Weather Info The most comprehensive road weather information system in the world

Slippery roads - accidents/victims - costs

Traffic accidents are extremely costly not only to the individual victims, but also to society at large. Many accidents are caused by slippery road conditions. A serious condition is scattered, hidden, slippery spots. These can be caused by freezing wet pavement, by frost on the pavement, or by rain falling on frozen road surface. Such hidden slippery spots are often quite local. Accidents involving drivers that are unaware of the slippery road conditions tend to have more severe accidents as their driving and travelling speeds are not properly adjusted to the situation. Locally formed slippery spots are typically caused by locally critical climate conditions. Roads close to open water, low lying areas, shaded road sections and bridges are all examples of places where slippery spots may first appear.

The intelligent way to success!

The Swedish Road Weather Information System gives an early warning when conditions become critical. The system provides real time informations thus enabling the maintenance crews to act even before the first icy spots have been formed. In addition to reducing the number of accidents, the system saves money through more efficient utilization of road maintenance personnel and reduced application of chemicals. Less chemicals mean reduced corrosive damage to vehicles as well as reduced environmental impact.

Climate mapping

The road climate map is an essential part of the Swedish system. The exact positions of the field stations are determined after a very careful mapping. By this mapping it is possible to reduce the number of station needed, while still retain accurate information of the road conditions. Later the information from the climate mapping is used when evaluating the information from the system.

700 field stations along the Swedish roads!

The earliest installed section of the RWiS has been in operation by the Swedish National Road Administration for 10 yars, which proves its well-developed technology and high level of reliability. Every half hour the roadmaster are given updated information, distributed via a computer network.

In this way 700 field stations along Swedish roads contribute to:

- Improved data for meteorological forecasts
- Improved background for proper maintenance decision and consequently
 - improved driving conditions
 - reduced chemical use resulting in less environmental impact and reduced corrosion on vehicles and bridges.



The field stations are equipped with different kind of sensors e.g.

- Windspeed
- Wind direction
- Air temperature
- Humidity
- Rain/Snow
- Road surface temperature
- Freezing point

RWiS

Through a network of computers, information from fieldstations is distributed to road maintenance people. Information from weather-radar and NOOA-satellites are exemples of other data wich can be incorporated.

Trafic-monitoring

ITS-Teknik has developed systems for trafficmonitoring. The systems are mobile and static, passive and active.

Alternative use of the system

Ski resorts

- Wind, temperature, humidity and wind chill information.
- Wind limit alarm for ski lifts and gondolas.
- Around-the-clock information indicating the best time to apply artificial snow.
- Control of pumps and cannons for artificial snow.

Airports

Data collection from sensors in the runway and atmospheric sensors.

- Four hour advance warning of slipperiness.
- System flexibility permits development of custimized configurations to meet customer specifications.

Environment

- Mobile and stationary systems for air quality measurements.
- Programmable systems for collection of data from all types/brands sensors.