



## **Highway Maintenance Manual**

**Bureau of Highway Maintenance**

### **Chapter 06 Winter Maintenance**

**January 2012**

### **Section 01 Winter Maintenance Introduction**

### **Subject 01 Introduction**

#### **1.0 Authority**

Under Section 84.07(1), Wisconsin Statutes, the department shall prescribe specifications for "the removal and control of snow [and] the removal, treatment and sanding of ice." This is the authority for the guidelines outlined in chapter 6 of this manual. These guidelines are considered a living document and will typically be reviewed at the end of each winter season.

#### **2.0 Introduction**

1. The goal of winter maintenance is to make roadways safe within the limitations of resources, roadway protection and environmental concerns. Hence, motorists can expect some inconvenience and will be expected to modify their driving practices to adapt to 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. Current acceptable anti-icing methods may include applying liquid anti-icing agents and/or pre-wetted salt 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 fence is a preventive maintenance action.
4. De-icing agents should be used in the following 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; and (d) to melt ice/snow.