

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

MMS Operator Data Entry Screen

Fleet Management **Pavement Mgmt** **Resources** **Road Maintenance**

Analysis and Budgets Inventory Issue Progress Reports Utilities ITD Help

Progress > Daily Log

Effective Date: 3/20/2015

Work orders

1 1 pages (1 rows)

WO#	Valid Acct	Activity	Comments	Administrative Unit	Start Date	Start Hour	Duration	Finish Date
901006	<input checked="" type="checkbox"/>	M336 - Chemical Anti-Icing/Deicing (Pass Mile)	hwy 57	173C - PRIEST RIVER MAINTENANCE SHED	3/15/2015	0	8	3/28/2015

Labor **Equipment** **Stockpiles** **Accomplishments** **Location/Asset** **Supply Items** **PO and Contract Costs**

Employees Hours

1 1 pages (3 rows)

Employee Name	TRC	901006 Hours	Hours Shown	Other Hours
HAMILTON, JOHN, WILLIAM	01. REG - Base Pay		0	0
PERSICK, TERRY, W JR	01. REG - Base Pay		0	0
RUSSELL, MONTE, JAMES	01. REG - Base Pay		0	0

Equipment & Material Data Entry

Fleet Management
Pavement Mgmt
Resources
Road Maintenance

Analysis and Budgets
Inventory
Issue
Progress
Reports
Utilities
ITD Help

Progress > Daily Log

Effective Date:
3/20/2015

Work orders

1
Go
1 pages (1 rows)

WO#	Valid Acct	Activity	Comments	Administrative Unit	Start Date	Start Hour	Duration	Finish Date	End Hour	Calendar	Responsible Crew	Budget Category
901006	<input checked="" type="checkbox"/>	M336 - Chemical Anti-Icing/Deicing (Pass Mile)	hwy 57	173C - PRIEST RIVER MAINTENANCE SHED	3/15/2015	0	8	3/28/2015	8	Mon-Sun 7-24s		Operations - Winter Response

Labor
Equipment
Stockpiles
Accomplishments
Location/Asset
Supply Items
PO and Contract Costs

