



## Research Quarterly Progress Report

Form 541001.pdf (9/08)

For Quarter Ending 06/30/2014

QPR Project Number (RTXXX)	Other Project Numbers (addendum, IHRB etc.)	Project Title	
RT 415	454	Synthesis of Practice on Multiple ITS Sensors at RWIS Sites	
Principal Investigator Name		Email Address	
Neal Hawkins		hawkins@iastate.edu	
Co-Principal Investigator Name(s)		Email Address	
Chris Albrecht		calbrecht@iastate.edu	
Principal Investigator Organization Name/Address			
InTrans, 2711 S. Loop Drive, Suite 4700, Ames, IA50010			
DOT Office	DOT Contact Name	Email Address	
Iowa DOT, 800 Lincoln Way,	Tina Greenfield	tina.greenfield@dot.iowa.gov	
Project Start Date	Original Project End Date	Extended Project End Date	
01/01/13	09/30/13	06/30/14	
Dollars Allocated	Dollars Paid	Percent Project Completed	
\$15,000.00	\$15,000.00	95	

Project Tasks	Scheduled Start Date	Scheduled End Date	Date Completed
1. Identify agencies for survey	01/01/2013	03/31/2013	04/30/2013
2. Develop and conduct survey	03/31/2013	05/31/2013	06/30/2013
3. Interview agencies	05/31/2013	03/31/2014	03/31/2014
4. Final report	07/31/2013	06/30/2014	06/15/2014
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### Research Quarterly Progress Report

Technical Advisory Committee Names		Email Addresses
Jack Stikel		jack.stickel@alaska.gov
Tina Greenfield		tina.greenfield@dot.iowa.gov
Joe Doherty		jdoherthy@dot.state.ny.us
Curt Pape		curt.pape@state.mn.us
Dawn Gustafson		gustafsond@michigan.gov
Last TAC Meeting Date		03/19/2014
PI Concerns, Problems, Needs, or No-Cost Extension Requests		
Due to slow survey response, this project was extended through June 30, 2014.		
Project Progress To-Date and other Pertinent Information		
For Quarter Ending June 30, 2014:  Interviews of the specific agencies (and industry) that responded to survey are complete. We have completed the final report, which is still under review.		



# Research Quarterly Progress Report

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For Quarter Ending

QPR Project Number (RTXXX) RT	Other Project Numbers (addendum, IHRB etc.)	Project Title
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Principal Investigator Name	Email Address
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Co-Principal Investigator Name(s)	Email Address
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Principal Investigator Organization Name/Address
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DOT Office	DOT Contact Name	Email Address
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Project Start Date	Original Project End Date	Extended Project End Date
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Dollars Allocated	Dollars Paid	Percent Project Completed
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Project Tasks	Scheduled Start Date	Scheduled End Date	Date Completed
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# Research Quarterly Progress Report

Technical Advisory Committee Names	Email Addresses
Last TAC Meeting Date	
PI Concerns, Problems, Needs, or No-Cost Extension Requests	
Project Progress To-Date and other Pertinent Information	



## Research Quarterly Progress Report

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For Quarter Ending 06/30/2014

QPR Project Number (RTXXX)	Other Project Numbers (addendum, IHRB etc.)	Project Title				
RT		Aurora Project 2010-03 - Winter Road Research				
Principal Investigator Name			Email Address			
Liping Fu			lfu@uwaterloo.ca			
Co-Principal Investigator Name(s)			Email Address			
Lalita Thakali			lalitathakali@gmail.com			
Principal Investigator Organization Name/Address						
University of Waterloo - Civil and Environmental Engineering, , Waterloo, ON N2L 3G1						
DOT Office		DOT Contact Name		Email Address		
Maintenance		Tina Greenfield		tina.greenfield@dot.iowa.		
Project Start Date		Original Project End Date		Extended Project End Date		
11/10/10		09/20/13		05/31/14		
Dollars Allocated		Dollars Paid		Percent Project Completed		
\$154,830.00		\$63,797.03		90		
Project Tasks				Scheduled Start Date	Scheduled End Date	Date Completed
1.	1. Safety benefit literature review			11/10/2010	12/31/2010	01/31/2011
2.	Data preparation, analysis, modelling			11/10/2010	11/10/2012	01/31/2011
3.	Model application			10/01/2012	09/20/2013	01/31/2011
4.	Reporting			11/10/2012	09/20/2013	02/06/2012
5.	2. Mobility benefit literature review			11/10/2010	12/31/2010	02/07/2012
6.	Data preparation, analysis, modelling			11/10/2010	11/10/2012	02/07/2012
7.	Model application			10/01/2012	09/20/2013	02/07/2012
8.	Reporting			11/10/2012	09/20/2013	09/25/2012
9.	3. Performance Measures Literature review			11/10/2010	06/30/2011	
10.	Friction analysis, reporting			11/10/2010	11/10/2012	
11.	Speed analysis, reporting			11/10/2010	11/10/2012	01/13/2013
12.	Performance standards			10/01/2012	09/20/2013	
13.	Reporting			11/10/2012	09/20/2013	
14.	4. RSC Monitoring Technologies Review			11/10/2010	06/30/2011	04/04/2011
15.	RSC Estimating			11/10/2010	07/30/2011	04/04/2011
16.	RSC Forecasting			07/01/2011	09/20/2012	
17.	Hot water sanding analysis (Class Standards)			07/01/2011	07/30/2011	
18.	New Sensors			07/01/2011	09/20/2013	04/04/2011
19.	Reporting			11/10/2012	09/20/2013	
20.						



