

Challenge

Drivers may not be aware of the road conditions that are ahead and drive at inappropriate speeds for the conditions. It can be difficult to notify drivers with timely information at the correct location and time.

Solution

Use RWIS to turn weather and road data into meaningful insights. Integrate the RWIS meteorological data to trigger the signs to alert drivers via navigation app or signage about notable hazards.

Benefits

By advancing a system to enable driver messaging, information is spread widely to the public in a timely manner. Thus, increasing driver awareness and preventing accidents due to inclement weather.

Advanced RWIS for Driver Messaging

The North Dakota Department of Transportation (DOT) in partnership with OTT HydroMet and Haas developed a complete solution for effective messaging in a notoriously difficult weather corridor.

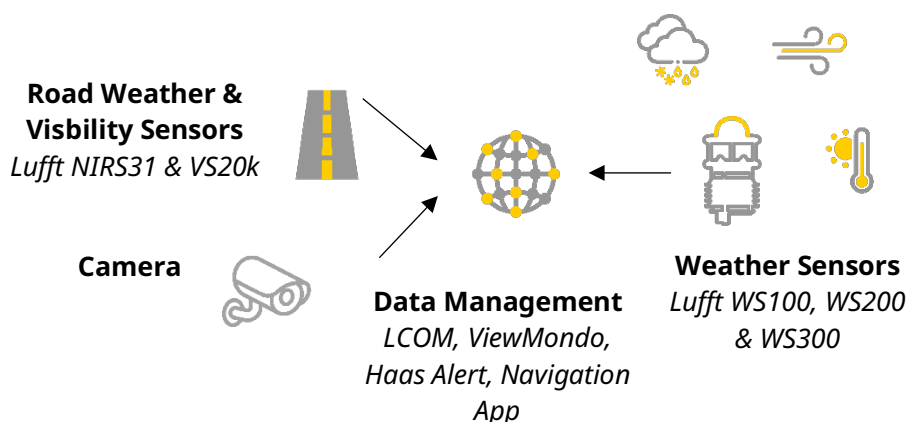
The solution integrates several sensors to capture the road conditions with intuitive software platforms to feed the data into a navigation app for immediate notification.

- Trusted suite of road weather instruments from the OTT HydroMet product brand Lufft
- Easy integration to activate signage with the help of flexible software solutions
- Successful collaboration to deliver a customized solution that can be redeployed to other areas



Weather threshold-controlled sign notifying drivers of dangerous road conditions in North Dakota, USA.

Schematic Setup *with product suggestions*




— an OTT HydroMet brand —

Further information

[Road Weather Monitoring Resources](#)

Contact

[Questions? Ask them!](#)



Station Components



Road Weather Sensor

The Lufft NIRS31 is a non-invasive road weather sensor working with optical principle. The sensor is mounted several meters above the surface to measure a variety of conditions and generate the friction coefficient on the road.



All-in-one Weather Sensors

The Lufft WS100, WS200 and WS300 sensors combine to capture data on precipitation type and intensity, wind direction and speed, temperature, relative humidity, and air pressure.



Visibility Sensors

The Lufft VS20k measures visibility up to 20,000m with a sharp measurement resolution of 1m. The sensor is ideal for road traffic applications on motorways, highways or bridges.



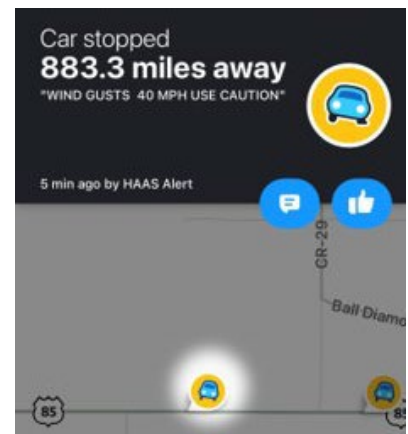
Camera

A RWIS can be enhanced by adding a camera to provide visual confirmation to sensor readings and to serve as eyes in the field, notifying stakeholders of road and weather conditions.



Data Management

The LCOM (Lufft-Communicator) is an industrial PC with the Windows-CE operating system. ViewMondo - Road & Runway Management Software visualizes the weather-related information in a cloud-based platform.



Navigation App

The system can be configured to integrate the road weather data into other tools for driver messaging such as a navigation app for accident alerts or a sign activation for public announcements.