VAISALA

Top 3 winter road maintenance strategies

The goal of every road maintenance organisation is to keep the roads safe no matter what the weather may bring. It's a simple goal, but finding the right strategy can be complex with shifting priorities, budgets and equipment demands.

Here are the top 3 approaches and the advantages of each.

Forecast approach

The forecast approach relies primarily on published weather forecasts from one or multiple sources. The forecast may be accurate, but offers no insight on current or changing road conditions.



Logical and cost-efficient

General weather information

Requires human interpretation

No road condition insight

Observation approach

The observation approach uses fixed weather stations at strategic locations. These provide accurate measurement data on road conditions in that location but lack information between stations.



Distributed weather stations and sensors

Greater accuracy of road conditions

Fixed observations

No insight between stations

Operational approach

The operational approach is the best of both worlds: hyperlocal forecast data, road condition measurements, and powerful visualization. This enables data-driven decision making for proactive and efficient maintenance.

Road condition data in between stations

Road weather modeling

Highest accuracy

No observation or forecast gaps

Vaisala is here to help

From sensors to systems and digital services, Vaisala gives road stakeholders unrivaled road network visibility and decision support — so everyone can keep moving toward better, more insightful ways of operating. We are recognized experts in transportation, and we continue to channel our curiosity into new ways of making roadways safer and more efficient than ever — as reflected in our guiding principles:



Move ahead



Mobility and beyond



The innovators



See, understand, decide

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Drive improvement in your road maintenance strategy.

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