

Winter Maintenance TSP: SICOP

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2015 AASHTO Spring Meeting
May 13-15, 2015

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Usually the TSP Chair makes this presentation

With Lee Smithson's retirement as SICOP Coordinator and my selection as the SICOP Coordinator we have been working to fill the SICOP Chair

In just the past few weeks we received approval for Nancy Albright of the Kentucky Trans Cabinet as the SICOP chair.

Winter Maintenance By The Numbers

- ❄ 1.1 Billion
Dollars spent by 23 States on winter maintenance last year
- ❄ 1,336,027
Number of weather related vehicle crashes (23 %)
- ❄ 464,668
Number of weather related vehicle injuries (19%)
- ❄ 6,526
Number of weather related vehicle fatalities (17%)

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Winter maintenance plays a significant role in DOT's mobility mission.

1.1 billion dollars spent this past winter by 23 states recently surveyed.

Estimates commonly used place this number at 2 billion dollars nation-wide for weather related events. Does not count the soft costs associated with loss of mobility.

1,366,027 - 23% of all crashes are weather related.

464,688 – 19% of all injuries are weather related.

6,526 – 17% of all fatalities are weather related.

Mention 15% of congestion from bad weather – (from Dennis M. presentation on NOCoE)

Purpose

To identify snow and ice control technologies and systems not now in use, to determine their suitability for use and help introduce the use of those with most promise ... Establishing a sustainable, systems approach to snow and ice control in the United States.

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Winter maintenance technologies are continuing to evolve.

Like those in **equipment, chemistry, technologies** such as MDSS, road weather information system **RWIS** sensors, and strategies
Its almost impossible to stay on top of all the changes

And sort out what's ready for prime time and what's not.

SICOP purpose

Three points

- 1. is to provide member states with focused attention on these advances,**
- 2. makes sure they are suitable for use,**
- 3. and help introduce them for implementation.**

SICOP Committee is at the forefront in state of the practice activities

- ❖ Representative from each AASHTO region
- ❖ TRB Winter Maintenance
- ❖ TRB Surface Transportation Weather
- ❖ APWA
- ❖ NACE
- ❖ FHWA Liaison

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The WMPCC are the individuals who accomplish the work of SICOP

With so many **different specialized consortia** and committees looking at winter maintenance The WMPCC is made up from **members who are positioned to be aware** of the state of the practice and **influence the direction of research** in their specialized areas.

The WMPCC's provides coordination and collaboration between the many groups, insures member states interests are represented, and is a vehicle for promoting results and implementation

Two examples:

SICOP Meeting in Louisville we took up the discussion of sustainability which lead to, among other things, a regional consideration of sustainability to include more representation of the societal aspects of sustainability. This was taken up APWA and ultimately resulted in sustainability checklists.

Second – Top 10 project that was initiated during the last Peer Exchange – briefly explain the project.

Main point – utilized **crowd-sourced data** and polling to quickly identify the Top-10.

World-wide participation

Accomplishments

- ❄ Identification of Top-10 practices for world-class winter maintenance program.
- ❄ Winter Maintenance Surveys
 - Annual Winter survey and NEMO
 - Salt Survey
 - Top-10 practices identified

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Top-10

SICOP initiated a project during the 2013 Winter Maintenance Peer Exchange to identify the top 10 activities that constitute a world-class winter maintenance program.

Based on the input from over 230 practitioners worldwide the top 11 were identified.

Mention the **survey of Top-10 implementation** to help identify gaps - This will become the basis for the next peer exchange and implementation gap analysis and research agenda for the next 2 years.

Winter Maintenance surveys are used to ground truth various aspects of winter maintenance.

Salt survey was used to quantify the breadth of the salt shortages on 2013-14. SICOP collaborated with AASHTO's Media Relations to use data from the Winter Maintenance survey just conducted was used to craft the National Earned Media Opportunity.

23 states responded, over 1,000 pieces of media were generated, positive piece highlighting the great work the maintenance forces accomplished last winter.

Accomplishments

- ❄ Co-sponsor National Winter Maintenance Peer Exchange
- ❄ Performance management
- ❄ Support HS&R TWG and other AASHTO subcommittees

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Peer Exchange has 3 emphasis areas.

Promote research competed by the various specialized groups

Showcase DOT's implementation of the practice activities through presentations and panel discussions.

Workshops to identify gaps in research and implementation to set the program for the next two years.

Approximately 130 persons, 37 states attended the Peer Exchange in Vancouver, Washington

Example- of how the coordination and collaboration provided by SICOP pays off.

2013 Peer exchange Identified MS4 issues for maintenance.

Top-10 identified facility layout and design as important element

RNS generated through HS&R TWG on Facility design ties it all together.

