

GETTING RESULTS



COMPLETE STREETS in MINNESOTA

A Report from the Minnesota Complete Streets Peer Exchange

National Complete Streets Coalition

2012

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www.completestreets.org

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Cover, clockwise from top left: Red Wing, Michael Hicks; Minneapolis, Michael Hicks; Ethan Fawley; Minneapolis, Eric Lowry

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Complete Streets in Minnesota

Complete Streets is a holistic approach to transportation planning and design that aims to create comprehensive, integrated networks of streets that are safe and convenient for all people, whether traveling by transit, bicycle, foot, or automobile and regardless of their age or ability. It is not a design mandate or singular approach to the complexities of Minnesota's transportation system. Rather, it emphasizes road projects that meet local needs, ensure safe travel, and create stronger communities.

The Complete Streets idea has spread across the state in recent years, as Minnesota communities are working to re-balance their transportation investments. In supporting the adoption of Complete Streets policies, community leaders, transportation staff, public health agencies, and residents have shown that they want to improve access to destinations, convenience, and safety for all modes of travel.

Since the first policy, adopted by the City of Rochester in 2009, the number of Complete Streets policies adopted each year has grown dramatically. In 2011 alone, 15 jurisdictions adopted their first policy, up from 6 the year before. To date, 25 regions, counties, and municipalities across Minnesota – from Duluth to Pipestone, Clay County to Red Wing – have adopted some form of a Complete Streets policy. Eighteen of these communities have a resolution in place, and three of those have successfully translated their resolutions into more comprehensive policy documents. The creation of detailed policy documents is a key step for Minnesota agencies; at least one community has found that a resolution has not provided the support to change its internal transportation practices.

Adopted Policies

<i>Place</i>	<i>Policy</i>	<i>Year</i>
State of Minnesota	Sec. 52. Minnesota Statutes 2008, section 174.75	2010
Rochester-Olmsted Council of Governments	Resolution No. 11-1	2011
St. Cloud Area Planning Organization	Resolution 2011-22	2011
Clay County	Resolution 2011-49	2011
Hennepin County	Complete Streets Policy	2009
Wilkin County	Resolution	2011
Albert Lea	Subdivision Ordinance Section 129 (t)	2009
Battle Lake	Resolution No. 06-14-2011	2011
Big Lake	Resolution No. 2010-74	2010
Bloomington	Complete Streets Policy	2012
Breckenridge	Resolution	2011
Byron	Resolution	2010
Dilworth	Resolution 11-09	2011
Duluth	Resolution No. 10-0218	2010
Falcon Heights	Complete Streets Policy	2011
Independence	Complete Streets Policy	2011
Lake Elmo	Resolution	2011
New Hope	Complete Streets Policy	2011
North St. Paul	Living Streets Plan	2011
Northfield	Resolution 2012-017	2012
Pipestone	Resolution No. 2011-7	2011
Red Wing	Resolution No. 6196	2011
Rochester	Complete Streets Policy	2009
St. Cloud	Resolution No. 2011-11-164	2011
St. Paul	Resolution No. 09-213	2009
Stewartville	Resolution 2010-32	2010

Implementing Complete Streets

Though the term Complete Streets applies to physical roadways that provide safe and convenient access for people of all ages, abilities, incomes, and ethnicities regardless of how they travel, it more widely means a new approach to community transportation systems. Complete Streets policies formalize a community's intent to plan, design, and maintain streets so they are safe for all, and should spur changes within the transportation decision-making process.

The National Complete Streets Coalition has found that the complex process of changing transportation planning, design, and construction to better create streets that support their surroundings and provide mobility options can be roughly categorized into five areas of action:

- **Organizing Implementation:** Activities undertaken to benchmark current activities, and to plan and support full implementation of Complete Streets.
- **Changing Processes and Procedures:** Updating documents, plans, and processes consulted in transportation decision-making, from scoping to funding, or, if necessary, creating new ones.
- **Reviewing and Updating Design Guidance:** Updating or adopting new design guidance and standards that reflect current best practices in providing multimodal mobility.
- **Offering Training and Educational Opportunities:** Providing ongoing support to transportation practitioners, other relevant agency staff, community leaders, and the general public so that they can understand the Complete Streets approach and potential new outcomes.
- **Measuring Performance:** Creating or modifying existing metrics to show Complete Streets success on the project- and network-level.

