

Road Weather Information Systems



Weather threatens surface transportation nationwide and affects roadway safety, mobility, and productivity. Accurate information about current and future weather conditions is essential. The use of roadside weather stations (RWIS Environmental Sensor Stations) can help traffic engineers predict weather changes, identify threats to road surface conditions, and activate automatic warning systems.

High Sierra Electronics provides a comprehensive range of products for traffic engineers and ITS officials. Real-time data collection is available for environmental monitoring, road surface status, flooded roadways, high wind and visibility advisory. Selections also include portable and tower-mounted installations. Communication options include wireless, cellular, satellite, radio telemetry and fiber optic transmission. NTCIP-ESS protocol is available for most applications.

At the Traffic Operations Center, HSE's management system offers centralized data collection and distribution with MDSS and GIS interface. Standard features also include custom alarms, graphical display, and data archiving capability.

HSE continues to work with the National Weather Service, State Department of Transportation offices, the Institute of Transportation Engineers, and the National Rural Intelligent Transportation Society to design and develop products that respond to changing road weather conditions in real time.

High Sierra Electronics provides:

RWIS - ESS Weather Stations

▶ Environmental Data

- Rain, Snow
- Wind Speed, Wind Direction
- Temperature, Humidity
- Barometric Pressure
- Solar Radiation
- Visibility

▶ Road Surface

- Pavement & Subsurface Temperature
- Moisture Content
- Road Surface Status

▶ Real-Time Telemetry Systems for Climate Monitoring & Research

▶ Software for Automated Data Collection with Alarms & Data Archiving

