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Invasive and Non-Invasive Sensing for Road Weather Information

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Abstract

Agencies continually considering innovative strategies and sensing equipment to reduce the impact weather has on mobility and safety. The recent market availability of non-invasive sensors adds a new element for consideration as agencies contemplate the use and integration of non-invasive sensing. This study seeks to support agency decision making in terms of understanding the agreement between invasive and non-invasive sensing data.

This project includes a large-scale effort to deploy non-invasive sensors adjacent to existing invasive sensors (at existing RWIS stations) and to report agreement between the different systems. The project includes identifying the non-invasive sensors on the market, purchasing and distributing the compatible devices per Aurora Pooled Fund state, and once the agencies have installed the devices working to establish access to the data for comparison as well as development of a dashboard to provide comparative information.