

OPERATOR'S EXPERIENCE ON SALT REDUCTION AND BRINE APPLICATION



Lake Champlain Sea Grant Program
Road Salt Education Workshop
October 24, 2019

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Rob Vopleus – Town of Lake George

PARTNERSHIP

- S.A.V.E. Lake George Partnership
- Science-based
- Basin-wide commitment

(Final 4-21-15)
**MEMORANDUM OF UNDERSTANDING OF
MUNICIPAL GOVERNMENTS BORDERING LAKE GEORGE
REGARDING THE APPLICATION OF ROAD SALT
FOR WINTER MAINTENANCE AND DE-ICING**

The purpose of this Memorandum of Understanding (MOU) is to describe an agreement among the municipal governments bordering Lake George regarding a program to address the levels of chlorides in, and currently entering, Lake George by reducing the application of road salt for winter road maintenance and de-icing practices. This MOU is not a binding commitment, but is a statement of the intent of the municipalities signing this document to work in good faith to create an effective program to reduce the levels of road salt application surrounding Lake George in recognition of the following:

- WHEREAS, there has been a steady increase in the basin-wide use of road salts to assist in winter road maintenance and de-icing; and,
- WHEREAS, within the Lake George watershed, there are a total of approximately 680 lane miles of local, county, state and federal roads and the average purchase rates as reported by municipal staff totals an estimated 15,000 metric tons of salt per year; and,
- WHEREAS, there are numerous studies that date back to the 1970s documenting the significant increases in road salt in the Lake George watershed and in Adirondack lakes from runoff; and,

INNVOATION

- Best Practices Agreement
- Annual Salt Summits
- Expanding engagement, public and private

The collage features several logos and a document snippet:

- ARROWHEAD EQUIPMENT, INC.**: Logo with a red arrowhead and the text "EQUIPMENT, INC."
- Sea Grant Lake Champlain**: Logo with a blue bird and the text "Sea Grant Lake Champlain"
- SIMA**: Logo with the text "snow & ice management association"
- THE FUND for LAKE GEORGE**: Logo with a green mountain and the text "THE FUND for LAKE GEORGE"
- STOP AQUATIC INVASIVES FROM ENTERING LAKE GEORGE**: Text in the center of the collage
- Barton & Loguidice**: Logo with the letters "B & L" and the text "Barton & Loguidice"
- The Lake George Watershed Coalition**: Text in the center of the collage
- FORT WILLIAM HENRY RESORT AND CONFERENCE CENTER**: Logo with a circular emblem and the text "FORT WILLIAM HENRY RESORT AND CONFERENCE CENTER"
- LGA LAKE GEORGE ASSOCIATION**: Logo with a blue circle and the text "LGA LAKE GEORGE ASSOCIATION Protecting Our Water. Educating for the Future. SINCE 1985"
- VILLAGE OF LAKE GEORGE**: Logo with a circular emblem and the text "VILLAGE OF LAKE GEORGE INCORPORATED 1900"
- WIT Advisers**: Logo with a green circle and the text "WIT Advisers empowering sustainability"

Below the logos is a document snippet with the following text:

- Prevent...
- Optimize solid salt use output through pre-w...
- Continuously Improve through analysis of salt measurement data, consistent field level training and implementation of latest innovation when affordable (i.e. surface temperature sensors, Live Edge Plow technology, etc.); and it is further

AGREED that the municipality's salt use policy shall include the adoption of the Snow and Ice Management Association (SIMA) Best Practice Guidelines for Salt Use [create ... and it is further



