

Traffic Incident Management



INTRODUCTION TO TRAFFIC INCIDENT MANAGEMENT

Traffic Incident Management (TIM) consists of a planned and coordinated multi-disciplinary process to detect, respond to, and clear traffic incidents so that traffic flow may be restored to reduce the duration and impacts of traffic incidents and improve the safety of motorists, crash victims and emergency responders. The state of Iowa has multiple ongoing programs relating to TIM including:

TIM Responder Training that brings police, firefighters, DOT, towing, medical personnel, and other incident responders together to engage in interactive, hands-on incident resolution exercises.

Iowa's Statewide Traffic Incident Management Committee that identifies strategic goals and objectives to guide day-to-day

TIM activities, evaluate the effectiveness of these activities, and explore and identify new trends and best practices in TIM.

The Statewide Multi-Discipline Safety Team (MDST) Program has a primary goal of enhancing interagency collaboration and information exchange within the Iowa transportation community.

Statewide Traffic Safety Programs covering a multitude of safety programs including, but not limited to, the Traffic Safety Improvement Program, Traffic Engineering Assistance Program, and Strategic Highway Safety Plan

TIM Diversion Plans which are cloud-based, pre-planned diversion routes for Iowa's interstate system that can be rapidly activated when a significant incident occurs.

Volume 1, Issue 1

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AFTER ACTIONS in 2021

Woodbury Co. 1/14/21

Tri state cooperation with winter weather closure of I-29 in South Dakota

Marion Co. 1/12/21

A two-vehicle crash on IA-14 at MM 34. Review focused on unified command role and how area traffic was detoured with no traffic or secondary crashes

Jasper Co. 2/5/21

Winter weather event involving a multiple vehicle crash with injuries, possible fatalities and Troopers hit on I-80 East at MM 163

Jasper Co. 2/5/21

Winter weather event involving a 3+ vehicle crash on I-80 WB at MM 175 (near Kellogg)

Grundy/Hardin Co. 2/5/21

Winter weather events involving two crashes, one at the WB 187MM on US 20. The second at the EB 181MM

Poweshiek Co – 9/27/21

I-80 blocked due to semi vs car Crash at MM189. Review focused on TIM routes and queue protection

Story Co. – 6/12/21

Mail truck work zone crash on SB I-35 at US 30. Review focused on project reviews, detour routes, and incident command coordination

Story Co. – 9/7/21

Crash involving two semis and a pickup truck that were SB on I-35 at the 106.2 MM. Review focused on communication from the ground to dispatch, available diversion routes, and secondary crashes

Dallas Co. – 10/10/21

Two fatal crashes occurred on I-80 WB at the 110MM and on I-80 WB 115MM in Dallas Co. Review focused on communication, TIM plans, and interstate closing

Adair Co – 11/12/21

I-80 EB at the 76MM. Initial crash at 4:37 pm, secondary crash at 4:52 pm. Review focused on crash causation and TIM plan activation

WHAT IS AN AFTER ACTION REVIEW?

An after-action review (AAR) is a structured review or de-brief process for analyzing:

What happened

Why it happened

How it can be done better

AARs are normally run by a facilitator and are attended by the participants and those responsible for the project or event

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TIM Training in 2021

4 hour SHRP₂ TIM training - Three of six Iowa DOT districts received 4 hour TIM training

8 hour Train-the-trainer - 13 new Iowa DOT TIM trainers received the 8 hour Train-the-trainer certification

Cable Barrier Training – Through funding from the Iowa DOT's I-80/380 construction project and in cooperation with the Coralville Fire Department, cable barrier will be secured for training purposes. The cable barrier is set to be deployed to the location of the Coralville Fire Department Burn Tower at 1001 Hughes St in Coralville.

Livestock Rollover training – Iowa DOT continues to engage with Iowa Pork Producer's Association and Iowa Farm Animal Care to conduct training to deal with incidents involving livestock rollovers.

Proposed training would encompass rollover accident factors, chain of command, scene management, animal handling and welfare, livestock transport trailer design and extrication techniques, as well as humane euthanasia.

*755 individuals
completed
TIM Training
in 2021*

WHAT IS SHRP₂?

SHRP₂ refers to the second Strategic Highway Research Program.

