



safety

mobility

productivity



Clarus will make use of the over 2,100 environmental sensor stations that are already deployed along America's highways to help reduce the impact of adverse weather for all road users and operators.



For more information about this US DOT initiative:

www.its.dot.gov/clarus

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Nationwide Surface Transportation Weather Observing and Forecasting System – Clarus

A Major ITS Initiative

Reducing the Impact of Adverse Weather

Adverse weather affects road safety, mobility, and the productivity of transportation agencies. A nationwide, integrated road weather observational network and data management system will mitigate the effects of adverse weather on all surface transportation users and operators by providing timely and accurate weather, pavement, and water level information.

Efforts to date to deploy Road Weather Information Systems (RWIS), and the Environmental Sensor Stations (ESS) that feed the road and weather observations into the systems, have proven effective, and more than 2,100 ESSs are currently in use throughout the United States. These systems, however, do not provide full-scale data sharing, which limits their functionality. A focused, national effort is needed to build a nationwide, integrated road weather observational network.

Deploying the Network

Deploying a road weather observational network requires a multiyear effort to build consensus across transportation and weather communities to design, build, test, and evaluate the system components. The Clarus initiative builds on the Federal Highway Administration's (FHWA) developing partnership with the National Oceanic and Atmospheric Administration (NOAA) and NOAA's efforts to improve the safety and efficiency of America's commerce.

This initiative involves:

- Establishing an Initiative Coordinating Committee (ICC) consisting of FHWA, NOAA, State departments of transportation, academia, and the private sector
- Overseeing the conceptual design and monitoring progress
- Completing research projects related to the initiative
- Demonstrating the system for a multistate, multidisciplinary region
- Exploring linkages to other databases, including other weather, traffic, road composition, flood monitoring, and road treatment data
- Developing guidance and standards to enable deployment by others, including full software documentation
- Refining the strategy to transition the system to sustainable operations
- Working with the ICC to transition to operations

For additional information, please refer to: www.clarusinitiative.org.