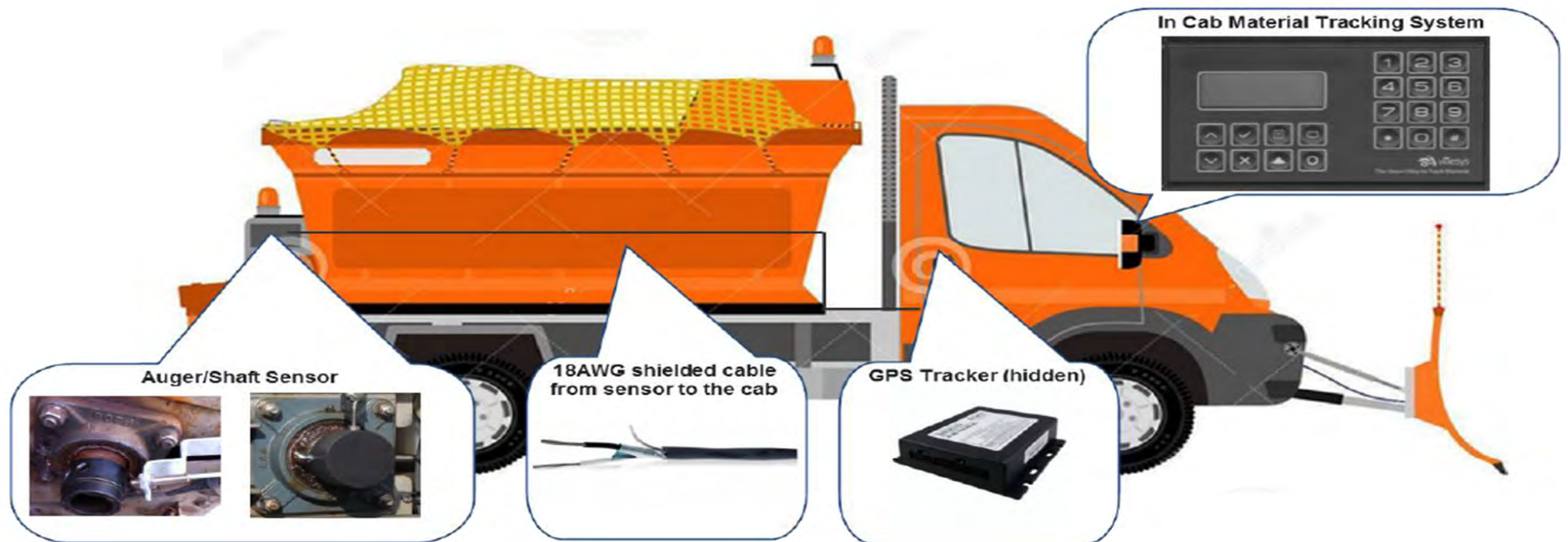
INVESTMENT

- Science and Technology
- Techniques and Equipment
- Education and training





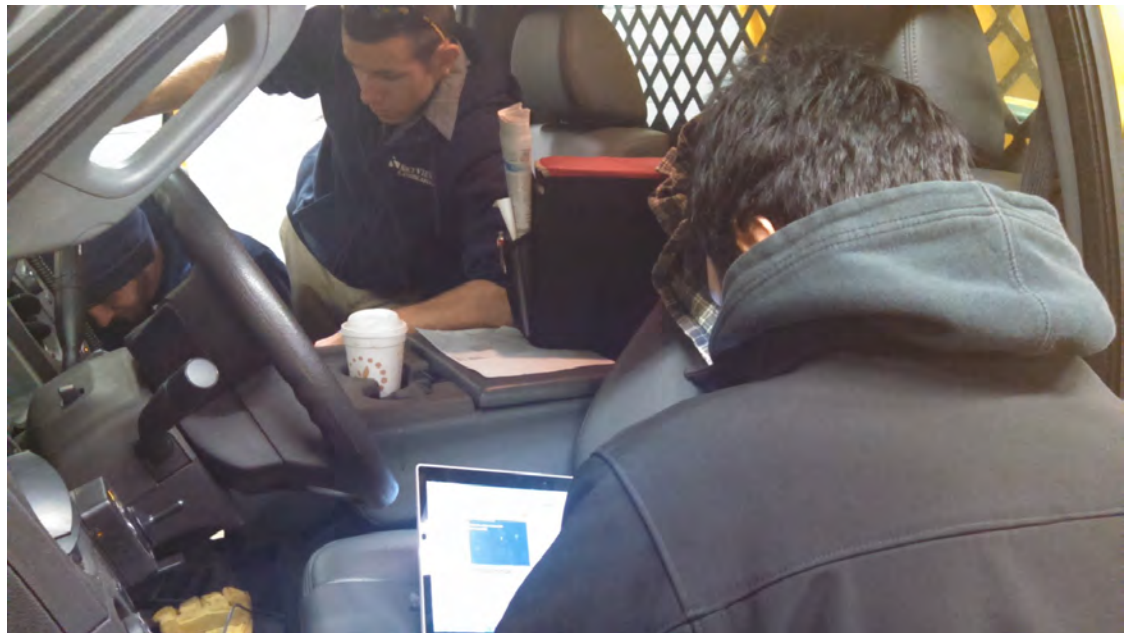
MEASURE



CALIBRATE



CALIBRATE



CALIBRATE



PREVENT



PREVENT



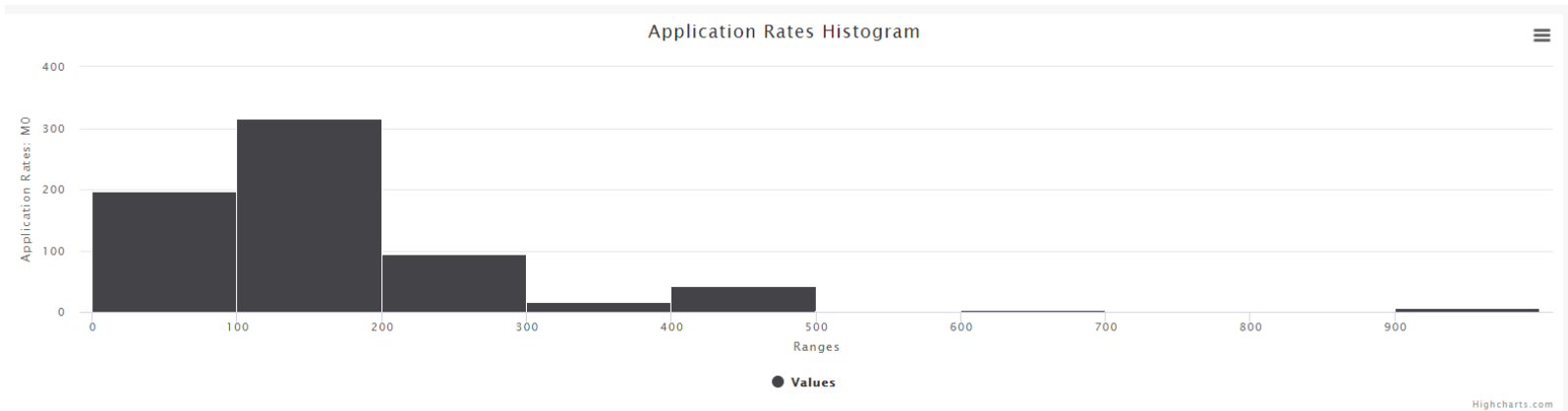
