

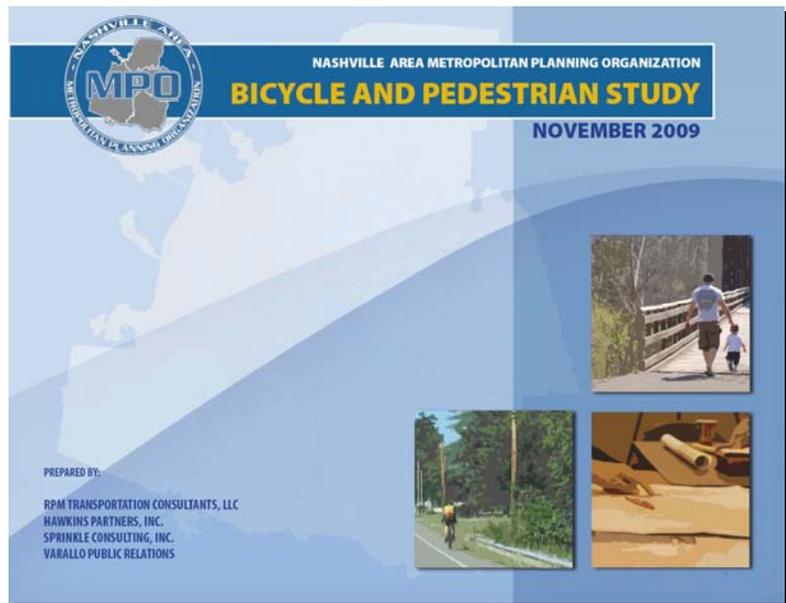
6.0 Active Transportation Choices & Walkable Communities

6.1 A Strategic Vision for Walking and Biking

Walking and bicycling are important modes of travel in our region. Everyone is a pedestrian, and people make pedestrian trips on a daily basis, whether that means walking from the transit stop to work, walking from the parking lot to the store, or walking with children to school. Walking and bicycling provide great forms of exercise. Bicycling, once seen primarily as a form of recreation, is now viewed as an inexpensive, quick and eco-friendly form of travel. Our region is supporting the growth of walking and bicycling and the Nashville Area MPO is working with local, state, and Federal government to ensure that walking and bicycling are viable transportation options in the greater Nashville area.

In 2008, the Nashville Area MPO initiated the development of the region's first comprehensive bicycle and pedestrian study. The Study was conducted to establish a strategic vision for walking and bicycling in the region. This strategic vision feeds into the MPO's overall 2035 Regional Transportation Plan and provides the basis by which future funding priorities of the MPO are established for bicycle and pedestrian accommodations.

Working with local governments, businesses, non-profit organizations, and the general public the Nashville Area MPO designed the study to serve as a mechanism to foster a better understanding of bicycle and pedestrian needs within the region. In general, the Regional Bicycle and Pedestrian Study:



- Provides a comprehensive inventory of existing and currently proposed on and off-road bicycle and pedestrian facilities in the greater Nashville region;
- Increases the region's understanding of how non-motorized modes add to system-wide capacity by improving connectivity between residential areas, employment centers, schools, retail centers, recreational centers, and other attractions;
- Serves as a framework for identifying and selecting bicycle/pedestrian projects for the region's Long Range Transportation Plan and Transportation Improvement Program; and
- Provides guidance for engineering, education, enforcement, encouragement, and evaluation activities to help improve the safety of non-motorized travel modes.

Improving walking and bicycling conditions across the Nashville area will provide numerous benefits to the region including increased recreational and leisure opportunities, increased roadway safety, and even increased access to and from existing and future mass transit services; but, perhaps the most significant reason for the recent emergence of active transportation initiatives relates more directly to personal health, and more

specifically, the increasing costs to our nation associated with an overall decline in public health, of which a share of the blame can be attributed current and former public policies for transportation infrastructure that have shaped the built environment. The issue is so important, the Nashville Area MPO has adopted as one of its three major policy initiatives an emphasis on supporting active transportation and the development of walkable communities.

6.2 Regional Objectives & Strategies

Throughout the development of the 2035 Regional Transportation Plan, the public and interested stakeholders were provided a variety of opportunities to share ideas for improving walking and bicycling conditions in their area. During the course of that community outreach, several themes for obstacles, challenges, and solutions were consistently surfaced to the top. Combining that public and stakeholder input with peer reviews and best practice research, the MPO has established the following set of four regional objectives for advancing active transportation choices and supporting the development of walkable communities.

Objectives	Regional Issues									
	Congestion	Land Use Patterns	Safety	Environmental Conservation & Quality	Sustainability	Health	Quality of Life	Mobility & Accessibility	Maintenance/Construction Costs	
Provide Facilities - Provide a comprehensive, safe, and convenient bicycle and pedestrian system for a wide range of skill levels that is interconnected and accessible making it easier for individuals to choose to walk and bicycle	●	●	●	●	●	●	●	●	●	●
Build Support - Build a collaborative and cooperative environment within the region among stakeholders and communities that supports more non-motorized transportation choices	●	●	●	●	●	●	●	●	●	●
Create Policies & Programs - Integrate walking and biking within the region through policies and programs that foster accommodations for improved safety, mobility, and health	●	●	●	●	●	●	●	●	●	●
Increase Awareness - Elevate the level of understanding and awareness of the benefits, uses, and needs of non-motorized transportation choices through comprehensive educational, enforcement, and outreach programs	●	●	●	●	●	●	●	●	●	●

- – Primary issue addressed by objective/strategy
- – Secondary issue that benefits from achievement of objective/strategy

The following presents the recommended strategies, policies, and programs that will help the region pursue and carryout the main objectives. Emphasis is placed on policies and programs that support the top priorities as identified by the MPO’s Bicycle and Pedestrian Advisory Committee (BPAC).