Equipment Usage

Equipment #
901006 Hours
901006 Mls
Hours Shown
Total Mls
Other Hours

Edit Equipment list

Equipment Short List

1
Go
3 pages (51 rows)

Select	Equipment #	MAKE	Model	Year	Meter 1	Equipment Category	Equip...	Assign...	Inse...	Admin. Unit Located	Assigned Admin Unit
<input checked="" type="checkbox"/>	T31927	MACK	CHN613 (VISION)	2005	131452	376 - TRACTOR TRUCK	IN-SERV...			125A - SHOP D1 COEUR D'ALENE	125A - SHOP D1 COEUR D'ALENE
<input type="checkbox"/>	T03423	GMC	3500 SIERRA	2012	56580	227 - TRUCK <15000 GVW CREWCAB DUMP	IN-SERV...			125A - SHOP D1 COEUR D'ALENE	125A - SHOP D1 COEUR D'ALENE
<input type="checkbox"/>	T31411	INTERNATIONAL	4900	1992	0	321 - DUMP-PATROL TRUCK 4X2	(D) PUB...			125A - SHOP D1 COEUR D'ALENE	125A - SHOP D1 COEUR D'ALENE
<input type="checkbox"/>	T10026	TRAIL-EZE	D20R24	1994	0	920 - TRAILER TILT BED/RAMP	IN-SERV...			125A - SHOP D1 COEUR D'ALENE	125A - SHOP D1 COEUR D'ALENE
<input type="checkbox"/>	T32125	MACK	GU713 (GRANITE)	2009	664189	372 - SANDER/DUMP TRUCK	IN-SERV...			125A - SHOP D1 COEUR D'ALENE	125A - SHOP D1 COEUR D'ALENE
<input type="checkbox"/>	T31740	ELGIN	WHIRLWIND MV / STERLING	2003	2756	910 - STREET SWEEPER VACUUM	IN-SERV...			125A - SHOP D1 COEUR D'ALENE	125A - SHOP D1 COEUR D'ALENE
<input type="checkbox"/>	T04985	JOHN DEERE	544K	2014	208	407 - LOADER 2-3 C.Y.	IN-SERV...			101A - DISTRICT 1	101A - DISTRICT 1
<input type="checkbox"/>	T03869	CHEVROLET	1500 SILVERADO	1999	944004	202 - PICKUP <6200 GVW LARGE	IN-SERV...			125A - SHOP D1 COEUR D'ALENE	125A - SHOP D1 COEUR D'ALENE
<input type="checkbox"/>	T32123	MACK	GU713 (GRANITE)	2009	66307	374 - SANDER/DUMP TRUCK WING PLOW	IN-SERV...			125A - SHOP D1 COEUR D'ALENE	125A - SHOP D1 COEUR D'ALENE
<input type="checkbox"/>	T04256	CASE	590SM	2006	966	401 - BACKHOE	IN-SERV...			125A - SHOP D1 COEUR D'ALENE	125A - SHOP D1 COEUR D'ALENE
<input type="checkbox"/>	T32126	MACK	GU713 (GRANITE)	2009	42453	392 - MULTIPURPOSE TRUCK	IN-SERV...			125A - SHOP D1 COEUR D'ALENE	125A - SHOP D1 COEUR D'ALENE
<input type="checkbox"/>	T04726	BOBCAT	T300	2010	1717	404 - LOADER SKID-STEER	IN-SERV...			125A - SHOP D1 COEUR D'ALENE	125A - SHOP D1 COEUR D'ALENE
<input type="checkbox"/>	T30200	GMC	C4500 TOPKICK	2007	210400	227 - TRUCK <15000 GVW CREWCAB DUMP	(D) PUB...			125A - SHOP D1 COEUR D'ALENE	125A - SHOP D1 COEUR D'ALENE
<input type="checkbox"/>	T40067	JOHN DEERE	310SK	2014	41	401 - BACKHOE	IN-SERV...			101A - DISTRICT 1	101A - DISTRICT 1

Route/Location Data Entry

Fleet Management **Pavement Mgmt** **Resources** **Road Maintenance**

Analysis and Budgets Inventory Issue Progress Reports Utilities ITD Help

Progress > Daily Log

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Work orders

<< 1 Go >> 1 pages (1 rows)

WO#	Valid Acct	Activity	Comments	Administrative Unit	Start Date	Start Hour	Duration
901006	<input checked="" type="checkbox"/>	M336 - Chemical Anti-Icing/Deicing (Pass Mile)	hwy 57	173C - PRIEST RIVER MAINTENANCE SHED	3/15/2015	0	

Labor **Equipment** **Stockpiles** **Accomplishments** **Location/Asset** **Supply Items** **PO and Contract Costs**

Work Target

<< 1 Go >> 1 pages (1 rows)

* Work Date	Route	Milepost From	Milepost To	Direction	Lane	Segment From	Segment To	* Portion Worked	Inventory Item Name
3/15/2015	SH057	0.000	37.230	Both	All	001620	001620	1	1.11

Winter Automated Reporting System (WARS)

- Imports Data from Cirrus 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

Cirrus Spreadsmart RX Controller Configuration Table									
Granular Products (Pounds Per Lane Mile)									
WARS Product Number	Cirrus 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	Cirrus 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	Inhibited 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	Inhibited 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

WARS

NAVIGATION

Home


Foreman Dashboard

My Reports

Reports

My Loops

Administration

 Daily Summary

Name: ZEKE SMITH (06599)

