



Chapter 9: Pedestrians and Bicyclists

Walking and bicycling are essential modes of transportation. These modes allow people to travel without contributing to congestion and air pollution, to access other means of travel, such as transit, and to contribute to healthy and active lifestyles.

Existing System

Safe and comfortable walkways are important to access destinations and other forms of transportation, such as transit, particularly for people with physical disabilities. Bicycling and walking offer a variety of transportation benefits. They save on energy and other transportation costs for short- and medium-length trips, do not contribute to pollution or congestion, and allow travelers to incorporate exercise into their daily routine.

Walkways and bikeways in the region consist of a collection of facilities typically constructed and funded by local governments and supplemented by recreational trails developed by counties, park districts and, in some cases, municipalities. In addition to street-level sidewalks, downtown Minneapolis and Saint Paul have a network of skyways that provide essential connectivity between blocks in these highly concentrated employment centers.

Local governments are in the best position to conduct the detailed planning and design of bicycle and pedestrian systems. They have decision-making authority over community land use and local streets and are most familiar with local conditions. Walking and bicycling trips are typically short – averaging about one-quarter to one-half mile for walking and between two and three miles for bicycling, so facilities for such trips are best addressed at the local, rather than regional, level. In addition, the Metropolitan Council does not operate or maintain bikeways and walkways but only facilitates in their planning, development and funding.

To help promote a shift from auto travel to walking and bicycling, Minneapolis and its surrounding cities received a federal pilot grant of nearly \$21 million to implement infrastructure and operational improvements as well as education and promotion programs until 2010. This grant was extended with additional funding with the extension of SAFETEA-LU through 2011. This program is administered by Transit For Livable Communities, which has distributed a portion of this funding to eligible jurisdictions and will continue to do so through 2011. After that date, projects and programs implemented by Bike Walk Twin Cities, as well as by the three other pilot communities in the country, will undergo an evaluation for effectiveness. Bicycling and walking has received even more attention at the federal level since the award of the Non-Motorized Pilot Program. Transportation Secretary Ray LaHood released a Policy Statement in 2010 encouraging all local agencies to provide safe and



Figure 9-1: All buses in the regional fleet are equipped with bike racks



*Figure 9-2: New bike facilities
Midtown Greenway*



Figure 9-3: Transit-supportive pedestrian environment

Pedestrians exit a Metro Transit bus at a wide sidewalk on Nicollet Avenue in Minneapolis.



Figure 9-4: Mixed traffic

A bicyclist and a bus with a bike on its front rack share the road on the Lake Street Bridge between Minneapolis and St. Paul

convenient facilities for bicycling and walking. Among the recommended actions described in the policy statement are to integrate bicycles and pedestrians on all bridges, collecting data on non-motorized travel, setting mode share targets for walking and bicycling, and going beyond minimum design standards for bicycle and pedestrian facilities.

At the regional level, the Metropolitan Council provides planning guidance on land use issues related to bikeways and walkways, and, with its Transportation Advisory Board, administers a competitive process for allocating federal transportation funds to bicycle and pedestrian projects. Since 1991, this program has awarded approximately \$112 million in federal funds for freestanding bicycle and pedestrian projects and has supported the inclusion of bicycle and pedestrian components in regionally funded highway projects.

The Metropolitan Council is participating in a regional effort to map and inventory both on-road and off-road bicycle facilities using common criteria (Figure 9-6). This map has been made available on the Council’s website for the purpose of coordinating planning for bikeways in the region. The Metropolitan Council is currently in the process of developing an extension of the bicycle trip planning resource called Cyclopath, a creation of a University of Minnesota research group, which will aid in planning and maintenance of bicycle routes and help to build the inventory of bicycle facilities. In addition, bicycle lockers, many at transit centers or in downtown areas, are currently available for rent, and bike racks have been installed on all buses. The Council has provided funding for many bike and multi-use paths and on-road bicycle facilities such as bike lanes.

Issues and Trends

In urban parts of the region developed prior to World War II, sidewalks typically were built on most streets. Since then, provision of sidewalks has varied greatly from one jurisdiction to another, often depending on the level of traffic on the adjoining street. In addition, many stops along transit routes are not accessible by sidewalk, a situation not supportive of increased transit use generally or of people with physical challenges who want to use regular-route transit.

In recent years, characteristics of community design have gained attention for the way that they can encourage or discourage physical activity. Public health policy discussions have increasingly identified opportunities for bicycling and walking as one element in the fight against obesity and other health problems related to the lack of physical activity. As a result, some counties in the Twin Cities metropolitan area have made active living a focus of community planning.







