



The 13th International Conference on Low-Volume Roads, held in Iowa, showcased the state's innovative bridge designs and maintenance activities. Inset: A publication featuring papers and presentations from the event.

RESEARCH SOLUTIONS

Tapping into the collective knowledge of low-volume roads

Since 1975, the Transportation Research Board (TRB) has hosted a conference every four years dedicated exclusively to low-volume roads. This multiday event routinely brings together hundreds of practitioners, researchers, and subject-matter experts from all over the world who discuss and share ideas on a variety of cutting-edge topics. To help interested state transportation agencies attend and benefit from the technology transfer opportunities at the July 2023 conference, Iowa DOT led a pooled fund study of nine states that share a similar responsibility and commitment to managing these essential routes.

THE NEED

Low-volume roads provide important connectivity for rural and agricultural communities across the country. With less traffic to support, these routes are typically designed and constructed using different methods and materials than higher-volume paved roads. Low-volume roads

can also benefit from maintenance and preservation strategies that are better-suited to their characteristics.

TRB's 13th International Conference on Low-Volume Roads, held July 24-26, 2023, in Cedar Rapids, Iowa, offered seminars, discussions,

and demonstrations on new and developing research and technologies that seek to advance the current state of practice for stakeholders of unpaved roads worldwide. Nine state departments of transportation (DOTs) formed a [pooled fund study](#) to facilitate



“By joining together as a pooled fund, Iowa DOT and the eight other member agencies were able to realize greater benefits from attending this event and provide a way to share best practices for our low-volume roads.”

— VANESSA GOETZ,
State Research Program Manager

a technology exchange avenue and ensure they could benefit from sharing knowledge on how to better serve these roads. Iowa DOT volunteered to serve as the pooled fund’s lead state and perform the necessary project management and administrative functions on behalf of the group.

RESEARCH APPROACH

Each member state’s investment of \$12,000 into the pooled fund allowed two representatives from a member agency to attend virtual planning meetings, travel to and from the conference in Iowa, attend any activities and demonstrations held on-site, and access all of the virtual webinars produced after the event. By joining forces, the states sought to share agency information; discuss the research and technology that are needed to improve the design, construction, maintenance, and safety of low-volume roads; and contribute the group’s collective ideas to TRB.

The pooled fund also sought to remove barriers that normally prevent practitioners from accessing the valuable information presented at the conference by reducing the financial burden of attending the event.

The theme of the 2023 technology exchange was the federal Infrastructure Investment and Jobs Act, which was signed into law in 2021. A variety

of presentations and discussions highlighted the potential policy implications for state transportation agencies, as well as for the local public agencies in their states.

WHAT IOWA LEARNED

Iowa is home to more than 60,000 miles of granular roads, and its state and local transportation agencies have extensive experience and interest in low-volume road management. With the conference held in Iowa and less travel required, a larger contingency of agency representatives from across the state were able to attend than would typically be possible for a meeting held out of state.

Another benefit of hosting the event in Iowa was the ability to help shape the direction and content of the conference’s programming. In addition to its work with the pooled fund, Iowa DOT collaborated with Iowa counties and local transportation agencies to showcase the many advances related to low-volume roads that have been put into practice across the state. A four-stop guided tour gave attendees a firsthand look at the new and emerging technologies and maintenance practices that workers in Johnson County use on their rural road networks. A second outing to Buchanan County offered views of the area’s low-volume bridges.

PUTTING IT TO WORK

The ability to learn and share knowledge is an integral part of any conference. By forming a pooled fund, the nine member states allowed more agency representatives to attend the event and enabled the information gathered in Iowa to be transferred across the country. A [TRB publication](#) produced after the conference presents papers and presentations from the event to increase technology transfer even further.

ABOUT THIS PROJECT

PROJECT NAME: [2023 Low Volume Road Design, Construction and Maintenance Transportation Research Circular](#)

PROJECT FUNDING PROGRAM: Technology Exchange on Low Volume Road Design, Construction and Maintenance Pooled Fund, a nine-state collaborative research effort

PROJECT NUMBER: TPF-5(495)

REPORT DATE: July 2023

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