Transportation Safety Planning – National and Alaska Context

Safety is a national transportation performance goal area, but more importantly, it is the number one priority for all transportation system users. For this reason, every state Department of Transportation (DOT), metropolitan planning organization (MPO), and many local jurisdictions are investing in programs and projects to reduce fatalities and serious injuries. Alaska is addressing transportation safety through a “Toward Zero Deaths” approach, which focuses on zero fatalities and the promise to move residents and visitors to their destinations safely. Many different stakeholders play a role in achieving this commitment, with transportation planners leading the way on stakeholder coordination, crash data analysis, prioritizing and programming investments, and tracking and evaluating results.

The Federal Highway Administration (FHWA) Office of Safety and Office of Planning provide technical assistance to their partners to address transportation safety. The Transportation Safety Planning (TSP) Workshops project is one such effort that facilitated open discussions between safety and planning practitioners to further the collaborations on saving lives and eliminating fatalities and serious injuries.

In May 2018, the Alaska Department of Transportation and Public Facilities (DOT&PF) hosted a workshop in Anchorage, Alaska, with participants from the MPOs, local safety and transportation partners, and FHWA. The workshop was a part of a yearlong project that also included a pre-workshop webinar to introduce participants to the concepts of transportation safety and planning integration, and prioritize topics to emphasize during the workshop; a post-workshop technical assistance webinar to discuss opportunities and challenges identified by participants at the workshop; and a peer exchange webinar to share successful practices and broaden collaboration with other states who were participating in this yearlong project around the same time.

Alaska’s Transportation Safety Planning Strengths

The Transportation Safety Planning Workshops project complemented and highlighted the safety planning work already underway in Alaska and provided new ideas for moving forward. Areas where Alaska excels in transportation safety planning include:

- Implementation of the Critical Analysis and Reporting Environment (CARE) data analysis and reporting system.

- Training and technical assistance for Alaska DOT&PF and MPO staff on CARE to ensure it is a viable crash analysis tool for planning purposes.

- Training for MPOs and local jurisdictions on how to query data in the Fatality Analysis Reporting System (FARS), making it a useful transportation safety planning tool.

- Inclusion of regional and local stakeholders in the Strategic Highway Safety Plan (SHSP) update and implementation processes.

- Coordination of local and MPO vision zero efforts.
Alaska’s Notable Practices in Transportation Safety Planning

**Crash Analysis:** To enable transportation planners and engineers to easily perform crash analysis and reporting, DOT&PF is utilizing a new system, CARE, with assistance from the University of Alabama. The built-in automation and features make it easier to access data and visualize analysis results.

In particular, it:

- Shows all crash data in tabular or map form;
- Conducts robust searches and has filter functionality; and
- Conducts hot spot and sliding scale analysis.

**Behavioral Efforts:** The Fairbanks MPO led a crash analysis, which showed that young driver crashes occur at a much higher rate than that of any other age group. In reviewing the Alaska SHSP, the MPO identified “Pursuing programs to ensure outreach and education to young drivers” as a strategy. In coordination with the local school district, the MPO will support two initiatives. The MPO will provide funding to the school district to reinstate driver’s education classes and to support student scholarships for private driver education courses.

**Project Prioritization:** Performance-based planning requires transportation agencies to identify programs and projects that demonstrate progress toward safety goals. One way to do this is to incorporate safety considerations into the project prioritization process. The Fairbanks MPO has taken steps to expand and vet the safety scoring criteria to ensure all projects include safety to the maximum extent possible.

**Next Steps for Transportation Safety Planning in Alaska**

- **Information Sharing** – Educate stakeholders and public, and manage expectations on safety improvements early and throughout the entire planning process.
- **Utilizing CARE** – Initiate information sharing, training, and technical assistance on this system so agencies can successfully analyze their safety issues.
- **Project Prioritization** - Include a transparent evaluation process to incorporate safety considerations in the decision making for all transportation plans.
- **Behavioral Safety** – Identify opportunities to address the most pressing behavioral safety needs at the regional and local levels.

**Safety Criteria Used in Prioritizing Projects**

- Addresses a high crash location (weight of 5)
- Improves safety for all users (weight of 4)
- Addresses a geometric deficiency (weight of 3)
- Reduces modal conflicts (weight of 2)
- Has a history of safety complaints (weight of 1)