### Research Quarterly Progress Report

Technical Advisory Committee Names	Email Addresses
Max Perchanok, Ontario MOT (champion)	max.perchanok@ontario.ca
Joe Doherty, New York State DOT	jdoherty@dot.state.ny.us
Dawn Gustafson, Michigan DOT	gustafsond@michigan.gov
Sheldon Drobot, NCAR	drobot@ucar.edu
Neil Hawkins, ISU	hawkins@iastate.edu
Chris Albrecht, ISU	calbrecht@iastate.edu
Last TAC Meeting Date	03/19/2014
<b>PI Concerns, Problems, Needs, or No-Cost Extension Requests</b>          	
<b>Project Progress To-Date and other Pertinent Information</b>  An analysis of speed as a performance measure using the Iowa data is nearing completion. A Road Surface Index was developed to relate visual descriptors to traction levels. Additional data were collected this past winter to compare and inter-calibrate performance measures based on conventional bare pavement reports, web-cam and multi-spectral camera-based reports, traction based reports, and plow movement based reports.	



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QPR Project Number (RTXXX)	Other Project Numbers (addendum, IHRB etc.)	Project Title		
RT 14532		Aurora Project 2010-04 - RWIS Density and Location		
Principal Investigator Name			Email Address	
Dr. Liping Fu			lfu@uwaterloo.ca	
Co-Principal Investigator Name(s)			Email Address	
T. Jonathan Kwon			tkwon@uwaterloo.ca	
Principal Investigator Organization Name/Address				
Dept. of Civil and Environmental Engineering, University of Waterloo, Waterloo, ON N2L 3G1				
DOT Office		DOT Contact Name		Email Address
		Tina Greenfield		Tina.Greenfield@dot.iowa.
Project Start Date		Original Project End Date		Extended Project End Date
09/28/12		10/01/14		
Dollars Allocated		Dollars Paid		Percent Project Completed
\$100,000.00		\$1,112.34		70
Project Tasks			Scheduled Start Date	Scheduled End Date
1. Review literature			09/28/2012	12/31/2012
2. Select study sites			09/28/2012	12/31/2012
3. Survey current practice			01/01/2013	03/31/2013
4. Process and compile data			01/01/2013	09/30/2013
5. Develop correlation and characterization models			07/01/2013	09/30/2013
6. Progress Report 1			09/30/2013	09/30/2013
7. Develop models to link data to WRM benefits			07/01/2013	12/31/2013
8. Develop optimization models and algorithms			10/01/2013	06/30/2103
9. Progress Report 2			03/30/2013	03/30/2013
10. Conduct Test cases			07/01/2013	11/15/2013
11. Develop guidelines			10/01/2013	12/31/2013
12. Final report and project presentation			01/31/2014	10/01/2014
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## Research Quarterly Progress Report

Technical Advisory Committee Names		Email Addresses
Max Perchanok		max.perchanok@ontario.ca
Mike Adams		michael.adams@dot.state.wi.us
Curt Pape		curt.pape@dot.state.mn.us
Sheldon Drobot		drobot@ucar.edu
Last TAC Meeting Date		03/19/2013
<b>PI Concerns, Problems, Needs, or No-Cost Extension Requests</b>		
Co-PI requested Aurora assistance in identifying recipients of a survey on current practice.		
<b>Project Progress To-Date and other Pertinent Information</b>		
Project has a head-start on the contract; literature review and some data collection and reduction were completed under a related Aurora Project, 2010-03.		





## Research Quarterly Progress Report

For Quarter Ending 06/30/2014

QPR Project Number (RTXXX)	Other Project Numbers (addendum, IHRB etc.)	Project Title		
RT 1036		Aurora 2011-02 RWIS Training Tool		
Principal Investigator Name			Email Address	
Bob Hart			rdh@iteris.com	
Co-Principal Investigator Name(s)			Email Address	
John Mewes			jjm@iteris.com	
Principal Investigator Organization Name/Address				
Iteris, Inc 1700 Carnegie Ave., Suite 100, Santa Ana, CA 92705-5551				
DOT Office		DOT Contact Name		Email Address
Maintenance		Tina Greenfield		tina.greenfield@dot.iowa.g
Project Start Date		Original Project End Date		Extended Project End Date
01/01/11		01/01/14		03/19/15
Dollars Allocated		Dollars Paid		Percent Project Completed
\$265,000.00		\$0.00		20
Project Tasks			Scheduled Start Date	Scheduled End Date
1. Finalize project Scope			01/01/2011	07/25/2011
2. Produce RFP			07/25/2011	11/01/2012
3. Contract in place			02/18/2013	03/19/2013
4. Task 1: Project Management			03/20/2013	03/19/2015
5. Task 2: Simulator Design			03/20/2013	08/31/2013
6. Task 3: Simulator Development			09/01/2013	08/31/2014
7. Task 4: Storm Scenario Generation			03/20/2013	08/31/2014
8. Task 5: Testing			09/01/2014	02/28/2015
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Technical Advisory Committee Names	Email Addresses	
Tina Greenfield		
Max Perchanok		
Mike Adams		
Jack Stickel		
Last TAC Meeting Date	03/19/2014	
<b>PI Concerns, Problems, Needs, or No-Cost Extension Requests</b>		
<p>Three bids were received from the RFP, but all of their proposed budgets were higher than the Aurora budget. The budget was increased by \$65,000 as a result, and Meridian/Iteris was selected as the contractor.</p>		
<b>Project Progress To-Date and other Pertinent Information</b>		
<ul style="list-style-type: none"> <li>- The database schema was expanded to include a first pass at storm/weather schema based on initial saved storm work, a database design narrative was started, and table relationships were better defined and refined.</li> <li>- All but a few of the remaining interface designs were laid out, and incorporated into a functional specification document relating student-system interactivity and operation.</li> <li>- Visual designs were consolidated into fewer discrete layouts, and wire frame displays were pseudo-coded and broken into display modules.</li> <li>- Working navigational prototype development continues, including integration of existing Iteris web modules and hooks for backend systems.</li> <li>- Evaluated methodologies to optimize storm scenario saving techniques to support the Storm Simulator as well as Iteris operational requirements.</li> </ul> <p>The Task 2 Design was completed in August, but a small percentage of effort is still</p>		