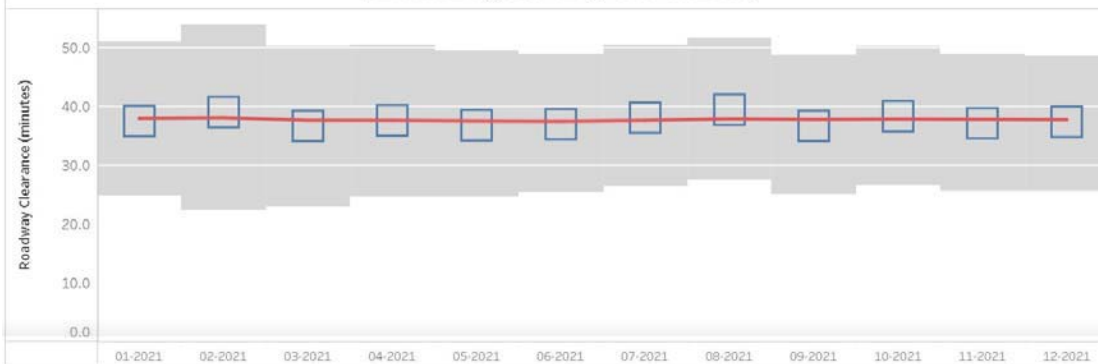
Starting in 2012, the Federal Highway Administration (FHWA) delivered the National TIM Responder Training Program (SHRP₂ TIM trainings) to a variety of State and local recipients with assistance from SHRP₂ and, later, with support from FHWA. Resources offered through SHRP₂ TIM trainings included a train-the-trainer curriculum, separate classroom trainings, Web-based components, a communications toolkit, and case study reports.

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Clearance Times/Secondary Crashes in 2021

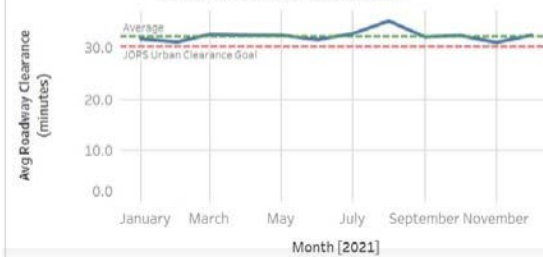
Overall Average Roadway Clearance Time



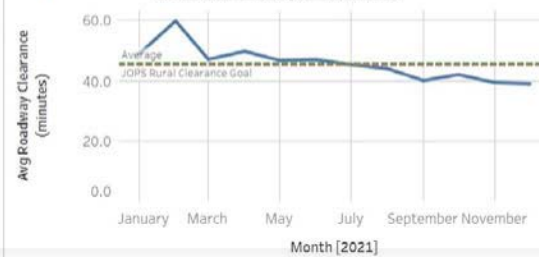
What is meant by clearance time?

Roadway clearance time – is the time between the first recordable awareness of the incident to the time all lanes open for traffic

Urban Roadway Clearance



Rural Roadway Clearance



Incident clearance time - is the time between the first recordable awareness of the incident to the time at which the last responder has left the scene

Secondary Crash - is a crash that occurs at the scene of an original crash or in the queue, including the opposite direction.

Secondary Crashes in Iowa Crash Details

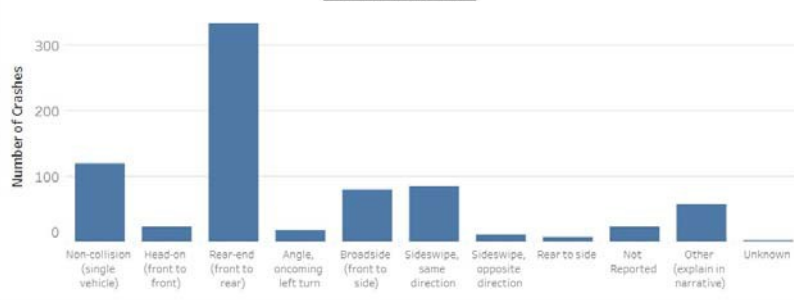
Total Crashes

755

Crash Locations



Collision Manner



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Towing Recovery Incentive Program (TRIP)

In 2018, the Iowa DOT commissioned a study relating to implementation of a Towing and Recovery Incentive Program (TRIP). This program provided monetary incentives to towers for meeting certain clearance goals.

The program provides for a \$600 payment for a “dry run” when a tower is mobilized and arrives at an incident scene within 45 or 60 minutes, depending on the time of day, and the tow services are not needed.