These categories overlap, and communities may pursue activities in several concurrently. Alternatively, they may focus more heavily on one aspect at a time. However, the Coalition believes that an agency must undertake activities in each of these categories to ensure routine, on-the-ground changes and institutionalization of the concept.

This report describes the ways Minnesota communities are turning their Complete Streets policies from paper policies into everyday practice. To gather information, the Coalition hosted a Peer Exchange in July 2011, with attendance from a dozen agencies across the state. Staff also conducted in-depth interviews via phone with representatives from the Fargo-Moorhead Metropolitan Council of Governments; Hennepin County; and the cities of Duluth, Rochester, and St. Paul. These five were selected for phone interviews based on length of time since adopting a policy; participation in a Complete Streets workshop; type of community; and previously recognized Complete Streets activities.

Though many participating communities in our data collection efforts had only recently adopted policy documents, and thus had little time to work on implementation in a systematic way, many had insight from existing efforts to improve walkability and bikeability and could provide insight into perceived future challenges and opportunities. However, those communities with more time to implement a policy are featured more frequently in the report. Additionally, we offered anonymity for comments made during the Peer Exchange and telephone interviews, so many communities are not recognized by name.

The Minnesota Department of Transportation is currently working to implement the Complete Streets vision embodied within 2010 legislation, though this report's findings and recommendations are based in the experiences of local and regional governments.

Organizing Implementation

Common Activities

- Creating internal and/or external committees to oversee the process or make project-level decisions.
- Creating a formal implementation plan.
- Designating a lead person or agency to implement their policy.
- Disseminating annual reports that include Complete Streets progress.
- Conducting an inventory of gaps or needs in the transportation system, such as for street lights, bus shelters, sidewalks, signals, pedestrian ramps, etc.

Once a Complete Streets policy is adopted, a community must focus on the necessary changes inside a transportation agency to routinely account for the needs of all users. Communities have found it easier to understand the whole world of possible activities by taking a step backward to better understand where they are today, create a plan for tomorrow, and/or establish a person or group of people who can help guide implementation efforts within and across departments and agencies. Though this step is listed first, it can happen concurrently with other activities and over time.

Successful Complete Streets implementation should include strengthening relationships between city departments; between elected officials and departments; and between citizens and transportation professionals. This can be accomplished with formal committees, formal designation of staff leadership, and restructuring the ways departments interact with each other.

A systematic approach to planning these changes can make the difference between a policy initiative that grinds to a halt and one that results in real change. Creating an implementation plan or framework can keep up the momentum from policy adoption, and it can help keep partners who were active in policy adoption engaged as the focus shifts to implementation. The process should also involve people across

the transportation agency – from planners to engineers to maintenance staff – in the decision-making process. An implementation plan provides the opportunity to assess current practices, to assign responsibility for the identified next steps, and to create estimated timelines for accomplishing those tasks. Doing so creates a tool with which the community can communicate its work with other agencies, with community leaders, and with advocates.

In Minnesota, a common approach to getting the implementation ball rolling has been the designation of a lead person or committee. In Hennepin County, the Board of Commissioners adopted a Complete Streets policy in July of 2009 and then created a Complete Streets Task Force in 2010 to help guide implementation and ensure the outcomes they envisioned. That task force is led by three commissioners: the chairs of the Health and Human Services committee; the Public Works, Energy and Environment committee; and the Budget and Capital Investment committee. The commissioners set the agenda for meetings and rotate leadership of task force meetings. Other Task Force members include city staff, additional elected officials, representatives from the Metropolitan Planning Organization and the state Department of Transportation, business owners, and residents representing the interests of older adults, people with disabilities, school children, and bicyclists. For more information on the Task Force, visit <http://bit.ly/GWluTM>.

In Rochester, Public Works Director Richard Freese credits a senior planner, Mitzi Baker, as being the city’s internal champion for Complete Streets. Baker worked with various departments to bring them on board, passes on pertinent information to the Public Works Department, and makes sure the conversation about Complete Streets does not get lost in the shuffle of everyday work. Freese and Baker have developed mutual admiration though: Baker credits the Public Works Director for leading a change in his department so that Complete Streets has become the normal way to do business – not a “special” process used occasionally.