Figure 9-5: New transit amenities on Marquette Avenue include attractive waiting areas and NexTrip online signage





Existing Twin Cities Metro Bikeways

-  Bike Lane or
Shoulder 5' or wider
-  Paved Trail
-  Non-Paved Trail
-  Other / Unclassified

Bikeways data was prepared for the Metropolitan Council by the Minnesota Department of Administration's Land Management Information Center in cooperation with the Minnesota Department of Transportation, counties and most cities in the metropolitan area. While every effort was made to collect and map the most current data available, portions of this map may now be out of date.

Updated: April 2007

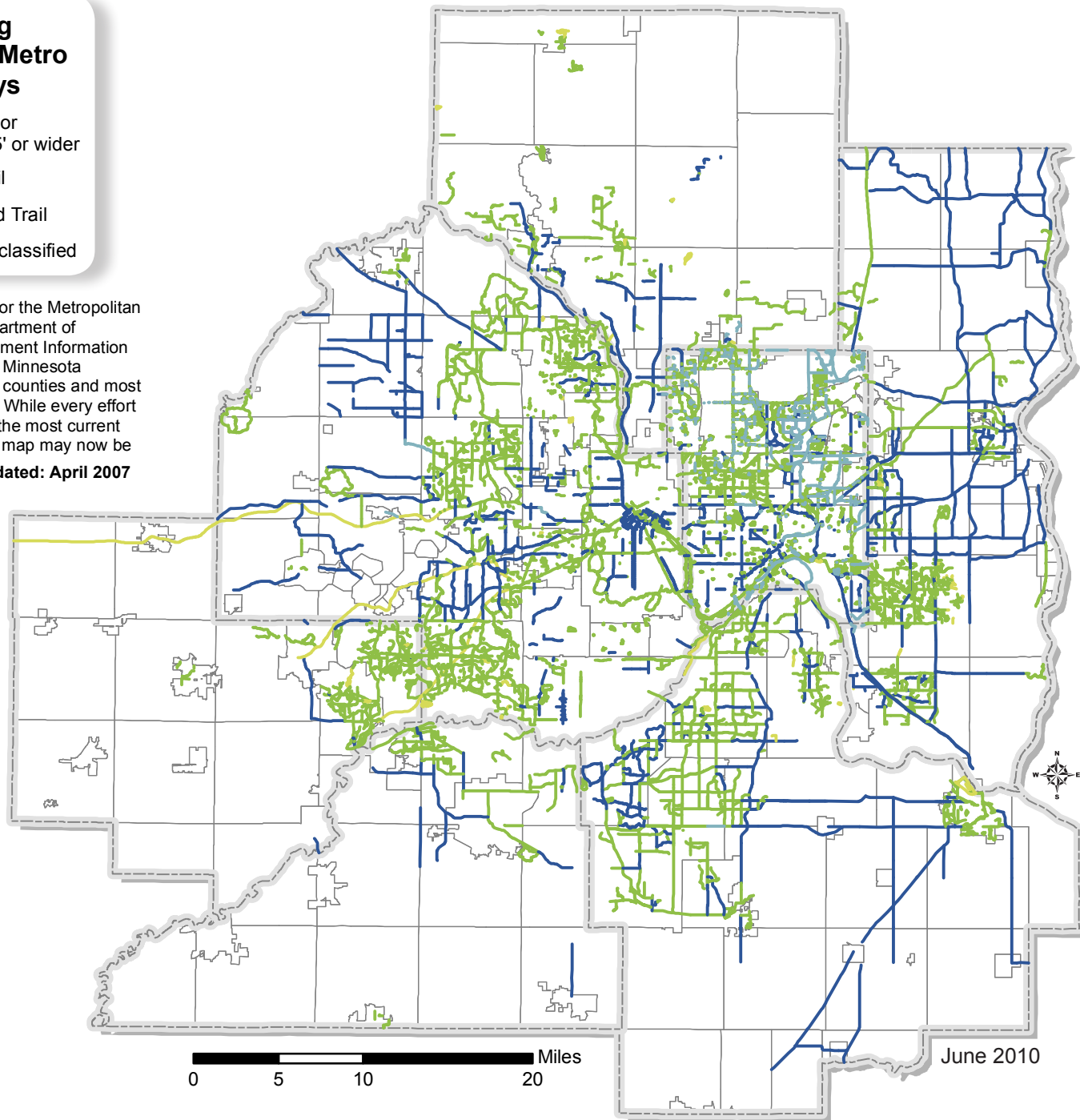


Figure 9-6: Existing Metro Bike Trails





Usable pathways are particularly important to people with disabilities, and the Americans with Disabilities Act (ADA) requires local governments to construct accessible rights-of-way to meet their needs. Since passage of the ADA, communities have had differing levels of success in working toward the goal of universal accessibility. There has recently been a greater emphasis on providing accessible routes and federal law requires that all agencies with over 50 employees develop an ADA Transition Plan that will detail the steps to take to make the community accessible to all. The Minnesota Department of Transportation adopted an ADA Transition Plan in 2010.