Objective#1: Provide Facilities

Strategy #1 - Designate and implement a regional bicycle network of bicycle commuter corridors and community connections.

- A regional bicycle network has been developed as part of the MPO's Regional Bicycle and Pedestrian Study which includes all the major commuting corridors into downtown Nashville as well as the US and State highways that connect the urbanized areas in the Nashville MPO region.
- Facilities should be constructed so that riders of all abilities can use the system.
- Facilities on the network that will provide connection of existing facilities should be given high priority.
- Policies should be adopted by local jurisdictions to provide ongoing maintenance of the bicycle network and to establish procedures for monitoring the implementation of the network. Examples of such maintenance activities include regular street-sweeping of the roadway and bicycle facility, debris removal, and sign and striping replacement.

Strategy #2 - Require sidewalk accommodations along all Arterial roadways on which pedestrians are allowed.

- A Sidewalk Accommodation Policy has been developed as part of the MPO's Regional Bicycle and Pedestrian Study. The policy calls for sidewalk accommodations on all federally classified Arterial roadways within an Urban Growth Boundary of the MPO on which pedestrians are not prohibited. The Urban Growth Boundary area (as defined by TN Public Chapter 1101) is used as this defines areas of the region that are expected to be urban in form over the next 20 years. For Davidson County, the Urban Transect categories (T3 through T6) define Metro Nashville's urban growth area.
- It is recommended that all local jurisdictions within the MPO region, at a minimum, adopt guidelines requiring sidewalk and/or pedestrian accommodations along all arterial roadways within an urban growth boundary. Policy adoption should occur as part of a local municipality's comprehensive plan, zoning code, and/or subdivision regulations.
- If not already an adopted standard in local documents, the minimum width of the sidewalk should be 5 feet regardless of the street classification. The sidewalks should be constructed with buffer zones along all roadways. A buffer zone width of 4 to 6 feet is recommended in the Nashville MPO region.
- Some jurisdictions in Tennessee and the MPO region allow "in-lieu-of" payments to the community's sidewalk fund. By collecting equal payments in lieu of actual on-site sidewalk construction, more strategic choices can be made regarding where and when sidewalks are built. Further use of this practice should be considered by local governments within the Nashville MPO region.

Strategy #3 - Create, fund, and implement spot improvement programs so that minor walking and bicycling improvement needs can be quickly addressed.

- Develop a maintenance and spot improvement program to be run by a Public Works or a Parks and Recreation Department. The responsibility could be split where on-road facilities are maintained by Public Works and greenways are maintained by a Parks and Recreation Department. Examples of such maintenance activities include regular sweeping, litter and debris removal, vegetation control, and signing and striping.
- Provide spot maintenance forms upon request at bicycle shops and on a website set-up for bicycle and pedestrian information.



- Roads that have bicycle facilities should be on the regular street sweeping schedule in jurisdictions where a schedule exists.
- Local sidewalk maintenance programs should be established to address sidewalk maintenance and repair needs.

Strategy #4 - Improve connectivity for pedestrians and bicyclists by providing a continuous system of sidewalks, bicycle facilities, and greenways that connect key origins and destinations such as neighborhoods, commercial areas, schools, parks, and transit service.

- In cooperation with local municipalities, the MPO should develop programs and initiatives which encourage local governments, as part of the development review process, to evaluate the potential for new developments to provide pedestrian connections to existing sidewalks and nearby destinations. These programs and initiatives should also encourage pedestrian and bicycle facilities which provide logical connections between schools, shopping centers, parks, civic buildings, transit stops, park-and-ride lots, residential developments, and other activity centers.
- The MPO should work with local municipalities to establish bicycle and pedestrian accommodation provisions within their local plans and governing documents (e.g. comprehensive plans, zoning ordinances, and subdivision regulations). Provisions should not only require sidewalk and bikeway facilities but also advocate for policies that support walking and bicycling through community design, mixed-use development, street connectivity, and transit oriented development.

Strategy #5 - Promote and encourage land use decisions that provide a meaningful and context-appropriate mixture of uses that are supportive of increased walking and bicycling.

- The Nashville region should consider developing a program to encourage local jurisdictions to more effectively plan and implement ways to link land use and transportation. A good example is the “Livable Centers Initiative” (LCI) which was created by Atlanta’s regional planning agency. The program is offered to encourage local jurisdictions to plan and implement strategies that link transportation improvements with land use development strategies to create sustainable, livable communities consistent with regional development policies. Planning grants are awarded by the regional planning agency on a competitive basis to local governments and non-profit organizations to prepare plans for the enhancement of existing centers and corridors. This takes advantage of the investments committed in these communities to achieve more balanced regional development, reduce vehicle miles traveled, and improve air quality. The primary goals of the program are to:
 - Encourage a diversity of mixed-income residential neighborhoods, employment, shopping and recreation choices at the activity center, town center, and corridor level;
 - Provide access to a range of travel modes including transit, roadways, walking and biking; and
 - Develop an outreach process that promotes the involvement of all stakeholders.
 - A similar program in the Nashville region could be an effective means in accomplishing the above strategy.
- The MPO and its member jurisdictions should encourage local school boards to establish school siting policies that favor sites with good walking and biking access. As an example, the policy could include a recommendation that new elementary schools be located on neighborhood streets with low traffic volumes and speeds, and within walking distance of a large proportion of students’ homes. In addition, the site design of schools should give opportunity for pedestrian and bicycle access.

