

Research assists DOTs in green stewardship

In constantly striving to better deliver their core services, state transportation agencies have become champions of environmental research. It turns out that being a good steward of the environment is good for business.

Environmental research not only enables state DOTs to comply with standards quickly and efficiently but also to conserve resources and become better corporate citizens. AASHTO's Standing Committee on the Environment helps state DOTs identify concerns related to natural, cultural, and social aspects of the environment, and NCHRP's Project 25-25 series addresses states' needs with quick-turnaround research.

Fast answers to pressing questions

Mia Waters of Washington State DOT relied on series 25-25 research results as the agency's former manager for air, noise, and energy: "Series 25-25 research allows us on an annual basis to look at dynamic and emerging issues with confidence that we'll get information we can act upon quickly."

Waters points to U.S. DOT's online Transportation and Climate Change Clearinghouse (climate.dot.gov), a product of NCHRP Project 25-25, as a prime example. "This research effectively addressed the pressing need for immediate access to

Selected Series 25-25 Topics

Air and Water Quality
Alternative and Early Mitigation Strategies
Climate Change
Community Impacts
Construction and Maintenance
Design-Build Issues
Emissions and Greenhouse Gases
Environmental Project Costs
EPA Assessments and Impact Statements
Geophysical Remote Sensing
Historic Bridges and Places
Land Development Impacts
Noise Barriers
Performance Measures
Pollutant Discharge Elimination
Road Construction and Maintenance
Secondary Impacts and Cumulative Effects
"Smart Growth" Initiatives
Solar and Wind Power
Stormwater Treatment
Stream Restoration and Dam Removal

"The report provided practical, hands-on examples of effective programs, solutions, and best practices."

climate change policies and practices at the state and federal level. This one-stop resource helps guide decisions on climate change throughout our entire agency."

An evolutionary process

Bill Hauser, administrator of the Office of Stewardship and Compliance at New Hampshire DOT, notes that the quick-turnaround nature of series 25-25 research allows it to be evolutionary: Critical questions raised in one study can be addressed in another.

Hauser cites the report from task 4, *Environmental Stewardship Practices, Policies, and Procedures for Road Construction and Maintenance*. "The report provided practical, hands-on examples of effective programs, solutions, and best practices," says Hauser. "It also suggested the need to compile effective and economical practices for environmental stewardship at transportation maintenance facilities. Series 25-25 research made creating that valuable follow-up tool feasible." The subsequent report is from task 46, *Compendium of Best Practices for Environmental Compliance and Stewardship at Transportation Maintenance Facilities*.

State needs, national products

Tim Hill, administrator for Ohio DOT's Office of Environmental Services, agrees that series 25-25 research provides results critical to many states. "This program affords individual agencies the opportunity to raise local environmental issues and have them assessed impartially on a national level."



Design flexibility provided in series 25-25 research helped Ohio DOT rehabilitate this historic one-lane bridge.

Hill calls out series 25-25 research on historic bridges, tasks 15 and 19, which helped Ohio DOT preserve those aspects of bridges that made them historically significant while

"The end result [of this research] was a product of national value."

upgrading other elements. "While this addressed a specific need in our state, the end result was a product of national value: AASHTO's *Guidelines for Historic Bridge Rehabilitation and Replacement*." Hill says these guidelines help states make environmentally conscious and cost-effective decisions.

Project 25-25 similarly delivered value nationwide in task 10, *Alternative Mitigation Strategies/Early Mitigation: Streamlining and Achieving Net Benefits for the Natural Environment*. Says Frannie Brindle, Geo-Environmental Natural Resource Unit manager for Oregon DOT, "By developing an integrated and programmatic approach to mitigation, this research helps states do more with limited financial resources."

Nearly 70 reports from NCHRP Project 25-25 address a wide range of environmental issues. See apps.trb.org/cmsfeed/TRBNetProjectDisplay.asp?ProjectID=761.

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