ITD Winter Maintenance Plans/Procedures 2017/2018

Trucking Advisory Council
October 12, 2017
Snowplow Mobile Data Collection

• Certified Cirus 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 Cirus 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
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
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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

- SHS Winter Serious Injuries
- Linear (SHS Winter Serious Injuries)

![Graph showing the trend of Winter (Dec - Feb) Serious Injuries from 2006 to 2015.]

Winter (Dec - Feb) Fatalities

- SHS Winter Fatalities
- Linear (SHS Winter Fatalities)

![Graph showing the trend of Winter (Dec - Feb) Fatalities from 2006 to 2015.]

Questions