

SAFE AND ACCESSIBLE STREETS FOR ALL USERS

STREET INFRASTRUCTURE AND TRANSPORTATION STRATEGIES MAY INCLUDE COMPLETE STREETS POLICIES, SAFE ROUTES TO SCHOOL POLICIES AND PROGRAMS, AND COMMUNITY DESIGN STANDARDS. THESE STRATEGIES CAN HELP ENSURE THAT STREETS ARE ROUTINELY DESIGNED, MODIFIED, AND UPDATED TO SUPPORT ALL FORMS OF TRANSPORT, INCLUDING ACTIVE TRANSPORT. ACTIVE TRANSPORTATION INCLUDES MODES OF HUMAN POWERED TRANSPORTATION SUCH AS WALKING, BIKING, AND USING A WHEELCHAIR.

MAKE THE CASE: Why Is This A Health Equity Issue?

The issues below highlight the need for street infrastructure and transportation strategies that advance health equity:

- Inadequate Infrastructure for Active Transportation Exists in Many Low-Income Communities and Communities of Color: Low-income communities and communities of color have been found to have poorly maintained sidewalk and street infrastructure, higher rates of crime, and increased dangers from traffic.^{174,175} These barriers may discourage some residents from engaging in active transportation or make it difficult and unsafe for those that depend on such infrastructure.
- Challenges for Active Transportation Exists in Many Rural Communities: Rural communities, including rural tribal lands, may experience unique infrastructure inequities. These communities may have less pedestrian and bicycling plans and infrastructure than urban communities,¹⁸⁹ and rural roads are some of the most dangerous for pedestrians.¹⁹⁰ Additionally, the long distances between key institutions/settings may present challenges to active transportation.

• Street Design May Neglect Users with Special Needs:

There are a variety of potential users to consider in street infrastructure and transportation strategies (e.g., the elderly, those with a disability, children). For example, older adults often have difficulty navigating busy, traffic-heavy roads, areas with obstructed or difficult to read signage, and inadequate sidewalks.^{177,179,191} Significant barriers may also exist for people with strollers and people with disabilities (e.g., those with hearing and vision impairments, those using wheelchairs).



Design and Implement with Health Equity in Mind

To maximize health impact and advance health equity, consider these factors and others when designing, implementing, and evaluating street infrastructure and transportation strategies:

KEY FACTORS	BARRIERS OR UNINTENDED CONSEQUENCES	OPPORTUNITIES TO MAXIMIZE IMPACT
COMMUNITY AWARENESS & INVOLVEMENT Encourage community participation and leadership	Community members may face barriers (e.g., language, time constraints, lack of transportation) that prevent them from being engaged in infrastructure and transportation planning processes.	 Organize events (e.g., walk and roll audits) to increase awareness of and participation in planning processes among underserved communities. Work with partners to address barriers to participation (e.g., provide venues for input at convenient times and locations, hold forums in prevalent languages or with interpreters, provide childcare if needed). Engage representatives from organizations who are trusted by underserved populations to commit to long-term participation in planning processes.
INCLUSIVE DECISION MAKING & DESIGN Ensure decision processes accommodate people with special needs	People with special needs, such as the elderly and people with disabilities, may be overlooked in the design and implementation of street infrastructure and transportation strategies.	 Work with transportation planners to engage people with special needs in planning and implementation processes. Encourage transportation planners to include guidelines and strategies developed specifically for people with special needs. Use inclusive language when discussing such strategies (e.g., "walk, bike, and roll" has been used to include those in wheelchairs).
RESOURCE LIMITATIONS Find ways to address funding limitations for street improvements in underserved communities	Funding may not be available for street improvements, particularly in underserved communities. Additionally, residents of these communities may lack the time and resources to apply for funding that addresses infrastructure.	 Leverage existing funds to make necessary improvements and enhancements (e.g., incorporate street improvements into routine road maintenance procedures). Provide technical support and training to underserved communities to enhance their capacity to apply for infrastructure funding. When evaluating proposals for funding, use criteria that prioritize communities in greatest need.
DISPLACEMENT Account for the potential displacement effects of street improvement strategies	When a community becomes a popular place to walk, bike, or use other modes of active transportation safely, local businesses may benefit. A possible result is that property values may increase and current residents may be displaced if they are no longer able to afford living there.	 Conduct an assessment (e.g., health impact assessment) to examine the possibility of displacement with all street improvement policies. Utilize supportive mechanisms and community benefits agreements (e.g., affordable housing protections, local hiring ordinances) to ensure current residents are not displaced and can benefit from infrastructure improvements.

