

# Vaisala Wx Horizon

Provides the best situational awareness and weather impact forecasts in one cloud-hosted application to ensure road safety



What time will the next storm begin? What areas will be most affected?

When it comes to winter maintenance, better decisions can save lives. Understanding the potential impact of weather on your network is critical for maintaining transportation safety and mobility.

Vaisala Wx Horizon provides observation-driven data from fixed weather stations, mobile sensors and forecast inputs to determine future conditions on the road network. Developed in collaboration with input from the public works community, Horizon is a first-of-its-kind service that helps you stay ahead of weather changes and make accurate decisions on when—and how—to keep your roads safer.

There is no substitute for real-time measurement. The combination of accurate measurements and powerful modeling provides the best situational awareness of current conditions plus a forecast of how the weather will impact road network mobility—giving you the ability to make timely, targeted decisions more easily.

## **Key benefits**

#### Maintain safer roads

Provides all the information you need—current conditions, precipitation levels, and near-term forecast data—to decide when and where to deploy your fleet.

### Simplify and save time

Analyzes and visualizes data from fixed RWIS/ESS, IoT and mobile sensors both from Vaisala and other manufacturers in one interface. Selects and combines relevant parameters from all sensors to provide meaningful information for decision-making.

### Improve sustainable operations

Helps managers prioritize treatments, optimize salt and liquid usage, and plan equipment resources efficiently to minimize the use of resources that can negatively impact the environment.

## **Drive efficient treatment** practices

Helps organizations save time and money by optimizing winter maintenance resources.

# Improve your mobile integration

Uses mobile observations to continuously improve road network forecast, based on research with users of the Vaisala Mobile Detector MD30.

## Provide consistent level of service

Removes the inconsistency inherent in decision-making that relies on interpretation of different data sets.

## **Observation-driven data for better accuracy**

Horizon combines the best of Vaisala's accurate, dependable technology with world-class forecasting.

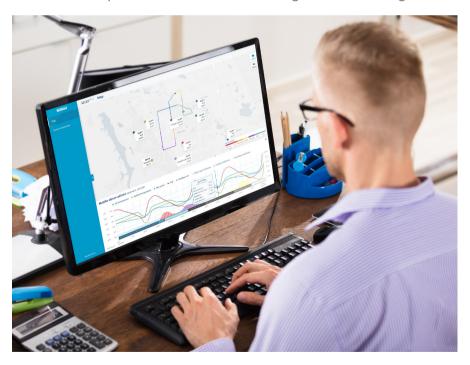
Horizon aggregates real-time road data from several sources—including mobile sensors, IoT sensors, RWIS and ESS—then analyzes and visualizes the information. This information provides cities, counties and state and national transportation departments with a clear picture of the current situation so they can take immediate steps to ensure road safety.

That same data is fused in the Vaisala Road Weather Model to provide actionable information of near-term weather impact on travel. This network-wide road condition forecast is visualized in an intuitive map-view to help decision-makers determine action more efficiently and consistently.

## Designed with mobile sensing in mind

We set out to produce the strongest, most efficient solution for helping customers keep their roads safer—which meant research and community input. Not only did we work closely with the public works community, we also sought feedback from users of the Vaisala Mobile Detector MD30.

The result of this research is a solution that has the needs of winter maintenance experts as a fundamental building block to its design.



### **Key features**

- Leverages Vaisala industryleading sensors and world-class forecasting capabilities
- Combines data from fixed and mobile Vaisala sensors and other suppliers
- Uses a secure, cloudhosted environment
- Provides road weather condition forecasts using our proprietary road weather model

## Why Vaisala?

#### **Expertise and innovation**

We have built our expertise on more than 80 years of highly accurate observations. For decades, road maintenance agencies all over the world have trusted Vaisala to deliver a full service offering for measuring the weather. This can include site selection, designing and building, sensor maintenance, analytical processing of observations, and displaying intuitive, actionable information.

Each year we re-invest more than 10% of our revenue to drive innovation to ensure sustainable actions can be delivered on transportation networks around the world.

### Support you can count on

With our deep understanding of the challenges faced by winter maintenance decision makers, you can count on Vaisala for dependable support, training, and project management based on best practices. With decades of experience providing the best technologies and expert know-how, Vaisala's philosophy of partnership is unmatched in the industry.



