

NCHRP meets DOT execs' unique needs

State DOT chief executives must serve deftly and effectively in a number of roles. They are at once policymakers, the public faces of their agencies, and managers of organizations with thousands of employees. The short- and long-term challenges that CEOs face are often quite different from those of other transportation professionals.

Yet when they need answers, DOT chief executives go to the same source that engineers, managers, and other practitioners turn to: NCHRP.

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More than 50 NCHRP Project 20-24 research studies in the past decade—often short-turnaround in nature—have addressed a wide range of high-level issues arising from an ever-changing transportation landscape.

The right answers, right now

Susan Martinovich, director of Nevada DOT and chair of the NCHRP Project 20-24 panel, explains, “The research and products that have come out of Project 20-24 are highly targeted, and that’s a good thing. Given the nature of our jobs and shifting top-level priorities, directors and CEOs have very immediate needs. We often require quick and focused answers, and the 20-24 series products provide just that.”

Project 20-24 research for CEOs addresses a wide range of topics:

Climate change and greenhouse gas emissions
E-business
Future funding and financing
In-service training
Innovative contracting
Land development
Mobility, access, and safety for an aging population
Organizational models for delivering services
Performance measurement and management
Quality management
Risk management

As one example, Martinovich points to Study 62 and its report, *Making the Case for Transportation Investment and Revenue*, which served as the basis for a number of highly topical AASHTO publications on how to best communicate transportation funding issues.

“Study 62 helped pull together many of the things we knew and organized them in a usable way,” says Martinovich. “It provided a checklist for a successful dialogue on transportation funding. It’s compiled as a usable tool that really helps leaders engage with different constituents—whether the public or their own staff—about this critical and timely topic.”

Strategically thinking green

Project 20-24’s model for strategic research has proved successful for a range of issues. John Horsley, AASHTO’s executive director, discusses the value of Study 59, *Strategies for Reducing the Impacts of Surface Transportation on Global Climate Change*. “Research funded through Project 20-24 documented the most effective strategies to reduce greenhouse gas emissions,” says Horsley. “It was critical to understand the expected impact of different strategies and refocus policy discussions at the state and national levels.”

Paula Hammond, secretary of transportation for Washington State DOT, provides a CEO’s perspective on how this research aids DOT leaders: “State DOTs have limited expertise and resources to address the challenge of climate change. This study provided

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Susan Martinovich draws from Project 20-24 results to communicate Nevada DOT’s message to constituents. (Image courtesy of Nevada DOT)

credible information we used to affirm our immediate greenhouse gas reduction strategies. The work remains a useful guidance and reference document for those beginning to develop strategies to reduce transportation emissions.”

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Hammond expands, “It is an example of how the 20-24 research series helps transportation leaders efficiently tap into cutting-edge information.”

Capacity from all the angles

This program recognizes that even when state executives share similar broad concerns, often the key issues may be very different from one state to the next. AASHTO’s Horsley describes a multifaceted research approach to address capacity: “Study 52, *Future Options for the National System of Interstate and Defense Highways*, documented the Interstate system’s accomplishments and projected the country’s long-term capacity needs.” It became the basis of three AASHTO studies that addressed different aspects of capacity: *Unlocking Freight*, *Unlocking Gridlock*, and *Connecting Rural and Urban America*.

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NCHRP—Transportation research that works

Objective national highway research since 1962 • Focused on practical problems of state DOTs • Contract researchers competitively selected • Overseen by balanced panels of technical experts • Reviewed by TRB highway specialists

Gene Conti, secretary of transportation for North Carolina DOT, explains the importance of the research in his state. “NCHRP Project 20-24 research on the Interstate system and the resultant AASHTO report, *Unlocking Freight*, were key visioning documents that gave us a decades-ahead look at the transportation challenges and needs that we are already seeing come into reality. In a world of limited resources, those studies serve as guidebooks to help us prioritize projects and identify funding and engineering tools that we can use to deliver them in North Carolina.”

“Through these research projects, we’ve been able to have an open dialogue about how performance management can help us build accountability and trust with our customers.”

Conti says, “Looking back at the NCHRP research, it’s impressive to see how prescient it was in forecasting the needs and solutions of the future and how much we are employing the strategies put forth in that work.”

Across the country, Wyoming’s capacity needs were very different, but they too were addressed by this research. John Cox, director of Wyoming DOT, says, “*Connecting Rural and Urban America* did a good job of identifying many common needs across rural states nationwide and highlighted the need to continue a rural priority among the many transportation needs in America.

“In many ways the report confirmed nationally what we know locally: Rural states can



DOT executives Paula Hammond (Washington State) and Tom Sorel (Minnesota) share challenges and strategies at the 2009 CEO Leadership Forum. (Image courtesy of University of Minnesota Center for Transportation Studies)

sometimes seem lost in the overpowering needs of high-population areas, but their transportation and production networks actually serve the entire country,” he says. “The Interstate system is aging, yet it is absolutely vital to the health and security of the country. The system will need to be a priority for future funding, as the report points out.”

A commitment to performance measurement

Other Project 20-24 studies are part of ongoing efforts to address long-term goals established among states and by the federal government. In the past several years, the program has addressed performance measurement through half a dozen studies, including those now in progress. Kevin Keith, director of Missouri DOT, discusses this research, including Study 37, *Measuring Performance among State DOTs: Sharing Good Practices*. That study led to several reports addressing performance measurement frameworks in specific areas like safety, preservation, and construction costs.

“The research and deliverables that have been produced in the 20-24 series have been very helpful,” he says. “Suffice it to say that without some of the comparative effort that has been completed within Study 37, we wouldn’t be able to have the candid and direct conversations with Congress about performance management.”

Of the ongoing efforts, Keith says, “In my role as the chair of the AASHTO Standing Committee on Performance Management, these research projects have opened the door in helping us as an industry realize how important performance management is. Through these research projects, we’ve been able to have an open dialogue about how



Study 52 was the basis of strategic tools addressing different aspects of capacity. (Images courtesy of AASHTO)

performance management can help us build accountability and trust with our customers—the taxpayers of this nation—who in the end will decide how we will fund infrastructure for the future.”

Defining the need: Leadership Forums and beyond

A recurring activity of Project 20-24 that helps direct its research mission is the CEO Leadership Forum, a summit for chief executives held every few years. The forum is a premier venue for sharing information and defining new research needs. Stan Gee,

executive deputy commissioner for New York State DOT and the agency’s former acting commissioner, leads the AASHTO committee planning the next summit, scheduled for 2013. “The fifth CEO Leadership Forum will provide a firsthand opportunity for state DOT CEOs, FHWA executives, and select TRB committee chairs to exchange ideas and learn from each other as well as from

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experts in leadership, organizational, and change management,” says Gee. “It will also provide an opportunity to reflect on what is needed in research to fill the knowledge voids identified at the forum.”

Nevada’s Martinovich expands on the value of the forums: “Across the country, differences in demographics and infrastructure make every state’s challenges unique and complex. These summits represent important opportunities for CEOs to learn what’s working elsewhere, what isn’t, and how research might help address common problems. We are always generating new ideas for research, both at these forums and elsewhere. No single agency has all the information or all the answers, and that drives the 20-24 series forward.”

For more information about Project 20-24 series research, visit the Web page apps.trb.org/cmsfeed/TRBNetProjectDisplay.asp?ProjectID=560.

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