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DEPARTMENT OF TRANSPORTATION

OFFICE OF RESEARCH & INNOVATION

TECHNICAL SUMMARY

Questions?
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Investigator:
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PROJECT COST:
$70,000

A highway cap could include parks, sports fields and space for farmers markets and community events.

Strengthening Communities with Innovative Right of Way Projects

Urban highways were intended to improve transportation through cities. Many communities, however, suffered social, economic and environmental hardships from highway development. A national review of innovative projects in the transportation right of way illustrates the potential for significant benefits within communities and the transportation network.

What Was the Need?

When many urban highway projects were built several decades ago, thriving communities were physically divided and negatively impacted. As social awareness and urban design have evolved, some areas have developed strategies for repairing and revitalizing these communities by redesigning right of way (ROW) areas along highway corridors.

Minnesota has a legislative goal to ensure the transportation system furthers "economic well-being and quality of life without undue burden placed on any community." Constructing "caps," or land bridges over highways, rightsizing highways and designing innovative uses of ROW space can create usable spaces with multiple social benefits.

Partnerships between MnDOT, community organizations and other entities can help ensure ROW projects meet both transportation goals and community needs. MnDOT wanted to understand best practices for collaboration and innovative methods for planning and implementing nontransportation elements of infrastructure projects for equitable social, economic and environmental outcomes.

What Was Our Goal?

This project explored innovative ROW infrastructure projects from across the nation to identify lessons learned and best practices that will benefit both MnDOT and the host communities.

What Did We Do?

MnDOT and researchers first identified creative uses of transportation ROW spaces around the country. Seven examples involved disadvantaged communities: freeway caps in Denver and Pittsburgh; two projects in Washington, D.C., involving an abandoned bridge and a three-block-wide area where the freeway traverses underground beneath the nation's capital; a freeway removal in Milwaukee; and underpasses in Atlanta and New Orleans. The eighth example illustrated an environmental benefit: a solar panel array adjacent to an Oregon highway interchange.

For each case study, researchers reviewed documentation and related literature, gathered information from interviews with key stakeholders and analyzed several concepts:

- **Stakeholder engagement:** Who was engaged and how? How was trust built, and was the process equitable?
- **Governance structure:** What agencies, nonprofit organizations or private entities were involved? Were relationships formalized through agreements or other instruments?
- **Financing strategies:** What public or private funding sources financed these projects, including the nontransportation elements? Could private entities use the space?
- **Community and economic development:** Did the project promote community and economic vitality? Who benefited? Was the displacement of people and businesses mitigated?
- **Human and natural environmental and health considerations:** Did the project support multimodal transportation, physical activity and social cohesion? Were environmental quality or noise impacts improved?

continued

"These results will be invaluable to us as we consider nontransportation uses in MnDOT's right of way. The lessons learned will apply across all projects—big and small—that we help facilitate."

—Lisa Austin,
Director, MnDOT Center for Community Connections

"This project illustrates that transportation needs and community needs aren't mutually exclusive. Working with a variety of stakeholders on right of way uses can result in significantly greater benefits than relying on engineering alone."

—Frank Douma,
Director, State and Local Policy and Outreach, University of Minnesota Institute for Urban and Regional Infrastructure Finance

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Honoring an area's history can strengthen community inspiration and pride. This mural of enlarged historical photographs in the highway underpass reflects the history of Atlanta's Auburn Avenue from 1918 to the 1950s.

- **Design features and placemaking:** Did the project reflect pride of place, incorporate historic and current community values, and enhance personal safety?

An online symposium brought together 90 participants from government agencies, academia, community organizations and others from around the nation to present lessons learned and recommendations for planning and implementing projects in Minnesota.

What Did We Learn?

The case studies illustrated that purposeful engagement with the surrounding community is key to ensuring a project serves neighborhood needs. Additionally, meaningful stakeholder input can focus goals to improve local rather than regional or statewide assets.

Another significant lesson learned was that infrastructure can cause community wounds, but infrastructure itself cannot heal them. In general, state transportation agencies can collaborate, working with community groups, public and private funders and other agencies in a visible and transparent process to identify community needs and nontransportation uses.

Nontransportation uses in ROW projects, in fact, are entirely acceptable as long as the transportation purpose is not negatively impacted. In many cases, a nontransportation use can coexist above, below or alongside the highway. If there is a potential impediment to the transportation purpose, traffic studies can determine if the project has a net-zero effect or even improves overall traffic. If the transportation purpose is negatively affected and the infrastructure has not reached the end of its useful life, federal funds originally used may need to be returned.

All projects need a Right of Way Use Agreement or other legal instrument to codify nonhighway uses, as detailed in Federal Highway Administration guidance. Financial best practices include ensuring that new infrastructure funds will result in financial benefits to the community.

What's Next?

MnDOT's Center for Community Connections reviews proposals for nonhighway uses in the transportation ROW, from skateboard recreation areas and public art to land bridges over freeways. The center will use the best practices immediately in evaluating community requests for nonhighway uses of transportation ROW and facilitating potential projects.

Other MnDOT offices that are planning projects in or adjacent to an ROW can also benefit from working with partners to develop innovative, mutually beneficial solutions for the transportation network and the communities through which it travels.

This Technical Summary pertains to Report 2023-28, "Maximizing Transportation Assets by Building Community Connection Through Innovative Deployment of Rights of Way and Airspace," published June 2023. More information is available at mdl.mndot.gov.