Objective #2: Build Support

Strategy #1 - Hold annual walking and bicycling regional summits in order to enhance awareness and report on progress made on increasing non-motorized transportation throughout the region.

- In May 2009, the Nashville MPO held a summit in conjunction with Cumberland Region Tomorrow (CRT) and TDOT to discuss transit initiatives in Middle Tennessee. It was well attended by local mayors and other public officials as well as by private businesses. The Nashville MPO could hold an annual (or biennial) walking and cycling summit in as a stand-alone event or in conjunction with other related initiatives.

Strategy #2 - Partner with local planning and transit agencies on integrated transportation and land use corridor studies, small area plans, and transit-oriented developments.

- Providing continuous bicycle and pedestrian facilities across city and county boundaries and between transportation modes enables bicycling and walking throughout the region. The Tri-County Study which includes the counties of Wilson, Sumner, and Robertson and the Northeast Corridor Study which includes the counties of Davidson and Sumner are two good examples within the MPO region of inter-jurisdictional cooperation and modal interconnectivity. The MPO could develop a pilot program which establishes similar cooperation between jurisdictions when preparing local plans, corridor studies, small area plans, and transit-oriented developments so that continuous facilities crossing city and county boundaries are constructed.
- The Nashville MPO should work with local and regional transit providers (MTA, RTA, and Franklin and Murfreesboro transit systems) to develop strategies and opportunities to increase walking and biking to and from public transportation services and facilities. Potential strategies include linking transit stops to sidewalks and bikeways, providing comfortable, well designed transit stops, and providing bike storage at transit stops.

Strategy #3 - Establish an annual report on the state of walking and biking improvements and activities in the region whereby municipalities report annually on their local activities. Information can be used to prepare a package to present throughout the region to mayors and elected officials, community organizations (i.e. YMCA, health depts., churches, bicycle clubs, parks depts., etc.), and other stakeholders detailing the benefits, projects, and practices for the year related to walking and biking in the region.

- The Nashville Region should continue an annual bicycle and pedestrian count program as piloted in 2009 consistent with the National Bicycle & Pedestrian Documentation Project (NBPD).
- Household surveys can be conducted periodically regarding the number of biking and walking trips and the type of trip that occurred, i.e. home to school, home to work, home to shop, work to shop, etc. Surveys can be used as a tool to measure the effectiveness of various policies and programs.
- Area Specific Programs - The City of Portland has a program that targets an area of town each year to increase bicycling, walking, transit, carpool, and car sharing trips. The projects include programs that are targeted toward the demographics in that area of town. Each household in the target area receives an order form for informational materials. The households can order materials about bicycling which included a bike kit, maps, safe routes, ride calendar, and helmet brochure. In some areas there are incentives offered to residents who returned their order forms. The residents receive a newsletter every other month that provides information on traffic safety and programs in that area, a calendar of events, and other resources.



Objective #3: Create Policies & Programs

Strategy #1 - Create a dedicated funding source for bicycling and pedestrian facilities improvements.

- While there currently is no state enabling legislation that would allow for the Nashville Area MPO to enact dedicated revenues for sidewalk and bikeway improvements at this time, such opportunities may materialize in the future given recent legislation that was passed this year. In July of 2009, Tennessee State Law (TCA Title 64, Chapter 8) was amended to allow for the levying of dedicated revenues for transportation purposes. This legislation is largely for the provision of public transportation services by a regional transportation authority (RTA), for which the Nashville region has. Funding through this program could be used for sidewalk and bikeway improvements. Limiting use of this to sidewalk and bikeway accommodations that directly link to transit services would be one way to ensure a link between transit and these funds.

Strategy #2 - Integrate consideration of walking and bicycle travel into all transportation planning, design, construction and maintenance projects as well as in local community and transportation plans.

- Across the country Complete Streets policies are being adopted by communities. A Complete Streets policy ensures that the roadway is designed with all users and all skill levels in mind, i.e. it is designed to accommodate bicyclist, pedestrians, transit users, and motorists from children to older people. Establishing a Complete Streets policy will ensure roadway designs include safe and effective access to all users. The MPO, the Tennessee Department of Transportation (TDOT), and local communities in the MPO region should adopt a Complete Streets policy.
- As part of all roadway design and retrofit projects in Tennessee, bicyclists and pedestrians should be accommodated when appropriate as stated in the Bicycle and Pedestrian Element of the Tennessee Long Range Transportation Plan. The Statewide Plan also states that bicycle and pedestrian facilities should be enhanced when existing roadways are improved and upgraded.

Strategy #3 - Give guidance to local communities on methods for establishing developer incentives for inclusion of sidewalks, bike lanes, and transit accommodations as part of all projects, and for inclusion of bike racks, lockers, showers, and other facilities in commercial and public building projects.

- Develop recommended guidelines for bicycle parking provisions which can be used by local governments.
- As an incentive, local jurisdictions could offer to perform an expedited development review for commercial developments and public building projects that include facilities for alternative modes of travel. The expedited review would place the development on the top of a priority list that is set by the local municipality.
- A variable reduction in the traffic impact fee for developments that include facilities for alternative modes of travel may be granted based on the level of action. An example of this reduction would be if a walkway is being constructed to connect to the nearest arterial for non-abutting developments a traffic impact fee reduction of 3 percent could be given to the developer. The criteria for the reductions and the amount of the reduction would need to be determined and clearly defined by the local jurisdictions.

