

New Hampshire's go-to source for research

New Hampshire DOT receives one of the smallest slices of federal highway funding in the nation and has a research program budget of only \$800,000. How does the agency parlay its State Planning & Research funds into \$35 million every year?

By annually supporting NCHRP.

Glenn Roberts, NHDOT's chief of research, wouldn't have it any other way. "It would be impossible for New Hampshire to try to achieve individually what NCHRP is able to provide us." An 18-year veteran of the state's research program, Roberts knows better than most just what NCHRP means to NHDOT.

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"I'm certain that some of our designers, planners, and engineers don't fully appreciate the impact that NCHRP research has on our agency." He cites FHWA's *Manual on Uniform Traffic Control Devices* and AASHTO's *Highway Safety Manual* as two high-profile examples: "Those key documents don't bear the NCHRP logo on their covers, but they are among the many resources that originated from or were improved by NCHRP research—research that NHDOT helped fund."

No need to do it alone

NHDOT staff from across the agency rely on NCHRP research results, from AASHTO bridge specifications to NCHRP environmental guidance to a wide range of safety tools. Highway safety engineer Stuart Thompson expands on the impact of the *Highway Safety Manual*. "The manual makes advanced statistical methods for crash analysis available to users in New Hampshire who might not otherwise have the necessary background," he says. "Using the latest, nationally vetted methods and technology gives credibility to our state safety program. First and foremost, it helps us save lives, but it also assures that we're spending safety dollars as effectively as technology allows."

Keith Cota, chief project manager for highway design, is another supporter of NCHRP.

"NCHRP offers the most efficient and cost-effective way of expanding the knowledge and practice of transportation agencies, not only for NHDOT but for agencies at all levels of government," he says.

Cota provides an example of improving safety in roadside design through reassessment of the state's guardrail installations. He describes how recent research completed under NCHRP Projects 22-14(2) and 22-14(3) led to the development of new crash-test guidelines adopted under AASHTO's *Manual for Assessing Safety Hardware*. NHDOT drew from that manual to make policy changes on safe guardrail design.

"We are able to install all new guardrails at what we now know is the optimum height, and we're investigating the best way to adjust existing guardrail systems as well," says Cota. "These seemingly small changes provide an immeasurable safety benefit to the traveling public."

It's not just about improvements. NCHRP also helps implement new programs. Project Manager Denise Markow needs two hands to count the research documents that



Denise Markow at NHDOT's Transportation Management Center, developed from the ground up using NCHRP tools.



New Hampshire used NCHRP research to make guardrails safer.

NHDOT used to develop its Transportation Management Center and its Intelligent Transportation Systems program. "During the inception of these programs, we relied on NCHRP guidance on everything from acquiring software to managing incidents and emergencies," she says.

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An agency gives back

NCHRP also gives New Hampshire the chance to have a voice in national research. Chief of Research Roberts says, "New Hampshire representatives regularly participate in NCHRP project panels to help shape national research. We have also taken part in the NCHRP International Scan Tour program, which is the first step toward implementing the very best international transportation practices in the United States." His conclusion: "I think both the needs and the contributions of a small state like ours would get lost in the shuffle if it weren't for NCHRP."

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

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