
September 12, 2018
Mission

Reduce crashes, injuries, and fatalities involving commercial motor vehicle (CMV) transportation through education, innovation, regulation, enforcement, financial assistance, partnerships, and full accountability.
Snapshot of the CMV Industry

524,058 regulated carriers operating in the United States in 2016

976,161 buses registered in 2016

604 million passenger trips in the U.S. and Canada in 2014

11.5 million large trucks registered in 2016

11.4 billion tons freight shipped in the U.S. in 2015

5.9 million CMV drivers (as of 2016)

304 billion vehicle miles traveled in 2016
FMCSA-Regulated Motor Carriers

Carriers by Headquarters (Domicile) Location, 2016

Source: FMCSA, Motor Carrier Management Information System (MCMIS), as of February 2016.
The Problem We Must Solve

Locations of Fatal Large Truck and Bus Crashes, 2016

In 2016, there were 4,564 fatalities in crashes involving large trucks and buses.

WORK ZONE CRASHES BY THE NUMBERS

1 WORK ZONE CRASH OCCURS EVERY 5.4 MINUTES
70 WORK ZONE CRASHES RESULT IN INJURIES EACH DAY
12 WORK ZONE CRASHES RESULT IN FATALITIES EACH WEEK


www.ShareTheRoadSafely.gov
Work Zone Crashes by the Numbers

- On average, over 700 fatalities occur in work zones each year. Commercial motor vehicle (CMV) and passenger vehicle drivers both need to be particularly careful while traveling through work zones. Trucks and buses have limited maneuverability and large blind spots, both of which make operating in these areas more challenging for them. In fact, large trucks are disproportionately involved in work zone crashes.

- CMVs are disproportionately involved in fatal work zone crashes. Large trucks are involved in over 11% of all fatal crashes. However, that percentage jumps to 27% when specifically talking about fatal crashes in work zones.
Innovative Technology Deployment (ITD) Grant Program Purpose

- Established by the FAST Act
- Replaced CVISN grant program
- $20M/year program for States (85/15 Match)

The ITD program is designed to:

- **Improve safety and productivity** of motor carriers, commercial vehicles and their drivers
- **Improve efficiency and effectiveness** of commercial vehicle safety programs through targeted enforcement
- **Improve data sharing** within States and between States and FMCSA
- **Reduce regulatory/administrative costs** (Federal/State and industry)
National Priority

- Deploying a work-zone and incident electronic notification system that will notify the CMV driver of an active work zone, traffic congestion, or an incident ahead. The alert system must be able to be broadcasted through the CMVs transponders, electronic on-board systems, cell phones, and/or motor carrier routing and dispatching systems.
Work Zone Incident Notification System

Alabama

- Funding for the development and rollout of both Android and iOS platforms the Workzone Notification System

- Mobile app accomplished the two objectives:
  - provide rolling reminders to the user as well as estimated distance from the Workzone.
  - collect anonymized feedback such as location, speed and timestamp as well as create a low level analytical tool with the data captured during the time frame.

- Dedicated public website is available at - https://algotraffic.com/

- Phase 2 of this project still active.
AL: Work Zone Incident Notification System

The exit ramp from 6th Avenue North to I-65 NB will be reduced to one lane until further notice due to construction of bridge piers.
AL: Work Zone Incident Notification System

**RESOURCES**

**WEBSITE**
https://algotraffic.com/#

**MOBILE APPS**
- iOS
- Android

Search for Algo or Algo traffic in the app stores to download the app.
Arizona

The objectives of the Arizona Work Zone and Incident Electronic Notification Systems are to:

- Develop and demonstrate a work zone warning and alert system using connected vehicle technologies (5.9 GHz DSRC communications) to provide in-vehicle information for commercial vehicle operators.

- Develop and demonstrate the use of connected vehicle systems, including variable speed limits, queue warning, lane closure warning, and vehicle-to-vehicle messages to augment the operation of core ITD capabilities (e.g. electronic bypass and enforcement).

- Project still active.
AZ Work Zone System Integration

Inform  
Aware  
Alert  
Warn

In-Vehicle Systems

In-Vehicle Display  
Vehicle Processor  
OBU

RSU Message

Event or Incident Location

Infrastructure Transportation Management System

CVISN Enforcement Systems

Fleet Management System Routing/Dispatching
AZ: Integration with Bypass provider for Pilot

In-cab messages can be integrated with:

✓ Preclearance
✓ Weather Alerts
✓ Emergency Alerts
✓ Other 511 messages

Partners/Stakeholders

✓ ADOT/MCDOT
✓ University of Arizona
✓ DriveWyze
✓ Knight-Swift Transportation
Work Zone Notification System

Kentucky

- The Executive Office of the Commonwealth of Kentucky will implement a project to provide in-cab notifications to commercial motor vehicle (CMV) drivers of impending conditions such as: an active work zone, traffic congestion or an incident, or a dangerous curve. Additional notification opportunities could also be identified, such as available commercial vehicle parking and high-crash corridors. This project will provide timely information to CMV drivers, improving safety and efficiency.

- This project was recently awarded ITD funds and is just getting started.
Thank you

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