Transportation Safety Planning – National and Virginia 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, state Department of Transportations (DOT), metropolitan planning organizations (MPO), and regional transportation planning organizations (RTPO) are investing in programs and projects to reduce fatalities and serious injuries. Virginia is addressing transportation safety through an “Arrive Alive” approach, which focuses on zero deaths 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.

To assist States and MPOs improve transportation safety, including progress toward zero deaths goals, the Federal Highway Administration (FHWA) Offices of Safety and Planning sponsored a series of Transportation Safety Planning (TSP) Workshops. In April 2017, the Virginia Department of Transportation (VDOT) hosted a workshop with participants from the Virginia MPOs, the Virginia Planning Development Commissions (PDCs), and the FHWA. The workshop provided an opportunity to collaborate on transportation safety and integrate safety in the transportation planning process. The effort consisted of a workshop to discuss strategies and opportunities for collaboration; a follow-up webinar to discuss further opportunities and challenges; and a peer exchange webinar to share successful practices in other states and broaden collaboration.

Virginia’s Transportation Safety Planning Strengths

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

- The ability and expertise to analyze crash data to prepare reports and identify priority locations or projects.
- The inclusion of safety considerations as part of the scoring/ranking process for all infrastructure projects. See SMART SCALE and STARS.
- The availability of training opportunities/webinars to learn more about safety.
- The availability of safety data and analysis tools to conduct safety planning.
- The availability of data and an excel workbook to advance safety target setting, particularly for the MPOs.
- The inclusion of safety in many transportation plans, including corridor studies, small area studies, and active transportation plans.
Virginia’s Best Practices in Transportation Safety Planning

Hampton Roads Regional Safety Study: The Hampton Roads Transportation Planning Organization (HRTPO) updates its regional safety study every five years. The study consists of two parts with Part 1 addressing regional safety trends, crash characteristics, and crash locations. A major component of Part 1 was the prioritization of the top five freeway segments and top ten arterial intersections that had the most potential for safety improvements (PSI). Part 2 of the study looked, more closely at these hazardous locations, to determine projects that would be good candidates for Highway Safety Improvement Program (HSIP) funding.

Virginia DOT Pedestrian Safety Analysis: VDOT recently updated its Strategic Highway Safety Plan (SHSP) and added an emphasis area for pedestrians. To understand the nuances of the issue, address the rising fatality trends, and develop effective solutions, a Pedestrian Safety Action Plan was created. They used a six-step process to inform the plan, including a policy review, crash data analysis, hot spot and risk factors identification, countermeasure development, project list and final report, and outreach and training. The crash analysis component details pedestrian crash clusters and priority corridors on state routes.

VDOT and MPO Safety Target Setting Coordination: VDOT used Tableau software to provide the MPOs with a tool to calculate trend lines and view potential percent reductions for the five safety performance measures. This approach allowed the MPOs to look at different options for setting regional targets and comparing that information to the state’s targets. VDOT also created a custom letter template for the MPOs to use when submitting their safety targets to FHWA.

Next Steps for Transportation Safety Planning in Virginia

- **Webinars** – Share information through webinars on national and Virginia-specific safety practices.
- **Safety Plans** – Develop regional safety action plans that address all engineering, enforcement, education, and emergency response solutions.
- **Relationships** – Coordinate with the people that participated in the project to coordinate on future transportation safety initiatives.
- **Tools** – Continue information sharing, training, technical assistance, and use of VDOTs analysis tools, other predictive tools, performance targets tool, or other tools.
- **Locals** – Coordinate with local jurisdictions to understand the safety needs in a planning area and identify opportunities for safety improvements using HSIP funds or other resources.
- **Public** – Utilize the strategies learned in the workshop to provide additional opportunities for the public to comment on safety and share safety information through the web and social media.