

Crossroads

Winter 1996



TRANSPORTATION Information Center

University of Wisconsin-Madison

Weather—the winter guessing game

A winter storm is howling through central Minnesota. Should you call out the plows? The air temperature is 18° F at 6:00 AM. Will it warm up enough by noon for salt to work?

Good questions. Where do you get the answers?

These days there's good satellite, radar, air and pavement condition information to help make winter maintenance a more exact art.

Pavement sensor forecasts

Pavement temperatures and forecasts are about the most sophisticated information currently available for road



maintenance. Wisconsin now has a network of pavement sensors and weather stations on Interstates and other major divided highways. The stations continuously report weather and pavement data via personal computer to all County Highway offices, WisDOT District offices, and other municipalities.

The system, coordinated by WisDOT, includes a 24-hour forecast of projected pavement temperatures.

Knowing pavement temperatures may let you eliminate a round of salting, says WisDOT's Wayne Peterson who has been coordinating the system until recently. (Mike Adams is the new on-site program manager.) Even though air temperature is below freezing, if pavement temperature is 40°, it doesn't make much sense to salt, Peterson says. But if the pavement temperature is 34° now, and projected to go down later, you want to salt right away to prevent ice bonding and buildup on the pavement. Peterson believes the system will help cut salt use around the state.

There are 30 stations now, and WisDOT will have 21 new stations on line in December. The department is

working towards a 35-mile grid covering the whole state. The information is quite accurate for up to 35 miles, Peterson says.

Larger communities can access this information directly through a computer hook-up. Contact the WisDOT District Maintenance Engineer for information.

Smaller communities can call their county Highway departments for a current status report and forecast.

Contract forecasts

Many municipalities contract for commercial weather forecasts. The cost varies with the level of service and size of community. At the simplest, you can just call whenever you want a forecast for your area. The businesses also offer daily routine forecasts, storm alerts, and 24-hour telephone calls. (Contact T.I.C. for a list of forecast services.)

Milwaukee, for example, has received forecasts from Murry and Trettle for more than 30 years. "We use them like an alarm clock," says Dave Lorbeske, the city's field manager for winter maintenance operations. "They will call and warn us if snow is coming, 24 hours a day."

The city's on-call manager writes the meteorologist's verbal weather observations and forecasts on a form. He can ask questions and get more information right away. Routine 24-hour forecasts are delivered in the morning by phone or fax and updated in the afternoon. The company also supplies storm alerts and longer range forecasts. The service costs Milwaukee about \$5000/yr.

"We want to know what time of day the storm will hit, the temperature before and after the storm, its

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