SICOP is prominently represented on several Performance Management projects though NCHRP and Aurora

Support HS&R TWG

Accomplishments

- ❖ Workforce development - CBT
- ❖ Facilitate Communication – List Serve
- ❖ Provide assistance to member states
- ❖ International Tech Transfer and alignment of research topics

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Flag-ship activities

Workforce Development – CBT

Designed with platform flexibility

Recently refreshed to a web based system compatible with DOT's learning management systems

Continuing to assist in the setup the new web based CBT in participating states

Facilitate communication between practitioners

Maintain the List Serve – approximately 900 practitioners participating

Provide assistance to member states

serve on panels and provide research and input on a variety of topics

Examples – Connecticut corrosion study with the Connecticut Academy of Science

MDSS issue with Minnesota, South Dakota and others

Individual state requests for references, resources and networking

Bringing International and national research into alignment

by serving as English secretary was able to influence the agenda for future work to align with work in the US

Financial Statement

Annual Voluntary Contribution: \$4,000

	FY12	FY13	FY14
Revenue	132,000	132,000	132,626
Expense			
Consultant	75,702	52,520	57,063
travel	27,034	20,702	17,362
Administration	0	1,434	13,481
Other	0	5,942	8,601
Total Expense	102,736	80,598	96,507

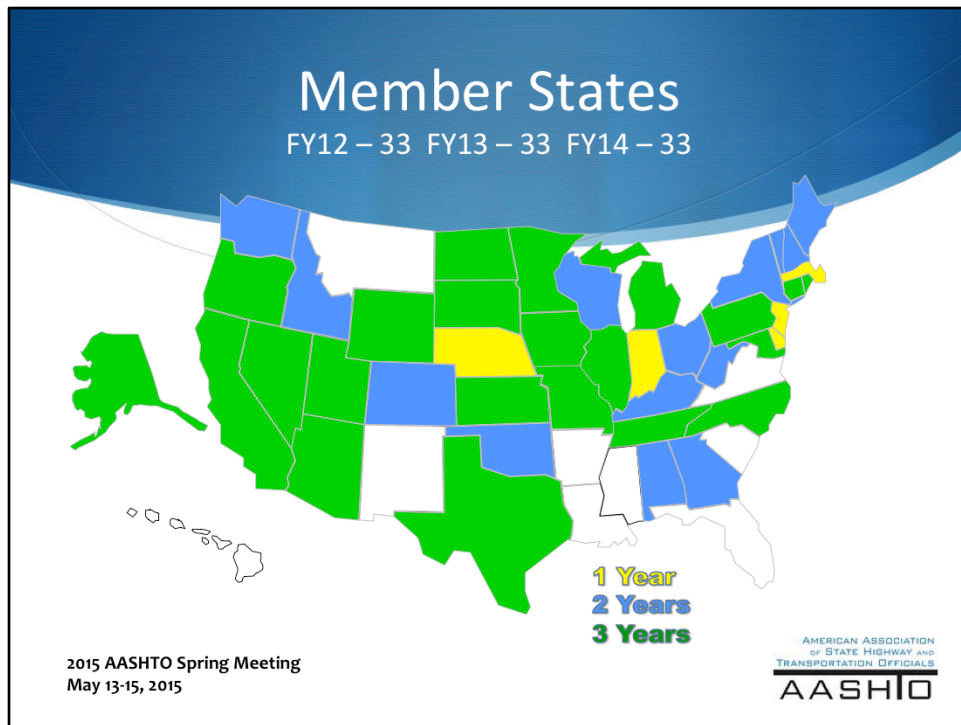
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We have accomplished our objectives within the budget established through the voluntary contribution of \$4,000/state.

Consistently have 33-34 member states.

No intention of increasing the contribution at this time. In fact we have a little excess capacity to move forward with some additional initiatives like Operations activities.



Shows the extent of the interest in the program

41 states have made the voluntary contribution to SICOP at least once in the past 3 years

- 22 states all 3 years
- 14 states 2 of the 3 years
- 5 states 1 year

Future Outlook

- ❁ Increased calibration with HTSM&O and the NOCoE
- ❁ Co-sponsor the 2015 National Winter Maintenance Peer Exchange
- ❁ Tech transfer through Webinars – Resiliency
- ❁ No increases in the voluntary contribution at this time.

Still much work to accomplish particularly with respect to sustainability and resiliency during weather events.

Increased collaboration with HTSM&O and NOCoE

First event will be an operations element in the Peer Exchange

Linkages include: RWIS / ITS utilization in winter operations – warning systems for wind and poor visibility

Co-sponsor Peer Exchange 2015 connection with operations and emphasis on implementation

Tech transfer – webinars on resiliency with TRB and FHWA

This brings in collaboration with the International community and the PIARC technical committee on Winter Service.

No increases in the voluntary contribution anticipated.

Thank You For Your Attention

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Thank the member states for their support.

Questions?