Objective #4: Increase Awareness

Strategy #1 - Emphasize a greater importance of pedestrian and bicyclist laws on the driver's licensing exam as a means of increasing safety for all users. The enforcement program should target pedestrian, bicyclist, and motorist behavior that can possibly result in a crash.

- The MPO should continue taking a leadership role in improvements to driver education. The Tennessee drivers' manual should incorporate clear, forceful information on the responsibilities of both motorists and pedestrians and the MPO can serve as a valuable resource in improving how that information is provided. Information and questions regarding the rights and safety of bicyclists and pedestrians should be added to the drivers' handbooks and driving tests. These components should be consistently used as part of driver education classes.
- The MPO should continue educational efforts regarding bicycle safety including efforts to increase understanding and awareness of the Tennessee 3-foot law for motorists passing bicyclists.
- The MPO should continue working with TDOT, the Tennessee Department of Safety, and the Governor's Highway Safety Office in the development, research, and outreach of efforts aimed at improving pedestrian and bicyclist safety.
- Grants from the National Highway Traffic Safety Administration (NHTSA) can be obtained by local police departments for enforcing pedestrian right-of-way laws and bicycle traffic violations. The grants can be used to conduct targeted enforcement campaigns, pedestrian enforcement at intersections and bicycle enforcement at other intersections.
- Pedestrian Enforcement campaigns can be conducted similar to those seen in Seattle. These campaigns have two components, one targets motorist and a second component targets pedestrians. The police write tickets to motorists who do not yield to pedestrians in the crosswalk or to pedestrians who jaywalk or do not follow the traffic signals.
- Those behaviors to be targeted should be determined at the outset of a law enforcement campaign. It is recommended that the following behaviors be targeted:

Motorist behaviors

- Failing to pass at a safe distance (not less than three feet),
- Right turners cutting off bicyclists,
- Failing to yield to bicyclists (comply with signals/signs) at intersections,
- Failing to yield to pedestrians at crosswalks, and
- Right turn on red violations.

Bicyclist behaviors

- Riding at night without lights,
- Violating traffic signals/stop signs,
- Sudden changes in direction without scanning or signaling,
- Riding against traffic on the roadway,
- Failing to yield to motorists at midblock locations, and



- Violating traffic signals.
- The effort to enforce the traffic laws as they relate to bicycle and pedestrian safety should be addressed in a regional, coordinated, bicycle enforcement campaign. Sporadic enforcement is not likely to result in significant improvements to motorist, cyclist, or pedestrian behavior.
- Adult Bicycle and Pedestrian Safety Training - Getting adults to participate in bicycle and pedestrian training courses is challenging. Bicycling and walking are not typically viewed by adults as things they have to learn how to do. Consequently, they do not typically enroll in traffic safety courses. As part of a Bike to Work promotion it is recommended that safety training be included. These can vary from “lunch and learn” type presentations to evening/weekend commuter workshops to providing League of American Bicyclists *Traffic Skills 101* courses.

Strategy #2 - Establish an informational website showing routes and locations of bicycle facilities as well as printable PDF maps.

- A website should be established that contains information regarding biking and walking in the region. This website can be used to post bicycle maps showing the routes in the MPO region.
- The website should also provide spot maintenance forms for bicycle and pedestrian facilities.
- The website should provide information on a variety of educational resources including information such as elementary instructor training courses on bicycle and pedestrian safety for children through programs like Safe Routes to School.

Strategy #3 - Integrate bicycle and pedestrian skills training into appropriate school curricula and annually fund school-based education programs on bicycling and walking safety.

- The MPO should encourage greater use of the Safe Routes to School Program locally and work to provide a coordinated approach to such initiatives within the region.
- It is recommended that a bicycle and pedestrian traffic safety curriculum for elementary school students be developed. The program should establish guidelines to maintain, update, and distribute the materials, as well as train the educators on implementing the materials.
- The program should have access to the biking and walking website that contains links to resources and mini-grant programs. The instructor courses should be free for educators, law enforcement officers, and community volunteers. The program should also provide mini-grants to local agencies/school districts to buy new materials or replace existing materials.

Strategy #4 - Create, fund, and implement pedestrian and bicycle media campaigns and promotional materials to promote walking and bicycling as a safe, healthy, cost effective, environmentally beneficial transportation choice. Identify partners to provide bicycle and pedestrian education, enforcement, and encouragement programs.

