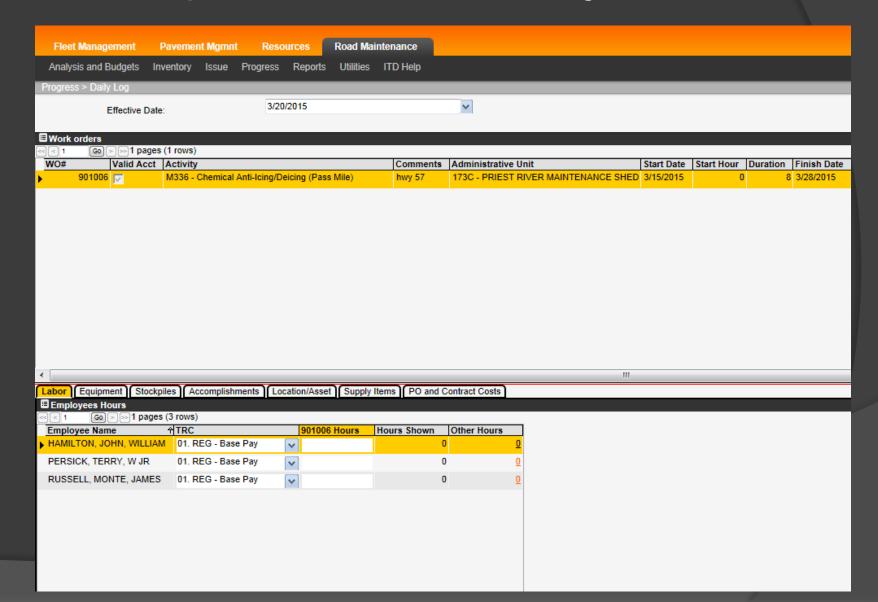National Equipment Management Meeting
Columbus, Ohio
June 28, 2016

IMPORTING AVL DATA TO MAINTENANCE MANAGEMENT SYSTEM
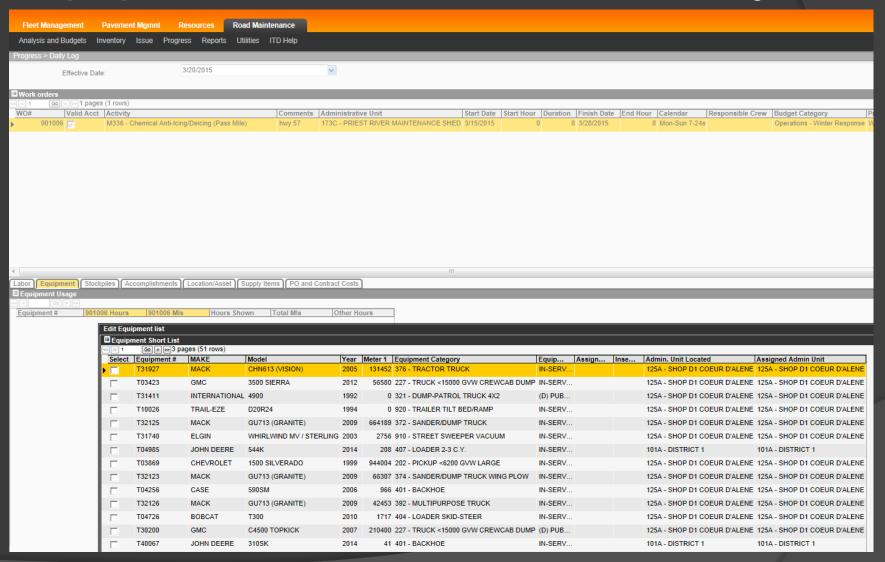
Current ITD Systems