Providing a more comfortable and safe walking environment could increase the amount of travel made by walking and likely increase transit use, since most transit trips begin and end with walking. For bicyclists, physical barriers such as major highways, railroad right-of-way and rivers can interrupt travel. In addition, many roads have also not been designed with bicycling in mind and are either uncomfortable or unsafe to use. Pedestrians encounter many of the same barriers as bicyclists. Pedestrians may be particularly disadvantaged by the presence of access-controlled county and state highways that have few crossing opportunities. For these reasons, the Metropolitan Council supports the Complete Streets concept for roadway planning and design. In 2010, a Complete Streets law was passed that requires Mn/DOT to adopt a Complete Streets policy on its trunk highway system and that provides greater flexibility to local governments in roadway design on State Aid routes for the purpose of implementing Complete Streets. Mn/DOT has stated that Complete Streets does not mean “all modes on all roads”; rather, the goal of Complete Streets should be to 1) develop a balanced transportation system that integrates all modes via planning inclusive of each mode of transportation (i.e., transit, freight, automobile, bicycle and pedestrian) and 2) include transportation users of all types, ages and abilities.

Despite obstacles, bicycling in the Twin Cities region is gaining popularity as a means of transportation. The region is known nationwide for its bicycle facilities and high levels of bicycling. The City of Minneapolis ranked second in the nation for bicycle commuting with 4.3 percent of all commute trips made via bicycle in 2008. The City of Minneapolis conducted counts in and around downtown Minneapolis and found that bicycling had almost doubled since the last time counts were taken in 2003. In addition, daily traffic on the newly completed Minneapolis portion of the Midtown Greenway has reached levels over 5,000 on busy days. The increasing use of bicycle facilities demonstrates that people are looking for travel alternatives to the automobile for many of their trips.

The potential for bicycle transportation is great. According to U.S. Census Longitudinal Employer Household Dynamics data, approximately 20 percent of all employees who work in one of the major employment clusters in the Twin Cities live less than three miles from their workplace. Nearly 14 percent of all trips in the region are less than one mile long and close to 40 percent are less than three miles, according to the Council’s 2000 Travel Behavior Inventory. It’s possible that removing these travel barriers could result in a significantly higher proportion of trips made via walking or bicycling. Bicycles and pedestrians can be a significant element of the transportation solution within and near congested activity centers because they accommodate this short-distance travel and require less space and infrastructure than automobiles.





Policy and Strategies

Policy 18: Providing Pedestrian and Bicycle Travel Systems

The Council, state, and local units of government will support efforts to increase the share of trips made by bicycling and walking and develop and maintain efficient, safe and appealing pedestrian and bicycle transportation systems.

Strategy 18a. Bicycle and Pedestrian Regional Investment Priorities: The Council will prioritize federal funding for bicycle and pedestrian improvements based on their ability to accomplish regional transportation objectives for bicycling or walking in a cost-effective manner and improving access to major destinations.

Strategy 18b. Connectivity to Transit: Recognizing the importance of walking and bicycling to a multimodal transportation system, the Council will strongly encourage local units of government to develop a safe and attractive pedestrian environment near major transit corridors and stations with linkages for pedestrians and bicyclists from origins and destinations to buses and trains.

Strategy 18c. Local Planning for Bicycling and Walking: The Metropolitan Council encourages local planning for bicycle and pedestrian mobility by requiring that a local bicycle or pedestrian project must be consistent with an adopted plan to be considered eligible for federal transportation funding.

Strategy 18d. Interjurisdictional Coordination: The Metropolitan Council, along with local and state agencies, will coordinate planning efforts to develop efficient and continuous bikeway systems and pedestrian paths, eliminate barriers and critical gaps and ensure adequate interjurisdictional connections and signage.

Strategy 18e. Complete Streets: Local and state agencies should implement a multimodal roadway system and should explicitly consider providing facilities for pedestrians and bicyclists in the design and planning stage of principal or minor arterial road construction and reconstruction projects with special emphasis placed on travel barrier removal and safety for bicyclists and pedestrians in the travel corridor.

Strategy 18f. Education and Promotion: The Council encourages educational and promotional programs to increase awareness of and respect for the rights of pedestrians and bicyclists by motorists and to educate bicyclists on the proper and safe use of public roadways.

