Overview

MnDOT is offering simulator training for anyone who operates a snowplow, single unit truck or a combination of a truck and trailer. The interactive driving simulation system is the first of its kind in Minnesota.

The training is designed for new drivers or veteran drivers to refresh their skills. Drivers can improve their ability to recognize and react to a variety of road conditions and hazards to better manage risk.

Companies whose employees took the simulator training report reductions in number/severity of crashes, and vehicle/maintenance repair costs and improvements in fuel efficiency.

Training

- Two experienced MnDOT staff conduct the training to maintain standardization and consistency
- The four-hour training session consists of: instructor-led classroom participation, computer-based and simulated driving components
- Two drivers operate the simulators, while other drivers complete computer-based training
- Drivers receive immediate feedback after each simulation scenario
- Each simulation is designed to accomplish and reinforce specific training objectives and skills
- Drivers can obtain credit for the University of Minnesota’s Road Scholars certification program

Training at your location

Two SP660 simulators are housed in a 32-foot self-contained trailer with a classroom slideout that enables the training to take place at any location in the state.

This eliminates driver travel time, making the training accessible and affordable.

The simulator replicates various driving cabs. On-the-road scenarios challenge drivers to demonstrate proper driving techniques, decision-making skills and reactions based on varying conditions.

*** Cost is $600.00 per session with a maximum of 6 students per session.

*** Cities and Counties are encouraged to work together to fill a session.

Reaction Test

All drivers participate in a reaction test that measures the distance traveled between the driver’s observation of and reaction to hazards.

Driver results are retained for comparison with future training and testing.

The reaction test is conducted as part of each driving simulation course. It can also be a stand-alone component.
MnDOT Driver Simulator Training

Designed for truck drivers, snow plow operators and traffic safety personnel in different working environments.

Courses

Courses should be completed in the following order:

**Hazard avoidance** – Familiarizes and acclimates the driver to the simulator. The course covers:

- Evaluation of hazards
- Driving training scenarios in simulated automatic transmission single or tandem rear axle dump trucks or snow plows with varying plow, underbody and wing configurations
- Exercises to assist in training muscle memory responses
- Reducing reaction times to hazardous situations such as oncoming vehicles, collision avoidance, dump truck hazard reactions versus snow plow hazard reactions, driving path vehicle intrusions, and driving conditions where multiple hazards may be present (e.g., icy roads, rain, snowfall, sun glare, night driving)

**Snow plows and speed** – Exposes drivers to the risks and consequences of improper speed. This course covers:

- Braking distance
- Stopping distance
- Freeway speed scenarios
- Urban speed scenarios
- Speeding on ramps and curves
- Proper speed given terrain, weather and traffic

**Truck box clearance and usage** – Focuses on the space cushion concept and challenges drivers to apply additional techniques such as:

- Using the timed-interval method (three second rule)
- Calculating stopping time
- Using lanes properly
- Following strategies
- Observing overhead obstructions and clearances

**Snowplow handling and underbody usage** – Includes best practices, rules of the road and factors that affect a driver's decision-making ability, including:

- Personal characteristics
- Health and family
- Equipment knowledge
- Work environment
- Hazard perception

**Operating in emergency conditions** – Focuses on hazards directly influenced by changes in weather and/or visibility, including:

- Results of reduced traction
- Changes in the road surface based on temperature or precipitation and vehicle/weight condition

**Precision driving and backing** – Emphasizes the concepts of:

- Perceiving hazards
- Mirror adjustment and usage
- Pivot points
- Blind spots and ground guides
- Applying decision-making skills

Other courses will be provided as available

Contacts

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