

**AASHTO Subcommittee on Maintenance  
Regional Breakout Session Minutes  
Clark County, NV  
Monday, July 18, 2016**

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**AASHTO SCOM Northeast Region Discussion (NAASHTO)**

NASHTO Regional Meeting: Moderator – Russ Yurek, MD

Topics of Discussion:

- SICOP Strategic Plan
- Urban Snow Removal - Blizzards
- Safety - best practices using attenuators
- Employee retention and winter operations
- Snow removal contracts
- Pollinators and mowing

**AASHTO SCOM SASHTO Regional Meeting**

Regional Meeting SASHTO: Moderator – Heath Patterson, MS

Opening and roll call 12 of 13 states present (35 in attendance)

SICOP Update

-Safety Program Round Table (Does your State require it?)

NC Some

SC Some on slope mowing and if the operation encroaches into 2' of the travel lane

AR Recommended but not required

MS Considering

-Mowing Practices/Pollinator Habitat Programs

- MS Looking @ developing a program
- AL Went through in 2000 but from the perspective of political leadership who stated "We need Natural Right of Way" Limited mowing to 1 deck width. Mayors caused an outcry about the ascetics and they resumed in urban areas. Now do 2 passes, 2 cycles secondary routes, 3 cycles intermediate routes, and On the Interstates 3-4 cycles and have not heard from pollinators much.
- AR There are areas we don't mow at all
- MS Had a wild flower program but got feedback of the public that they should be fixing the road not planting flowers.
- TX 2 cycles in rural areas; 3 cycles in urban areas; Some cities want more and Texas calculates what mowing would cost DOT and gives the money to the City and they do what they will. Wait until June after the wildflowers seed.
- KY Has been scaling back. Interstate – 3 full width cycles<sup>4</sup> in some cities and 5 in other; Now 3 cycles w/ first 2 being swath and a cleanup in fall; Saved \$600,000 by cutting back and introducing pollinator plants. Mowing contractors were receptive if KY removed the trimming with the swath mowing but it looks bad.
- LA 4 – 7 cycles; Has just started Swath Mowing
- NC 4-6 cycles; 6 on interstates; Have found that if you go from 4 to 3 cycles you pay the same price; Has trouble keeping up with 4 cycles; NC has designated flower beds
- SC Reduced Interstate cycle to 3 but didn't save and received feedback and went back to 4 cycles.
- GA Increased mowing; Have started vegetation removal projects. Looking at a capital project to remove; Have wild flower plots
- KY Was looking at pollinators separately
- TN 4 Cycle more in urban area; Doing some swath mowing along interstate and full width on last cycle
- VA Set up for 3 cycle 1st and last full width(fence line to fence line) others swath; Saw opportunity

-350 Phase out (Who is making plans to phase out?)

- LA Replace as hit
- TX Not Aware
- TN Working
- GA ID areas
- SC Committee
- NC Upgrade when damaged; Have a list
- MS Trinity has made an offer to provide retro fit

-811 Legislation

- MS Has a requirement to notify 811 for and digging on Right of Way; Initially wanted to require as-built's that are PE stamped but had to back off
- KY Any time they penetrate the surface of the earth.

AL Routine maintenance excluded

-Pool who has sent people to the Maintenance Leaders Academy?

GA, SC, TN, TX, MS, NC, KY (Yes)

LA, AL, AR (No)

-Who has completed their TAMP

Complete - GA, LA

Draft - SC, TX, AL

Partial - NC, VA, WV, TN, MS, VA, KY

No - AR

-Snow and ice

KY Contract Plowing and Spreading - Talked about a new system they have for awarding their on call snow and ice contracts. It is an online reverse auction. They pay a flat rate of \$90 per hour for a vehicle and driver, the DOT supplies the salt. The state awards 7 year contracts that range between \$20 - \$35 thousand dollars per year to be on call. There are ~432 contract trucks. This past year the acting director did a reverse bid. They are able include an equipment quality score as part of the bid. They saw a significant drop in prices.

AR \$5 Million Salt contract; Some contract Bidding

AL Budgets \$1.5 Million

GA Contracts (Inclement); Comprehensive Maintenance Contracts; Line Items in Contracts

VA \$220 Million; 6000 pieces of equipment

WV In house

TX In house

SC Has used it for the purchase of equipment and commodities. They feel it works very well for commodities but not for equipment and services.

LA Louisiana is hosting the peer exchange this year from October 31st – November 2nd.

## **AASHTO SCOM WASHTO Regional Meeting Notes**

Moderator: Lonnie Hendrix, AZ

FHWA Liaison: Marc Hoelscher

DOT's in Attendance: UDOT, ADOT, NDOR, NDOT, CDOT, CalTrans, Oregon DOT, Oklahoma DOT, TXDOT, MTDOT, WSDOT, AKDOT and Public Facilities

Industry Attendees: Enviro Tech Services, Ergon, Applied Pavement Technology, Dye Management Group, NCPP

## Self-Introductions

### Kevin Griffin – Utah Presentation on Winter Maintenance Performance Metric

Utah has their own weather group, meteorologist on staff, forecast down to each state route. Winter road weather index, benefits real time data and has competed with other software companies. Designed in-house algorithm. 1” per hour event is the benchmark. Grip/Condition numbers .30 to .50. 92 RWIS sites. Grip sensors give the Rubik’s cub coloring. Statewide snow and Ice Performance Dashboard capabilities. Information to Maintenance Station leadership for decision making with real time information to make informed decisions. Future Development – complete upgrades to remaining RWIS stations, develop future locations, and work with new mobile weather station technologies to provide additional information in areas where RWIS is not needed.

