How Alaska Department of Transportation and Public Facilities (DOT&PF) Streamlined Field Inspections with Sitenotes in Integration with AASHTOWare

"Thanks to this field data inspection mobile app, we are able to capture information in the field — even in remote sites with no network. It's changing how we work."

Meagan Wright, Chief Data Officer - Data Modernization and Innovation, Alaska DOT&PF

About Alaska DOT&PF

The mission of the Alaska Department of Transportation & Public Facilities (DOT&PF) is "Keep Alaska moving."

Unlike most U.S. states, Alaska faces unique challenges:

- Vast geography and harsh climate—think an area larger than California, Texas, and Montana combined.
- Remote sites without reliable wireless network and internet services.
- Sparse population—about 740,000 people.

These factors make infrastructure delivery complex and expensive, with little margin for inefficiency.

Challenges

Construction field inspection is critical:

- **Clipboards & duplication** – Without an offline functionality inspectors methods of capturing information that would eventually end up in AASHTOWare varied from inspector to inspector
- **Disconnected tools** – Laptops in trucks, photos on phones, handwritten notes; syncing opened the possibility for errors.
- **Remote conditions** – Inadequate connectivity meant the possibility for delays and lost work.
- **Comprehensive data needs** – Required details and variations of data and calculations — covering what was built, where, and how (progress, materials, labor, & equipment).
- **Lag in reporting** – Without offline functionality there were possible delays between inspections and those inspection details ending up in AASHTOWare.

Solution

Alaska DOT deployed **Sitenotes**, a configurable field oversight mobile app designed to **extend—not replace—AASHTOWare.**
Key features:

- **Two-way sync with AASHTOWare Project**: Pulls all project info in, pushes collected field data back.
- **Highly configurable**: Exactly matches AASHTOWare's existing configurations, setups, restrictions, and agency views.
- **No relearning required**: Familiar labeling and workflows mirror AASHTOWare, eliminating the need for retraining.
- **Consumer-grade ease of use**: no steep learning curve.
- **Offline first**: Works in remote areas; syncs automatically when reconnected.
- **Daily reporting**: Inspectors capture progress, staff hours, equipment, and materials installed directly in the field with sync to AASHTOWARE

Initial deployment covered **5 projects across all 3 regions**, with a crawl-walk-run approach: start with daily work reports and agency views, expand to material testing and asset lifecycle integration.

Results

Alaska DOT&PF has already seen measurable improvements:

- **Save hours every day** on projects with teams of inspectors and office staff. Further, depending on connectivity, reduce time otherwise spent traveling to the office or re-entering information. As new capabilities roll out, these time and cost savings will increase even further.
- **Instant access and more consistent real time reporting** for the back office.
- **Reusable, complete records with geolocation.**
- **Fast reporting**
- **Improved well-being for field staff** — by cutting the need to go to the main office to complete daily work reports, Sitenotes gives workers valuable time back.

According to AASHTO research, **2–4% of cost overruns stem from poor communication and planning.** With Sitenotes, Alaska DOT&PF is already reducing these risks.

Looking ahead: As Alaska DOT&PF connects construction data into its asset management systems, it can unlock significant lifecycle savings. With **75% of an asset's total cost of ownership occurring in operations and maintenance**, agencies that employ lifecycle management solutions have realized **up to 40% cost reductions** [Sources: Woolpert 2024; Deloitte 2018; National Academies].