



Highway Maintenance Manual

Bureau of Highway Maintenance

Chapter 06 Winter Maintenance

July 2025

Section 15 Snow Removal

Subject 01 Passable Roadway – During a Winter Storm

1.0 Purpose

To define the level of effort expectations for winter maintenance during a winter storm event. One of the goals of winter maintenance is to achieve “passable roadways” within the limitations imposed by climatological conditions, the availability of resources, and environmental concerns during a winter storm event.

2.0 Passable Roadway Definition

A “**passable roadway**” is defined as a roadway surface that is free from drifts, snow ridges and as much ice and snowpack as is practical and can be traveled safely at *reasonable speeds*. A passable roadway should not be confused with a “dry pavement” or “bare pavement” which is essentially free of all ice, snow and any free moisture from shoulder to shoulder. This “dry/bare pavement” condition may not exist until the weather conditions improve to the point where this pavement condition can be provided.

The definition of “**reasonable speed**” is considered a speed that a vehicle can travel without losing traction. During and immediately after a winter storm event, a reasonable speed will most likely be lower than the posted speed limit. Motorists can expect some inconvenience and will be expected to modify their driving practices to suit road conditions.

3.0 Passable Roadway Expectations

Category 1: Major urban freeways and most highways with six lanes and greater

(These highways are considered “high volume” and receive 24-hour coverage, during the winter storm event. See HMM 06-05-01.)

Highways in this category often have traffic congestion and snow storage problems, making typical plowing and deicing agent applications very difficult or inappropriate. Therefore, when traffic volumes and snow storage are problems on these highways it may be appropriate to use extraordinary efforts, such as chemical removal, so that snow does not pack on the roadways during the winter storm event.

On these highways service providers should strive for “passable roadway” conditions on **all lanes and ramps**, during the winter storm event. Plowing is the first priority for snow removal, however extraordinary efforts (as described above) **may** be taken so that snow does not pack on the roadways during the winter storm event.

Category 2: High volume four-lane highways (ADT \geq 25,000) and some enumerated four-lane highways (ADT $<$ 25,000) and some 6-lane highways.

(These highways are considered “high volume” and receive 24-hour coverage, during the winter storm event. See HMM 06-05-01)

Highways in this category typically do not have the traffic congestion and snow storage problems of those in category 1. However, they still have high traffic volumes that make it necessary to focus on more than just the driving lanes during the winter storm event.

On these highways service providers should strive for “passable roadway” conditions on the **driving lanes, ramps and passing lanes** during the winter storm event. Plowing is the first priority for snow removal. The counties should strive to keep the snow from packing on the **driving lanes, ramps and passing lanes (if not needed for snow storage)** during the winter storm event. Only enough de-icing agents should be used to keep the total accumulation workable, thereby minimizing bonding during the winter storm event. It is considered inappropriate to attempt to melt the snow as fast as it hits the ground or keep the highway wet so as to eliminate any accumulation or packing. If packing should occur, service providers will strive for “passable roadway” conditions and eventually “bare pavement” as soon as practical after the winter storm event has ended.

Category 3: All other four-lane highways (ADT < 25,000)

(These highways may be considered either “high volume” or “all other” and receive either 18-hour or 24-hour coverage, during the winter storm event. See HMM 06-05-01.)

Highways in this category have lower traffic volumes and do not fit into either category 1 or 2. The typical cycle times in this category are long enough that it can sometimes be impractical to keep the snow “workable” in both the driving and passing lanes without excessive de-icing agent usage.

On these highways service providers should strive for “passable roadway” conditions on the **driving lanes and ramps** during the winter storm event. Plowing is the first priority for snow removal. The service providers should strive to keep the snow from packing on the **driving lanes and ramps** during the winter storm event. Only enough de-icing agents should be used to keep the total accumulation workable, thereby minimizing bonding during the winter storm event. It is considered inappropriate to attempt to melt the snow as fast as it hits the ground or keep the highway wet so as to eliminate any accumulation or packing. If packing should occur, counties will then strive for “passable roadway” conditions and eventually “bare pavement” conditions on the **driving lane and ramps only** as soon as practical after the winter storm event.

Plowing should be conducted on the **passing lanes** throughout the winter storm event, but the majority of effort required to achieve “passable roadway” conditions and eventually “bare pavement” conditions on the **passing lanes** should be done, as soon as practical, after the winter storm event.

Category 4: Most high volume two-lane highways (ADT >= 5,000) and some 2-lanes (ADT <5000)

(These highways are considered “high volume” and receive 24-hour coverage, during the winter storm event. See HMM 06-05-01.)

On these highways service providers should strive for “passable roadway” conditions on the **driving lanes**, during the winter storm event. Plowing is the first priority for snow removal. The service providers should strive to keep the snow from packing on the **driving lanes** during the winter storm event. Only enough de-icing agents should be used to keep the total accumulation workable, thereby minimizing bonding during the winter storm event. It is considered inappropriate to attempt to melt the snow as fast as it hits the ground or keeping the highway wet so as to eliminate any accumulation or packing. If packing should occur, counties will then strive for “passable roadway” conditions and eventually “bare pavement” conditions as soon as practical, after the winter storm event.

Category 5: All other two-lane highways

(These highways are considered “all other” and receive 18-hour coverage, during the winter storm event. See HMM 06-05-01)

On these highways service providers should strive for “passable roadway” conditions on the **driving lanes**, during the winter storm event. Plowing is the first priority for snow removal. The service providers should strive to keep the snow from packing on the **driving lanes** during the winter storm event. Only enough de-icing agents should be used to keep the total accumulation workable, thereby minimizing bonding during the winter storm event. It is considered inappropriate to attempt to melt the snow as fast as it hits the ground or keep the highway wet so as to eliminate any accumulation or packing. If packing should occur, counties will then strive for “passable roadway” conditions and eventually “bare pavement” conditions as soon as practical after the winter storm event, during normal work hours (including Saturdays and Sundays).

During the time between the winter storm event ending and achieving “passable roadway” conditions, it is acceptable that only clear wheel tracks be provided when conditions warrant.

4.0 Exceptions

Exceptions to this guideline will occur when subsequent winter storm events happen at a frequency where it is not possible to obtain passable roadway conditions and subsequently bare pavement between the events. The severity of a winter storm event, roadway temperatures and availability of resources along with other factors will dictate how soon passable roadway conditions and subsequently bare pavement can be obtained. Also, it may be deemed appropriate to use extraordinary means when impending weather or an influx of traffic, such as traffic prior to a holiday, is anticipated.

Another exception can occur when the department, because of budget restrictions or unavailability of de-icing agents, has requested that service providers reduce the level of effort or passable roadway condition expectations during the winter storm event. In such a case the department, after notifying and in cooperation with the service providers, may reduce level of effort expectations on one, several or all five categories described above.