Zones
13

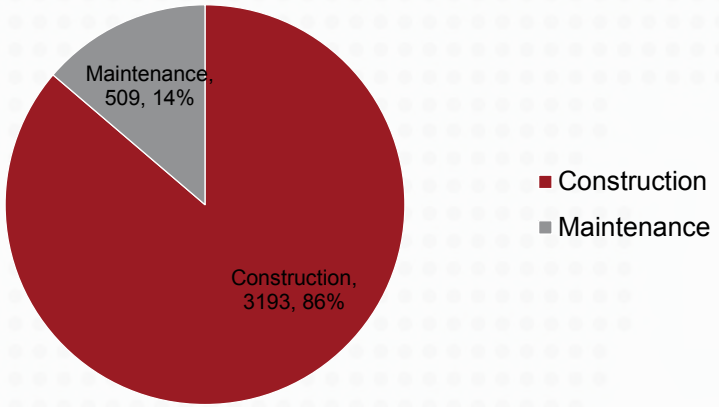
LOCATIONS OF WORK ZONES ENTERED INTO THE ATMS

Construction Work Zones entered by TMC (3193 of 3702)

Maintenance Work Zones entered by TMC (509 of 3702)



WORK ZONES BY TYPE ENTERED INTO THE ATMS



TRAFFIC MANAGEMENT CENTER INCIDENT RESPONSE DASHBOARD

Message Mondays

Message Monday is a safety initiative to increase public awareness of traffic deaths on Iowa's roadways. The message contains the aggregate number of traffic fatalities that have occurred since the start of the calendar year and a safety related message. **Iowa's goal is zero fatalities.**

August's Message Monday:

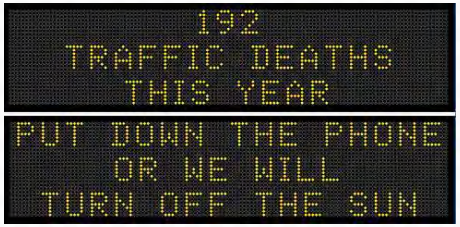
The Message Monday messages are displayed on 76 overhead DMS and 34 Rest Area DMS.

zero Fatalities®
A Goal We Can All Live With

AUGUST 7

AUGUST 14

AUGUST 21



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TRAFFIC MANAGEMENT CENTER INCIDENT RESPONSE DASHBOARD

511 Traveler Information
www.511ia.org or dial 511

TRAVELER INFORMATION

Traffic Management center activated **2,721** message boards in August 2017. (This number does not reflect Public Safety Announcements or TIS scheduled messages.)

Total number of calls to 511 in August 2017	Total Visits to 511 Traveler Information Website (Includes all versions of website)
6,600	74,505