PREVENT



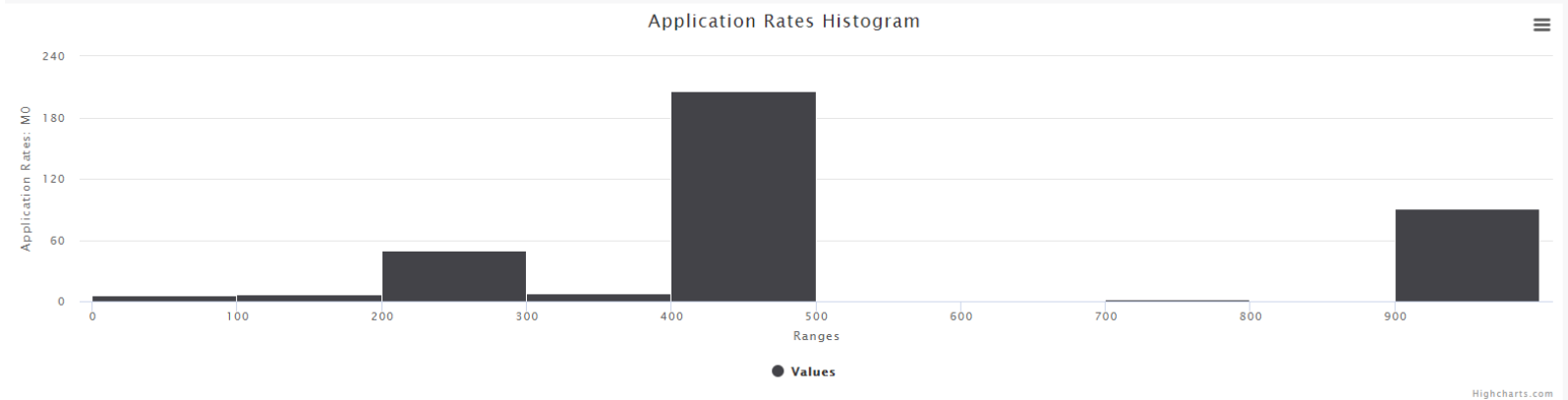
PREVENT




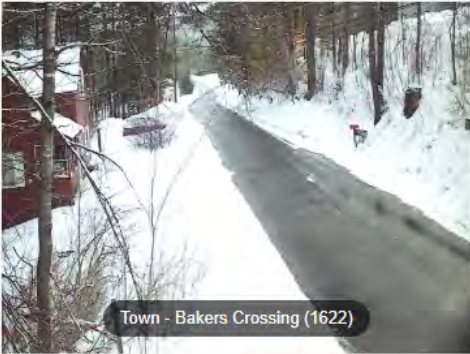

REAL TIME DATA



1






ROAD CAMERAS






Town - Bakers Crossing (1622)

Picture Time	Scheduled Time
Feb 25, 9:06 AM EST	9:00 AM
Resolution	Exposure
640*480	1
Air Temperature	Pavement Temperature
