

ITD Winter Maintenance Plans/Procedures 2017/2018

Trucking Advisory Council

October 12, 2017



YOUR *Safety* • • • ► YOUR *Mobility* • • • ► YOUR *Economic Opportunity*

Snowplow Mobile Data Collection

- Certified Cirrus Controls
 - SpreadSmart RX™ Spreader Controllers
 - DataSmart™ Reporting System
- 409 Single/Tandem Axle Plow/Spreader Trucks
- WiFi Communication



Data Uses

- Snowplow Operations Assessment
 - Winter Automated Reporting System (WARS)
- Integration with Road Weather Information System (RWIS)
 - Vaisala Navigator



Winter Automated Reporting System (WARS)

- Imports Data from Certified Cirrus Controls, GPS DataSmart™ System
- Auto Creates Work Orders and Operator Daily Summary to Road Maintenance Module
- Generates Reports for Operations Assessment to Improve Efficiency
 - Storm Summary Report
 - Operator Exception Report
- Integrates AVL Data with RWIS



Storm Summary Report

- Report Parameters
 - Date
 - Operator
 - Equipment Number
 - District
 - Foreman
 - Maintenance Shed
 - Route or Combination of Routes
- Report Outcomes
 - Crew Efficiency
 - Consistency of Applications Across Routes

The screenshot displays the 'Storm Summary Report' web application. At the top, there is a user profile for 'STEVEN SPOOR (01044)' and a 'Save Selections' button. Below the header, there are tabs for 'View Report', 'PDF', 'Excel', 'Word', and 'Report Viewer'. A filter section includes radio buttons for 'All', 'Submitted', and 'Not Submitted'. The main content area is divided into two panels: 'Dates' and 'Actors'. The 'Dates' panel has input fields for 'Start Date/Time' (9/15/2016 12:00 AM) and 'End Date/Time' (9/15/2016 11:59 PM), with a 'Clear' button. The 'Actors' panel has dropdown menus for 'Operator' and 'Equipment', both set to 'Select All', with a 'Clear' button. To the right, the 'Location' panel has a 'Clear' button and a section for 'Statewide' routes. It includes a table with columns 'Tams Route Name', 'Begin Mile Point', and 'End Mile Point'. Below the table, there are dropdown menus for 'My Loops', 'District', 'Foreman', and 'Shed', all set to 'Select All'.



Operator Exception Report

- Defined Exceptions
 - Plowing Speed (MPH)
 - Spreading Speed (MPH)
 - Spinner Speed (Lanes)
 - Blasting
 - Pre-Wet Use
 - Application Rates by Material Type
- Efficiency Through Material Savings
- Correct Application Rate Based on Conditions



