

Powering a Winter Automated Reporting System



Goals

The Idaho Transportation Department (ITD) wanted to develop an automated maintenance and reporting support system to improve its winter snowplow operations.

The ITD team identified four strategic goals:

1. Improve data quality
2. Reduce operator input needs
3. Improve winter maintenance management tools
4. Reduce winter maintenance costs

ITD staff moved forward to develop a comprehensive Winter Automated Reporting System (WARS) that would meet these four strategic goals through a customized interface with its existing maintenance management system (MMS), **AgileAssets® Maintenance Manager™**.

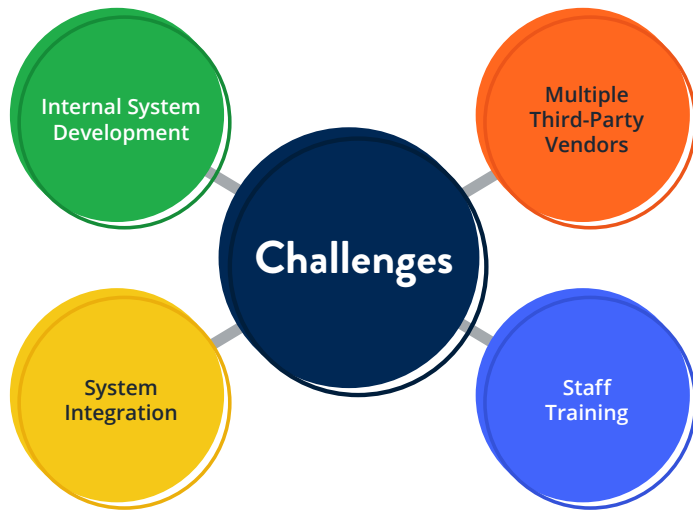


Challenges

ITD manages about 12,000 lane miles of roads, more than 1,700 bridges, and 30 airstrips. The department also oversees federal grants to 15 public transportation systems and supports rail, bicycle, and pedestrian projects. In addition, ITD oversees the Idaho Division of Motor Vehicles.*

To develop and implement the new WARS, ITD needed to overcome several challenges: managing the development of the system internally, coordinating multiple third-party vendors, integrating the system with existing department hardware and software, and training the staff of numerous statewide districts on how to most effectively use the new system.

* ITD, Frequently Asked Questions, 2018.

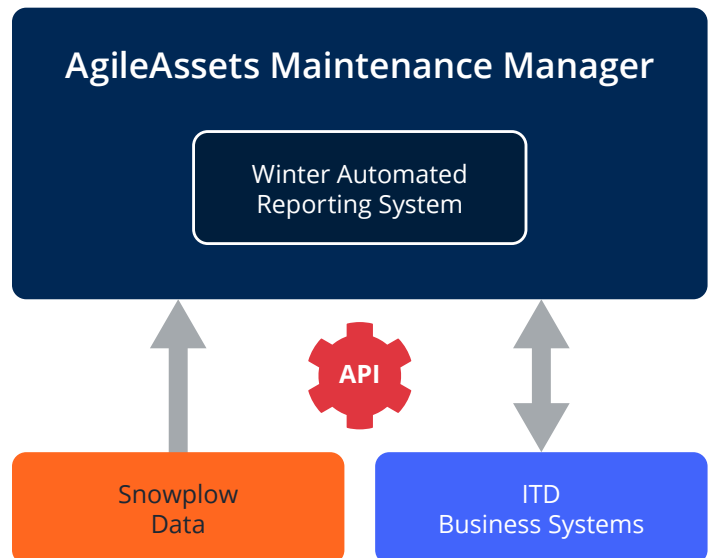


Solutions

Using a customized interface with AgileAssets Maintenance Manager, ITD developed WARS to provide more accurate and timely snowplow truck data for field operations.

Key WARS system requirements included:

1. Generating snowplow truck spreader, plow position, and automatic vehicle location (AVL) data via Certified Cirrus™ Control Systems SpreadSmartRx™ with an on-board data recorder connected to ITD by WiFi
2. Creating activity and route records with data on operators, labor hours, material types and quantities, completed work units, and truck numbers, miles, and hours
3. Interfacing snowplow data and legacy systems with AgileAssets Maintenance Manager, which automatically generates work orders, labor day cards, and information on equipment, materials, locations, and accomplishments



With this system, ITD saves approximately \$600,000 per year in materials costs and 7,500 labor hours per year in operator input time.



Benefits

With the deployment of the WARS, ITD achieves materials savings of 10%, or approximately \$600,000 per year. Additional, direct cost savings include a reduction of operator input time by approximately 7,500 labor hours per year and a reduction of equipment costs through improved efficiencies.

The WARS enables ITD to validate consistent performance from snowplow operators throughout all highway sections. By improving winter operations performance, ITD enhances overall transportation quality and safety while reducing severe winter weather crash events.

As part of the AgileAssets Excellence in Infrastructure Asset Management (**AXIAM**) Awards, ITD received an Honorable Mention for its WARS implementation.



Learn More

For more information about transportation asset management strategies and solutions, contact us at +1 800.877.8734 or [AgileAssets.com](https://www.agileassets.com).

