

**STAY BACK,  
STAY SAFE.**



### **Winter Maintenance – Technology**

Saskatchewan's Ministry of Highways and Infrastructure always seeks new technology and practices to make winter travel for motorists as safe as possible, while ensuring snow and ice are removed in the quickest and most efficient manner. Sixty four percent of the Ministry's snow plow fleet is equipped with state-of-the-art equipment. As old snow plows are decommissioned they are replaced with new snow plows outfitted with state-of-the-art equipment.

#### **State-of-the-art snowplow trucks**

Here are just some of the features of the ministry's improved snowplows:

- High-tech spreader control system automatically adjusts the amount of salt spread as snowplows speed up or slow down, which ensures a consistent and efficient application of material on the highway.
- An infrared pavement temperature sensor displays road temperatures for the operators as they travel, which helps them determine how much salt and sand to apply.
- Before sand or salt is applied to the highway, it's treated with a salt and corn or molasses based solution to help it stick to the road so that it's less likely to blow off in high winds and become ineffective.
- Traditional farm technology was applied to improve the box on the back of a snowplow truck that holds the salt and sand. Instead of a conveyor chain to move the material in the box, an auger was developed. Using this auger helps prevent corrosion in the box, because the auger is fully contained and doesn't allow sand or salt to be inadvertently deposited along the truck frame or other components, which means fewer repairs for corroded parts.
- Snowplow trucks are dual purpose and can be used during summer highway maintenance activities to spread sand, haul gravel or assist in filling potholes, which reduces the number of vehicles the Ministry requires overall.
- Salt silos are strategically located near the ends of snowplow routes, which means operators don't have to travel all the way back to their maintenance depots to reload.