



## Highway Maintenance Manual

### Chapter 06 Winter Maintenance

#### Section 01 Winter Maintenance Introduction

##### Subject 01 Introduction

## Bureau of Highway Maintenance

August 2024

### 1.0 Authority

Under [Section 84.07\(1\)](#), Wisconsin Statutes, the department prescribes specifications for "the removal and control of snow [and] the removal, treatment and sanding of ice." The guidelines in chapter 6 of this manual provide policies and guidance related to these winter maintenance activities. The guidelines are considered a living document and are reviewed as necessary to provide adequate direction to counties that provide the winter maintenance activities.

### 2.0 Introduction

1. The goal of winter maintenance is to make roadways safe within the limitations of resources, roadway protection, and environmental protections. Motorists may encounter some traveling inconveniences and will need to modify their driving practices such as reducing speeds, to adapt to winter road conditions.
2. The proactive approach of anti-icing has proven under certain conditions to be an effective and efficient technique for winter maintenance. All service providers responsible for winter operations on state-maintained highways should utilize anti-icing methods when the weather conditions warrant. Acceptable anti-icing methods may include applying liquid anti-icing agents to the pavement surface and/or bridge decks prior to predicted precipitation events or on a predetermined schedule.
3. Plowing is to be the primary means of snow removal. De-icing agents are used principally to keep snow from bonding to the pavement, which in turn facilitates clearing of the pavement after a storm. Abrasives used to provide traction should be used in combination with de-icing agents. Snow fencing is considered a preventive maintenance action.
4. De-icing agents should be used in the recommended priority order:
  - (a) To anti-ice by attempting to prevent the bonding of ice/snow to the pavement.
  - (b) To keep snow in plowable condition and keep slush from forming into compacted snow (snowpack).
  - (c) To de-ice, thereby breaking the bond between ice/snow already bonded to the pavement.
  - (d) To melt ice/snow.