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For Quarter Ending 06/30/2014

QPR Project Number (RTXXX)	Other Project Numbers (addendum, IHRB etc.)	Project Title		
RT		Aurora Project 2011-05 - Funding Source Identification		
Principal Investigator Name			Email Address	
Jack Stickel			jack.stickel@alaska.gov	
Co-Principal Investigator Name(s)			Email Address	
Principal Investigator Organization Name/Address				
Alaska DOT&PF				
DOT Office	DOT Contact Name	Email Address		
Maintenance	Tina Greenfield	tina.greenfield@dot.iowa.g		
Project Start Date	Original Project End Date	Extended Project End Date		
01/01/11	12/31/12	03/31/13		
Dollars Allocated	Dollars Paid	Percent Project Completed		
\$5,000.00	\$0.00	50		
Project Tasks		Scheduled Start Date	Scheduled End Date	Date Completed
1. Establish Section in the Aurora Knowledge Base		10/01/2012	10/31/2012	01/31/2012
2. Review MAP-21		10/31/2012	12/31/2012	10/31/2013
3. Provide links to applicable webinars		10/31/2012	12/31/2012	
4. Establish an Aurora Program web site notification process		01/31/2013	03/31/2013	
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Technical Advisory Committee Names	Email Addresses
Jack Stickel, Alaska DOT&PF (champion)	jack.stickel@alaska.gov
Joe Doherty, New York State DOT	jdoherty@dot.state.ny.us
Jason Norville, Pennsylvania DOT	janorville@pa.gov
Last TAC Meeting Date	03/19/2014
<b>PI Concerns, Problems, Needs, or No-Cost Extension Requests</b>	
<p>This effort is also being completed internally, without an RFP, and has been recently re-scoped at request of the board.</p>	
<b>Project Progress To-Date and other Pertinent Information</b>	
<p>Tasks: 1) Establish a Funding Source section in the Aurora Knowledge Base. 2) Review MAP-21 and reference the applicable funding avenues for RWIS technologies. 3) Provide links to applicable webinars on MAP-21 that cover ITS, RWIS, traveler information funding. 4) Establish an Aurora Program web site notification process where members can add short term funding opportunities and have this information distributed automatically to Aurora members.</p> <p>A page on the Knowledge base is complete.</p>	



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QPR Project Number (RTXXX)	Other Project Numbers (addendum, IHRB etc.)	Project Title
RT		Aurora Project 2012-01 - Accuracy of Pavement Prediction

Principal Investigator Name	Email Address
Max Perchanok	max.perchanok@ontario.ca

Co-Principal Investigator Name(s)	Email Address

Principal Investigator Organization Name/Address

DOT Office	DOT Contact Name	Email Address
Maintenance	Tina Greenfield	Tina.Greenfield@dot.iowa.

Project Start Date	Original Project End Date	Extended Project End Date

Dollars Allocated	Dollars Paid	Percent Project Completed
\$30,000.00	\$0.00	0

Project Tasks	Scheduled Start Date	Scheduled End Date	Date Completed
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Technical Advisory Committee Names	Email Addresses
Max Perchanok	max.perchanok@ontario.ca
Dawn Gustafson	gustafsond@michigan.gov
Gabe Guevara	gabriel.guevara@dot.gov
Curt Pape	curt.pape@dot.state.mn.us
Mike Adams	michael.adams@dot.state.wi.us
Last TAC Meeting Date	03/19/2014
<b>PI Concerns, Problems, Needs, or No-Cost Extension Requests</b>	
<b>Project Progress To-Date and other Pertinent Information</b>	



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For Quarter Ending 06/30/2014

QPR Project Number (RTXXX)	Other Project Numbers (addendum, IHRB etc.)	Project Title
RT		Aurora Project 2012-03 - Cameras and Remote Conditions

Principal Investigator Name	Email Address
Mitsuru Saito	msaito@byu.edu

Co-Principal Investigator Name(s)	Email Address

Principal Investigator Organization Name/Address
Brigham Young University

DOT Office	DOT Contact Name	Email Address
	Tina Greenfield	Tina.Greenfield@dot.iowa.

Project Start Date	Original Project End Date	Extended Project End Date

Dollars Allocated	Dollars Paid	Percent Project Completed
\$25,000.00	\$18,500.00	95

Project Tasks	Scheduled Start Date	Scheduled End Date	Date Completed
1. Conduct literature search	03/01/2013	05/31/2013	05/31/2013
2. Select maintenance sheds for analysis and collect necessary	04/01/2013	04/30/2013	04/30/2013
3. Study maintenance shed dispatch procedures and protocols	05/01/2013	09/30/2013	09/30/2013
4. Analyze maintenance records to determine costs that could	07/01/2013	09/30/2013	06/30/2014
5. Identify efficiencies gained, impacts on road condition, costs	10/01/2013	12/31/2013	06/30/2014
6. Prepare a final report	12/01/2013	06/30/2014	06/30/2014
7. Project Management	03/01/2013	06/30/2014	
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Technical Advisory Committee Names		Email Addresses
Jeff Williams		jeffwilliams@utah.gov
Travis Lutman		tlutman@nd.gov
Chris Albrecht		calbrech@iastate.edu
Dr. Mitsuru Saito		msaito@byu.edu
Glenn Blackwelder		GBLACKWELDER@utah.gov
Lynn Bernhard		lynnbernhard@utah.gov
Curt Pape		Curt.Pape@dot.state.mn.us
Ron Hall		RHall@ksdot.org
Robert Prezioso		Robert.Prezioso@VDOT.Virginia.gov
Ryan Porter		rporter@liveviewtech.com
Mike Kisse		mkisse@nd.gov
Gene Martin		E.Martin@VDOT.Virginia.gov
Last TAC Meeting Date	03/19/2014	
PI Concerns, Problems, Needs, or No-Cost Extension Requests		
<p>* Technical Advisory Committee also includes: Kevin Nichol (knichol@utah.gov), Jimmy White (Jimmy.White@VDOT.Virginia.gov), David Studdert (dstuddert@liveviewtech.com), Steve Lindsey (slindsey@liveviewtech.com), and Seishi Yamagata (seishi0921@gmail.com)</p>		
Project Progress To-Date and other Pertinent Information		
Essentially complete		