Associated Policies and Strategies

Policy 2: Prioritizing Regional Transportation Investments

Strategy 2a. System Preservation

Strategy 2d. Bicycle and Pedestrian Investments





Strategy 2e. Multimodal Investments

Policy 3: Investments in Regional Mobility

Strategy 3a. Congestion Management Process

Strategy 3d. Travel Demand Management Initiatives

Strategy 3f. Promoting Alternatives

Policy 4: Coordination of Transportation Investments and Land Use

Strategy 4b. Alternative Modes

Strategy 4c. Increased Jobs and Housing Concentrations

Strategy 4f. Local Transportation Planning

Policy 6: Public Participation in Transportation Planning and Investment Decisions

Strategy 6b. Interjurisdictional Coordination and Participation

Strategy 6c. Participation of Underrepresented Populations

Policy 7: Investments in Preserving of Right-of-Way

Strategy 7a. Preservation of Railroad Rights-of-Way

Strategy 7c. Identification of Right-of-Way in Local Plans

Policy 8: Energy and Environmental Considerations in Transportation Investments

Strategy 8a. Reduction of Transportation Emissions

Strategy 8e. Reduction of Greenhouse Gas Emissions

Policy 9: Highway Planning

Strategy 9b. Multimodal System

Strategy 9e. Interconnected Roadway Network

Strategy 9h. Context Sensitive Design

Policy 12: Transit System Planning

Strategy 12c. Transit Centers and Stations

Policy 15: Transitway Development and Implementation

Strategy 15d. Transitway Coordination

Strategy 15g. Transitways and Development

Policy 16: Transit for People with Disabilities

Strategy 16c. Access to Transit Stops and Stations





2030 Pedestrian and Bicycle Plan

Investment Priorities and Requirements

The Council, through its Transportation Advisory Board's regional solicitation process, makes specific categories of federal funds available to local governments on a competitive basis for pedestrian and bicycle facilities and pedestrian and bicycle safety and promotion programs.

The Council recognizes that, as with other modes, there are significantly more needs for bicycle and pedestrian infrastructure and operations improvements than there is available funding. The Transportation Advisory Board provides federal funding for these improvements from the Transportation Enhancements and Surface Transportation Program and may provide it from the Congestion Mitigation Air Quality program.

Consistency with Policies and Plans. As a condition of receiving federal funds, both freestanding bicycle and pedestrian projects must be included in or be consistent with:

- A comprehensive plan or, in the case of pedestrian projects, a comprehensive plan or a transition plan developed under the federal Americans with Disabilities Act, or
- An adopted capital improvement program consistent with a comprehensive plan.

Cooperative Projects. Evaluation criteria will favor bicycle and pedestrian projects that were developed under the cooperation of more than one jurisdiction. These jurisdictions could be a state, county, city, park or transit agency.

Cost Effectiveness. Bicycle and pedestrian projects should be cost-effective to construct and to maintain. When determining the right solution for a safety or connectivity problem, local agencies should first consider methods that use existing right-of-way and infrastructure to improve the desirability of bicycling or walking before considering the construction of entirely new facilities.

Safety. Evaluation criteria will favor infrastructure and operations projects that significantly improve safety for bicyclists and pedestrians while maintaining or enhancing the ease of bicycling or walking. Funding can also be provided to projects that do not improve network connectivity but significantly improve the safety of bicycling or walking or that address an identified safety problem. An example of this type of project would be improvements to intersections that receive a high amount of bicycle travel but which were not originally designed with bicyclist safety in mind.

Multimodal Projects. Roadway projects submitted for federal funding should include features that benefit all users of the transportation system including pedestrians and bicyclists. The evaluation criteria for roadway and transit categories favor those projects that address more than one travel mode. Evaluation criteria will favor highway projects that accommodate pedestrians and bicyclists with an emphasis on safety and barrier removal. In addition, evaluation criteria for stand-alone bicycle and pedestrian projects will favor those that support compact mixed-use transit-oriented development and within employment centers and to projects that provide a direct connection to a high-service transit facility.





Reconstruction of Existing Facilities. In addition to building new facilities for bicyclists and pedestrians, local jurisdictions are encouraged to apply for regional funding for reconstruction of existing facilities so long as the proposal enhances the bikeway or pedestrian path to a quality level superior to that of the original facility.

Transportation Purpose. Federal transportation funds will be used on bicycle projects that serve primarily a transportation function in addition to recreation. Bikeway facilities should be located where potential use is highest and where they can most significantly enhance transportation choices. The magnitude of a proposed project's improvement to connectivity or safety should be considered in addition to the degree of land use accessibility and density in the area, and amount of individuals without access to a motorized vehicle.

