

CASE STUDY

Building an AI-Powered Road Condition Baseline

City of Maple Valley, WA, USA

Customer Situation

The City of Maple Valley is a fast-growing community of nearly 30,000 residents southeast of Seattle, Washington. Its Public Works Department is responsible for maintaining more than 80 miles of roads, a task that, until recently, relied on time-consuming manual inspections.

The City needed a smarter and more affordable way to obtain an objective, data-backed view of road conditions across the entire city, while also supporting the case for long-term infrastructure investment to the City Council.

Challenges

Maple Valley faced several interconnected obstacles:

- **No systematic baseline**

The City lacked a standardized, city-wide road condition index to prioritize repairs or track pavement deterioration.

- **Budget pressure**

Hiring a traditional pavement consultant to survey more than 80 miles of roads was prohibitively expensive.

- **Manual and reactive**

Without continuous data, the City could only respond to visible problems rather than anticipate future maintenance needs.

- **Council reporting**

Objective evidence was needed to justify maintenance spending and support the development of a six-year capital plan.

“It would have cost us 5-6 times more to hire a consultant for the same assessment. DareeSoft gave us a complete, data-driven picture of our entire road network — and the results matched what we know on the ground.”

Tawni Dalziel

(Public Works Director,
City of Maple Valley)



Client

City of Maple Valley



Project Duration

Jul 2025-Jan 2026



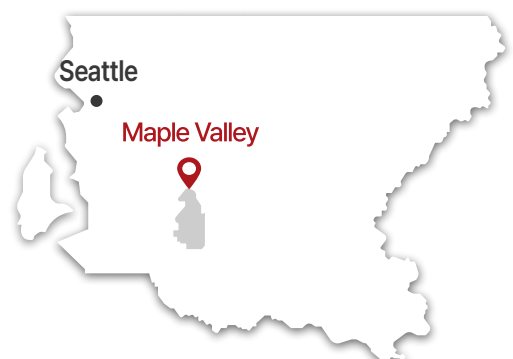
Service Type

RiaaS RoadMonitor



Project Location

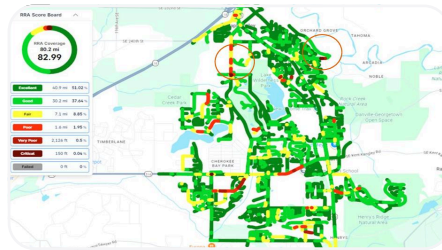
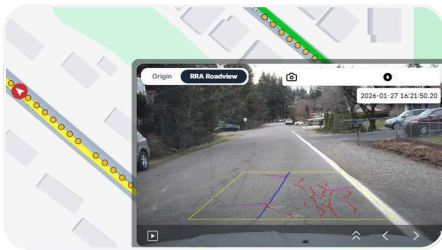
City of Maple Valley
(King County, Washington)



Solution

The City deployed RiaaS (Road-information-as-a-Service) RoadMonitor, an AI-powered solution for rapid, cost-efficient pavement assessment that identifies priority road segments for repair through a data-driven scoring system.

A single AI Road Analyzer (ARA-30) device was installed on the City's patrol vehicle and operated over a one-month period, scanning 80.2 centerline miles across 2,086 road links. Each road link was assigned a grade based on a standardized rating system, enabling clear identification of maintenance priorities.



Detailed View of Identified Distress

RRA Score for Scanned Roads

Results

The system provided the City of Maple Valley with its first objective baseline of road condition data, offering a clear view of the overall health of its road network and identifying the top 12 priority road segments for targeted maintenance planning.

The findings were presented to the City Manager, who was immediately impressed by the platform's clarity and depth. The data is now being used to support the development of the City's pavement preservation program.

By adopting RiaaS RoadMonitor instead of relying on subjective manual assessments, the City can now present objectively graded road conditions to the City Council while achieving up to five times greater cost efficiency.

Schedule a demo to see how DareeSoft can help you:

- ✓ Identify roadway defects
- ✓ Assess pavement conditions
- ✓ Monitor roadway assets
- ✓ Improve maintenance decisions

Detections

- ✓ Longitudinal Cracks
- ✓ Transverse Cracks
- ✓ Alligator Cracks
- ✓ Potholes
- ✓ Crack Sealings

Impact

- ✓ 5X cost efficiency
- ✓ Top 12 priority segments identified
- ✓ Objective reporting to City Council
- ✓ Enabled preventive maintenance
- ✓ Optimized budget decisions

Contact



Douglas Dragovich

General Sales Manager,

North America

douglas.dragovich@dareesoft.com



H. www.dareesoft.com

E. riaas@dareesoft.com

Y. www.youtube.com/riaas

L. www.linkedin.com/company/dareesoft