# Aurora Project 2012-03: Cameras and Operational Impact of Remote Road Condition Monitoring

## MINUTES

OCTOBER 9, 2013

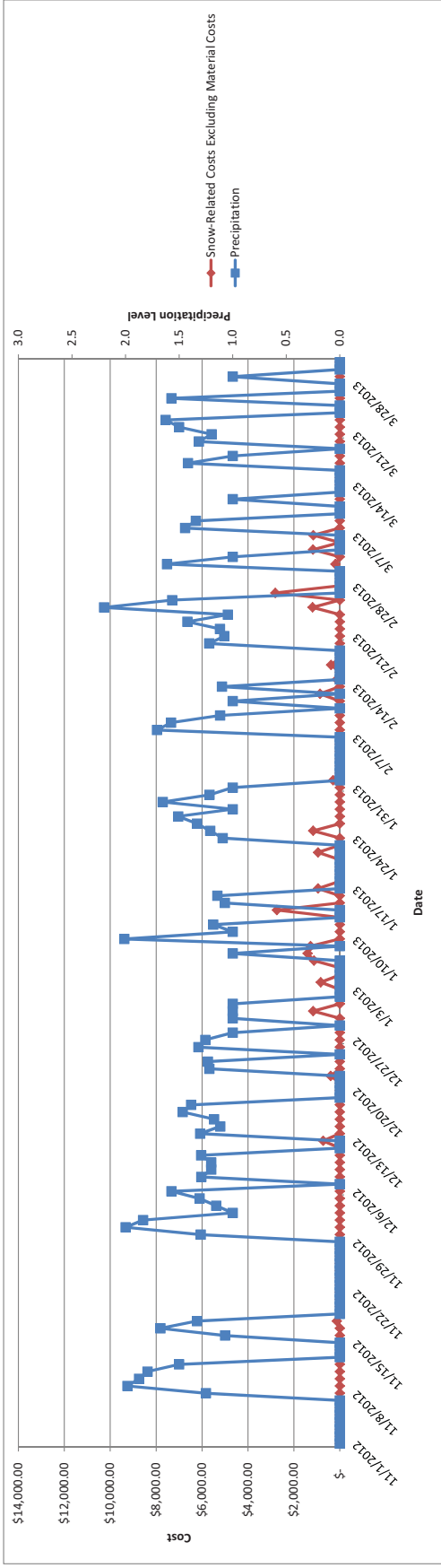
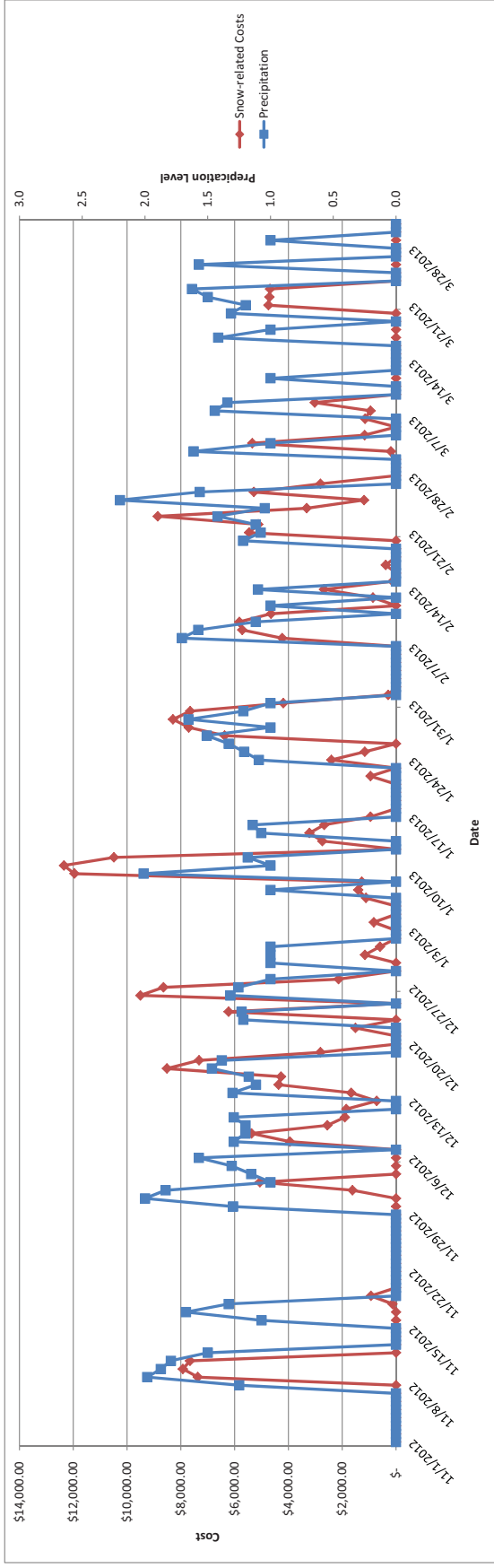
14:00-14:40 MST

LOCATION: VARIOUS LOCATIONS

TYPE OF MEETING	TAC Meeting via Video Conference
ATTENDEES	Jeff Williams (Utah DOT), Travis Lutman (North Dakota DOT), Chris Albrecht (Iowa State University), Ryan Porter (Live View Tech.), David Studdert (Live View Tech), Dr. Mitsuru Saito (BYU), Seishi Yamagata (BYU)

1. Welcome
2. Review of Tasks
  - Literature search is completed.
  - Interviews with maintenance station supervisors are completed.
  - A questionnaire for those who received cameras in the 2011/2012 was sent out and responses were collected.
  - There is an ongoing investigation of snow-related costs on labor, material, and equipment that were provided by Lynn.
3. Results of Interviews
  - Report on the summaries of interviews and responses of questionnaire by Seishi.
4. Next 3-month work
  - Report on plan of quantitative analysis on snow related cost data by Seishi.
5. Immediate plans of action
  - Seishi will coordinate with Jeff to meet and receive help with interpreting weather data.
  - Ryan will contact Seishi about site selection visit so that Seishi can go with him.
6. Next Meeting Date
  - Next meeting will be in early January, after the next quarterly report. Possible dates are January 7<sup>th</sup> and January 21<sup>st</sup> (both Tuesdays).

