# МОDOT WINTER OPERATIONS 

Maintaining a Safe and Reliable Transportation System



## Each winter storm is different, and we adjust our tools, materials and practices accordingly.

Our goal is to keep all who travel Missouri roads as safe as possible no matter what adverse weather conditions come our way.

> MoDOT spends an average of $\$ 45$ million annually to battle ice and snow on more than 34,000 miles of roadway.

## Staffing, Equipment and Facilities

MoDOT utilizes a fleet of over 1,500 trucks and more than 3,000 employees dispatched from over 170 buildings throughout the state to service more than 34,000 miles of road. In an average season, snow plow operators work almost a half-million labor hours covering more than five million miles during winter operations. That's the equivalent of circling the earth more than 200 times. Maintaining adequate staffing for winter operations continues to be a challenge for MoDOT with an average turnover rate of $18 \%$ for plow operators.

## Materials and Environmental Stewardship

MoDOT can house over 250,000 tons of salt and utilizes 123,000 tons in an average winter. To make salt more effective at lower temperatures, MoDOT uses combinations of different application rates of salt, calcium chloride, magnesium chloride, beet juice and abrasives. Beet juice and brine application make the treatment more effective at lower temperatures, and beet juice prevents the scatter and bounce of salt, reducing the amount of salt needed on the road. This not only conserves material usage but is also friendly to the
environment and infrastructure.

## Getting Ahead of the Weather

MoDOT actively monitors weather throughout the state. The National Weather Service has been a strong partner of MoDOT and provides the general forecast. A private service supplies bridge and pavement forecasts. There are also remote pavement sensors located on interstates throughout the state which allow our maintenance crews to keep on top of developing road conditions.

## Emergency Operations

In a statewide snow event, MoDOT activates our Emergency Operations Center--or EOC--to respond to rapidly changing situations and utilize crews where they are needed most. MoDOT partners with the Missouri State Highway Patrol, the Missouri State Emergency Management Agency and the Governor's Office to coordinate the best responses to address the storm. The EOC remains activated communicating real-time updates to the travelling public until the situation has passed and roads return to normal.

## Collaboration with Other States

Year-round, MoDOT participates in nationwide cooperative programs, sharing information with most other state transportation departments to drive improvement in winter roadway maintenance and ensure the most up-to-date snow fighting techniques are being used. In addition, during each winter storm event, MoDOT coordinates with adjoining states to monitor the impending storm and determine the most effective treatment.

## Comparison to Bordering States



## Plowing Priorities in a Winter Event

The most travelled highways and all designated incident bypass routes are given top priority. For an average snow event it takes MoDOT $21 / 2$ hours to address all the priority higher traffic volume routes, though it might take longer in rush hour traffic.
All other state highways are plowed and treated as expeditiously as possible following the clearing of primary higher traffic volume routes.
Our trucks are on the road before, during and after the storm. Before the snow, we can treat roads with a variety of chemicals designed to limit ice and snow buildup on the road. But treating ahead of the storm is not a quick fix. Any number of conditions such as extreme low temperatures and rain can limit the effectiveness of chemicals and solutions or simply wash them away before the snow begins.
Planning, training and frequent drills allow our crews to tackle the toughest winter event, until...something goes wrong. Traffic incidents, breakdowns, jack knives or simply not driving for conditions can result in roads being disrupted for everyone. Remember when you're stuck, we're stuck.


PHONE


Buckle Up Phone Down saves lives.

## Partnering with you for Safety

The absolute best recourse for motorists when winter weather hits is to stay home and postpone travel if possible.
If you need to travel, please plan accordingly. Never assume that just because roads are clear where you are that they will be clear where you're going. Consult the MoDOT Traveler Information Map at modot.org or call our 24-hour Customer Service line at 1-888-ASK-MODOT for road conditions across the state.

Safety is a shared responsibility between MoDOT and everyone traveling Missouri roads. Always drive for conditions and never drive distracted. Make sure everyone in the vehicle has their seat belt buckled. And if you're driving, put your phone down or turn it off. Take the BUPD challenge at SaveMOLives.com.

