

research for winter highway maintenance

AGENDA Clear Roads Fall Meeting September 24-26, 2019 Double Tree by Hilton Burlington Vermont 870 Williston Rd., South Burlington, VT 05403 Meeting Room: Emerald I

Monday, September 23, 2019

Dinner on your own.

Tuesday, September 24, 2019 – 8:00 a.m. to 5:00 p.m.

Breakfast provided at the 252 Tavern beginning at 7:00 am.

Time	Facilitator	Торіс
8:00 to 8:30	James Morin	 Introductions and Meeting Objectives Welcome and opening remarks (Wayne Symonds, Chief Engineer, Vermont Agency of Transportation) Introductions Brief overview of Clear Roads goals and activities Agenda review
8:30 to 10:00	Various	 Proposal Discussions Review and evaluate proposals for the following projects: 19-01: Expanding Application Rate Guidance for Salt Brine Blends for Direct Liquid Application and Anti-Icing (Jim Hughes, Allan Johnson, David Gray, Ty Barger, Doug McBroom, John DeCastro, James Stevenson, Scott Lucas, Jeff Pifer, Rick Nelson, and Tom Peters) 19-02: Recruitment and Retention of Highway Maintenance Workers (Cliff Spoonemore, Tom Renninger, Brian Burne, David Gray, Joe Bucci, Scott Lucas, Jeremy McGuffey, and Tom Peters) 19-03: Comparison of Performance of Traditional Chain Conveyor Spreader and Auger-Driven Spreader for Distributing Prewet Salt (Mark Goldstein, Patti Caswell, James Morin, Steve Spoor, Ryan Ferrin, James Stevenson, and Tom Peters) 19-04 Measuring the Efficiencies of Tow Plows and Wing Plows (Doug McBroom, Steve Spoor, Cliff Spoonemore, David Gray, James Morin, Jon Fleming, Melissa Longworth, Jeff Pifer, and Tom Peters) 19-05 Synthesis of Technical Requirements and Considerations for an Automated Snowplow Route Optimization RFP Template (Scott Lucas, Clay Adams, Brian Burne, Todd Law, Melissa Longworth, Kevin Hensley, Kevin Duby, Kyle Lester, and Tom Peters)
10:00 to 10:15		Break
10:15 to 12:00	Various	Proposal Discussions (cont'd)
12:00 to 1:00		Lunch (Petit Dejeuner Terrace)

1:00 to 2:00	Various	Proposal Discussions (cont'd)
2:00 to 3:00	Greg / James / Patti	Dissemination / Implementation
3:00 to 3:15		Break
3:15 to 3:30	Greg Waidley	Clear Roads Budget Overview of the Clear Roads budget TPF-5(353).
3:30 to 4:15	Doug McBroom	Montana State Report (Including CR project-based implementation activities/efforts)
4:15 to 5:00	Steve Spoor	Idaho State Report (Including CR project-based implementation activities/efforts)
5:00	James Morin	Wrap-Up
		Dinner (on your own)

Wednesday, September 25, 2019 – 8:00 a.m. to 5:00 p.m. Breakfast provided at the 252 Tavern beginning at 7:00 am.

Time	Facilitator	Торіс
8:00 to 8:15	James Morin	Meeting Objectives James will review the objectives for Day 2.
8:15 to 10:00	Various	 Update on Projects in Progress (included in these updates: problem/need, goals/objectives, expected results, current status of project, and implementation opportunities) 13-05 Developing a Test Bed Software to Qualify Plug and Play Technology (Scott Lucas) 16-05: Weather Event Reconstruction and Analysis Tool (Brian Burne) 17-01: Integrating Advanced Technologies into Winter Operations Decisions (Kyle Lester) 17-02: Standard Specifications for Carbide Insert Blades (Brian Burne) 17-03: Aftermarket Cameras in Winter Maintenance Vehicles (Todd Miller) 18-01: Defensive Driving for Snowplow Operators (Doug McBroom and Clay Adams) 18-02: High Performance Blade Evaluation (Craig Bargfrede and James Morin) 18-03: Evaluation of SSI and WSI Variables (Todd Miller and James Morin) 18-04: Review and Summary of Pre-wet Methods and Procedures (James Morin and Patti Caswell) 18-05: Alternative Methods for De-icing (Joe Bucci and James Morin) 18-06: Std Test Procedure for Ice Melting Capacity of Deicers (Jasmine Dondlinger)
10:00 to 10:15		Break
10:15 to 11:00	Rick Nelson	SICOP and FHWA Reports
11:00 to 12:00	Patti Caswell	QPL Update
12:00 to 1:00		Lunch (Petit Dejeuner Terrace)

Time	Facilitator	Торіс
1:00 to 2:30		Recently Completed Projects
		 15-01: Synthesis of Material Application Methodologies for Winter Operations (Jeff Pifer) 16-03: Identification of Mobile Technologies for the Assessment of Winter Road Conditions (Kyle Lester)
2:30 to 3:00	Kevin Hensley	APWA Report
3:00 to 3:15		Break
3:15 to 3:45	Brian Burne/ Greg Waidley	Subject-based Webpages, Phase 3
3:45 to 5:00	James Morin	Clear Roads Membership
5:00	James Morin	Wrap Up
		Harvest Moon Dinner Cruise (or on your own)

Thursday, September 26, 2019 – 8:00 a.m. to 4:30 p.m. Breakfast provided at the 252 Tavern beginning at 7:00 am.

Time	Facilitator	Торіс
8:00 to 8:15	James Morin	Meeting Objectives
		James will review the objectives for Day 3.
8:15 to 8:45	Greg Waidley	Future Meetings
8:45 to 9:30	Øystein Larsen /	Norway Report
	Kai Rune Lysbakken	Norwegian salting guidelines.
9:30 to 10:00	CR TAC	Business Roundtable
10:00 to 10:15		Break
10:15 to 12:00	CR TAC	Business Roundtable
12:00 to 1:00		Lunch (Petit Dejeuner Terrace)
1:00 to 4:30	Todd Law	Tour
		Dinner (on your own)