- One of the primary resources for non-motorized transportation safety campaign materials is the Federal Highway Administration’s (FHWA) Pedestrian Safety Campaign. As stated on FHWA’s website, the materials developed in 2003 consist of ready-made information that State or local governments can tailor and use for campaigns in their communities. These materials include radio, television, and public service announcements; brochures; posters; press releases; and newspaper articles.
- In a separate effort, FHWA developed and tested media-based marketing materials directed specifically at Hispanic audiences. This information may be useful in reaching out to the Nashville region’s growing

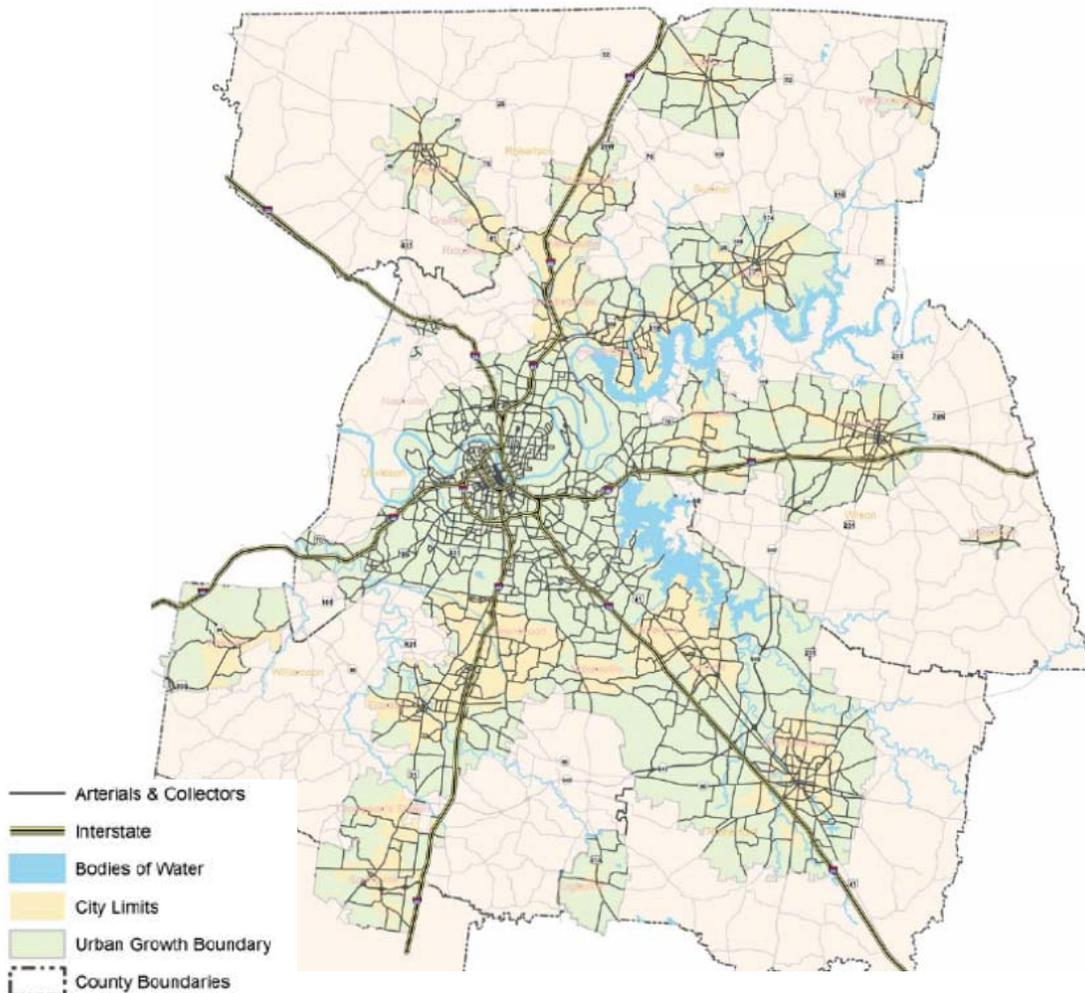
Hispanic community. Other training resources exist through NHTSA including training for law enforcement.

6.3 Future Accommodations on the Regional Network

Regional Sidewalk Recommendations

The MPO’s strategic vision for walking and bicycling across the region includes support for the development of local sidewalk and bikeway improvements but places emphasis on regional accommodation recommendations as a regional priority system. As a regional priority, sidewalk accommodations should be included on all federally-classified Arterial roadways within an Urban Growth Boundary of the MPO, on which pedestrian are not prohibited. These roadways serve as major commuting corridors, commercial corridors and corridors of commerce, and connect communities, activity centers, transit, and major destinations throughout the region. As such, they serve as the backbone to other roadways and streets in the region which, combined with local sidewalks and streets, link neighborhoods, businesses, and other community facilities to one another. The Urban Growth Boundary (as defined by TN Public Chapter 1101) was selected as the policy boundary as these areas of the region are expected to be urban in form over the next 20 years.

Table 19. Regional Sidewalk Priority Areas



There are approximately 914 miles of federally functionally classified Arterial roadways in the Nashville region that are located in an Urban Growth boundary. Of these facilities, 252 miles currently have sidewalk accommodations. The following table depicts the total Arterial miles within the MPO region by county with and without existing sidewalk accommodations.

Table 20. Arterial Roadway Miles in the MPO Region within an Urban Growth Boundary

County	With Sidewalks (Miles)	Without Sidewalks (Miles)	Total Arterial (Miles)	% Miles Built
Davidson	167	223	390	43%
Rutherford	31	110	141	22%
Sumner/Robertson	16	162	178	9%
Williamson/Maury	30	88	118	25%
Wilson	8	79	87	9%
Regional Total	252	662	914	28%

Design Considerations

Everyone is a pedestrian at one time or another. Pedestrian facilities must be designed to meet a wide range of needs. One’s decision to walk is not only based on convenience, but also on the perceived quality of the experience. The choice to walk is influenced by both “hard” factors, such as the continuity of the sidewalk system, and “soft” factors, such as the shade or the beauty offered by street trees. Therefore, pedestrian facilities should be designed with the following considerations:

- Pedestrian facilities should be easily accessible for all users.
- Pedestrian facilities should offer real and perceived safety. They should be free of hazards and obstructions and should be designed so as to minimize conflicts with vehicular traffic.
- Sidewalks and crosswalks should be wide enough to comfortably accommodate the anticipated volume of pedestrians. The widths should be based on the pedestrian volumes, adjacent land uses, and roadway classifications.
- Crosswalks should be frequent and as short as possible.
- Pedestrian facilities should provide direct connections between origins and destinations.
- Pedestrian facilities should be continuous.
- Landscaping and street furnishings should be provided to create an attractive and comfortable sidewalk corridor.

