



# Minnesota Truck-Weight Education Program

## The Balance of Roads and Loads

### WHY THIS MATTERS: COSTS AND COMMERCE

Roads are essential for moving goods, services, and people. Preserving a roadway's life now saves on future and increasing construction costs. To ensure the efficient movement of goods, we must maintain our roads. Given rising costs and tight budgets, smart choices are essential to keep roads safe and operational.

### HOW WEIGHT DAMAGES ROADS

Pavements (subgrade = soil, base = aggregate, and surface = asphalt or concrete) are systems designed to spread out axle loads.

- Heavier axle loads stress pavement layers, shortening the road's life.
- Many legacy routes and gravel roads were built for lower loads (7-9 ton design). Today's standard is 10 tons.
- This mismatch accelerates wear and dramatically shortens pavement life.



**Road design balances art and science, but limited resources mean many older roads are inadequate for today's heavier loads.**

### WEATHER'S ROLE: WHY SPRING IS THE DANGER ZONE

Pavement strength is at its lowest during the spring.

- During thaw, frozen layers weaken as they melt from the top down.
- Heavy loads do the most damage when the road is weakest.
- Spring load restrictions (SLR) are seasonal rules that lower allowed axle loads when roads are weakest to protect the network and save taxpayers money.



**Overweight trucks wear out infrastructure faster in the spring. SLR prevent millions of dollars of damage each year; voluntary compliance keeps taxes lower.**

## EDUCATION + ENFORCEMENT = LONGER-LASTING ROADS

- Minnesota's Truck-Weight Education Program (TWEP) clarifies complex laws (axle, tandem, bridge, tire limits) so carriers can haul the most legal weight safely.
- Enforcement by State Troopers and partners keeps roads safe and protects public investment. Education prevents violations before they happen.



**Education extends road life and makes enforcement proactive.**

## ELECTED OFFICIALS PLAY A CRUCIAL ROLE

Road damage, safety risks, and economic impacts transcend political boundaries and affiliations. The policies and approach of one jurisdiction directly affect everyone's roads, safety, and pocketbooks. Elected officials at all levels are responsible for informed decision-making that provides for fair permitting and equitable enforcement policies.



## GET MORE INFORMATION

**Workshops:** Take a one-day TWEP workshop, offered for both the public and private sectors.

**Video:** Watch "Truck-Weight Education: The Balance of Roads and Loads" which features firsthand perspectives from engineers, elected officials, trainers, and law enforcement officers.

Visit [mnltp.umn.edu/truckweight](https://mnltp.umn.edu/truckweight) for resources and scheduling!



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