Vaisala Navigator/AVL Data Integration

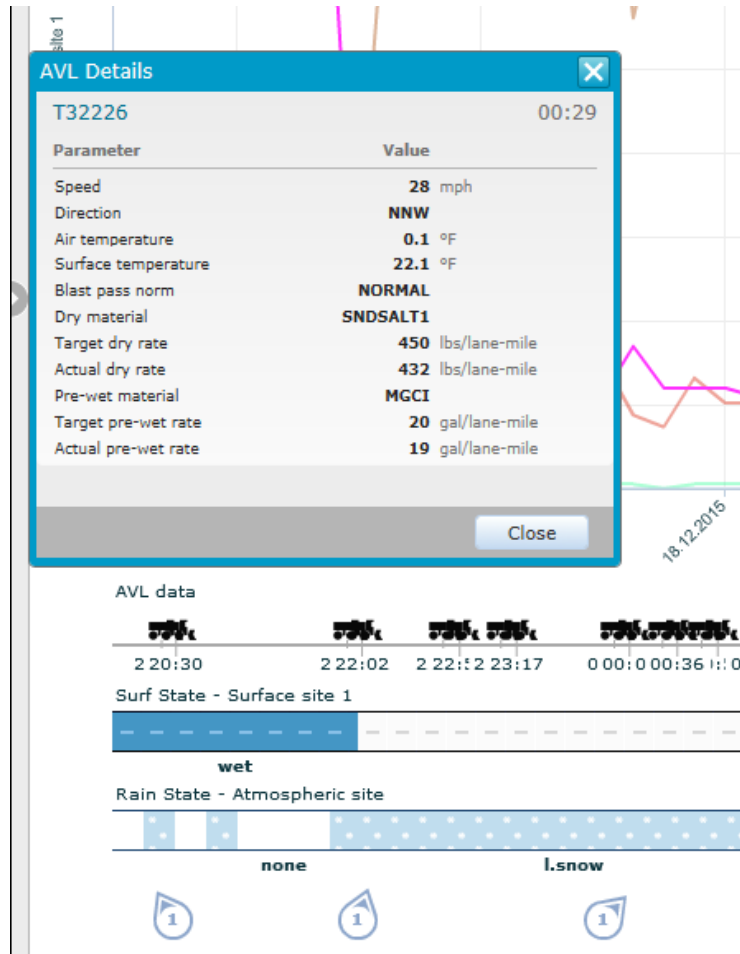


Vaisala Navigator/AVL Data Integration

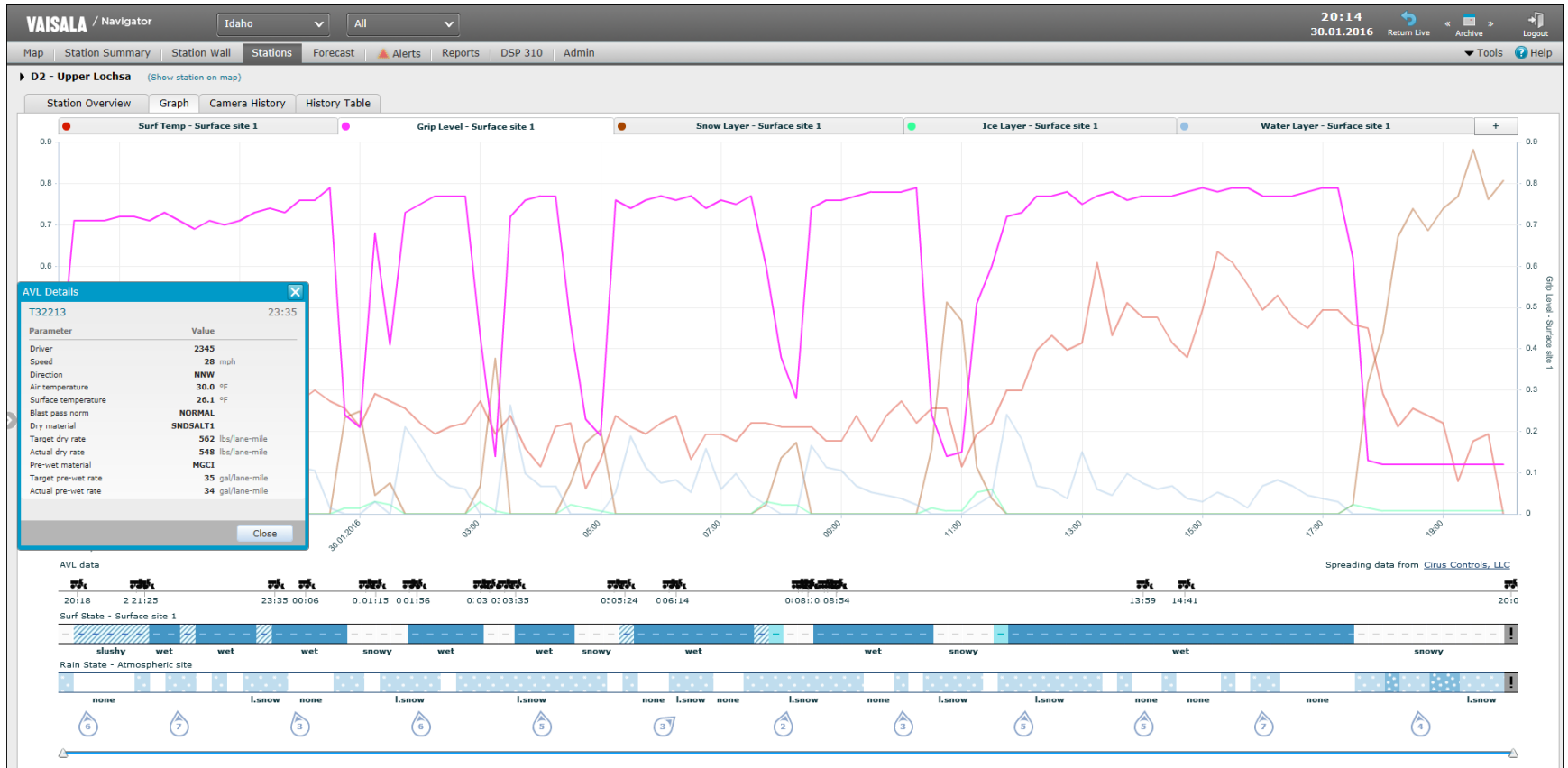


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Vaisala Navigator/AVL Data Integration



Progress from Data Analysis



ITD Focuses on Additional Winter Metrics for FY 2018

- What is new?
 - Focused on Bond Breaker Management
 - Prewet of Solids
 - Winter Performance Measuring will be done at the District Level
 - New Storm Curriculum Course has been Constructed and Customized to Idaho Winter Operations



