Improving transportation with smarter planning

Before the shovel hits the dirt—even before the back-of-the-envelope design calculations are made—transportation projects, programs, and policies all start at the same important place: planning.

A range of challenges
Transportation planning encompasses an array of issues—from congestion management, land use, and corridor development to financial planning, public involvement, and asset management. Deb Miller, secretary of Kansas DOT, knows the importance of planning. “DOT’s have a mandate to increase accountability to taxpayers and transportation users,” Miller says, “and accountability starts with sound planning. NCHRP research enables continuous improvement of all aspects of transportation planning.”

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To complement its full-scale planning research projects, NCHRP conducts quick-response research through its Project 8-36 series with input and guidance provided by AASHTO’s Standing Committee on Planning. Each year, SCOP helps direct a number of these low-cost projects to address critical issues.

“Since becoming chair of SCOP in 2003, I have monitored the results of dozens of NCHRP 8-36 projects and reports,” says Miller. “The nationwide benefit of this work is immeasurable. As just one example, four 8-36 research reports were used to develop AASHTO’s Bottom Line Report—2009, a definitive review of our nation’s surface transportation needs that has been an invaluable resource for policymakers.”

Pointing to the next step
Many 8-36 projects result in fast answers to meet immediate needs. For example, Minnesota DOT made quick use of the report from task 80, Synthesis of State Practices in Developing Linear Referencing Systems. Mn/DOT’s Jonette Kreideweis, chair of SCOP’s Subcommittee on Data, says, “We needed to replace our state’s outdated mainframe system for linear referencing. This research was incredibly helpful as we prepared to make a multimillion dollar investment in a modern linear referencing system for Minnesota.”

Michigan DOT similarly ran with the results of task 90, Best Practices in the Use of Microsimulation Models. MDOT’s Susan Mortel, vice chair of SCOP, says, “MDOT has been struggling with the question of when to do microsimulation modeling and what type of modeling is appropriate. This research helped us target our limited modeling funds toward the types of projects most likely to benefit from the extra technical effort.”

Other 8-36 projects highlight the need for new planning practices and lead to more in-depth research. SCOP member Ben Orsbon of South Dakota DOT describes how task 92, Counting Motorcycles, recently brought to light significant technical and procedural challenges in motorcycle counting practices. “South Dakota is using this research to assess and improve our procedures,” Orsbon says. “Better data will mean better planning decisions. We are among the many states participating in the larger follow-up NCHRP project based on this effort.”

Enhanced responsiveness
Florida DOT’s David Lee, chair of SCOP’s Subcommittee on Research, describes how SCOP and NCHRP stress “response” in quick-response research: “We are finding new ways to engage the transportation planning community across the country to share research results and help shape our research efforts.” SCOP created the Web site statewideplanning.org as an online hub for Project 8-36 results as well as related transportation planning resources, best practices, and information. “This kind of active outreach helps make NCHRP even more effective and responsive to the planning challenges of today and tomorrow,” says Lee.

See the full list of Project 8-36 tasks—currently 110 in all—at apps.trb.org/cmsfeed/TRBNetProjectDisplay.asp?ProjectID=909.

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