Saint Paul is one of the few places nationwide that has adopted a formal Complete Streets implementation plan. The Saint Paul Planning and Economic Development Department and Public Works Department, working with other city departments as appropriate, created a three-step implementation process, funded in part by a grant from the U.S. Department of Transportation. The process includes three elements:

- An assessment of the street design process, transportation infrastructure and network gaps;
- The writing of a street design manual that will include local and state standards, best practices and an evaluation of how well street users are served by different design elements; and
- The design of pilot projects using the new design manual to test and revise the manual, as needed.

The formal plan is backed up by a changed decision-making structure that echoes some of the cross-departmental relationship-building happening in Rochester: Saint Paul expanded the existing Planning Commission to include a new Transportation Committee that focuses on transportation issues and whose membership was intentionally created to include multimodal representation. This committee replaced an advisory board, unrelated to the Planning Commission, which had been dedicated only to bicycle issues. The new committee reviews transportation projects, ensuring implementation of the Complete Streets resolution in place and several plans that support Complete Streets outcomes.

Coordinating with other departments was already common practice in Saint Paul, and their Complete Streets progress can be attributed to some unique cross-departmental activities and staffing arrangements:

- The city employs a senior transportation planner who splits time between the Planning and Economic Development Department and the Public Works Department.
- A sustainable transportation planner in the Public Works Department facilitates a balanced and flexible transportation system for the City by planning and reviewing street projects for multimodal accommodations.
- A formalized group focuses on the implementation of light rail station area plans. Organized by the Saint Paul Riverfront Corporation, this group includes city staff from Planning and Economic Development, Parks, and the Department of Safety and Inspections (which includes a water resources coordinator). Many members of this group overlap with those that review development site plans.
- The new Transportation Committee of the Planning Commission, noted

above, also helps reinforce close collaboration.

Implementation in Saint Paul continues and can be monitored online: <http://stpaul.gov/index.aspx?NID=4800>

Pointers for organizing implementation activities

- Build relationships between agencies and stakeholders such as public health, law enforcement, and businesses.
- Having a champion is invaluable; designate a lead person, agency, and/or committee that will move the process forward.
- Formal advisory committees can be an effective catalyst for achieving other implementation steps.

Changing Processes and Procedures

Common Activities

- Using new committees or regular interdepartmental meetings to consider project-level decisions on multimodal consideration.
- Creating project-level checklists to ensure practitioners are taking needs of all users into account.
- Defining a process for exempting projects from Complete Streets requirements.
- Updating or adopting new bike, pedestrian, transportation, and comprehensive plans that support development of a network of Complete Streets.
- Changing project selection criteria to award points for multimodal accommodation.
- Requiring a Complete Streets approach in RFPs.
- Changing maintenance and operations procedures to help identify low-cost projects that can be completed within the existing scope of work.
- Improving communication by developing a standard procedure for engaging the public.

Changing the way planners and engineers do their jobs on a day-to-day basis is challenging – but is essential if Complete Streets plans or new design manuals are to do more than take up space on a shelf or hard drive. Communities in Minnesota are using a variety of ways to be sure the needs of all users are considered throughout the project development process.

In some places, simply bringing the right people together to discuss projects in light of Complete Streets is an important procedural step. Peer Exchange participants from smaller communities noted they had more opportunities to collaborate on projects because it was easier to coordinate when departments are smaller and fewer

staff need to participate in meetings. In larger jurisdictions, a more concerted effort is needed to manage interdepartmental initiatives, though informal conversations can help spur across-the-board support for a Complete Streets approach.

In Duluth, an internal, multidisciplinary Complete Streets workgroup has been formed to encourage cross-departmental discussion through the lens of Complete Streets. The internal group meets monthly to discuss individual projects, how to apply Complete Streets to address local needs, and the connection of the neighborhood to economic or recreational generators. The city decided to implement its resolution primarily through this project-by-project technique, so the discussions within this group have greatly influenced the transportation process.