-2.5°C 27.5°F	ERROR



Town - Truesdale Hill Rd. (6088)

Picture Time	Scheduled Time
Feb 25, 9:06 AM EST	9:00 AM
Resolution	Exposure
640*480	1
Air Temperature	Pavement Temperature
-3.8°C 25.1°F	ERROR



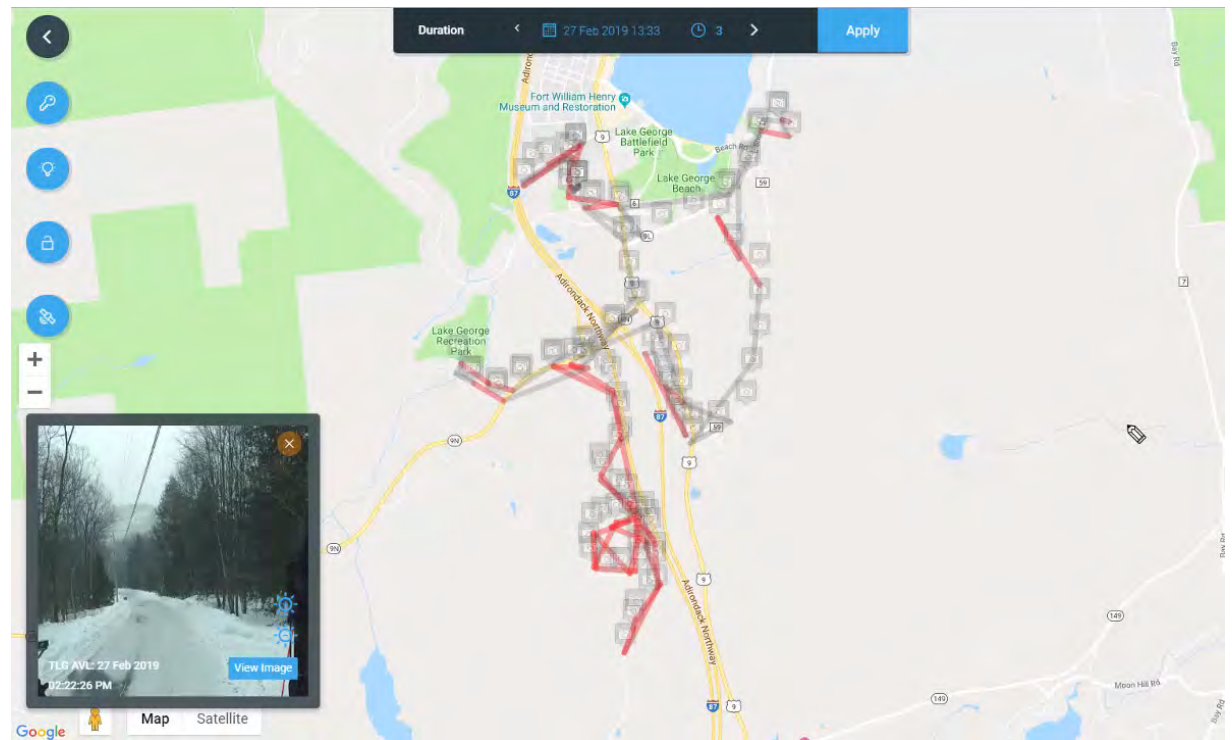
Town - Olde Coach Rd (9702)

