Putting Research into Practice: A Complete Streets Resource for Local Agencies

What Was the Need?
A Complete Streets approach to transportation infrastructure design and maintenance takes into account the needs and safety of motorists as well as pedestrians, bicyclists and transit riders. This means planning for walkways, bike lanes and other infrastructure elements.

Another element of Complete Streets is context-sensitive solutions, which bring more stakeholders into transportation decision-making at all project stages to ensure that a proposed transportation facility best fits its setting; this is important for the environment and the community involved.

Complete Streets is a growing national trend, and MnDOT is legally required to act on Complete Streets principles. While there is no legal mandate for Minnesota’s local transportation agencies to adopt Complete Streets, they are encouraged to do so and are given flexibility as to how to implement this approach when building roads that are subject to State Aid design standards. While such an approach was already in use informally by many local agencies, a resource guide would help encourage further development of Complete Streets programs, tailored to agency characteristics and needs.

What Was Our Goal?
This project sought to develop a guide to help local transportation agencies create their own Complete Streets programs. This guide would facilitate implementation and help resolve conflicting transportation modal priorities.

What Did We Implement?
To create the guide, investigators synthesized nationwide research, policy documents and reports from Minnesota as well as its cities and counties, and guidance from the National Complete Streets Coalition. One key source was the 2009 MnDOT-funded Complete Streets Report, which was produced in response to a legislative directive to study the cost, benefits and feasibility for MnDOT to implement a Complete Streets policy.

How Did We Do It?
An active advisory committee with city and county representatives held a series of meetings to identify the information needs of agencies implementing Complete Streets while balancing concerns like safety, efficiency and multimodal road-sharing.

Investigators studied Complete Streets processes from Hennepin County, Minnesota, and the cities of Rochester and Big Lake, Minnesota, representing counties, large cities and small cities, respectively. Then they synthesized and categorized these programs to highlight how they address the 10 elements that the National Complete Streets Coalition specifically recommends should be addressed as part of a comprehensive Complete Streets program: vision, users, projects, exceptions, network/connectivity, jurisdictional coverage/applicability, design criteria, context-sensitivity, performance measures and implementation. Massachusetts DOT’s GreenDOT, a comprehensive sustainability initia-
Agencies need to tailor their local Complete Streets programs to match expected demand levels of each modality of transportation.

tive, features Complete Streets as an integral component and can also help to inform local programs. The purpose was to provide model policy language for comparable communities.

While the Federal Highway Administration’s functional roadway classification system is a key element in system planning, its formal classifications may not provide sufficient guidance to communities incorporating context-sensitive solutions in roadway designs. Investigators identified three street classification schemes that could be adopted: Massachusetts DOT’s Project Development & Design Guide, New Jersey DOT and Pennsylvania DOT’s Smart Transportation Guidebook and ACCESS Minneapolis’ Design Guidelines for Streets and Sidewalks. These guides provide more detail about the full range of a road’s users, context, and desired character and activity. Massachusetts DOT’s guide is most appropriate for state and county use, while the Minneapolis guide is more applicable for city conditions. The New Jersey/Pennsylvania guide is appropriate for both cities and counties. Finally, investigators outlined an implementation guide with templates that can be modified by each community to meet its local needs.

What Was the Impact?
The Complete Streets Worksheet (Appendix A of the guide) has been deployed and is available for agency use. It was designed for use by novices while still helpful for experts. Agencies can use this form to assess a planned roadway construction project’s ability to safely and cost-effectively accommodate multiple modes of transportation and people of all abilities. The worksheet addresses general characteristics of the road, including facilities nearby that attract users; existing and future transportation context, including traffic levels for vehicles, pedestrians, bicycles, trucks and transit; speed conditions; crash data and trends; functional classification of the road and cross streets; existing multimodal accommodations within the project and nearby; existing access challenges in the area; current deficiencies in supporting multimodal access; objectives for the project, including recommended area and street typologies; and any existing constraints that may impact development.

What’s Next?
Many communities are actively exploring Complete Streets implementation. As agencies provide feedback and modify Complete Streets processes, this resource will continue to be refined.