

# Weather Savvy Roads Pilot Program

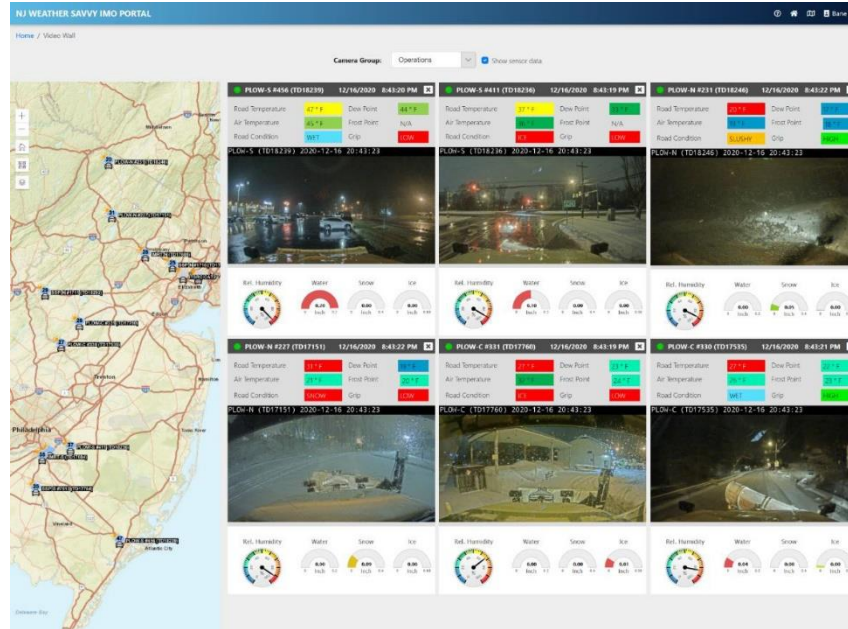


## OVERVIEW OF INNOVATION

The deployment of real-time vehicle-based Intelligent Transportation System (ITS) road weather sensors and video cameras, improves NJDOT's ability to detect and forecast adverse road weather and pavement conditions, and determine the most effective roadway and traffic management response. These technologies have enabled the communication of critical road-weather data between vehicles, infrastructure, and Department personnel across the State to assess the impacts of weather on roads, vehicles, and travelers, and has also been used to inform the decision making process by the Department leadership.

NJDOT equipped 24 fleet vehicles with windshield cameras, mobile Road Weather Information Systems (RWIS) sensors, portable PC computers, and cellular routers. The equipment in each vehicle was integrated to provide a continuous feed of road weather data and video of the roadway conditions to the remote data center using cellular communications. The data feed from all vehicles was integrated in a unified data management platform, which also provided a web-based graphical user interface for data and video feed visualization, among other features.

The mobile RWIS provides information on ambient temperature, road temperature, road condition and grip, as well as a windshield view of road conditions. Management can see what the drivers are seeing. The information helps to assess a storm's duration and intensity while it is ongoing and helps management determine appropriate responses.



Source: New Jersey Department of Transportation

## BENEFITS

Safety is improved through provision of a continuous feed of road weather data and video of roadway condition which can inform real-time management decisions, post-event analysis, and pavement treatment strategies.

Improves information sharing and communications among agencies including emergency services.

Real-time data is harnessed to inform weather responsive deployment of personnel and vehicle fleet which offers efficiencies for weather responsive management and operations.

## FIND OUT MORE . . .

NJDOT Weather Savvy Roads Pilot: Update and Lessons Learned Summary  
<https://www.njdottechtransfer.net/weather-savvy-update>

NJDOT Weather Savvy Roads Pilot Program: Final Report  
<https://www.njdottechtransfer.net/weather-savvy-final-report>

New Jersey Department of Transportation

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