Bicycle Connections. Evaluation criteria will favor projects that are able to most significantly improve connectivity by overcoming a major barrier or filling in a large gap in the network.

Signage and Maintenance. Bicycle projects funded with regionally selected federal transportation funds should include signage to help users navigate the system and identify bicycle routes once the project is completed. The Council may provide guidance on sign content and placement following the development of a regional signage plan. Projects considered for federal funding should also have an approved plan for maintenance or a maintenance agreement to ensure that the facility remains in good repair and is passable.

Opportunities for Pedestrian Improvements. Funding priority will be geared toward stand-alone pedestrian projects that are connected to transit service. These include:

- Along high-frequency service bus routes in the urban core and first-ring suburbs.
- Transit-oriented developments around existing or programmed fixed-guideway transit stations.
- Existing transit stations, high-service park-and-ride locations that are within a reasonable walking distance to residential development or activity centers, and high transit destinations like the downtowns and the University of Minnesota.
- Projects that are included as part of a community's ADA transition plan and/or demonstrations of best practices in design for the use of persons with different physical abilities.

Education and Promotion Programs. In addition to operations and infrastructure, the Transportation Advisory Board will continue to make programs designed to promote and to increase the safety and ease of bicycling and to educate bicyclists on the proper and safe use of roadways eligible for receiving federal transportation funds.





Comprehensive Plan Requirements

Pedestrian and bicycle elements of local comprehensive plans shall:

- Promote safety of pedestrians and bicyclists;
- Provide connections to adjacent (local and county) jurisdictions and their walkway and bikeway systems;
- Fill gaps and remove barriers in the existing local, county or regional walkway/bikeway systems;
- Design and locate walkways and bikeways to serve both travel and leisure purposes;
- Provide pedestrian and bicycle facilities to and within high activity nodes, especially commercial and transit centers; and
- Include programs for educating motorists, pedestrians and bicyclists to increase awareness of and respect for the rights and responsibilities of all three types of travelers.



Figure 9-7: Bus passengers wait at the Chicago Lake Transit Center

Pedestrian and Bikeway Connectivity

Connections with Transit

Improving multimodal connections with transit is important to:

- Increase opportunities for people to take advantage of transit
- Improve safety of transit passengers
- Improve accessibility and mobility for people with disabilities
- Support transit-oriented compact development
- The regional goal of improving the multimodal transportation system can be well served by investing in pedestrian improvements in areas with a strong transit presence. As with pedestrian improvements, connectivity to transit should be a prime consideration in strategies for improving bike-transit commuting. Good sidewalk access and on-street bike lanes between destinations and bus stops and transitway stations can encourage travelers to use transit, thereby reducing auto trips while supporting mixed-use transit-oriented developments.



Figure 9-8: Bicycle racks and lockers at a station on the Hiawatha LRT line



Figure 9-9: A bicyclist accesses the Hiawatha LRT

Further support for combined bicycle and transit trips can include crosswalks, bike racks and lockers, and other facilities for pedestrians and bicyclists at park-and-ride lots, transit stations and at major destination centers throughout the region, including the downtowns.





To encourage a strong intermodal link, the policy for all transit modes, including light rail transit and commuter rail, will be to allow bicycles on board. Bike-and-transit travel has become much easier since bike racks were installed on the regional bus fleet. However, the high popularity of bike-and-transit travel since rack installation results in many bicyclists being turned away because the on-board racks are often full. The Council will pursue bike rack technology that can accommodate the greatest number of bikes as reasonably possible. Recognizing that some bikes may not be able to travel with the transit vehicle, bicycle racks and lockers will be located at transitway stations. The Council shall pursue ways to provide covered bike parking at bus stops, park-and-ride lots and transit stations whenever practical. The Council will monitor bicycling potential to park-and-ride lots and other transit stops and provide bicycle parking to encourage such travel.

In 2009, the Metropolitan Council released a study that detailed bicycle and pedestrian safety deficiencies along the major bus routes in the communities that surround Minneapolis. This study included recommendations for cost-effective solutions to these deficiencies. The Metropolitan Council will seek ways to implement some of the recommendations included within the study.

Overcoming Barriers

There are many gaps and barriers to bicycle travel in the region. Freeways, railroads and rivers without bridges that are safe for bicycle and pedestrian travel effectively wall off much of the region to those wishing to make the choice to bicycle for transportation or recreation. For this reason, bicycle-accessible bridges are an important element for a region to be friendly to non-motorized transportation.

