1.0 Introduction

The proactive approach of anti-icing has proven under certain conditions to be an effective and efficient technique for winter maintenance. During the winter of 2000-2001 the bureau of highway maintenance sponsored a campaign to get more anti-icing units into operation on state highways. Through this program, service providers were given a variety of different mechanisms to acquire the systems. In 2000-2001, over 30 service providers took advantage of the funding. As of the 2010-2011-winter season, there 65 counties using anti-icing equipment.

2.0 Equipment Configuration

The county in cooperation with the department will decide on the equipment configuration that bests meets the needs of each county. It is recommended that when a dedicated anti-icing unit is specified that the unit be dual purpose, when possible, so that it can be used during the summer months as well. Weed spraying is one recommended dual purpose. It is also recommended that an infrared pavement temperature sensor be installed in the vehicle that is applying the anti-icing agents.

3.0 Spray Bars

A typical anti-icing system utilizes a spray bar to distribute anti-icing/de-icing agents onto the pavement. When using a spray bar, it is recommended that the nozzles be streamer nozzles and not fan nozzles. The nozzles should be spaced such that the pavement is not saturated at the time of application. This should help ensure that adequate friction is present on the pavement. When possible, it is recommended that wind flaps be installed on either side of the spray bar to minimize drifting of the anti-icing/de-icing agent.

4.0 Calibration

Anti-icing units shall be calibrated every fall prior to the winter season. Anti-icing units found to be in nonconformance with standard application rate practices shall be adjusted, or not used on the state maintained system. It is recommended that each county keep a calibration card or report in the anti-icing vehicle for the operator's reference.