- 409 Single/Tandem Axle Plow/Spreader Trucks

- Cirus Controls SpreadSmart RX™ Spreader Controllers and GPS DataSmart™ Reporting System
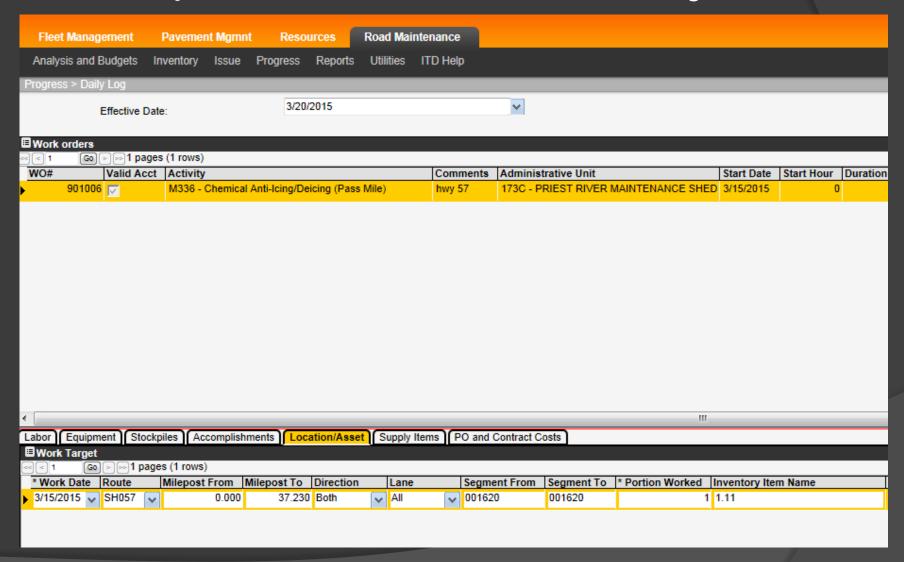
- Agile Assets Road Maintenance Management System

MMS Operator Data Entry Screen

Equipment & Material Data Entry

Route/Location Data Entry

Winter Automated Reporting System (WARS)

- Imports Data from Cirus Controls, GPS DataSmart™ System

- Creates Operator Daily Summary
  - Derives Maintenance Activities Based on Truck Sensors
  - Calculates/Summarizes Equipment and Material Usage
  - Allows for Operator Edit and Approval

Interfaces Data to Agile Assets Maintenance Management System

- ⦿ Auto Creates Work Orders
  - Unique Work Order for each Activity and Route
- ⦿ Auto Input of Data to Daycards
  - Employee Hours Based on Employee ID
  - Truck Hours/Miles
  - Materials Gallon/Tons
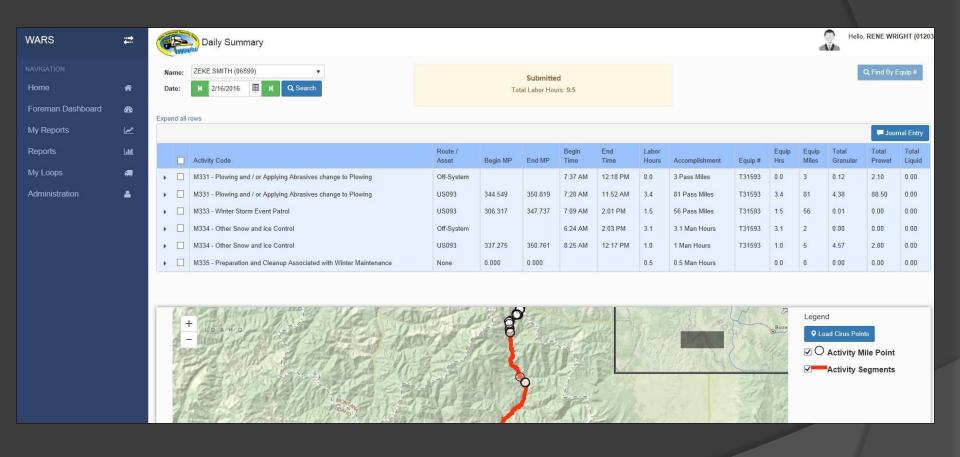 - Accomplishments
  - Route/Milepost Range

Configuration Steps for Implementation

- Define Winter Activities Currently in Use
  - M331 – Plowing/Applying Abrasives
  - M332 – Plowing/Applying Chemicals – Deicing
  - M333 – Routine Winter Patrol
  - M334 – Other Snow & Ice Control
  - M335 – Winter Preparation
  - M336 – Chemical Anti-Icing
- Develop Statewide Materials List
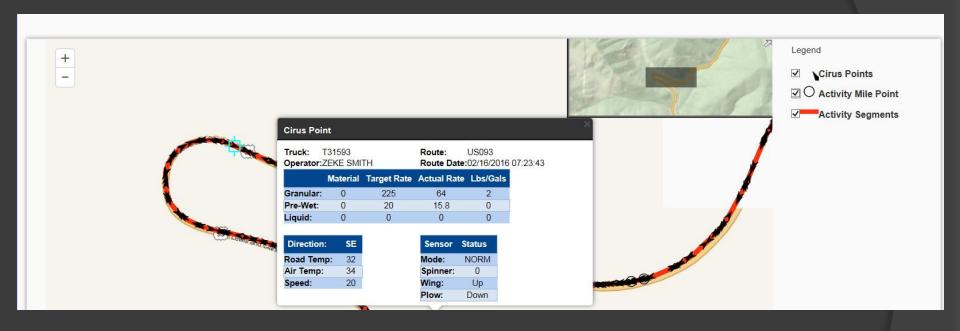- Develop Activity Derivation Based on Material Type and Plow Position