Maintenance Shed Without Camera





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QPR Project Number (RTXXX)	Other Project Numbers (addendum, IHRB etc.)	Project Title
RT		Aurora Project 2012-04 - Communicate and Publicize Wea

Principal Investigator Name	Email Address
N/A	

Co-Principal Investigator Name(s)	Email Address

Principal Investigator Organization Name/Address

DOT Office	DOT Contact Name	Email Address
Maintenance	Tina Greenfield	Tina.Greenfield@dot.iowa.

Project Start Date	Original Project End Date	Extended Project End Date

Dollars Allocated	Dollars Paid	Percent Project Completed
\$30,000.00	\$0.00	5

Project Tasks	Scheduled Start Date	Scheduled End Date	Date Completed
1. Project Scoping	07/01/2013	08/31/2013	
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## Research Quarterly Progress Report

Technical Advisory Committee Names		Email Addresses
Joe Doherty (champion)		joe.doherty@dot.ny.gov
Dawn Gustafson		gustafsond@michigan.gov
Jack Stickel		jack.stickel@alaska.gov
Jason Norville		janorville@pa.gov
Tim Peters		tim.peters@illinois.gov
Last TAC Meeting Date	03/19/2014	
<b>PI Concerns, Problems, Needs, or No-Cost Extension Requests</b>		
<p>This project was approved in March, and the scope is being revised by the project team. Currently investigating additional funding and expansion of scope due to 2013 peer exchange discussions and needs.</p>		
<b>Project Progress To-Date and other Pertinent Information</b>		
<p>A draft scope is being prepared.</p>		



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For Quarter Ending 06/30/2014

QPR Project Number (RTXXX)	Other Project Numbers (addendum, IHRB etc.)	Project Title
RT		Aurora Project 2012-05 Seasonal Weight Restriction Dem

Principal Investigator Name	Email Address
TBD	

Co-Principal Investigator Name(s)	Email Address

Principal Investigator Organization Name/Address

DOT Office	DOT Contact Name	Email Address
	Tina Greenfield	Tina.Greenfield@dot.iowa.

Project Start Date	Original Project End Date	Extended Project End Date

Dollars Allocated	Dollars Paid	Percent Project Completed
\$50,000.00	\$0.00	5

Project Tasks	Scheduled Start Date	Scheduled End Date	Date Completed
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# Research Quarterly Progress Report

Technical Advisory Committee Names	Email Addresses
Max Perchanok	max.perchanok@ontario.ca
Mike Adams	michael.adams@dot.state.wi.us
Jack Stickel	jack.stickel@alaska.gov
Dawn Gustafson	gustafsond@michigan.gov
Travis Lutman	
Mike Kisse	mkisse@nd.gov
Last TAC Meeting Date	03/19/2014
PI Concerns, Problems, Needs, or No-Cost Extension Requests	
<p>Administrative delays at USDA risks the Phase 1 work not being completed in time to begin Phase 2. Consider going to #2 bidder if USDA fails to complete the contract.</p>	
Project Progress To-Date and other Pertinent Information	
<p>The RFP was completed and was distributed by IHRB on July 2, 2013. Administrative delays at USDA risks the Phase 1 work not being completed in time to begin Phase 2. Consider going to #2 bidder if USDA fails to complete the contract.</p>	



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QPR Project Number (RTXXX)	Other Project Numbers (addendum, IHRB etc.)	Project Title
RT		Aurora 2013-01 - 2013 Peer Exchange
Principal Investigator Name		Email Address
Jason Norville (champion)		janorville @pa.gov
Co-Principal Investigator Name(s)		Email Address
Principal Investigator Organization Name/Address		
Iowa DOT		
DOT Office	DOT Contact Name	Email Address
Maintenance	Tina Greenfield	tina.greenfield@dot.iowa.g
Project Start Date	Original Project End Date	Extended Project End Date
12/15/12		
Dollars Allocated	Dollars Paid	Percent Project Completed
\$35,000.00	\$0.00	100

Project Tasks	Scheduled Start Date	Scheduled End Date	Date Completed
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## Research Quarterly Progress Report

Technical Advisory Committee Names		Email Addresses
Jason Norville		janorville@pa.gov
Dawn Gustafson		gustafsond@michigan.gov
Mike Adams		michael.adams@dot.wi.gov
Tina Greenfield		tina.greenfield@dot.iowa.gov
Last TAC Meeting Date		03/19/2014
PI Concerns, Problems, Needs, or No-Cost Extension Requests		
The event was successfully completed, with final billing completed.		
Project Progress To-Date and other Pertinent Information		
Completed 2013 National Winter Maintenance Peer Exchange. Closed out travel claims and other event related expenditures. Complete.		