Date: 2/16/2016

Submitted

Total Labor Hours: 9.5

Find By Equip #

Expand all rows

<input type="checkbox"/>	Activity Code	Route / Asset	Begin MP	End MP	Begin Time	End Time	Labor Hours	Accomplishment	Equip #	Equip Hrs	Equip Miles	Total Granular	Total Prewet	Total Liquid
<input type="checkbox"/>	M331 - Plowing and / or Applying Abrasives change to Plowing	Off-System			7:37 AM	12:18 PM	0.0	3 Pass Miles	T31593	0.0	3	0.12	2.10	0.00
<input type="checkbox"/>	M331 - Plowing and / or Applying Abrasives change to Plowing	US093	344.549	350.819	7:20 AM	11:52 AM	3.4	81 Pass Miles	T31593	3.4	81	4.38	88.50	0.00
<input type="checkbox"/>	M333 - Winter Storm Event Patrol	US093	306.317	347.737	7:09 AM	2:01 PM	1.5	56 Pass Miles	T31593	1.5	56	0.01	0.00	0.00
<input type="checkbox"/>	M334 - Other Snow and ice Control	Off-System			6:24 AM	2:03 PM	3.1	3.1 Man Hours	T31593	3.1	2	0.00	0.00	0.00
<input type="checkbox"/>	M334 - Other Snow and ice Control	US093	337.275	350.761	8:25 AM	12:17 PM	1.0	1 Man Hours	T31593	1.0	5	4.57	2.80	0.00
<input type="checkbox"/>	M335 - Preparation and Cleanup Associated with Winter Maintenance	None	0.000	0.000			0.5	0.5 Man Hours		0.0	0	0.00	0.00	0.00

