



## Trouble spots no more: 5 road weather measurement challenges solved

*Many winter maintenance organizations rely on road weather information to help keep their winter roads safe. However, there are certain types of areas that may be challenging for road weather measurements. Here is a look at some of those locations and how new technology makes it easier and more affordable to get the information you need.*

### Tough-to-monitor locations



#### Bridges and elevated sections

- Short distances
- Unexpected conditions
- Heat loss above and below the surface
- Can become icy especially early in the winter season



#### Parking lots

- Microclimate by design
- Low traffic and speeds
- Scattered shading
- Hyperlocal surface weather data is difficult to obtain



#### Cities

- Heavy traffic
- Low speeds
- Large condition variations even as critical spots are well-maintained



## Non-urban roads

- Low traffic
- High speeds
- Long distances
- Topography and shading create hazardous spots



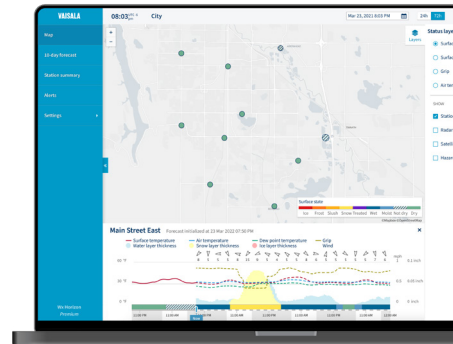
## Cycleways and sidewalks

- Increasing in use
- Diligent winter maintenance required
- Different thermal properties than roads

# Easy insights with modern technology

## Vaisala Wx Horizon

Wx Horizon, part of our Xweather family of subscription based products, is a weather hazard impact portal that delivers insights to current and future road conditions. The fusion of accurate measurements with industry-leading weather forecasting and best-in-class road weather model delivers actionable information for specific use in transportation.



## Vaisala Cast Sensors

Intelligent, wireless Cast Sensors provide an easy, cost-effective way to enhance your road weather network and can go where other sensors cannot. They are small, have a built-in battery, and install quickly and easily just about anywhere with built-in NB-IoT connectivity.



### GroundCast

- Road temperature from multiple depths
- Treatment material amount
- Surface state: dry / not dry



### TempCast

- Air temperature
- Humidity (dew point)
- Surface temperature

*Learn more about the industry's most dependable road weather technology.*

# VAISALA

[vaisala.com/roads](https://vaisala.com/roads)



Scan the code for more information

Ref. B212695ENA ©Vaisala 2023

This material is subject to copyright protection, with all copyrights retained by Vaisala and its individual partners. All rights reserved. Any logos and/or product names are trademarks of Vaisala or its individual partners. The reproduction, transfer, distribution or storage of information contained in this brochure in any form without the prior written consent of Vaisala is strictly prohibited. All specifications – technical included – are subject to change without notice.