In other situations local bike networks can be interrupted by high-traffic arterials that are difficult to cross or to ride on. In order to overcome many of these physical barriers to bicycling in the region, interjurisdictional coordination is absolutely necessary since many rivers, freeways and other barriers are also between two cities or two counties, and county and state highways sometimes interrupt city bicycle networks. The Council supports interjurisdictional coordination to resolve conflicts and to create connections across boundaries.

Improving network connectivity and bicycle safety are primary ways that transportation investment can encourage bicycling. Other factors such as land use mix and density, and household vehicle ownership patterns will also affect existing and latent demand for bicycling but fall within other policy realms. However, planning for bicycling should consider these factors in determining the degree to which improving the network connectivity will influence overall travel behavior.



Figure 9-10: A bicyclist uses the marked shoulder on the Lake Street Bridge between Minneapolis and St. Paul

Figure 9-11: “Trail Oriented Development”

New residential construction at the Bryant Street entrance to the Greenway





Figure 9-13: A bicyclist turning left from the Greenway to Bryant Avenue bikeway

Mixed-Use Developments

As the Council works with communities to promote centers of development and redevelopment along transit corridors, walking and bicycling are increasingly important as effective means of travel within and between compact, mixed-use neighborhoods. Systems of safe, continuous, barrier-free bicycling and pedestrian facilities are integral to the success of these developments.

Pathway Maintenance

Year-round maintenance of pedestrian paths, sidewalks, crosswalks and bikeways should be a priority for local governments, particularly during the winter snow season. Maintenance is particularly important for persons with disabilities for whom a blocked path can require travel into the street or on a highly circuitous route. Maintenance should be reliable and predictable.

Designing Complete Streets

Roadways should be designed in ways that are appropriate to the multimodal roles they play and meet the safety and mobility needs of users of all of those modes. Complete Streets is an approach to transportation planning that considers the needs of motorists, pedestrians, transit users and vehicles, bicyclists, and commercial and emergency vehicles moving along and across roads, intersections, and crossings.

Roadway Elements

When a principal or minor arterial road is constructed or reconstructed, off-road walkway designs and both on- and off-road bikeway designs should be considered at the planning and scoping stage of the project, with special emphasis placed on safety and barrier removal with the goal that the street meets the needs of all users. In the case that bicycle or pedestrian facilities on the roadway right-of-way itself are deemed impractical during the planning and scoping stages of the project, such travel should be facilitated and improved along the general corridor such as on adjacent streets or trails to the greatest extent feasible.

Complete Streets does not mean “all modes on all roads” but that the accessibility and safety of all users of the transportation system be incorporated at the beginning of any roadway project’s planning and scoping process. In addition to mandating a Complete Streets approach on all trunk highways, the state law on Complete Streets has given local units of government more flexibility in designing roads to accommodate all users. Design for roads and bikeways and combined bicycle/pedestrian facilities that have federal or state funding must meet the requirements of the Mn/DOT State Aid process. However,

Figure 9-12: Bike Route Signage



Figure 9-14: Marshall Avenue in St. Paul is a “complete street” with bike lanes, sidewalks, multi-use lanes and bus shelters.





local governments may receive a variance from State Aid standards. They may use the AASHTO *Policy on Geometric Design of Highways and Streets* and in urban areas can use the Institute of Transportation Engineers (ITE) *Context Sensitive Solutions in Designing Major Urban Thoroughfares for Walkable Communities* as alternatives when designing for Complete Streets. When designing bicycle facilities, guidelines from the Mn/DOT Bikeway Facility Design Manual should also be considered.

Pedestrian facilities should be provided along roads unless demonstrated to be impractical, considering that many roads in the region currently do not have adjacent sidewalks or separated pedestrian paths. Designs for major complex multi-lane intersections on minor arterials and collectors should also pay particular attention to the safety of bicyclists and for pedestrians.

Pedestrian comfort warrants as much attention as simple functionality of pedestrian paths. Pedestrian elements of roadways should include amenities that foster a welcoming environment for walking.

Bicycle facilities should be provided within existing rights-of-way whenever feasible instead of acquiring exclusive new rights-of-way. Improvements could include the addition of wide marked shoulders or bike lanes, sidewalks or multi-use paths, as well as intersection treatments that are sensitive to the safety of non-motorized users of the roadway. Improvements for bicycle and pedestrian safety and mobility should be made on minor arterials so long as they do not diminish the capability for multimodal function and capacity.

While more facilities are being built to give the bicycle its own right-of-way, such as on the Midtown Greenway, most bicycling occurs on roadways. The Council supports improvements such as on-street bike lanes or wide shoulders on roads that can accommodate them or off-road separated bike paths, as long as they provide safe bicycle travel conditions.

