

2018-20 National Strategic Winter Maintenance Plan
Adopted January 2018

Strategic Issue: 2 - Performance Management of Winter Maintenance		
Description of the selected strategies	<p>Performance measures for winter maintenance operations are crucial for the internal management of the activity as well as providing transparency to the public and elected officials. There have been many studies conducted associated with winter maintenance performance measures however differences in both the actual measures themselves, as well as how a similar measure is collected and the associated data correlated, has caused confusion and variation. FHWA MAP-21 has several performance measures that have a direct relation to winter maintenance. The ability for an agency to accurately and consistently report performance measures as they relate to winter maintenance and the various MAP21 measures will be crucial as this program matures. Some of these winter related measures include: NHS and Interstate Travel Time Reliability, Freight Reliability, Number of Fatal Crashes, Number of Serious Injury Crashes, Fatal/Serious Injury Crashes per VMT and Environmental Sustainability.</p> <ul style="list-style-type: none"> - Promote NCHRP 14-34 Guide for Performance Measures in Snow and Ice Control Operations - Collaborate with Clear Roads on a Phase 2 of the Snow Removal Performance Metrics (Phase 1 completed June, 2017) - Liaison with FHWA Office of Transportation Performance Measurement to understand how winter performance measures play a role in the overall FHWA program. - Promote the need for a Domestic Scan Tour to identify the states that are leading this effort, what measures they are tracking, obstacles identified, solutions developed and how are they using that WPM information in day-to-day operations. 	
Champion	Caleb Dobbins, Region 1, New Hampshire DOT Steve Lund, Region 3, Minnesota DOT	
Cooperation with other organizations	<ul style="list-style-type: none"> - Collaborate with other states/agencies who have developed best practices:, Colorado, Idaho, Iowa, Minnesota, New Hampshire, Wisconsin, APWA - Collaborate with Pool Fund groups (Clear Roads, Aurora) - Liaison with FHWA Office of Transportation Performance Measurement 	
Outputs		Schedule
Technical reports or summary document	<ul style="list-style-type: none"> - Case studies from states who have best practices - Summary document of findings - Relevance to FHWA Performance Measurements 	AASHTO Spring Meeting 2020

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Articles for Publication		
AASHTO Conferences or other events	AASHTO Subcommittee on Maintenance SICOP/Clear Roads/Aurora Winter Maintenance Peer Exchange APWA National Conference TRB Annual Meeting- Winter Maintenance committee	Summer 2020 Summer 2021 2021 Spring 2021
Other events	WASHTO, NASTO, MAASTO ?????	
Session at AASHTO Annual Meeting		
Remarks	<p>NCHRP Project 20-68A, Scan 07-03 <u>Best Practices in Winter Maintenance</u></p> <p>NCHRP Project 06-17: <u>Performance Measure for Snow and Ice Operations</u></p> <p>NCHRP Project 20-68A, Scan 10-03 <u>Best Practices in Performance Measurement For Highway Maintenance And Preservation</u></p> <p>NCHRP Project 14-34: <u>Guide for Performance Measures in Snow and Ice Control Operations</u> (in progress)</p> <p>Clear Roads Project 15-04: <u>Snow Removal Performance Metrics, Phase 1</u> (in progress)</p>	

Strategic Initiative Activity

July 2018

Activity Update:

- The Final Report for NCHRP Project F14-34 Guide for Performance Measures in Snow and Ice Control Operations was released. Principal investigator (ICF) will be presenting the report finding at the July 24, 2018 general session of the AASHTO Committee on Maintenance meeting in Charlotte, NC. Other opportunities to raise awareness are being considered such as applying for a NCHRP 20-44 Implementation project.
- Clear Roads Pooled Fund group has completed their Project 14-05 Snow Removal Performance Metrics (Phase 1). Currently this has not been brought forth for Phase II consideration. SICOP will work with Clear Roads to coordinate the NCHRP F14-34 and CR 14-15 results to determine the best next step.
- Discussions have begun with FHWA, currently thru NHI Performance Management instructors, to determine how winter maintenance will affect the overall MAP-21 measures pertaining to Safety, Congestion Reduction, System Reliability, Freight Movement and Economic Vitality, and Environmental Sustainability since “FHWA believes that reliability measures should include travel times during weather- and construction- related events to ensure that the measure reflects the efforts by transportation agencies to maintain and improve roadway operations”. These discussions will hopefully result in whether a section of Performance Management curriculum should contain a component of winter performance or if, due to the regional nature of the winter conditions, this should be standalone training, available for those that may require this measure factor. Further investigation of the data that is available from the MAP-21 measures which can be leveraged for winter performance measures (i.e crashes, congestion/return to normal speed) is needed.
- Submitted a NCHRP 20-68A Scan Tour proposal “Performance Measures for Winter Maintenance” for CY 2018 which was not selected for CY 18 funding. This proposal will be refined and solicitation will be made to the AASHTO Committee on Maintenance-Maintenance Operations Technical Working Group for support in the CY 2019 Scan Tour solicitation.

Future Work:

Present 14-34 results at the MaC meeting in July 18. Other options to promote this work and the work of Clear Roads... (podcast with the PIs?)

Produce a podcast with Iowa on their big data dashboard.

Should we host a podcast with 2-3 states who have PM programs to discuss the PM and how they are used.

The scanning tour was not accepted this year. This might be a better peer exchange where states would come together to discuss their PMs. Identify the good, bad, and ugly of PMs. Move forward with the endorsement of the Maintenance Operations TWG. Looking at a core group to provide input. If the domestic scan continues to be unfunded need to explore other options. There might be a Clear Roads option to the domestic scan or a peer exchange – needs to be defined as a Clear Roads project.

Strategic Initiative Activity

February 2019

NCHRP 14-34 Guide for Performance Measures in Snow and Ice Control Operations

- Presented by ICF International at the AASHTO Maintenance Committee meeting
- Report is now being prepared for publication as NCHRP Research Report 889; publication is expected in Spring 2019
- Update on the Report will be done at the 2019 Maintenance Committee meeting prior to a motion being made to accept the report as an official AASHTO document
- Liaison with the Planning Committee for the National Winter Peer Exchange to discuss possibility of a session in regards to this report as well as a general state of the practice from the states in attendance

Other Efforts

Submitted a revised 20-68A Domestic Scan Tour proposal to determine the current state of practice of those states that are currently utilizing winter performance measures. Scan was not accepted for CY 2019.

- Applying for NCHRP 20-44 Implementation Assistance for promoting NCHRP 14-34 Guide for Performance Measures in Snow and Ice Control Operations once Guide is published.

- Lund/Dobbins participated in a SICOP Talks Winter Ops Podcast on Winter Performance Measures, **Episode 17: You can't manage what you don't measure** which aired in January 2019.

May 2019

There was a TRB webinar on NCHRP report 14-34. It is unknown just how widely it was viewed. There needs to be discussion with regards to how to proceed with the report at the Committee on Maintenance level – should it be accepted by AASHTO, etc.