

**Highway Maintenance Manual** 

Chapter 06 Winter Maintenance
Section 25 Weather Services
Subject 20 RWIS Maintenance

**Bureau of Highway Maintenance** 

January 2012

# 1.0 Background

The department has installed 61 remote weather stations with pavement sensors throughout the state. This system, known as the Road Weather Information System (RWIS), provides users with information on current atmospheric and pavement conditions. The purpose of this chapter is to detail responsibilities of the Bureau of Highway Maintenance, the regions, and the winter maintenance service providers in maintaining this system. Adherence to these policies is essential to ensure data from the system is constantly available to all users. Failure to follow these procedures results in wasted funds and a non-functioning RWIS.

# 1.1 Responsibilities

## 1. Bureau of Highway Maintenance (BHM)

- Negotiate and provide all funding for a RWIS maintenance service contract. This contract will
  specify all actions required of the RWIS service provider, including routine maintenance, repairs of
  malfunctioning equipment, and software and technical support. BHM will ensure terms of this
  contract are adhered to by the service contractor.
- Respond to all TRANS 220 requests for potential conflicts between RWIS stations and highway improvement projects.
- Review the department's three-year plan at least annually to determine if there are any projects for which new RPU's might be included as a safety enhancement. If so, coordinate with the region offices to ensure specifications for the new weather station are included in project specifications.
- Meet annually with the contractor responsible for RPU maintenance and installation to review
  planned improvement projects for the upcoming year to ensure that the maintenance contractor
  knows of all potential sensor replacements.
- Submit Equipment Loss Reports and claims for all damaged sensors through the WisDOT Risk Management Section.
- Provide sample sensor and RPU specifications to any region or county requiring them for inclusion in bid documents.

#### 2. Regions

- Ensure proper maintenance and care of the RPU's in their region. This includes taking proper precautions outlined in Sections 3 of this chapter to prevent accidental damage to RPU equipment and requesting maintenance for any system component that has failed.
- Submit a request for service to BHM on a form provided or via electronic mail or telephone for any
  malfunctioning RPU equipment. BHM will then review the request and forward the form, if required,
  to the RWIS maintnenance provider.
- Each region operations office will coordinate with their region construction office and winter maintenance service providers on all road projects such as overlays, diamond grinding, and shoulder work that are planned in that region in the vicinity of RPU's. The region operations office will ensure that the design and construction sections are aware of the locations of all pavement sensors and cabling associated with the RPU. Regions will take every necessary precaution to see that cables are not damaged or cut. Regions should include a checklist item in their construction/improvement project checklists for the project manager to check with the operations section to see if any weather stations and/or sensors will be affected by the project.

January 2012 Page 1

- For bid construction/improvement projects, ensure that funding is included in the project budget for replacement of any pavement sensors installed in the roadway within the project limits. Since the sensors are not removable, they must be replaced with new ones. Funding will be provided for within the project budget. Regions will also include funding in the project budget to cover the costs of re-siting the RPU, if necessary. The project bid document will include specifications for the new sensors and any telephone or electrical work that would be required. Regions will notify BHM of any sensors requiring replacement to determine costs and best dates for new sensor installation.
- Notify BHM immediately when damage is done to a pavement sensor or any other component of the RPU so that a damage claim can be submitted to Risk Management.

# 3. Winter maintenance service providers

- Know the locations of any sensors and cabling that may be affected by their construction or maintenance activities or by activities that have been contracted out.
- Coordinate with the region to prevent accidental damage to RPU's and cabling. Counties may be held financially responsible for any damage done to sensors and/or cables during their or their contractors' maintenance operations.

Provide traffic control for RWIS maintenance activities, as requested by the maintenance contractor. Traffic control will be billed the same as routine traffic control.

January 2012 Page 2