Some communities with grid street systems have introduced “bicycle boulevards” on which bicycle travel is prioritized on local residential streets with pavement markings, traffic calming techniques and careful intersection crossing treatments so that cyclists may travel unimpeded parallel to a major arterial where bike lanes are impractical. Converting these types of streets is an innovative way to improve the environment for bicycling by retrofitting underutilized infrastructure. However, they do not replace the need to provide bicycle accommodation on collector or minor arterial roadways.

Trail plans should be integrated with the local street network, which can be enhanced for bicycle travel by providing bike lanes or wide shoulders where room exists on the roadway or by converting low-traffic volume residential streets into priority routes for bicyclists.

Bridges

Every bridge that is newly constructed or reconstructed with federal or state funding and that removes or crosses a barrier for pedestrians and bicyclists must safely accommodate bicycle and pedestrian travel unless a reasonable alternative exists within one-half mile for bicyclists and one-quarter mile for pedestrians. However, bicyclists and pedestrians must be explicitly considered in project planning and scoping for all new or reconstructed bridges.

Figure 9-15: Lake Street in Minneapolis includes “bump outs” at crosswalks that shorten the distance pedestrians must be in the crosswalk.





Figure 9-17: A pedestrian scale street.

Nicollet Avenue has wide sidewalks and trees that create a comfortable environment for walking and sitting at one of the many sidewalk cafes.

Potential Conflicts Between Modes

When there is potential for trail user conflict, bicycle facilities should be separate from pedestrian facilities. All new or reconstructed roadways, with the exception of freeways, should be designed with the assumption that bicycles and pedestrians may use them and so designed to minimize conflict with motorized vehicles. Particular attention to bicycle and pedestrian safety should be paid at intersections where vehicle movement is most complex and conflict points increase.

Planning to Better Accommodate Pedestrians

Pedestrian paths can take the form of sidewalks, pedestrian plazas, skyways, and multi-use trails. Healthy communities include safe and attractive spaces for pedestrians including on local streets in residential neighborhoods,

In its *Regional Development Framework*, the Council encourages local governments to implement a system of interconnected arterial and local streets, pathways and bikeways. Land use characteristics and site designs – responsibilities of local units of government – determine how pleasant and safe the walking experience is and therefore are critical factors in promoting walking as a means of travel.

Local governments shall consider safe and convenient access when planning neighborhoods and places with the potential to draw significant numbers of pedestrians, such as schools, civic gathering sites and employment and commercial centers. In addition, cities, counties and Mn/DOT shall consider pedestrians when planning, designing and constructing all roadways and bridges.

Pedestrian Amenities

Pedestrian amenities usually can be incorporated into all transportation projects, such as sidewalks, landscaping, and crossing treatments in roadway construction projects. While providing basic pathways is necessary where they do not currently exist, communities should strive to become truly walkable by including features such as trees, plantings and other landscaping, benches for resting, and attractive pedestrian-scale lighting in pedestrian projects. The degree to which people choose to walk is often the result of these elements, which can alter the perception of distance, create a welcoming environment and make walking routes understandable to the traveler. Traffic calming measures on local streets also improve the environment for pedestrian travel.



Figure 9-16: Pedestrian amenities, such as trees and a buffer between the road and the walkway, increase walkability.



Figure 9-18: Children ride bikes for fun and transportation





Examples of good pedestrian improvements can be found in the Metropolitan Council's *Guide for Transit Oriented Development*. Where a complete TOD-style development program is impractical, local communities may be able to find innovative ways to improve the pedestrian environment through other means.

Accessibility for People of Differing Ability

Local governments shall be committed to the goal of providing universal accessibility on the transportation system by utilizing best practices in designing pedestrian facilities. Such facilities need to be accessible to people of all levels of functional ability so that they meet and exceed the requirements of the Americans with Disabilities Act (ADA).

Designers of roadways and walkways should consult the Access Board's Public Rights-of-Way guidelines at the board's [website](#) for guidance on developing an accessible pedestrian system. Mn/DOT has adopted these guidelines as their standards. In addition, federal law requires that all public agencies with over 50 employees must develop an ADA transition plan that utilizes the advice of persons with disabilities. Mn/DOT updated its Transition Plan in 2010.

The Metropolitan Council's Transportation Accessibility Advisory Committee (TAAC) provides advice to the Council on Metro Mobility and fixed-route transit service and facilities. The TAAC will also be informed of all regionally-funded roadway projects and may be used as a resource for local governments in their planning and design of these projects. The Council encourages local communities to set up ad-hoc or standing disability advisory committees to advise them on planning for universal accessibility in pedestrian systems.

Education and Promotion

Along with improvements to facilities, education and promotion are important fundamentals in increasing the amount of bicycling and walking while also improving its safety.