Sidewalk corridors should be compatible with the community and the context for which they are provided. Their design should complement the adjacent land uses, as well as enhance the design and transportation objectives of the neighborhoods through which they travel or downtown centers for which they serve.

The Americans with Disabilities Act

The *Americans with Disabilities Act* (ADA) is a federal law that was signed on July 26, 1990. The ADA prohibits discrimination on the basis of disability and mandates that all disabled persons be provided full access to all public facilities in the country. Designing and constructing public facilities that are not usable by people with disabilities is a violation of the ADA.

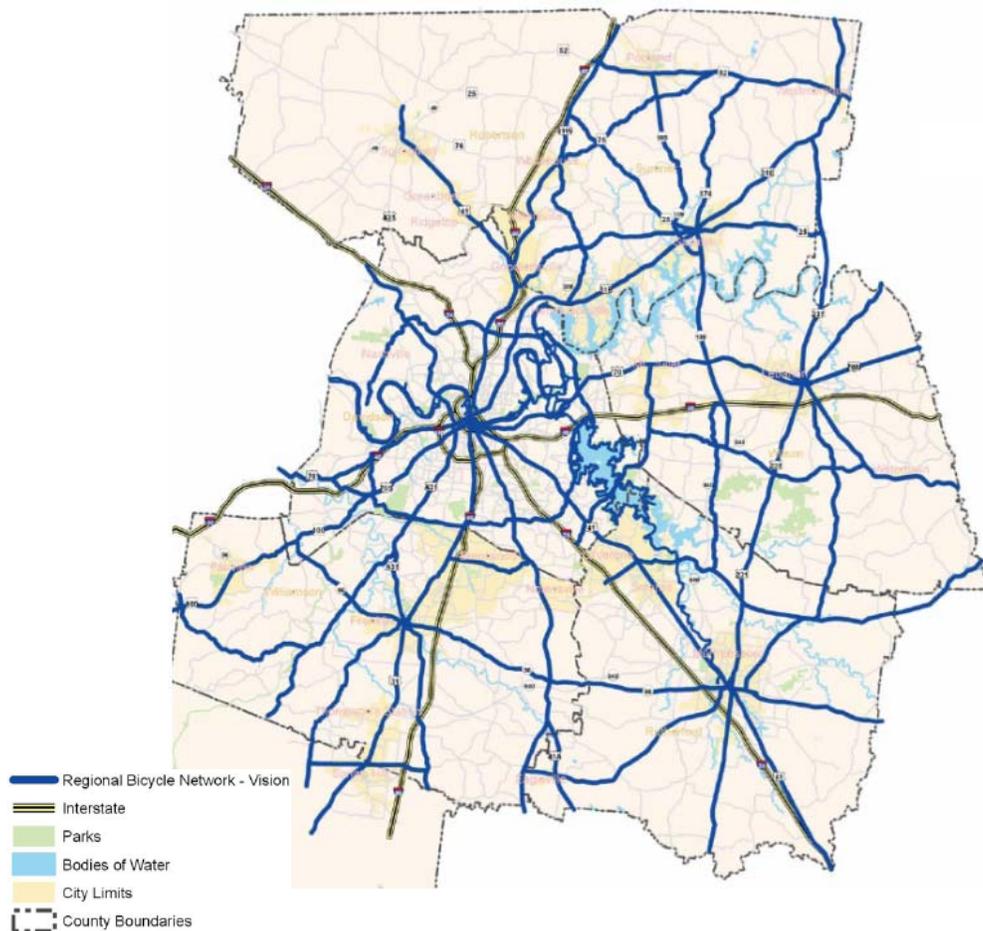
Current ADA standards, which are contained in the 2002 edition of the *Americans with Disabilities Act Accessibility Guidelines* (ADAAG), thoroughly outline requirements for building design. However, ADAAG provides little guidance regarding the design of facilities in public right-of-way. The U.S. Access Board is the federal agency that is responsible for the development of minimum accessibility guidelines to assist the Department of Transportation (DOT) and the Department of Justice (DOJ) in establishing design standards for the ADA. This board released a draft update of the ADA guidelines on June 17, 2002. The draft update was revised on November 23, 2005 and is entitled *Accessible Public Rights-of-Way Planning and Designing for Alterations*. This document provides more specific guidance for public right-of-way and includes provisions for sidewalks, sidewalk ramps, street crossings, and related pedestrian facilities. Although these guidelines have not yet been adopted, the Federal Highway Administration (FHWA) and the U.S. Access Board encourage their use since they offer the most authoritative guidance available regarding accessible design in public right-of-way.

The current and proposed ADA guidelines provide minimum design standards for ensuring accessibility. Alternate standards may be applied provided that the alternate standards meet or exceed the minimum ADA guidelines. The recommendations presented in the pedestrian facilities design guidelines section are consistent with, and in some cases exceed, the standards presented in *Accessible Public Rights-of-Way Planning and Designing for Alterations* (refer to the US Access Board's website – <http://www.access-board.gov/prowac/> for the most up to date ADA accessibility guidelines).