Material Lists

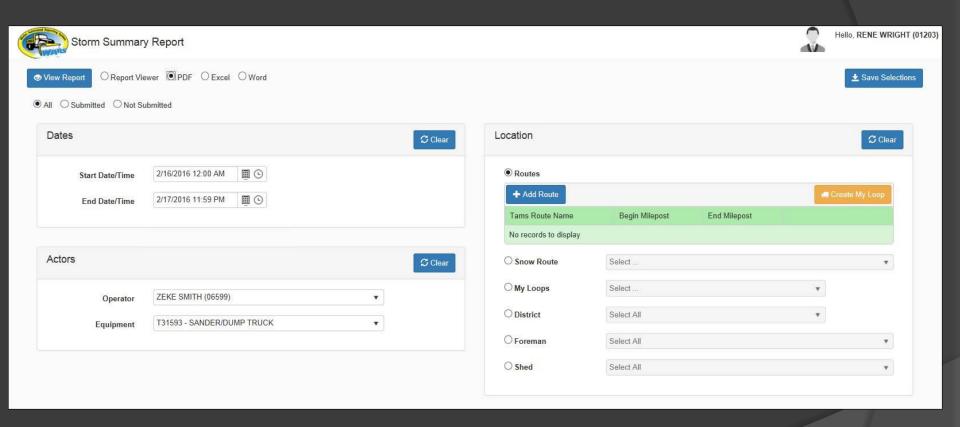|		Cirus Spreadsmart RX Controller Configuration Table								
		Granular Products (Pounds Per Lane Mile)								
WARS Product Number	Cirus Database Number	Name(Proper)	Number in SSRx	Name in SSRx	Minimum Rate	Maximum Rate	Blast Rate	Small Increment	Large Increment
0	0	Salt	1	SALT	50	400	400	25	50
1	1	Ice Slicer	2	ICE SLCR	50	400	500	25	50
2	2	Salt/Sand 2:1	3	SALTSAND	75	500	600	50	75
3	3	Sand/Salt 1:1	4	SNDSALT1	100	600	800	100	200
4	4	Sand/Salt 2:1	5	SNDSALT2	100	800	1000	100	200
5	5	Sand/Salt 3:1	6	SNDSALT3	200	1000	1000	100	200
6	6	Sand/Salt 4:1	7	SNDSALT4	200	1000	1000	100	200
7	7	Sand/Salt 5:1	8	SNDSALT5	300	1000	1000	100	200
8	8	Sand/Ice Slicer 1:1	9	SNDSLICE	100	600	800	100	200
9	9	Sand	10	SAND	600	1400	2500	100	200
		Anti-Ice/Liquid Products (Gallons Per Lane Mile)								
WARS Product Number	Cirus Database Number	Name	Number in SSRx	Name in SSRx	Minimum Rate	Maximum Rate	Blast Rate	Small Increment	Large Increment
20	0	Brine/De-Icing	1	BRINE332	15	60	60	1	5
21	1	MgCl/De-Icing	2	MAG 332	15	60	60	1	5
22	2	Inhibitied Brine/De-icing	3	INBRN332	15	60	60	1	5
23	3	Boost Brine/De-Icing	4	BOOST332	15	60	60	1	5
24	4	Geomelt Brine/De-Icing	5	GMELT332	15	60	60	1	5
25	5	Brine/Anti-Icing	6	BRINE336	15	60	60	1	5
26	6	MgCl/Anti-Icing	7	MAG 336	15	60	60	1	5
27	7	Inhibitied Brine/Anti-icing	8	INBRN336	15	60	60	1	5
28	8	Boost Brine/Anti-Icing	9	BOOST336	15	60	60	1	5
29	9	Geomelt Brine/Anti-Icing	10	GMELT336	15	60	60	1	5

WARS Daily Summary

Daily Summary Point Data

Activity, Equipment, Material Detail

Reporting

Famous Idaho Potatos

Questions?