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Form 541001.pdf (9/08)

For Quarter Ending 06/30/2014

QPR Project Number (RTXXX)	Other Project Numbers (addendum, IHRB etc.)	Project Title
RT		Aurora 2013-02 - Transition to MADIS

Principal Investigator Name	Email Address
Jack Stickel	

Co-Principal Investigator Name(s)	Email Address

Principal Investigator Organization Name/Address
Iowa DOT

DOT Office	DOT Contact Name	Email Address
Maintenance	Tina Greenfield	tina.greenfield@dot.iowa.g

Project Start Date	Original Project End Date	Extended Project End Date
12/15/12		

Dollars Allocated	Dollars Paid	Percent Project Completed
\$5,000.00	\$0.00	80

Project Tasks	Scheduled Start Date	Scheduled End Date	Date Completed
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## Research Quarterly Progress Report

Technical Advisory Committee Names	Email Addresses
Jack Stickel	jack.stickel@alaska.gov
Mike Adams	Michael.Adams@dot.wi.gov
Ron Hall	RHall@ksdot.org
Last TAC Meeting Date	03/19/2014
<b>PI Concerns, Problems, Needs, or No-Cost Extension Requests</b>	
<p>This project is being done internally, with money only set aside in case of travel for transition meetings.</p>	
<b>Project Progress To-Date and other Pertinent Information</b>	
<p>The transition has been going very smoothly, so no expenditures are expected.</p>	



# Research Quarterly Progress Report

Form 541001.pdf (9/08)

For Quarter Ending 06/30/2014

QPR Project Number (RTXXX)	Other Project Numbers (addendum, IHRB etc.)	Project Title
RT		Aurora 2013-03 Improving Traffic Speed Estimations for V
Principal Investigator Name		Email Address
Tina Greenfield		tina.greenfield@dot.iowa.g
Co-Principal Investigator Name(s)		Email Address
TBD		
Principal Investigator Organization Name/Address		
Iowa DOT		
DOT Office	DOT Contact Name	Email Address
Maintenance	Tina Greenfield	tina.greenfield@dot.iowa.g
Project Start Date	Original Project End Date	Extended Project End Date
12/15/12		
Dollars Allocated	Dollars Paid	Percent Project Completed
\$130,000.00	\$0.00	5

Project Tasks	Scheduled Start Date	Scheduled End Date	Date Completed
1. Finalize project Scope	01/01/2013	06/01/2013	10/31/2013
2. Begin contract with ISU	08/01/2013	09/01/2013	
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## Research Quarterly Progress Report

Technical Advisory Committee Names		Email Addresses
Tina Greenfield		tina.greenfield@dot.iowa.gov
Max Perchanok		max.perchanok@mto.gov.on.ca
Jack Stickel		jack.stickel@alaska.gov
Ron Hall		RHall@ksdot.org
Last TAC Meeting Date		03/19/2014
PI Concerns, Problems, Needs, or No-Cost Extension Requests		
Project Progress To-Date and other Pertinent Information		
Recently a revised draft was resubmitted to Iowa DOT's research coordinator for approval.		



# Research Quarterly Progress Report

Form 541001.pdf (9/08)

For Quarter Ending 06/30/2014

QPR Project Number (RTXXX)	Other Project Numbers (addendum, IHRB etc.)	Project Title
RT		Aurora 2013-04 Quantifying Salt Concentration on Pavement

Principal Investigator Name	Email Address
Max Perchanok	max.perchanok@ontario.ca

Co-Principal Investigator Name(s)	Email Address
TBD	

Principal Investigator Organization Name/Address

DOT Office	DOT Contact Name	Email Address
Maintenance	Tina Greenfield	tina.greenfield@dot.iowa.gov

Project Start Date	Original Project End Date	Extended Project End Date
12/15/12		

Dollars Allocated	Dollars Paid	Percent Project Completed
\$150,000.00	\$0.00	5

Project Tasks	Scheduled Start Date	Scheduled End Date	Date Completed
1. RFP	01/01/2013	04/30/2013	
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## Research Quarterly Progress Report

Technical Advisory Committee Names		Email Addresses
Tina Greenfield		Tina.Greenfield@dot.iowa.gov
Jason Norville		janorville@state.pa.us
Tim Peters		Tim.Peters@illinois.gov
Curt Pape		Curt.Pape@dot.state.mn.us
Lee Smithson		Leland.Smithson@dot.iowa.gov
Last TAC Meeting Date		03/19/2014
PI Concerns, Problems, Needs, or No-Cost Extension Requests		
An RFP is under development.		
Project Progress To-Date and other Pertinent Information		



# Research Quarterly Progress Report

Form 541001.pdf (9/08)

For Quarter Ending 06/30/2014

QPR Project Number (RTXXX)	Other Project Numbers (addendum, IHRB etc.)	Project Title
RT		Aurora 2013-05 - Knowledge Base Content Management
Principal Investigator Name		Email Address
Tina Greenfield		tina.greenfield@dot.iowa.g
Co-Principal Investigator Name(s)		Email Address
TBD		
Principal Investigator Organization Name/Address		
Iowa DOT		
DOT Office	DOT Contact Name	Email Address
Maintenance	Tina Greenfield	tina.greenfield@dot.iowa.g
Project Start Date	Original Project End Date	Extended Project End Date
12/15/12		
Dollars Allocated	Dollars Paid	Percent Project Completed
\$10,000.00	\$0.00	5

Project Tasks	Scheduled Start Date	Scheduled End Date	Date Completed
1. Finalize project Scope	01/01/2013	02/01/2013	
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## Research Quarterly Progress Report

Technical Advisory Committee Names	Email Addresses
Jack Stickel	jack.stickel@alaska.gov
Jason Norville	janorville@pa.gov
Tina Greenfield	Tina.greenfield@dot.iowa.gov
Last TAC Meeting Date	03/19/2014
<b>PI Concerns, Problems, Needs, or No-Cost Extension Requests</b>	
<p>A new scope is being written.</p>	
<b>Project Progress To-Date and other Pertinent Information</b>	
<p>New project just approved in December. Scope drafted by ISU but not yet approved by the project team. The scope is being revised as the old knowledge base content is being moved to a new site.</p>	





# Research Quarterly Progress Report

Form 541001.pdf (9/08)

