

TZD and Commercial Motor Vehicles: Bridging the Gap

Julie Whitcher, PE, Program Manager

Office of Freight and Commercial Vehicle Operations

Spring 2019



| mndot.gov

Main Topics

- What is the Weight and Safety Program?
 - Why is it important?
- Engineering strategies for reducing commercial vehicle crashes
 - What tools does our office have?
 - Things to keep in mind during the design process.





Minnesota Weight and Safety Enforcement Program

- MnDOT works with the Minnesota State Patrol to keep our roads safe
- Program areas in truck safety, school bus safety, specialty transportation providers (STSS, limos), oversize/overweight permits
- Required by federal law

Why is Weight Enforcement Important?

- Weight enforcement and safety inspections are needed to protect the safety, wellbeing and health of the public, operators, freight owners and Minnesota's infrastructure
- According to latest estimates, illegal overweight vehicles cause \$42 million of damage to Minnesota's trunk highway system each year

SEASONAL WEIGHT INCREASE: Minnesota highways are at their strongest during the winter months. During the dates set by the Commissioner of Transportation each winter, the weight limitations are increased by 10 percent in each frost zone as shown below.

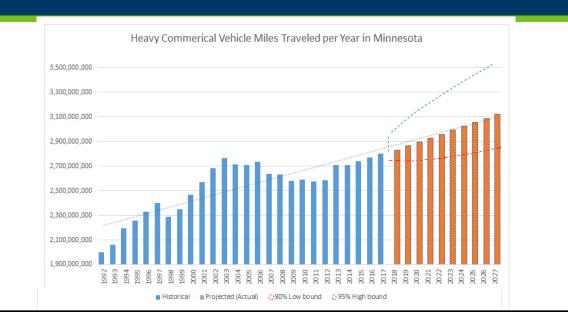


Enforcement Programs



- Roadside Inspection Program throughout the state carried out in coordination with Federal Motor Carrier Safety Administration guidelines
- Mandatory Inspection Program annual inspection of vehicles that transport hazardous materials, have a gross weight of more than 26,000 pounds, are a school bus, or selfpropelled mobile equipment mounted on a vehicle chassis that weigh more than 26,000 pounds.

Commercial Vehicle Truck Traffic Trends



Available Resources for Designers

- SUPERLOAD Utility Resource Map
 - Filter clearances on MnDOT utility lines, overhead signs and signals on state highways, and details on electrical services in different areas of Minnesota.
- Width of Roadway Map
 - Displays travel lane widths for MnDOT's two-lane undivided highways in three different travel lane width classes: 10 ft., 11 ft., 12ft. or greater.
 - You can also view the location of Metro rush hour zones and restricted travel areas.

http://www.dot.state.mn.us/cvo/oversize/index.html

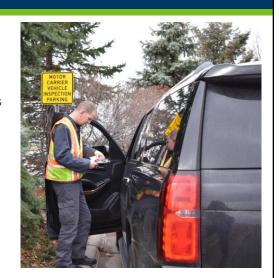
Available Resources for Designers

- Prevent Crashes & Minimize Crash Severity
 - Separate Commercial Vehicles out of the stream of traffic
 - Encourage trucks to use alternative routes
 - Create a truck only lane through the work zone
 - Work Zone Design and Maintenance
 - Maintaining sufficient truck parking nearby
 - Maintain good retroflectivity (sign, device and pavement markings)
 - Establish and enforce work zone speed limits
 - Avoid the creation of traffic queues/Provide warning of stopped or slow traffic ahead
 - Avoid using short or no acceleration lane entrance ramps



Available Resources for Commercial Vehicle Drivers

- Guide for New Commercial Vehicle Operators
 - http://www.dot.state.mn.us/cvo/new operator.html
 - Fact sheets
 - · Statutes and Rules
 - Minnesota Commercial Truck and Passenger Regulations
- Statewide Truck-Weight Education Training
 - http://www.dot.state.mn.us/cvo/training/
 - Online Training
 - Commercial Motor Vehicle driver training (not CDL training)
 - Passenger Transportation Classes (limousine and special transportation services)
 - OSOW permit training
 - Truck Weight Education Training



Available Resources for Commercial Vehicle Drivers Truck Parking Information Management System (TPIMS) • https://trucksparkhere.com/ Minnesota 1 of 8 states with new technology • 6 rest areas in Minnesota along I-35 and I-94 · Collects and broadcasts real time data **HOW TPIMS WORKS** Vehicle detection Data is delivered to drivers Parking data goes to states and 3rd party systems measure available parking in DYNAMIC MESSAGE SIGNS processors lots across each state P OPEN SPACES **REST AREAS** 34 MILES 78 MILES

Things to Consider

- Design decisions that may affect commercial vehicles, oversize/overweight permitting and State Patrol's ability to enforce laws
 - · Narrower shoulder or lane widths
 - Roundabouts
 - Tighter turning widths

Coordination Opportunities

- Check the Commercial Vehicle volumes
- Consult the maps on the Office of Freight and Commercial Vehicles Website
- Call our office

Shelly Meyer, Permits Supervisor 651-366-3689 and/or Rob Holschbach, Special Projects Coordinator 651-355-0243 Julie Whitcher 651-366-3688

http://www.dot.state.mn.us/cvo/oversize/index.html



Thank you!

Julie Whitcher

<u>Julie.whitcher@state.mn.us</u> 651-366-3644

Office of Freight and Commercial Vehicle Operations | mndot.gov

13