Highway Safety Improvement Program Peer Exchange: Streamlining Project Delivery

U.S. Department of Transportation
Federal Highway Administration

Noteworthy Practices

The West Virginia Division of Highways (WV DOH) hosted a Highway Safety Improvement Program (HSIP) Peer Exchange on September 23 and 24, 2014 in Charleston, West Virginia. The purpose of the peer exchange was to share information and experiences for streamlining HSIP project delivery. Peer States including Kentucky, North Carolina, South Carolina, and Tennessee presented noteworthy practices in the following areas during the exchange.

Staffing and Design Support

A common theme during the workshop was the importance of having sufficient HSIP staff resources to assist with all aspects of project development. To identify needs, Peer States suggested creating a detailed staffing plan for safety projects. States should **consider current staffing levels versus ideal staffing levels** and then **develop and implement strategies to close the staffing gaps**. Peer states have had success with a combination of in-house staff, on-call contractors, and university partnerships. The right mix of these different resources can provide flexibility for staff priorities.

KTC is an example of an agency with limited staffing that uses **consultants and university support to provide analyses and develop projects**. Consultants have been critical to KTC's success with its HSIP projects. SCDOT uses three project delivery methods: in-house plan preparation, consultant prepared plans, and strip-map plans. **South Carolina** is unique in that it **has a design staff that works within safety.** NCDOT uses consultants for project development despite staffing levels to keep projects flowing in the pipeline. If projects are delayed due to staffing overload, NCDOT employees are encouraged to use this resource. The message is that a "safety dollar is worth $14 on the street and only one dollar or even less in the bank." In other words, **it is better to spend the additional funds to expedite a project which has the potential to reduce fatalities and serious injury crashes**.

Project Development and Delivery

Flexible project programming is key to successfully delivering HSIP projects in a timely manner. Tracking projects from creation to construction should be a priority. In West Virginia, all projects are programmed individually in the State Transportation Improvement Program (STIP). If a STIP project modification is needed, implementation can be delayed by up to 3 months. **Project tracking, particularly the sequence of letting contracts, is critical in timely project delivery and adherence to a project budget.** Participants from peer States suggested grouping projects in the STIP, and exploring the use of alternate project implementation pipelines, such as on-call contracts, for routine safety projects.

NCDOT uses a **project development approach** to HSIP project delivery. NCDOT believes that efficient project delivery starts with addressing a clear need, effectively communicating the project purpose, gaining DOT and community support, and properly scoping the project. Safety staff analyze system data, create a collision diagram, and then complete a site visit to finalize the assessment. Field operations staff then put together applications for project development. **NCDOT's process for HSIP project delivery includes batching project lettings for multiple safety projects** and **centrally letting systemic projects.**

To **execute relatively simple safety improvements** which are paid for with HSIP funds, the **Tennessee Department of Transportation** (TDOT) devised a project method which the agency calls ***No Plans Contracts***. *No Plans Contracts* eliminates the need for a design phase for simple safety projects that do not require right-of-way acquisition. As part of the *No Plans Contracts* framework, TDOT staff commit to a high level of project organization and communication with stakeholders. The *No Plans Contract* method uses **a safety checklist** for projects to ensure that a project can achieve high safety standards.

KTC also identifies **easily implementable safety projects** that are within existing right-of-way and that do not require relocating utilities. Rumble strips, slope improvements, culvert extensions, ditching and shouldering, improved signage, and delineation are all examples of easily implementable safety projects. No matter the approach, a strategy for executing simple safety improvements can lead to major gains in preventing crashes.

Another key takeaway from the peer exchange was the **benefits of establishing a backlog of projects**. Over-programming or planning two years out can assist states in ensuring that back up projects are in the queue if other projects are delayed. The **North Carolina Department of Transportation** (NCDOT) uses a benefit-cost ratio methodology and **maintains a significant backlog** to ensure that only the best projects get funded.

Environmental Coordination

The environmental review process can be one of the biggest hurdles impeding timely implementation of HSIP projects. **TDOT** overcame its environmental review challenge by creating a **Memorandum of Understanding** with TDOT's Environmental Division. The MOU, which outlines the parameters of typical environmental review processes, allows TDOT to fulfill environmental requirements quickly. Now, turnaround is typically less than 8 weeks for environmental reviews of Tennessee's HSIP projects.

SCDOT holds weekly team meetings that encourage dialogue among designers, and monthly meetings are held with staff from the safety, environment, analysis, and design offices. Environmental permitting was once a major challenge, but it is becoming less of an obstacle thanks to improved coordination.

Conclusion

Participants from West Virginia and the Peer States noted that they appreciated the opportunity to share information and expertise and learn from each other during the event. All agreed that discussing the processes and procedures used by other States gave them ideas to improve their safety programs. Important takeaways for West Virginia were the **benefits of using additional resources to establish a backlog of projects** and encouraging staff to **work simultaneously on project development tasks to improve efficiency**. For additional information, please see the full report *West Virginia Peer Exchange: Streamlining Highway Safety Improvement Program Project Delivery* (FHWA-SA-15-040) at https://rspcb.safety.fhwa.dot.gov/p2p_reports/peer_report_WV_Sept2014.aspx.

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