A few communities are creating systems that ensure the needs of all users are taken into account. A systems approach can mean multiple things, depending on agency culture. In most communities, it means updating relevant plans that guide community development and growth, such as the comprehensive plan; transportation and mode-specific plans; and subdivision and zoning ordinances. These documents often provide the backbone for project selection and preliminary ideas about context and needs. Updating them to reflect Complete Streets priorities also creates a unified, comprehensive, network approach from the public agency and private developers.

A checklist approach is being considered by several communities as a way to unify project approach; provide appropriate solutions based on transportation and land use needs; and collect and share information. Checklists can ensure that at each stage of a project, from scoping to construction, the needs of all users are accounted for and appropriately accommodated.

Hennepin County has developed a checklist that is now being used on all projects. The checklist covers existing and proposed features of the roadway; intersections; utilities; bicycle and pedestrian facilities; and presence of transit. It also asks about features along the roadway, such as schools, fire stations, and parks. Project managers use the checklist at the beginning of the design process on street reconstruction projects and update it as the project evolves. The County's diversity of roads – 350 of which are classified as urban and 223 as rural – demands a context-specific approach. The extensive checklist helps provide this needed measure of flexibility. It continues to evolve, as it is tested with each new project.

One of the most important changes a department can make is to change the way it selects projects. Hennepin County is leading here as well, having changed its Provisional Capital Improvement Program's project criteria. The existing ranking system awarded points to projects based on improvements to safety, capacity, congestion, and pavement condition. An additional measure was added to assign value for the inclusion of transit, bicycling, and pedestrian features. Multimodal features now make up 150 points of the total. Hennepin County has also included Complete Streets components in the RFP and project scoping for the projected 'first and last mile' of travel to two new major transit stations.

The Fargo-Moorhead Council of Governments has created a matrix that prioritizes projects that use a Complete Streets approach. More points are awarded to projects that serve all modes, connect neighborhoods, and fill in network gaps. The COG also asks consultants competing for RFPs how they will comply with the Complete Streets policy. If bicycle and pedestrian facilities are not included, it must be justified.

Another important avenue to achieve Complete Streets is to ensure that maintenance and operation procedures are adjusted to take advantage of opportunities to make multimodal improvements. These are often the most important – and frequent – opportunities to quickly create change within communities, as larger construction and reconstruction projects may take years. Changes made during maintenance and operations work can usually be low-cost too, and tied to work that already must be done. For example, routine signal timing adjustments can also take into account the new standard for walking speed that gives folks with disabilities or older residents a few extra seconds to cross the street.

Reviewing the striping of roadways when doing mill-and-overlay to improve pavement condition can also provide opportunities to incorporate bicycle lanes, clearer pedestrian crossings, or add back-in angled parking, depending on the available right-of-way. Because of the relatively quick turn-around time on these projects, and their frequency, applying a Complete Streets approach to them is attractive to many communities. However, these communities are still struggling with how to fully incorporate design changes, as these projects are typically sent out the door without a comprehensive review. Some communities suggested that more advance planning work to redesign these roads a year out from their repaving might be a way to ensure these projects follow the Complete Streets vision.

The City of Bloomington is planning to implement its Complete Streets policy gradually, primarily through their Pavement Management Program, which rehabilitates about 12 miles annually and serves as the primary method for implementing the city's Alternative Transportation Plan. The Pavement Management Program looks out 5 years and estimates which streets will be in need of a reconstruction, overlay, or sealcoat; striping and traffic management are one of the components analyzed for these streets.

Another important process to consider in implementing a Complete Streets policy is when and how exceptions to the policy are made. Often this will be discussed during policy development, and fine-tuning the system occurs as the community begins work. In other cases, the exceptions are spelled out in the policy document, but not the process by which they are sought and approved.

Rochester's policy specifies that all street construction, reconstruction, resurfacing, and re-striping projects have to be evaluated for Complete Streets applicability. The City Engineer is tasked with determining appropriateness of the Complete Streets approach to reconstruction, resurfacing, and rehabilitation projects. An internal staff project review by the City Engineer, Traffic Engineer, and Director of Public Works ensures compliance with the policy or, in some cases, approves technical exemptions. Sometimes, exceptions are made by the City Council. Public involvement meetings, previously only required for contracted projects, are now common for all types of projects, including those made through the annual bituminous mill and overlay program. These meetings help to inform community members and leaders of proposed road design and safety solutions. City Council also makes an 'up or down' vote on the projects.