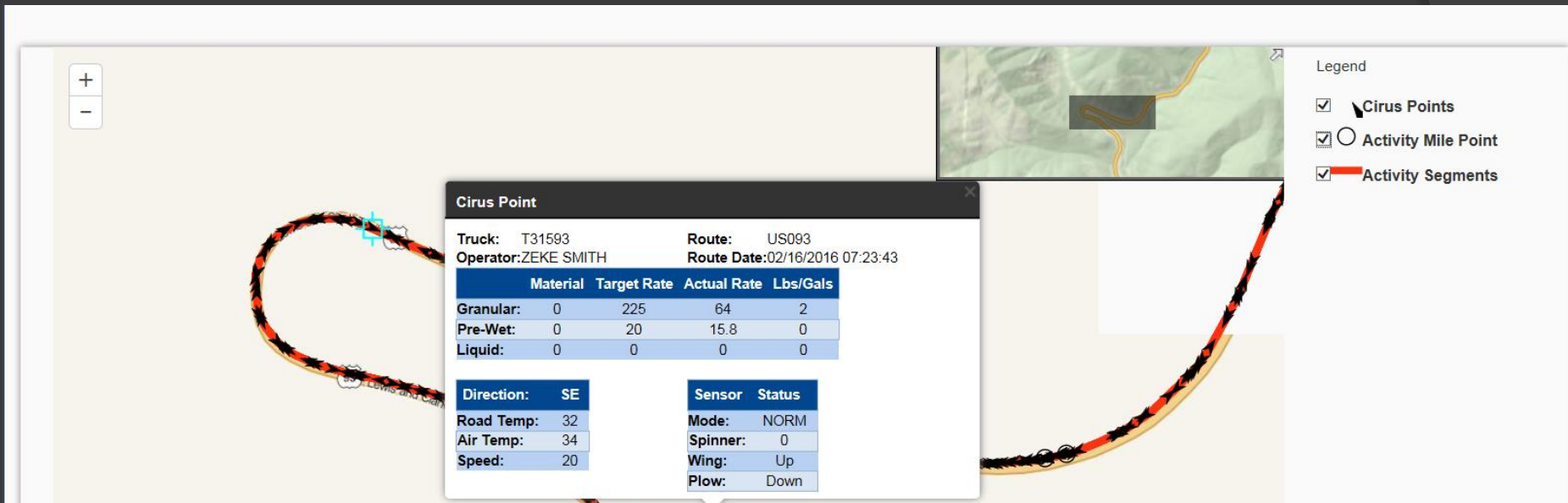
Legend

Load Cirrus Points

☒ Activity Mile Point

☒ Activity Segments

Daily Summary Point Data



Activity, Equipment, Material Detail

Journal Entry

<input type="checkbox"/>	Activity Code					Route / Asset	Begin MP	End MP	Begin Time	End Time	Labor Hours	Accomplishment	Equip #	Equip Hrs	Equip Miles	Total Granular	Total Prewet	Total Liquid				
<input type="checkbox"/>	M331 - Plowing and / or Applying Abrasives change to Plowing					Off-System			7:37 AM	12:18 PM	0.0	3 Pass Miles	T31593	0.0	3	0.12	2.10	0.00				
	ID	Activity Code	Route / Asset	Begin MP	End MP	Begin Time	End Time	Labor Hours	TRC		Accomplishment		Equip #	Equip Hrs	Equip Miles	Total Granular	Total Prewet	Total Liquid				
▲	<input type="checkbox"/>	A602827	M331	Off-System		7:37 AM	7:38 AM	0.0	01. REG - Base Pay		1 Pass Miles		T31593	0.0	1	0.02	0.30	0.00				
	ID		Equip #		Equip Hrs		Equip Miles			ID	Material Type		Material		Quantity		UOM		Stockpile ID			
	E600798		T31593		0.0		1			M264642	Granular		SALTSAND		0.02		Tons		O58 - LEADORE - SAND/SALT			
										M264643	Prewet		BRINE		0.30		Gallons		O66 - GIBBIONSVILLE - BRINE			
▲	<input type="checkbox"/>	A602870	M331	Off-System		10:57 AM	10:58 AM	0.0	01. REG - Base Pay		1 Pass Miles		T31593	0.0	1	0.00	0.00	0.00				
	ID		Equip #		Equip Hrs		Equip Miles			ID	Material Type		Material		Quantity		UOM		Stockpile ID			
	E600841		T31593		0.0		1															
▲	<input type="checkbox"/>	A602894	M331	Off-System		12:17 PM	12:18 PM	0.0	01. REG - Base Pay		1 Pass Miles		T32076	0.0	1	0.10	1.80	0.00				
	ID		Equip #		Equip Hrs		Equip Miles			ID	Material Type		Material		Quantity		UOM		Stockpile ID			
	E600865		T32076		0.0		1			M264692	Granular		SAND		0.10		Tons		O04 - GIBBIONSVILLE - SAND			
										M264693	Prewet		BRINE		1.80		Gallons		O66 - GIBBIONSVILLE - BRINE			
<input type="checkbox"/>	M331 - Plowing and / or Applying Abrasives change to Plowing					US093	344.549	350.819	7:20 AM	11:52 AM	3.4	81 Pass Miles	T31593	3.4	81	4.38	88.50	0.00				
	ID	Activity Code	Route / Asset	Begin MP	End MP	Begin Time	End Time	Labor Hours	TRC		Accomplishment		Equip #	Equip Hrs	Equip Miles	Total Granular	Total Prewet	Total Liquid				
▲	<input type="checkbox"/>	A602826	M331	US093	344.983	350.813	7:20 AM	7:37 AM	0.3	01. REG - Base Pay		6 Pass Miles		T31593	0.3	6	0.60	12.10	0.00			
	ID		Equip #		Equip Hrs		Equip Miles			ID	Material Type		Material		Quantity		UOM		Stockpile ID			
	E600797		T31593		0.3		6			M264640	Granular		SALTSAND		0.60		Tons		O58 - LEADORE - SAND/SALT			
										M264641	Prewet		BRINE		12.10		Gallons		O66 - GIBBIONSVILLE - BRINE			

Reporting



Storm Summary Report



Hello, RENE WRIGHT (01203)

☒ View Report ☐ Report Viewer ☒ PDF ☐ Excel ☐ Word

[Save Selections](#)

☒ All ☐ Submitted ☐ Not Submitted

Dates

[Clear](#)

Start Date/Time

End Date/Time

Actors

[Clear](#)

Operator

Equipment

Location

[Clear](#)

☒ Routes

[+ Add Route](#)

[Create My Loop](#)

Tams Route Name	Begin Milepost	End Milepost
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No records to display

☐ Snow Route

☐ My Loops

☐ District

☐ Foreman

☐ Shed

Famous Idaho Potatoes



Questions?

