

Vermont Agency of Transportation

2018 Research and Innovation Symposium

September 12, 2018 – Vermont State House, Montpelier



Symposium Agenda

- 8:25-8:40 Welcome to STIC Stakeholder Day! Wayne Symonds, AOT Chief Engineer; Larry Dwyer, FHWA VT Asst. Division Administrator
- 8:40-9:05 Group A presentations (Planning and Traffic)
- 9:05-9:30 Group B presentations (Material and Pavement; Environmental, Snow and Ice)
- 9:30-10:30 Posters manned by presenters, Break
- 10:30-10:50 Group C presentations (Structures and Asset Management)
- 10:50-11:30 Mentimeter Feedback and Discussion (Thoughts? Do people have research ideas? STIC ideas? Valuable interactions?)
- 11:30-12:30 Posters manned by presenters
- 1:00 Event Ends

Comments and Feedback?

We welcome your feedback (general or about specific posters/projects). Comments can be left today using [menti.com](https://www.menti.com), with code [67 98 79](https://www.menti.com/join/679879) or through scanning the QR code. Feedback can also be submitted through the survey following the Symposium or by email to emily.parkany@vermont.gov.

Poster Presentations

Group A: Planning and Traffic (Highlights Presentations 8:40-9:05)

- 1: VTRC 16-2, VTrans Employee Retention & Knowledge Management Study - Carol Vallett, UVM
- 2: Chittenden County Advanced Traffic Monitoring System using Bluetooth Technology - Sai Sarepalli, CCRPC

3: Methods and Tools for Resilience Planning - Joe Segale, VTrans; Roy Schiff, Milone & McBroom

4: NETC 17-1 Quick Response: New England Connected Automated Vehicles - Joe Segale, VTrans; Chris Chaffee, AECOM

5: Using UAS for Agency Applications – Dave Tillberg, Jen Davis, Dan Delabruere, VTrans

6: Advanced Transportation Management System (ATMS) and Traveler Information System (TIS) – Josh Schultz, Robert T. White, VTrans

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7: Bicycle and Pedestrian Counting Program Management - Jim Sullivan, UVM TRC

8: Improvement and Operation of the Vermont Travel Model - Jim Sullivan, UVM TRC

Group B: Materials/Pavements and Environmental/Snow and Ice (Highlights Presentations 9:05-9:30)

Materials/Pavement

9: Development of Pay Factors for QA/QC Concrete Compressive Strength – Dave Novak, Jim Sullivan, UVM TRC

10: VTRC 17-2, Implementation of Intelligent Compaction for Pavement Construction in Vermont - Ehsan Ghazanfari, Maziar Foroutan, UVM

11: NETC 13-3, Improved Regionalization of Quality Assurance (QA) Functions - Eshan Dave, UNH

12: NETC 15-3, Moisture Susceptibility Testing for Hot Mix Asphalt Pavements in New England - Eshan Dave, UNH

13: VTrans Recycled Materials Activities – Emily Parkany, VTrans; James “Buzz” Surwilo, ANR DEC

14: Pavement Life - Ian Anderson, Emily Parkany, VTrans

15: Experimental Features - Ian Anderson, Emily Parkany, VTrans

Environmental/Snow and Ice

16: Reducing Wildlife Mortality on Roads in Vermont: Determining Relationships Between Structure Attributes and Wildlife Movement Frequency Through Bridges and Culverts to Improve Related Conservation Investments - Paul Marangelo, The Nature Conservancy

17: VTRC 17-1. Snow and Ice Control Performance Measurement: Comparing "Grip", Traffic Speed Distributions and Safety Outcomes during Winter Storms – Jon Dowds, Jim Sullivan, UVM TRC

18: VTRC 18-2, Evaluating Effectiveness of Floodplain Reconnection Sites along the Lamoille Valley Rail Trail: A Blueprint for Future Rail/River Projects - Mandar Dewoolkar, UVM

Group C: Structures and Asset Management (Highlights Presentations 10:30-10:50)

Structures

19: VTRC 16-3 Acoustic Emission Monitoring of Prefabricated and Prestressed Reinforced Concrete Bridge Elements and Structures – Robert Worley II, Dryver Huston, UVM

20: Quantifying the Vulnerability of Vermont Bridges to Seismic Loading - John Lens, UVM

21: VTRC 17-3, Identifying Sensitive Structural and Hydraulic Parameters in a Bridge-Stream Network for Flood Mitigation Planning - Matt Truehart, Mandar Dewoolkar, UVM

22: NETC 13-1, Development of High Early-Strength Concrete for Accelerated Bridge Construction Closure Pour Connections - Sergio Brena, UMass-Amherst

23: Effective Exclusionary Measures for Threatened Bats in Middlebury, VT - Megan Lout, VHB; Glenn Gingras, VTrans

24: Bridge Deck Rehabilitation - Rob Young, VTrans

Asset Management

25: Real-Time Pavement Condition Ratings by Vermont Drivers: Assessing the Condition of Road Segments Through a Location-Based Smartphone App - Chris Leggett, RSG

26: Traffic Signs Detection & Geospatial Localization - Safwan Wshah, Thayer Alshaabi, Fayha Almutairy, UVM

27: VTRC 18-1, Radio Frequency Identification (RFID) Technology for Transportation Signage Management - Tian Xia, Byung Lee, UVM

28: Using HIVE for Culvert Assessment - Jonathan Griffin, VTrans