During the Peer Exchange, many participants discussed how the general community reacted to the new priorities represented by the Complete Streets policy – and the need to change the way the agency communicates with the public when moving through a project's phases.

Rochester changed the standard operating procedure after adoption of its Complete Streets policy to expand community education and input. Mailed letters had always notified property owners of rehabilitation, reconstruction and resurfacing on their streets. Now, a paragraph is added about the Complete Streets approach, and a public

meeting is scheduled to answer questions when changes to the allocation of roadway space will be implemented.

In Duluth, residents receive multiple letters to announce meetings for planned projects. Officials listen to needs of residents at the first meeting; come back with options at the second meeting to allow residents to discuss them; and then return a third time with a final plan. The final meeting discusses the final project before it goes out to bid.

Pointers for achieving procedural change

- Encourage stronger relationships between departments, with citizens, and with elected officials.
- Try easier, smaller projects or those with obvious, visible benefits first.
- Keep a network approach in mind when selecting the first projects: new facilities won't be well used if they don't connect to destinations or other routes.
- Document results of early projects, including through before-and-after studies of safety benefits if possible.

Reviewing and Updating Design Guidance

Common Activities

- Writing or rewriting street design guidelines.
- Updating subdivision and zoning codes.
- Applying street design guidance to public and private projects.
- Utilizing the latest versions of best practices documents for design guidance.

In many agencies, the highway design manual is the go-to reference for all transportation projects. In many cases, its revision to be more supportive of multimodal efforts receives the lion's share of attention when it comes time to implement a Complete Streets approach. In Minnesota, design standards have particular relevance, because some of those standards are now enshrined in the state code, and localities need to obtain a variance to receive state aid funding for some projects that are typical of Complete Streets – such as narrower lanes and road conversions. Peer Exchange participants indicated that the perception that the standards are a significant barrier is widespread in Minnesota.

While the Minnesota Department of Transportation (MnDOT) was not able to participate in the Peer Exchange, it has been addressing how to change those standards as part of its Complete Streets implementation work. The state has clarified and updated the process for asking for a variance, and its Complete Streets workplan includes many steps related to testing designs and creating different state aid rules. MnDOT is considering, but has not decided upon, a legislative change to the state aid standards.

At the local level, subdivision codes that apply to private development can also have an outsized influence on Complete Streets implementation. Under these standards, developers must conduct traffic-impact studies and mitigate their impact; but this can result in developer-funded changes to the road network near new schools and senior

centers – leaving the local government to foot the bill for sidewalks. Early Complete Streets projects may face resistance from developers, and without code language the jurisdiction may be unable to require compliance.

In built-out communities, updating design guidance is necessary to create flexibility in the type of facilities used to accommodate all users. It is often not possible, or advisable, for each street to feature expansive accommodations for every mode, and design guidance must allow for that reality while also ensuring some level of accommodation for all potential users.

Minnesota communities are working on this step in earnest: Hennepin County is working on transforming its streetscape design guidelines. Saint Paul has issued an RFP for development of Complete Streets design standards as part of its three-step implementation process outlined above. Rochester worked closely with developers to gain acceptance of changes to its design requirements.

The City of Duluth’s Unified Development Code (UDC) was adopted in November 2010 and is a critical tool to implement the Comprehensive Land Use Plan for development projects. Language in the UDC includes construction of sidewalks and bicycling infrastructure where required by a city plan; pedestrian connections from cul-de-sacs to the closest adjacent street; pedestrian ways in blocks over 800 feet; bicycle and pedestrian access from the street to commercial buildings; and other tools to ensure network connectivity.

Participants in the Peer Exchange discussed many barriers and challenges related to street design standards. One of the biggest issues discussed was how to accommodate and appropriately fund maintenance needs, especially maintaining roadway striping. Some participants noted that different techniques had varying life spans. The challenges of a snowy climate were also noted several times, as removal and storage of heavy snowfall poses challenges for maintaining clear travel routes for those on foot or on bicycles. They also noted that often the state roads provide the best connectivity between communities – but have the least flexibility in design, and it is believed that the state won’t pay for non-motorized facilities. Conducting a comprehensive re-write of a design manual can be too much work for smaller communities to undertake alone, and even larger communities see it as potentially time-consuming and difficult.

