



Alberta



arhca
alberta roadbuilders &
heavy construction
association

TECHNOLOGY IMPROVES *Winter Safety* ON ALBERTA'S HIGHWAYS

The Alberta government and Alberta's highway maintenance contractors use the latest technology to improve winter safety on our highways



- Many newer snowplows 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 snowplow fleet has been equipped with pre-wetting devices to assist in sanding operations to make highway conditions safer.

Dial 5-1-1

 www.511.Alberta.ca

 @511Alberta

www.transportation.alberta.ca

INTELLIGENT TRANSPORTATION SYSTEMS (ITS)

Alberta Transportation also uses Intelligent Transportation Systems (ITS) technology to enhance the safety and effectiveness of our provincial transportation network. Information and communication technology is installed in vehicles and infrastructure to collect data on such things as road and weather conditions, traffic speed, volume and delays. This information is then fed back to

road users through a variety of channels – including 511 Alberta, dynamic message signs and local media – to help drivers stay informed of the road ahead. Some examples of Alberta Transportation’s use of Intelligent Transportation Systems technology include Automatic Vehicle Location Systems (AVLS), Road Weather Information Systems (RWIS), and 511 Alberta.

AUTOMATIC VEHICLE LOCATION SYSTEMS (AVLS)

All highway maintenance contractor snowplows are equipped with Automatic Vehicle Location System (AVLS). AVLS systems use GPS technology to track snowplow movements and help the government to monitor and audit the contractors’ work. AVLS also allows automated billing by contractors, which is more efficient and accurate.



ROAD WEATHER INFORMATION SYSTEMS (RWIS)

The Alberta government has 104 Road Weather Information System (RWIS) stations located on major Alberta highways. Automated weather reporting stations contain special sensors embedded in and below the road and on nearby towers. These sensors record real-time meteorological conditions and provide data that allow maintenance contractors to make informed decisions about the type and timing of specific winter maintenance activities like when to plow or apply de-icing materials.

Many of the RWIS stations are also equipped with traffic cameras. Along with the meteorological data, and up-to-date road reports, the images from the traffic cameras are displayed on 511 Alberta for motorists to consult when making their travel plans.

As a further development of RWIS, Alberta Transportation recently introduced the Maintenance Decision Support System, which combines information from the RWIS with the expertise of maintenance contractors to develop “smart” maintenance treatment choices.

511 ALBERTA

Since its launch in February 2013, 511 Alberta has quickly become the province’s official source of road reports with close to 1.9 million visitors to the website and more than 39,000 followers on Twitter.

Available 24 hours a day, seven days a week, 511 Alberta provides reliable road report data around the clock, including access to more than 124 highway cameras. By dialing 5-1-1 in Alberta, visiting 511.alberta.ca, or following @511Alberta on Twitter,

Albertans can access provincial highway network road report information any time they need it. Users can download the 511 Alberta mobile app for free at the Apple App Store and Google Play.

Additionally, the 511 Alberta team can also alert motorists about highway incidents and conditions that could impact travel through the 12 dynamic messaging signs that are located around the province.

ALBERTA’S MAINTENANCE CONTRACTORS

Alberta’s maintenance contractors are the eyes and ears of winter maintenance in our province. Each day they are up before dawn, assessing road conditions. Our contractors are out on the road when conditions are at their worst. Let’s give them the respect they deserve by providing them with the space they need to do their jobs safely. Remember: don’t crowd the plow.