For Quarter Ending 06/30/2014

QPR Project Number (RTXXX)	Other Project Numbers (addendum, IHRB etc.)	Project Title
RT		Aurora 2013-06 - Make Aurora Index Available to Agencies

Principal Investigator Name	Email Address
Tina Greenfield	tina.greenfield@dot.iowa.gov

Co-Principal Investigator Name(s)	Email Address

Principal Investigator Organization Name/Address
Iowa DOT

DOT Office	DOT Contact Name	Email Address
Maintenance	Tina Greenfield	tina.greenfield@dot.iowa.gov

Project Start Date	Original Project End Date	Extended Project End Date
12/15/12		

Dollars Allocated	Dollars Paid	Percent Project Completed
\$30,000.00	\$0.00	50

Project Tasks	Scheduled Start Date	Scheduled End Date	Date Completed
1. Extend Aurora access contract with AccuWeather	12/09/2012	03/01/2013	12/05/2013
2. Create 50 new access accounts for other agencies	12/20/2012	03/01/2013	
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## Research Quarterly Progress Report

Technical Advisory Committee Names	Email Addresses
Tina Greenfield	tina.greenfield@dot.iowa.gov
Mike Adams	michael.adams@dot.wi.gov
Jason Norville	janorville@pa.gov
Last TAC Meeting Date	03/19/2014
<b>PI Concerns, Problems, Needs, or No-Cost Extension Requests</b>	
A contract has now been worked out with AccuWeather.	
<b>Project Progress To-Date and other Pertinent Information</b>	
A contract has now been worked out with AccuWeather.	



# Research Quarterly Progress Report

Form 541001.pdf (9/08)

For Quarter Ending 06/30/2014

QPR Project Number (RTXXX)	Other Project Numbers (addendum, IHRB etc.)	Project Title
RT		Aurora Project 2014-01 Seasonal Weight Restrictions
Principal Investigator Name		Email Address
TBD		
Co-Principal Investigator Name(s)		Email Address
Principal Investigator Organization Name/Address		
DOT Office	DOT Contact Name	Email Address
	Tina Greenfield	Tina.Greenfield@dot.iowa.
Project Start Date	Original Project End Date	Extended Project End Date
Dollars Allocated	Dollars Paid	Percent Project Completed
\$200,000.00	\$0.00	0

Project Tasks	Scheduled Start Date	Scheduled End Date	Date Completed
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## Research Quarterly Progress Report

Technical Advisory Committee Names	Email Addresses
Max Perchanok	max.perchanok@ontario.ca
Mike Adams	michael.adams@dot.state.wi.us
Jack Stickel	jack.stickel@alaska.gov
Dawn Gustafson	gustafsond@michigan.gov
Travis Lutman	
Mike Kisse	mkisse@nd.gov
Last TAC Meeting Date	03/19/2014
<b>PI Concerns, Problems, Needs, or No-Cost Extension Requests</b>	
<p>Under Phase 1, IHRB is negotiating a contract with USDA, with subcontracts to FROST Associates. USDA has agreed to write a paper on the project plan, which can be presented by Aurora or by her at the upcoming ITS America conference in Michigan. There has been some difficulty in the contracting process. If contractual issues cannot be worked out, the project team will consider moving on to the second highest ranking proposal to put under contract. Iowa DOT had asked that this effort be split into two phases to accommodate the “old” Aurora close-out, with \$50,000 allocated for a first phase and another \$200,000 allocated under FY2014.</p>	
<b>Project Progress To-Date and other Pertinent Information</b>	



# Research Quarterly Progress Report

Form 541001.pdf (9/08)

For Quarter Ending 06/30/2014

QPR Project Number (RTXXX)	Other Project Numbers (addendum, IHRB etc.)	Project Title
RT		Aurora 2014-02 Quantifying Salt Concentration 2
Principal Investigator Name		Email Address
Max Perchanok		max.perchanok@ontario.ca
Co-Principal Investigator Name(s)		Email Address
TBD		
Principal Investigator Organization Name/Address		
DOT Office	DOT Contact Name	Email Address
Maintenance	Tina Greenfield	tina.greenfield@dot.iowa.g
Project Start Date	Original Project End Date	Extended Project End Date
Dollars Allocated	Dollars Paid	Percent Project Completed
\$115,000.00	\$0.00	0

Project Tasks	Scheduled Start Date	Scheduled End Date	Date Completed
1. RFP for phase 1	01/01/2013	04/30/2013	
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## Research Quarterly Progress Report

Technical Advisory Committee Names	Email Addresses
Tina Greenfield	Tina.Greenfield@dot.iowa.gov
Jason Norville	janorville@state.pa.us
Tim Peters	Tim.Peters@illinois.gov
Curt Pape	Curt.Pape@dot.state.mn.us
Lee Smithson	Leland.Smithson@dot.iowa.gov
Last TAC Meeting Date	03/19/2014
PI Concerns, Problems, Needs, or No-Cost Extension Requests	
An RFP is under development.	
Project Progress To-Date and other Pertinent Information	
Phase 1 will cover the literature review. Phase 2 will include the demonstration and evaluation.	



Iowa Department of Transportation

# Research Quarterly Progress Report

Form 541001.pdf (9/08)

For Quarter Ending 06/30/2014

QPR Project Number (RTXXX)	Other Project Numbers (addendum, IHRB etc.)	Project Title
RT		Aurora Project 2014-03 - Accuracy of Pavement Prediction

Principal Investigator Name	Email Address
Max Perchanok	max.perchanok@ontario.ca

Co-Principal Investigator Name(s)	Email Address

Principal Investigator Organization Name/Address

DOT Office	DOT Contact Name	Email Address
Maintenance	Tina Greenfield	Tina.Greenfield@dot.iowa.