### Direction of the Future in Winter Weather Forecasting

WS – Would like to get the grip numbers from vehicle manufactures.

WY – Infrared information from trucks and trying to get the numbers into the system.

UT – Wants to continue to keep a strong RWIS backbone. Need to standardization scales of friction/grip into the future.

NE – What drives the product in the application?

UT – Weather group is familiar with the products and makes recommendations, but the ultimate decision is with the station supervisory. A station can use any product they want.

Utah used to have only one vendor in an area, but now has opened the market up to others.

High performance salt is tested to a set of requirements.

### Cross Training Staff

What are others doing in this area? Not sure how to handle the wide range of skills.

UT – Does cross training and has found they have jacks of all trades masters of none.

Equipment operators have dwindled and is a real issue. New learning management system, creating training modules for on the spot training in various areas. Structures are handled a little different.

ND – Transportation technician maintenance curriculum, maintenance staff and loaned to construction.

UT – Trans Tech program is tied to pay.

### Equipment

Underutilized equipment? Yes

WS – Incentive to turn in underutilized equipment. Review underutilized equipment reports and stay in front of legislature.

UT – Dual rental rate 50% charged to the unit, which helps with underutilized equipment. Utah is turning over equipment every ten years.

NE – Units get money back on sale of equipment. Buy equipment from other units.

CA – GPS on every piece of equipment (trailers, etc). Light duty equipment mile aging out of warranty while other areas of the state is not seeing this. Equipment decisions left with those closest to the equipment.

UT – Leasing graders, loaders, mowers, etc. Looking and ten wheeler fleet with leases and possible plows.

CO – (Kyle) Promoted SICOP and provided a handout to select the six most important items to you and/or your agency (member or non-member). Corrosion study completed clear roads.

#### Kyle Lester – Presentation on CDOT's ROAD X Program

How can we engage industry to fully utilize technology? \$60 million put towards Road X program. Purpose – Provide freedom, connection and experience through travel. Try technology and put it on the road. Connected Vehicles, Automated Vehicles and Autonomous Vehicles.

Kyle – Covered the ROAD X vision, mission and timelines of ROAD X. Moving forward in building an autonomous snow plow. Connected vehicle pilot time line.

Lonnie – Traditional highway maintenance and the new technology are driving our maintenance business.

Kyle – Autonomous vehicles vs. connected vehicles and the differences. Development of technology in vehicles and infrastructure, infrastructure needs in the future to support the technology that is being developed in today's vehicles and into the future. Surviving the technology costs from year to year within a DOT. Standardization of vehicle technologies by 2030. Insurance companies will enter into the equation. Vehicle Technology – AASHTO working with the manufactures.

#### P3 Sponsorship

CO has a few corridors utilizing P3.

UT is not allowed to generate revenue. The only item it can pay for is the maintenance of the system. Innovative items with Federal-aid – disaster management

#### Idle Time on the Fleet

UT is getting the idle time down some by managing through watching the reports.

CO – Going to start putting standards in place.

UT – Solar and Wi-Fi stations in areas of the state.

#### Commercial Truck Parking

UT – Has highest truck traffic in the nation, starting to identify areas in the state where trucks can park.

NV – truck parking is a big issue and huge shortage of parking. Truck parking is a huge issue to all states in the room. Reservation system? Still have a demand issue

#### Chain up Stations

WS – Chain up stations are managed with cameras and message boards. Looking into calling ahead process for professional drivers for driving over the pass. Liability? Look into.

## **AASHTO SCOM MAASTO Regional Meeting Notes**

Moderator: Steve Cook - MI

Members States present: KS, MN, IA, MO, WI, IL, IN, MI, OH, KY

Survey Results for Members Using:

Percent Vote	YES	NO
Contracting:	30%	70%
AVL:	20%	80%
Performance Based:	60%	40%
Green/Blue Lights on WMTS:	60%	40%
MDSS:	30%	70%
MMS:	30%	70%

1) Salt reduction efforts:

- Training
- Technology
- Alternative chemicals

2) Effective staffing practices to provide winter/summer operations

- Staff 2 persons per route/truck
- Utilize limited term & temporary workers
- Utilize existing staff in other classifications

3) Electronic data capture/asset management

- Specialty Systems: Herbicide/Paint Striping
- Moving towards enterprise transportation asset management systems)

4) Management of maintenance budgets for winter/summer priorities

- Winter rules
- Varying budget structure (if don't use lose, cut back summer activities)

5) Snow plow route/truck station location optimization

- Performed by internal staff/universities/contractors
- Increased efficiency