

National Strategic Winter Maintenance Plan 2018-2020 Accomplishments

SI 3/4 - AVL & CAV

Effective use of AVL and CAV technologies in winter maintenance

Champions: Tina Greenfield, IA DOT & Steve Cook, MI DOT

Winter maintenance fleets have been instrumented for many years with Automated Vehicle Location (AVL) and Global Positioning System (GPS) technologies. These data are being utilized for fleet management and most recently as a tool for traveler information. Many opportunities exist to utilize data to improve performance and mobility during winter and technologies continue to evolve expanding their utility.

Connected and Automated Vehicle (CAV) technologies are being developed at a rapid pace. Winter maintenance fleets have been utilizing connected vehicle technology for some time through various AVL/GPS applications. Utilizing CAV technologies and mobile observations from other vehicles opens up opportunities to improve safety, mobility, and winter operations efficiency. Understanding the implications and applications of CAV technologies in winter maintenance will be key in moving forward

- Monitored deployment of Pikalert Systems
- Collaborated with Clear Roads on several AVL projects
- Monitored the development of Road X program at CO DOT
- IA DOT work with HERE CAV in work zone and moving to include weather - IA DOT working on a project on “zero visibility” plow
- Collaborated with FHWA EDC-4 and IMO peer exchanges
- TRB Research Statement developed dealing with CAV, ITS, System Automation, Communications protocols, etc.
- Promoted the Indiana smart snowplow in State Showcase webinar
- STWO Podcast episode 27: Integrated Mobile Observations at the Nevada DOT with Rod Schilling, NV DOT