



**Department of
Transportation**

ANDREW M. CUOMO
Governor

PAUL A. KARAS
Acting Commissioner

DOT Salt Reduction Initiatives

Lake George and Lake Placid Salt Reduction Pilots

October 3, 2018

4th Annual S.A.V.E. Lake George Partnership

SALT SUMMIT

The Business of Reducing the Use of Road Salt

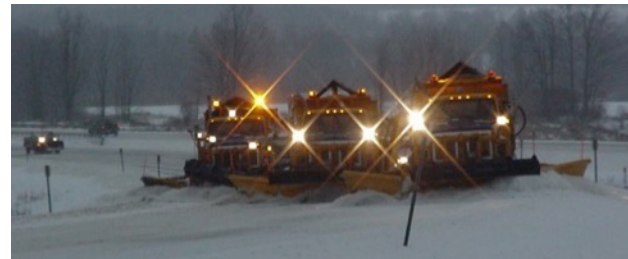
Why are we here?

- Concern for the impacts to our environment due to road salt use
 - Surface waters (environmental)
 - Groundwater (health)
- Need to maintain safe roadways
- Looking for a better balance



Background

Documentation of Concerns



- Environmental advocacy groups using a science-based approach to demonstrate salt levels are rising
 - FUND for Lake George using decades of historical data combined with cutting edge technology
 - ADKAction's Well Study
- Bottom line...

Background

Why use salt anyway?

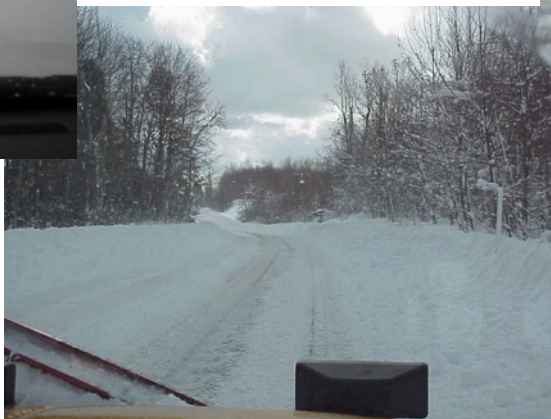
- Need to maintain safe roadways
- Section 12 of NYS Highway Law
 - “to provide reasonable passage and movement of vehicles over such highways”

What is reasonable?

- Based on Engineering Judgement
- No more than 2 ½” snow on roadways
- Clear wheel paths/center line – No “Bare Roads” Policy
- No formation of ice or hard pack on pavement
- Travel lanes should be cleared within 2 hours of end of event
- 24/7 operation to provide for emergency access to all communities in the State
- Bottom line...

Background

What is reasonable?



How DOT minimizes salt use...

- Automated spreader equipment
- Prescribed application rates
- Calibration
- Driver training
- Salt Handling Practices

Salt Reduction Pilots

- Leverage Best Management Practices
- Engage a Strategic Working Group and Tactical Working Group
- Documentation/Communication
- Explore abrasive mixes and other materials
- Safety is a priority

Opportunity

Best Management Practices

- Use of Brine for Pre-storm anti-icing



Opportunity

Best Management Practices

- Use of Segmented Edge Plow Blade



Best Management Practices

- Use of Treated salt
- Use of Enhanced AVL/GPS
- Close monitoring during events
- Post-storm reviews
- Train Operators in goals of the Pilots
- Addressing trouble spots with Summer Work

Salt Reduction Pilots

- Route 9N in Lake George
 - 17 mile segment along west side of Lake George
 - Dovetails with The FUND for Lake George's salt reduction efforts
 - Explore reduction in salt application rates
 - This is a salt-only pilot

Salt Reduction Pilots

- Route 86 in Lake Placid
 - 16 mile segment from Old Military Road to Wilmington – numerous challenges
 - Explore reduction in salt application rates
 - Experiment with abrasive mixes/alternative materials
 - In alignment with ADKRSWG salt reduction initiative

Opportunity

Strategic Working Group

- Advocacy Groups
 - AdkAction
 - Paul Smith's College Adirondack Watershed Institute
 - The FUND for Lake George
 - Ausable River Association
- NYSDOT, NYSDEC, NYSDOH

Strategic Working Group

- Forum for communication/coordination
- Regularly scheduled meetings – minutes will be available to public
- “Big Picture”

Opportunity

Tactical Working Group

- Local stakeholders
 - Municipal leaders, Sponsor
 - Public Works/Highway Departments
 - Business leaders, Local land owners
 - Local advocates
- NYSDOT, NYSDEC

Opportunity

Tactical Working Group

- Pilot-level coordination
- Coordinate other salt reduction efforts
- Coordinate with private salt use
- Get Local feedback
- Discuss Pilot-level strategy

Anticipated Outcomes

- Better understanding of road salt application rates
- Better understanding of abrasive mixes
- Enhance our training program
- Refinement of Best Management Practices for S&I
- Potential for revised Operational Guidelines

Next Steps...

- Finalize Operational Plan Revisions
- Snow University
- Documentation of trouble spots



Questions?



Rob Fitch, P.E.
Director, Office of Transportation Maintenance
robert.fitch@dot.ny.gov