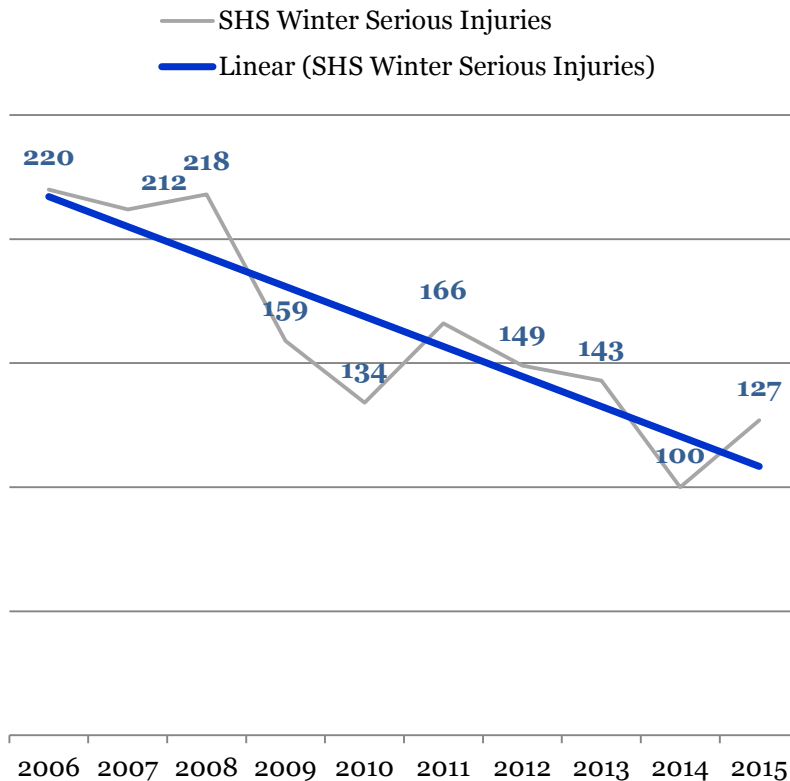
ITD focuses on additional winter metrics for FY 2018

- How does this effect you?
 - Focused on Bond Breaker Management
 - Maintaining a anti-icing surface verses a deicing surface will utilize less chlorides and provide a better driving state by reducing adverse conditions such as ice and snow floor.
 - Prewet of Solids
 - Will allow the solids to burn through the ice/snow floor to the roadway surface allowing the majority of snow to be mechanical removal instead of heavy chemical treatments used in deicing.
 - Winter Performance Measuring will be done at the District Level
 - Encourages multiple sheds to work together putting more resources in the storm impact area promoting higher degree of anti-icing success
 - New Storm Curriculum Course has been Constructed and Customized to Idaho Winter Operations
 - Providing the operators all the tools and knowledge to do the best job possible, building subject matter experts.

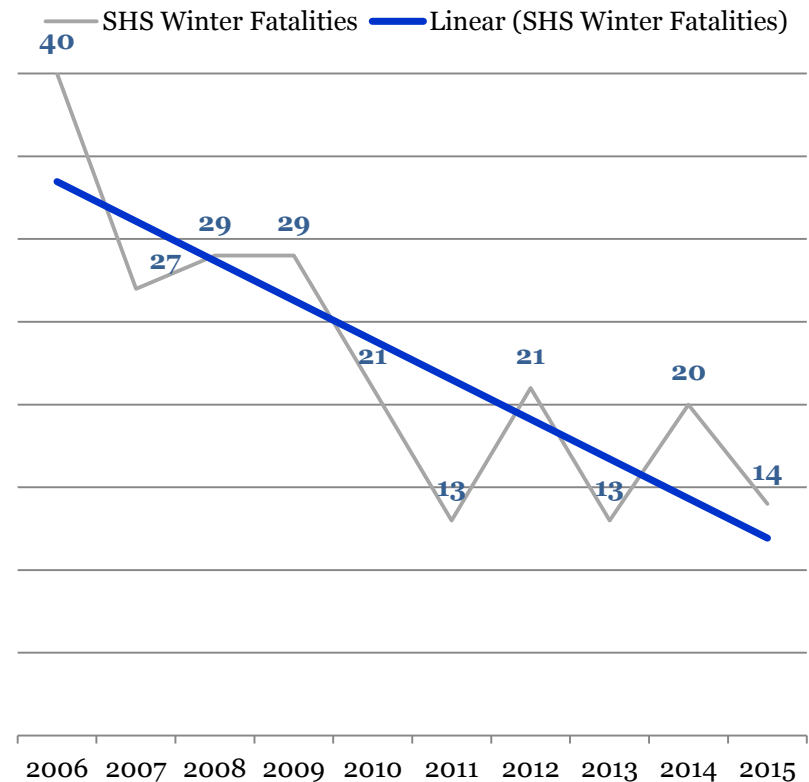


Results of Our Efforts

Winter (Dec - Feb) Serious Injuries



Winter (Dec - Feb) Fatalities



Questions

