

# Winter Maintenance

The winter levels of service provide a guideline for what highway users can expect in most circumstances.

The Ministry of Highways and Infrastructure has two main operations within the winter maintenance program where a service level is defined. They are:

1. Snow Removal
2. Ice Control

Highways are prioritized for snow removal and ice treatment based on highway classification and traffic volumes, also called Annual Average Daily Traffic (AADT).

Operations are carried out in order of priority:

## **Level 1 – highest priority given to inter-provincial routes and highways with greater than 1,500 AADT:**

- Examples of Highways are 1, 7, 10, 11, 16, and 39.
- Snow plowed and ice treated (or assessed for treatment) within six hours of the **end of the storm**.
- Snow removal initiated as soon as practical or after 3 cm of snow accumulated on driving lanes.

## **Level 2 – Highways with AADT between 300 and 1,500:**

- Snow plowed and ice treated (or assessed for treatment) from driving lanes within 12 hours of the **end of the storm**.
- Snow removal starts when resources are available without jeopardizing service on Level 1 highways

## **Level 3 – Highways with an AADT less than 300:**

- Snow plowed and ice treated (or assessed for treatment) within 24 hours of the **end of the storm**.
- Snow removal starts as soon as resources available without jeopardizing service on Level 1 or 2 highways.

**Extra time may be needed in extreme circumstances.**

There are two major snow removal operations;

- Storm Conditions and,
- Storm Clean-up.

**Storm Clean-up** of snow from shoulders, interchanges, bridge railings, intersections, weigh scale sites and school bus routes will be completed after all highways are passable and storm conditions have concluded.

**Ice control** is the application of sand and/or chemical de-icer mixtures on the driving surface to add traction and aid in the removal of snow and ice.

Storm clean up and ice control follow the same levels of service as previously listed.

Sand and/or chemical de-icer are applied when conditions are appropriate to aid in the removal or prevention of snow and ice build-up in the travel lanes. The following chart illustrates the suggested actions and application rates for different conditions:

Pavement Temperature (°C)	Initial Maintenance	Dry Salt (kg/Lane km)	Salt Pre-Wetted (kg/Lane km)	Sand	Follow-up Action
Above 0	Monitor precipitation and temperature				Survey and spot treat as necessary
0 to -4	Apply dry salt or pre-wetted salt, plow if needed	70-105	63.94.5		Re-apply pre-wetted or dry salt as necessary
-4 to -8	Apply dry salt or pre-wetted salt, plow if needed	70-140	63-126		Re-apply pre-wetted or dry salt as necessary
-8 to -11	Apply dry salt or pre-wetted salt, plow if needed	105-175	94.5-157.5		Re-apply pre-wetted or dry salt as necessary
Below -11	Apply abrasives			Apply sand as necessary	Re-apply abrasives as necessary

Below are guidelines for acceptable road conditions after the completion of snow removal and ice control following a storm event. Weather conditions may impact the effectiveness of snow removal and/or ice control.

**Levels 1 and 2** – All traveled lanes will be cleared such that the surface is predominantly visible. Short sections of ice and packed snow can be expected between the wheel paths and on center line.

**Level 3** – Traveled lanes may be cleared such that the surface will have intermittent bare wheel paths. It is acceptable to have a snow pack on TMS and gravel surfaces.