Regional Bikeway Network Recommendations

The Nashville region has numerous roadways throughout the region which serve as direct links between communities and major destinations for employment and other activities. The inventory and needs assessment process of the Regional Bicycle and Pedestrian Study revealed a number of roadways within the region that currently provide some level of bicycle facility accommodations, such as a paved shoulder and/or signed bicycle designation. Also, the analysis process identified numerous connections via these roadways to areas which indicate a relatively high potential for non-motorized travel. The proposed Regional Bikeway Network serves to provide bicycle accommodations along major commuting corridors and corridors that connect communities, activity centers, transit, and major destinations throughout the region.

Table 21. Regional Bikeway Vision



The Regional Bikeway Network focuses on regional routes and connections. The MPO recognizes that the cities and counties within the region will need to develop or update community level bicycle plans so that localized bikeway networks and connections between the regional facilities are provided.

The Regional Bikeway Network consists largely of on-street facilities but also includes the Cumberland River Greenway in Davidson County and the Stones River Greenway of Davidson and Rutherford Counties given the linear and regional connections of these two planned greenway facilities. The Regional Bikeway Network consists of 1,127 miles traversing the complete region. The network includes 908 miles of on-street bicycle facilities and 219 miles of greenways. Currently, 130 miles of signed on-street bicycle facilities and 30 miles of greenways exist (a combined total of 160 miles). Of the Regional Bikeway Network which is unbuilt, approximately 284 miles of the on-street network currently have 4 foot or more of paved shoulders but is unsigned. Approximately 493 miles have less than 4 foot of paved shoulder and are unsigned as well. The unbuilt off-road component of the Regional Bikeway Network includes approximately 190 miles of unbuilt greenways.

A summary of the network mileage by county, including a breakdown of existing versus unbuilt mileage, is shown in the following table. Of the Regional Bikeway Network, approximately 625 miles (or 55 percent) are actually identified in local.

Table 22. Regional Bikeway Network Miles in the MPO Region

County	Existing Facilities		Proposed Facilities			Total Bikeway Network (Miles)
	On-Street (Signed)	Off-Street (Greenway)	On-Street > 4 Ft PS (Sign)	On-Street < 4 Ft PS (Pave & Sign)	Off-Street (Greenway)*	
Davidson*	15	25	62	136	174	412
Rutherford*	11	5	90	56	16	178
Sumner/Robertson	58	0	62	86	0	206
Williamson/Maury	24	0	31	122	0	177
Wilson	22	0	39	93	0	154
Regional Total	130	30	284	493	190	1127

* Totals include both the planned Cumberland River Greenway and Stones River Greenway, PS – Paved Shoulder

Table 23. Regional Bikeway Network in Local Plans

County	Proposed Regional Bikeway Network (Miles)	Existing Facilities			Regional Bikeway Network in Local Plans		
		On-Street (Signed)	Off-Street (Greenway)	Percent Existing	On-Street Facility	Off-Street (Greenway)	Percent in Local Plans
Davidson	412	15	25	10%	168	174	83%
Rutherford	178	11	5	9%	13	16	16%
Sumner/Robertson	206	58	0	28%	111	0	54%
Williamson/Maury	177	24	0	14%	39	0	22%
Wilson	154	22	0	14%	104	0	68%
Regional Total	1127	130	30	14%	435	190	55%

6.4 System Costs, Prioritization, & Funding Opportunities

Project cost estimates at a systems level have been developed for both the recommended Regional Sidewalk Accommodation Policy improvements as well as for the proposed designated Regional Bikeway Network. This cost information provides a regional perspective of facility cost and funding needs for sidewalk and bicycle facility improvements as part of these regional priority systems. Cost estimates are in 2009 dollars and were prepared as stand-alone projects (e.g. not as part of a road widening project). The total estimated cost for implementing the regional sidewalk and bikeway recommendations is nearly \$800 million with the regional sidewalk recommendations accounting for \$149 million and the Regional Bikeway Network accounting for \$644 million.

Regional Sidewalk and Bikeway System Costs

Planning level cost estimates were prepared for both the regional sidewalk recommendations as well as the recommended Regional Bikeway Network. Cost estimates are in 2009 dollars and were prepared as stand-alone projects (e.g. not as part of a road widening project). The total estimated cost for implementing the regional sidewalk and bikeway recommendations is nearly \$800 million with the regional sidewalk recommendations accounting for \$149 million and the Regional Bikeway Network accounting for \$644 million.

Regional Sidewalk System Costs

The following table shows a summary of total costs for each county to construct sidewalks on both sides of all arterial roadways within an urban growth boundary of the MPO. It is assumed that the sidewalks will be constructed of concrete on both sides of the road and will be five (5) feet wide. The cost for drainage and additional right-of-way, if needed, and the cost for pedestrian facilities at the intersections, i.e. ramps, crosswalks, and pedestrian signals, are not included in the total cost, which is typical for a regional planning cost estimate.