The program provides an incentive of \$2,500 when a tower successfully arrives on scene in the prescribed time and completes removal of all incident vehicles, cargo, debris, etc from the traveled lanes within 90 minutes after the tower is given a notice to proceed.

An additional \$1,000 incentive is paid if additional specialized equipment is needed.

The TRIP program provides incentives for incidents involving:

- Truck Tractor Semi-Trailer Combinations
- Trucks over 26,000 lbs. and ‘Bobtail’ Tractors
- Large Motor Homes (40ft plus) and Motor Coaches
- Busses - 16 passengers or more
- Trucks towing loaded equipment trailers or cargo trailers
- Aircraft

In 2021, the TRIP program was implemented as a pilot program in the I-80/I-380 system interchange construction project. There are three towing companies enrolled in the program.

There were two successful activations in 2021 with more expected in 2022

WHAT IS TRIP?

It is a program to incentivize rapid response and to facilitate safe, quick clearance of major incidents on interstate segments

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Did You Know...

The DOT's TIM plans are available for viewing online at <https://www.iowatim.org/>.

MACH (Mobile Architecture For Communications Handling), the internet based communications tool that allows public safety agencies to share information during emergency situations, will have a new custom map layer by spring of 2022 that will allow Users to pull up TIM plans within MACH.

Quick clearance data is collected within the TraCS crash report utilizing roadway and incident clearance dates/times? For a demonstration of this, go to <https://www.youtube.com/watch?v=EgsTeeW7AY>

That median-crossover crashes can present the highest risk of fatal and severe injuries among all collision types on freeways. These crashes are caused by a variety of factors, including driver distraction, impaired driving, mechanical failure, and loss of control.

The Iowa DOT began installing high-tension median cable barriers in 2003 to prevent such crashes.

Releasing barriers that have been struck in a crash requires special training that the Iowa DOT can provide for free to interested responders. If interested, contact Ted Shipley at ted.shipley@iowadot.us

A TIM Field Guide is available for responders. It can be downloaded at: <https://www.iowatim.org/training>

The Iowa State Patrol and Iowa DOT have an agreement in place called the JOPS (Joint Operations Policy Statement). This is an agreement between the agencies establishing roles and responsibilities on the primary road system relating to TIM, major incident and towing recovery, winter operations, work zone safety, and CMV crash investigations.

TIM on Facebook

See more about Iowa Traffic Incident Management on our Facebook page at:

<https://www.facebook.com/IowaTrafficIncidentManagement>

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TIM Web Links

Iowa DOT's TIM web page:
<https://iowadot.gov/tim/Traffic-Incident-Management-Home>

TIM Performance Measures:
https://ops.fhwa.dot.gov/tim/preparedness/tim/performance_measures.htm

Multi-Discipline Safety Teams
<https://iowaltap.iastate.edu/MDST/>

TIM Training Program:
<https://sites.google.com/view/iowaltapmdst/training>

Iowa TraCS/MACH
<https://iowadot.gov/tracs/about-mach>

IowaDOT Traffic Incident Management – Director Scott Marler
<https://www.youtube.com/watch?v=NzdtoWugDlw>

TIM Roadway Clearance Time
<https://reactor.ctre.iastate.edu/traffic-incident-management-roadway-clearance-time/>

Next-Generation TIM
https://www.fhwa.dot.gov/innovation/everydaycounts/edc6/nextgen_tim.cfm

Secondary Crash Tool
https://tableau.vdl.iastate.edu/t/InTrans/views/SecondaryCrashes/Summary/3c1cc7c1-00fb-4940-972f-d73d28a6bb03/12fcb71d-a389-40be-b238-3dab9e56ccb5?%3Adisplay_count=n&%3AshowVizHome=n&%3Aorigin=viz_share_link&%3AisGuestRedirectFromVizportal=y&%3Aembed=y

Other Useful Links

Traffic Management Center

<https://iowadot.gov/trafficoperations/Traffic-Management-Center/About-Traffic-Management-Center>

Highway Helper Program

<https://iowadot.gov/districts/highway-helper>

TRANSPORTATION SYSTEMS MANAGEMENT AND OPERATIONS (TSMO)

<https://iowadot.gov/tsmo/>



Traffic Operations Bureau

515-239-1919

<https://iowadot.gov/trafficoperations/>