



Technology Improves Winter Safety on Alberta's Highways

Although our province has high highway maintenance standards, there is always room for improvement and innovation. The Alberta government and Alberta's highway maintenance contractors are using the latest technology to improve winter safety on our highways. For example:

- Many of our newer snowplows now have side wings and larger hoppers for additional plowing and sanding capacities. This means highway maintenance can be done more quickly to improve safety.
- About half of the fleet has been equipped with pre-wetting devices to assist in the sanding operation to make highway conditions safer.
- Snowplows are equipped with Automatic Vehicle Location Systems (AVLS). The systems use GPS technology to track snowplow movements and help government monitor work and audit payments. AVLS also allows automated billing by contractors, which is more efficient and accurate.

Road Weather Information Systems

Government installed 76 Road Weather Information System stations on major Alberta highways, allowing Albertans to better plan trips and road authorities to better plan snow and ice control.

Automated weather reporting stations contain special sensors embedded in and below the road and on nearby towers. The sensors collect detailed data on weather conditions at and near the road surface, which can help highway maintenance personnel predict icing conditions and respond more proactively. From this real-time information, maintenance crews can decide if road treatment is necessary or which treatment to apply. In addition to enhancing winter driving safety, this may help reduce the overall amount of road salt used, helping the environment.



AMA Road Reports

Alberta's highway maintenance contractors distribute road condition information to help motorists plan their routes. This includes supplying information to the AMA Road Reports - a partnership between the AMA and the Alberta government that helps you safely plan your next trip. On its web site (www.ama.ab.ca), AMA provides current reports on road conditions throughout Alberta based on information received from highway maintenance contractors, the RCMP and Parks Canada. AMA Road Reports are automatically updated when changes in road conditions are reported. Visitors to the site can look at pictures of current road conditions at 68 locations on highways 1, 2, 3, 4, 9, 16, 35, 43, 63, and 881 and check weather conditions at the camera locations.

Intelligent Transportation Systems

The Alberta government and its partners began Intelligent Transportation Systems research and development projects in the area of road safety. The federal government will contribute \$500,000 toward these initiatives. The province and its partners will match the federal funding.

The first project is a wireless communications pilot for commercial vehicle inspection. Inspectors will test technology that allows them to access information from central computer systems and databases with laptop computers in the field.

Intelligent Transportation Systems are a broad range of technologies designed to make transportation systems safer, more efficient, more reliable and more environmentally friendly without necessarily having to physically alter existing infrastructure.