Pointers for changing design guidance

- Consider making simple changes to design standards, or adopting templates such as the Model Design Manual for Living Streets.
- Look at guidance not just in transportation agency/department but others too.
- Take advantage of mill and overlay/repaving projects by planning, and even designing ahead of time to include bicycle and pedestrian needs in the process.
- Evaluate budgets to support maintenance needs, especially with roadway striping.
- Add an evaluation of bicycle and pedestrian needs to the maintenance and operations review cycle.

Offering Training and Educational Opportunities

Common Activities

- Hosting Complete Streets workshops for agency staff and consultants, with auxiliary sessions for elected officials and the public.
- Taking advantage of professional development opportunities and webinars offered by the state Department of Transportation, professional organizations, and transportation non-profits.
- Taking an on-the-job training approach for agency staff, including informal and interdepartmental activities such as brown bag lunch presentations.
- Leading walking audits and bicycle rides for decision-makers, agency staff, and the public.
- Engaging the community through formal public engagement activities and project-based meetings.

A big part of implementing Complete Streets is in education – and it is about far more than helping engineers learn how to incorporate bicycle and pedestrian facilities. Planners, engineers, consultants, and other agencies need a thorough understanding of new procedures. Elected officials need ongoing engagement to understand how the general policy goal will be translated into projects on the ground. A common theme among Minnesota communities was the level of education and communication with the public required for implementation to be successful. The public may have supported the policy citywide, but residents will have more questions when the project is on their street.

Transportation Professionals

Many communities participating in the Peer Exchange have hosted at least one of the National Complete Streets Coalition's Complete Streets workshops, which are aimed mainly at the agency professionals but also often include a component for

elected officials and the general public. Some communities report taking advantage of professional development opportunities such as classes and webinars, and MnDOT's Context Sensitive Solutions workshops were highly recommended. Webinars hosted by Blue Cross and Blue Shield of Minnesota and Transit for Livable Communities were also cited. However, there was also general agreement that trainings and in-person sessions needed to be held across the state – not just in the Twin Cities metro.

While technical training is a useful tool, it is more important for transportation engineers and planners to see that a Complete Streets approach is practical and to have the will to make the changes in their procedures, documents, and projects. Engineers, for example, often already have the tools necessary to create Complete Streets, but they need a nudge in the right direction. Everyone needs to hear how this approach works in other communities, and how it fits into their professional goals and standards. Peer Exchange participants agreed that the best messengers are those within the same profession: engineers need to hear directly from other engineers, planners from other planners.

Many have also used a more informal, on-the-job training approach. Communication between departments – sometimes as simple as a conversation while walking to and from the office building – was cited as an absolute necessity in getting all staff on the same page. Doing so also reinforces the notion that Complete Streets is not one person's job, but everyone's.

Elected Officials

One of the big lessons learned is that work with decision-makers and elected officials must be ongoing. Establishing initial support for the vision of Complete Streets is essential to a policy's adoption, but that support can erode if elected officials face community opposition to particular projects or do not understand the changes that are being made. Transportation staff need to be able to communicate how the proposed projects benefit the community and nearby residents and businesses, and how incomplete streets impact mobility and access to shops, offices, and schools.

Minnesota Complete Streets champions have discovered that experiential learning is a great way to create lasting support. Saint Louis Park conducted a 'Winter Walking Tour' for both elected officials and transportation agency workers. National expert Mark Fenton led the group on a walk down snowy city streets so everyone could

experience the barriers presented by mounds of snow that block access to buses or reduce sight lines; slick surfaces that imperil older pedestrians; and other hazards. The city also sponsored a bike tour with Council and key Department leaders, using principle bike routes. Both events built a common experience; the city council continues to refer back to the experience during its decision-making. Saint Paul took advantage of its Nice Ride bike sharing system to take decision-makers out for a training ride – at rush hour!

General Public

The biggest communication challenge many communities face is upon the implementation of the first project that begins to reallocate space to make room for users beyond automobiles, such as a road conversion or a project that would remove automobile parking in order to provide for a bicycle lane. In Minnesota, this process was so painful that during our Peer Exchange an engineer from one community suggested that public outreach should take place for an entire year before a Complete Streets approach is implemented.