The Council supports building upon the existing education and promotion activities of community and county bicycle/pedestrian advisory boards, Metro Transit Rideshare, local Transportation Management Organizations and local community initiatives in support of bicycling and walking, including helping to improve the knowledge and ease of bicycle commuting by interested residents and employees in congested activity centers. The Council also supports local "Safe Routes to School" programs that address bicycling and walking safety for elementary and secondary school students and programs aimed at teaching children to walk and bike safely, including the use of proper equipment and helmets while bicycling.

Local and state agencies are encouraged to establish safety programs oriented toward educating the public in the proper use of sidewalks and crosswalks by pedestrians and of shared lanes, bicycle lanes and paths by bicyclists. Programs will also provide training in proper bicycling procedures such as making turns, and stopping at stop signs and signals. In addition, programs will educate motorists regarding pedestrian roadway crossing laws, how to safely interact with bicyclists riding legally in the roadway, and generally to be aware of pedestrians and bicyclists.



Figure 9-19: The Americans with Disabilities Act (ADA) requires local governments to construct accessible rights-of-way for persons with disabilities





Interjurisdictional Coordination

Interjurisdictional coordination is necessary to improve network connectivity and to remove barriers to travel since many of these barriers are between two cities or two counties. All partners in bikeway and walkway development should work collaboratively as much as possible to improve connectivity.

Metropolitan Council

The Metropolitan Council's main role in promoting bicycling is to coordinate planning among local jurisdictions. The Council will coordinate with Mn/DOT's Bicycle and Pedestrian section and city and county planners to improve interjurisdictional coordination and provide technical assistance to communities.

The **regional bikeways mapping project** is an example of this effort. This effort was initiated originally by Mn/DOT, with participation from regional partners, to evaluate the need to plan a regional bikeway system focused on the highest priority bicycling transportation corridors and destinations and to remove barriers in the bicycle transportation system. A regional bikeways map published by the Council is a starting point for cities and counties to use in developing integrated metro-wide bikeway systems. The Council will update the dataset with information from local comprehensive plans which should provide the most current inventory of what local governments are planning and what exists today.

Efforts are needed to **integrate the trail systems within the region's bicycle network** as well as connections between on-road bikeways and off-road trails. Recreational bicycling and walking are popular activities among the region's residents and bicycling for recreation is usually the first introduction that potential bicycle commuters have to bicycling.

Regional recreational trail plans are detailed in the Council's 2030 Regional Parks Policy Plan, and the Council publishes a regional parks map showing the state and regional off-road trails in the metropolitan area. The 10 regional park agencies that own and manage portions of the Regional Park System have about 170 miles of regional trails open for use at this time. Another 700 miles are proposed in the future. These trails offer great potential to expand bicycling opportunities in the region; however some of them lie along right-of-way purchased explicitly for transit use and may or may not be available to bicycles by the year 2030.

The region's bikeway system would be easier to navigate with a **metro-wide system of signage with wayfinding information** on the region's trail and bikeways. A University of Minnesota report evaluating the impact of new trails and on-road bike facilities on bicycle commuting concluded that publicizing the existence of a new bike route through signage or other means may have a significant favorable impact on levels of use.

The Metropolitan Council will work with local trail implementing agencies, Mn/DOT, the DNR, counties and cities to develop and implement a signage plan, including guidelines for sign content and placement to help bicyclists navigate the network within and between jurisdictions. The Council, Metro Transit and Transportation Management Organizations can be resources to help publicize new routes and the destinations they serve.





Local Government

Most detailed bicycle planning, design and construction occurs at the city or park agency level. Local governments shall consider the needs of all bicyclists – experienced, commuter, and recreational – when planning and designing bicycle facilities and programs.

When planning for bicycle transportation, local governments should seek the knowledge of local bicyclists to understand the local conditions for bicycling and to identify barriers to travel and safety problems. Many jurisdictions have created bicycle advisory committees that provide advice to cities and counties on bicycle issues in transportation.

County governments are also important in providing facilities, since county highways can be significant elements of the bicycle system as they provide cross-community service. Special attention shall be paid to county road improvements in developing areas, where right-of-way is still available and yet imminent development makes it likely that destinations will be within a reasonable distance for bicycling. In addition, counties shall help to coordinate the connections between cities within their boundaries and between adjacent counties.

As implementing agencies for the regional park system in many cases, counties are in the best position to coordinate the recreational and destination trip-making facilities, and to help integrate local trail and bikeway plans with county plans. The Council encourages all seven counties to establish bicyclist advisory committees to help develop an interconnected and safe bicycle network.