(Also see Neighborhood Development that Connects Community Resources to Transit on page 96)

Build the Team: Partnership for Success

Successful efforts to implement street infrastructure and active transportation strategies depend on strong partnerships that bring a diverse set of partners to the table early, consistently, and authentically. These partners may include the following:

- Area Agencies on Aging
- Community development, revitalization, and redevelopment agencies and organizations
- Community members (of diverse abilities, ages, cultures, gender, income levels, race/ethnicity, and sexual orientation)
- Environmental and climate change groups
- Leaders and community champions from multiple sectors
- Local transportation planning department

- Organizations serving populations experiencing health inequities
- Program evaluators
- Public health agencies
- Public Works Department
- School districts, universities, and community colleges
- Transit agencies
- Transportation organizations
- Zoning and Planning organizations



HEALTH EQUITY IN ACTION

Creating Safe Routes in a Rural Community

Sault Ste. Marie, MI

The service area of the Sault Ste. Marie Tribe of Chippewa Indians covers seven rural counties in Michigan's Eastern Upper Peninsula. These counties have higher percentages of low-income populations than other places in the state. Limited infrastructure options often force residents who live in tribal housing to drive to local stores, schools, childcare, and employment, even though these resources are within walking or biking distance. Rising gas prices coupled with limited household incomes prompted the Sault Tribe Community Health Program, with support from the CDC's *Strategic Alliance for Health* program, to explore infrastructure improvements that would support active transportation.

The Sault Tribe's Strategic Alliance for Health Project staff and coalition members conducted walking audits in tribal housing, as well as the broader community. Pictures taken by community members illustrated the need for bicycle and pedestrian improvements. The presentations were effective in educating community stakeholders about the need for pedestrian and bicycle facilities, resulting in construction of a sidewalk connecting tribal housing in one community to a major employment center. In another neighborhood, a need was identified for a midblock crossing near a childcare center to allow caregivers to take young children on walks during the day. The Strategic Alliance for Health Project also facilitated a partnership between tribal transportation planners and the City of St. Ignace to invest in sidewalk improvements that will connect housing to a nearby high school athletic field.

Key partnerships among tribal transportation planners, tribal housing authority, local government, and school systems fostered success. These partnerships were instrumental in implementing strategies that will support the creation of complete streets in five communities and in the seven-county region, focus on safe bicycle and pedestrian projects in the regional transportation plans, and address health and safety needs of all residents.



Transportation Framework Supports Health Equity and Sustainability

Multnomah County, OR

When Multnomah County Health Department staff realized the tremendous impact of transportation decisions on the health of Oregon's residents, they wanted to get involved. They wanted to ensure transportation projects would contribute to-not detract from-their health and equity goals. With funding from CDC's Communities Putting Prevention to Work program, the health department leveraged their relationships with local transportation leaders and other community-based organizations and began working with Upstream Public Health (a Portlandbased public health policy organization), the City of Portland Bureau of Transportation, and the North American Sustainable Transportation Council. One goal of the cross-sector partnership was to create a system to ensure health, multimodal safety, and equity outcomes are improved in the planning, analysis, and operation of transportation plans and projects.

In 2010, the North American Sustainable Transportation Council developed the Sustainable Transportation Analysis and Rating System (STARS) pilot project application manual. STARS is a framework for developing and rating transportation projects, plans, and programs. It is a performancebased system with a multimodal focus that allows planners to compare and improve performance across all modal strategies. The STARS project manual currently consists of 12 core credits that encompass the "triple bottom line," also known as the "three Ps" of access (people), climate and energy (planet), and cost effectiveness (prosperity). Projects that achieve at least nine of the 12 core credits are qualified for STARS certification. Through Multhomah County's collaborative effort, three new STARS credits have been developed to increase the likelihood that transportation projects improve key health, safety, and equity criteria.

With health equity as a driving principle, STARS gives credit for meaningful engagement of the communities most affected by the transportation project. Focusing



Infrastructure improvements on the Hawthorne Bridge in Multnomah County make safe, sustainable, and equitable transportation options available to all users. Photo Courtesy of Greg Raisman

on meaningful engagement ensures residents have a say in how transportation projects are planned and implemented. Credits are also awarded to projects that are planned so that transportation-disadvantaged communities gain improved access to meet daily needs and are not burdened disproportionately. Plans and projects that earn safety, health, and equity credits take one step closer to becoming STARS certified, providing an incentive for transportation planners and project managers to integrate health, safety, and equity into their work. Certified projects may be prioritized for government funding. Communities across the country can use STARS to ensure that their own transportation projects and plans include health and multimodal safety, while maximizing efforts to achieve equitable outcomes.