One community discussed its experience with such a project in detail. Neighborhood residents and local school officials caught wind of a proposed road conversion that would have converted a four-lane roadway into a corridor with two through automobile lanes, a center turn lane, and bike lanes. The road had low Average Daily Traffic (9,000 vehicles), and the bike lanes could provide access to a high school. But the community was not well informed about the project's intent and reacted to the unfamiliar design. The Parent-Teacher Association came out against the bike lanes as 'baby killers.' The opposition eventually gained the ear of the city council, which stopped the project. Learning this bitter lesson, the transportation staff and its partners began a new procedure to inform the community about upcoming projects and Complete Streets principles. With this greater level of public involvement, no Complete Streets project in the city has been stopped.

Pointers for effective education

- In working with professionals, make sure engineers and planners are hearing from their professional peers.
- Strive to instill a sense that Complete Streets is part of everyone's job.
- Don't assume the community is behind you following policy adoption; you still need to do outreach with the public.
- The first projects are the hardest to sell. Communicate on a project-by-project scale as well as in more general terms. Go to the public so they hear about the project and your goals directly from you first.
- Start with temporary or pilot projects, or choose low-hanging fruit that won't spark opposition; be sure to tie these popular projects back to the Complete Streets objective.
- Provide regular updates to council and media on implementation and successes.
- Ask your Metropolitan Planning Organization to provide training for its member jurisdictions.
- Share project successes in the context of overall policy implementation.

Measuring Performance

Common Activities

- Counting the number of new or repaired facilities each year (e.g. blocks of sidewalks).
- Tracking crashes and injuries for all types of roadway users.
- Tracking behavior on and use of street facilities (e.g. number of people walking).
- Prioritizing multimodal projects for funding.

Measuring the effects of a Complete Streets policy is essential to its ultimate success, yet we have found that the development of new performance measures often lags behind other activities. This is not an issue in Minnesota alone, but one that is national in scope, as practitioners question how best to gather new types of data or tweak existing models. Data collection can be expensive, requiring more staff resources and time.

The most common activity reported by Peer Exchange participants is the simple measure of facilities built. This shows that the community is making on-the-ground changes, and the annual numbers can show the pace of change over time. This type of data is often the easiest to collect and measure. Communities should measure not only new facilities, but also maintenance activities such as repairs to curb ramps and repainted bicycle lanes. In more rural areas, the regional planning organization can aggregate this data, as the Fargo-Moorhead Metropolitan Council of Governments does.

Minnesota communities are looking beyond these measures, too. They want to better analyze how the infrastructure changes are affecting community behaviors, such as how people travel. This “middle” level of data collection requires more tools and staff time to collect, but can better show the successes of Complete Streets

efforts. Partnerships with law enforcement agencies, transit providers, and other departments and organizations can be helpful to transportation professionals looking to collect this type of data. Potential performance measures include:

- Crashes by mode, type, and severity
- Mode share (bike, walk, transit, drive alone, carpool)
- Bike and pedestrian counts in key areas or select new projects
- Overall vehicle miles traveled

A third layer of data collection also interests Minnesota communities – those of long-term changes to public health and the physical environment. Such measures cannot be the responsibility of the transportation department alone, requiring leadership from other departments. In the long-term, Peer Exchange communities expressed interest in seeing healthier people, as indicated by lower obesity rates and fewer children with asthma, and a better natural environment, as indicated by air quality.

Participants in the Peer Exchange discussed the potential for creating standardized performance measures for use across communities, perhaps as a way to address the limited resources available for developing performance measures.

Pointers for developing new performance measures

- Transportation departments should work with others to collect and analyze data, including the health department and public health organizations; law enforcement agencies and emergency responders; and advocacy groups, including those focused on equity.
- Use rates, rather than straight numbers, to show changes in safety and mode shift over time.
- Establish baseline data so as to better illustrate successes.
- Be clear about measuring outputs (such as blocks of sidewalks built or repaired) versus outcomes (such as increases in walking rates).
- Create metrics that are specific to community goals.

Getting Results: Complete Streets in Minnesota

National Complete Streets Coalition