Picture Time	Scheduled Time
Feb 25, 9:06 AM EST	9:00 AM
Resolution	Exposure
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Air Temperature	Pavement Temperature
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ROAD CAMERAS



AVL – ROAD PATROL



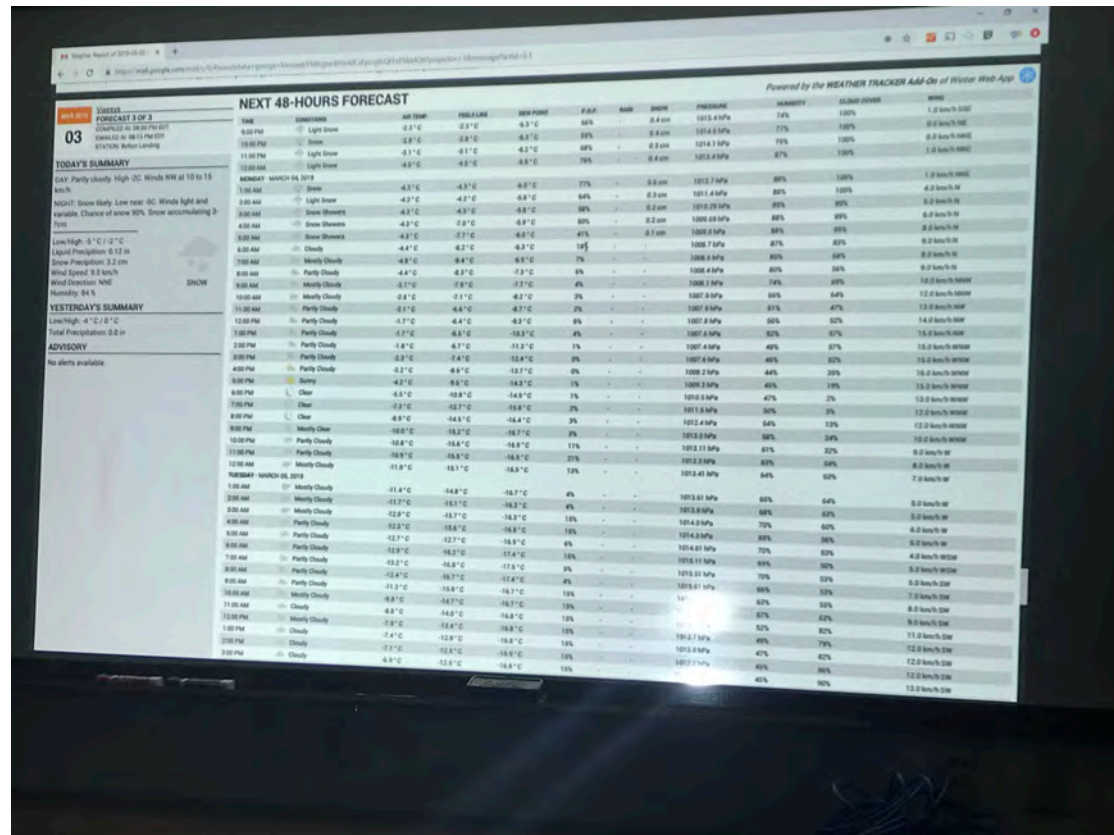
BRINE APPLICATION



SELF ASSESSMENT



WEATHER FORECASTING



ANALYSIS



GOAL



QUESTIONS?