Project Start Date	Original Project End Date	Extended Project End Date

Dollars Allocated	Dollars Paid	Percent Project Completed
\$105,000.00	\$0.00	0

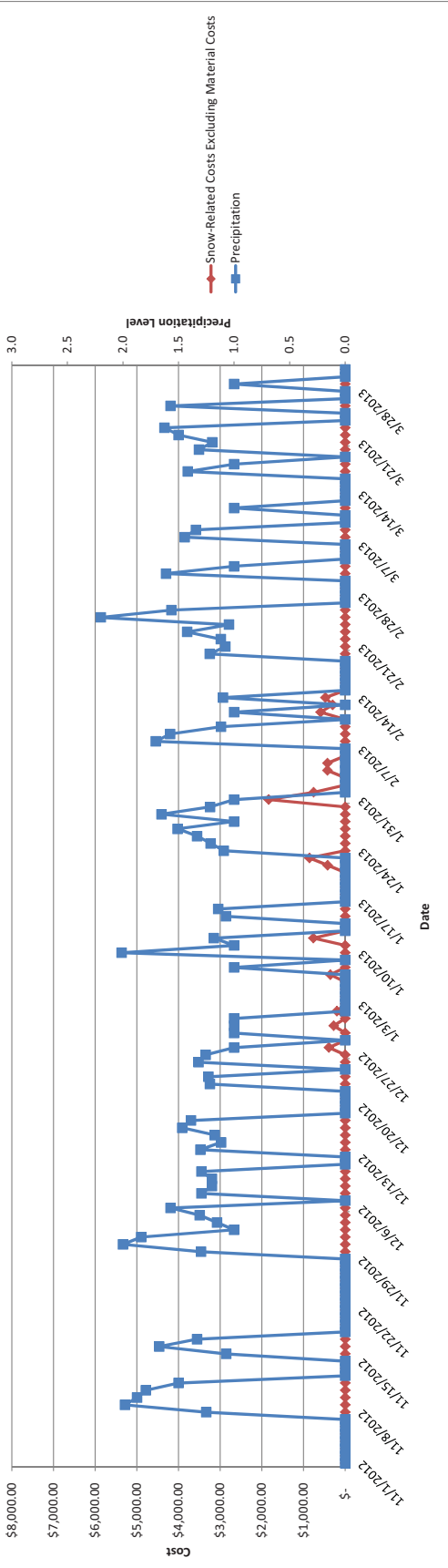
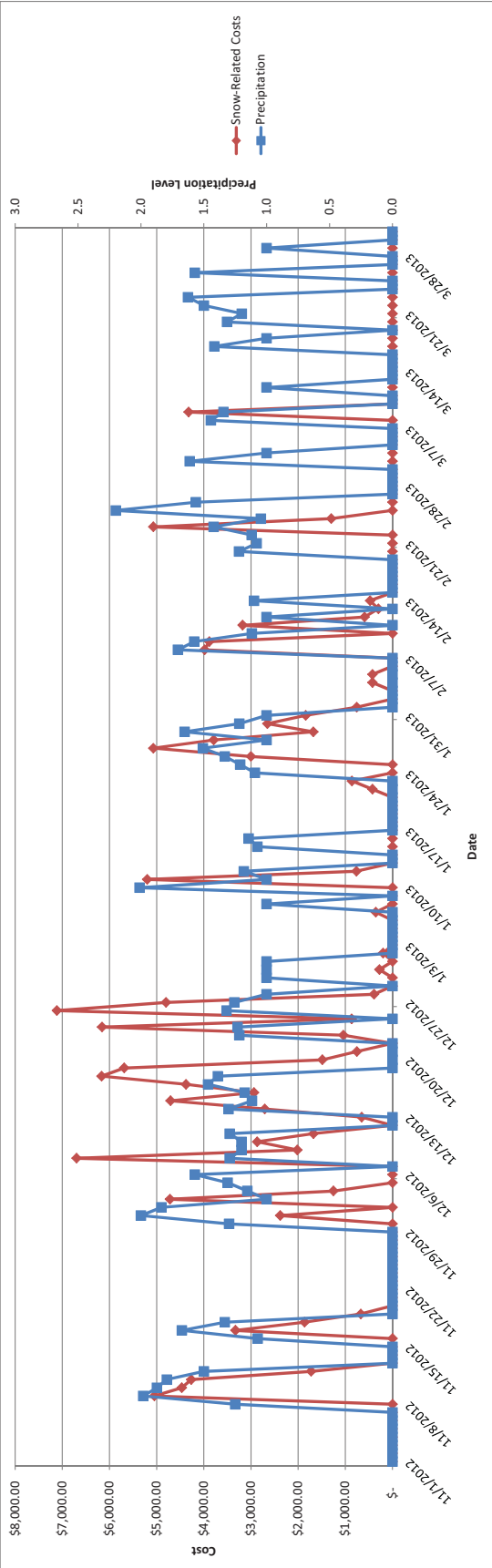
Project Tasks	Scheduled Start Date	Scheduled End Date	Date Completed
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## Research Quarterly Progress Report

Technical Advisory Committee Names		Email Addresses
Max Perchanok		max.perchanok@ontario.ca
Dawn Gustafson		gustafsond@michigan.gov
Gabe Guevara		gabriel.guevara@dot.gov
Curt Pape		curt.pape@dot.state.mn.us
Mike Adams		michael.adams@dot.state.wi.us
Last TAC Meeting Date		03/19/2014
PI Concerns, Problems, Needs, or No-Cost Extension Requests		
<p></p> <p></p> <p></p>		
Project Progress To-Date and other Pertinent Information		
<p>This second phase will be completed under the new TPF program number and will be funded for \$105,000.</p>		



Maintenance Shed with Camera



	total w/ camera	no mat w/ camera	total w/o camera	no mat w/o camera	standardized cost	proportion
	\$ 143,695.82	\$ 8,088.16	\$ 276,495.08	\$ 21,058.88	\$ 15,562.99	0.739023