Table 24. Costs of Proposed Regional Sidewalk Network

County	Existing Sidewalks (Miles)	Planned Sidewalks (Miles)	Planned Sidewalks Total Cost
Davidson	167	223	\$ 50 Million
Rutherford	31	110	\$ 25 Million
Sumner/Robertson	16	162	\$ 36 Million
Williamson/Maury	30	88	\$ 20 Million
Wilson	8	79	\$ 18 Million
Regional Total	252	662	\$149 Million

Cost estimates are in 2009 dollars

Regional Bikeway Network Costs

The following table shows a summary of total costs by county to implement the proposed Regional Bikeways Network. Cost estimates assume a four foot bike facility on the Regional Bikeway Network for on-road facilities and a 12-foot wide asphalt facility for the greenway connections.

Table 25. Costs of Proposed Regional Bikeway Network

County	Proposed Facilities			Total Cost (Rounded)
	On-Street > 4 Ft PS (Sign)	On-Street < 4 Ft PS (Pave & Sign)	Off-Street (Greenway)*	
Davidson*	\$0.087 Million	\$126 Million	\$173 Million	\$ 299 Million
Rutherford*	\$0.126 Million	\$ 52 Million	\$ 16 Million	\$ 68 Million
Sumner/Robertson	\$0.087 Million	\$ 79 Million	-	\$ 79 Million
Williamson/Maury	\$0.044 Million	\$112 Million	-	\$ 112 Million
Wilson	\$0.055 Million	\$ 86 Million	-	\$ 86 Million
Regional Total	\$0.399 Million	\$453 Million	\$189 Million	\$ 644 Million

** Totals include both the planned Cumberland River Greenway and Stones River Greenway, Cost estimates are in 2009 dollars*

Historic Funding Levels

A review of the Nashville Area MPO's *Fiscal Years 2006 through 2008 TIP* and *Fiscal Years 2008 through 2011 TIP*, covering a combined six year horizon, was undertaken during the Regional Bicycle and Pedestrian Study, with projects funded exclusively for the purposes of adding sidewalks, bicycle facilities, and/or greenways identified. While a number of roadway widening projects and new roadway construction projects provided sidewalk and bikeway facilities in the TIP, funding levels for these projects were not included in the funding analysis. Additionally, locally constructed sidewalk, bikeway, and greenway facility improvements which may be funded locally were not included in this assessment.

The results of the analysis indicate that over the six year period (e.g. 2006 to 2011), approximately \$87 million (representing an annual average of \$14.5 million per year) in funds have been, or are to be, expended specifically for sidewalk, bikeway, and greenway facilities in the Nashville region. Of these funds, all are federal funds less local match requirements. The following table illustrates the funding type and funding level for each of the funds allocated for sidewalk and bikeway improvements.

Table 26. Historic Funding Levels for Sidewalk and Bikeway Improvements by Funding Type

Funding Program	Source	Amount	Percent
Surface Transportation Program (STP) Funds	Federal	\$ 2,242,481	3%
Congestion Mitigation & Air Quality (CMAQ) Funds	Federal	\$10,693,005	12%
Transportation Enhancement (TE) Funds*	Federal	\$14,713,016	17%
High Priority Project (HPP) Funds*	Federal	\$53,550,054	61%
Demonstration (DEMO) Funds*	Federal	\$ 1,657,614	2%
Transportation, Community, & System Preservation (TCSP) Funds*	Federal	\$ 250,000	0.3%
Safe Routes to School (SRTS) Funds*	Federal	\$ 812,169	1%
American Recovery & Reinvestment Act (ARRA) Funds	Federal	\$ 3,124,724	4%
Regional Total		\$87,043,063	100%

*Source: Nashville Area MPO Fiscal Years 2006-2008 TIP and Fiscal Years 2008-2011 TIP, * Discretionary and/or grant funds*

As illustrated by the numbers, approximately \$71 million (or 82 percent) of these funds are discretionary and/or grant awarded funds not dedicated to active transportation, meaning they are not reliable and/or stable funding sources for future non-motorized mode accommodations. In fact, of the \$71 million, 78 percent of these funds are congressionally selected (e.g. earmark funded). Of the total amount of funds allocated toward sidewalk and bikeway improvements over the 6 year period, approximately \$16 million (or 18 percent) are funding sources (e.g. Surface Transportation Program (STP) Funds and Congestion Mitigation & Air Quality (CMAQ) Funds) for which the MPO has had programming authority. Of these two funding sources, the MPO annually receives about \$17 million (\$14.7 million and \$2.3 million respectfully). This equates to about 2.5 percent of the MPO's annual STP allocation toward sidewalk and bikeway improvements and approximately 77 percent of the MPO's historic levels of CMAQ allocation.

The table below summarizes how these funds are allocated by type of improvement. Of the \$87 million nearly \$73 million (or 83 percent) of the funding is allocated toward greenway facilities. The remaining lion's share is allocated toward sidewalk and streetscape projects which largely include sidewalk accommodations. A tenth of one percent is allocated toward exclusive bikeway improvements.

Table 27. Historic Funding Levels for Non-Motorized Modes Type of Improvement

Type of Improvement	Amount	Percent
Sidewalk	\$10,429,354	12%
Bikeway	\$ 48,000	0.1%
Greenway	\$72,662,518	83%
Streetscape	\$ 3,903,191	4%
Regional Total	\$87,043,063	100%

Source: Nashville Area MPO Fiscal Years 2006 through 2008 TIP and Fiscal Years, 2008 through 2011 TIP



The next table summarizes how these funds have been allocated by county. The vast majority are shared between Davidson and Rutherford Counties.

Table 28. Historic Funding Levels for Non-Motorized Modes by County

County	Amount	Percent
Davidson	\$28,152,950	32%
Robertson	\$ 3,835,235	5%
Rutherford	\$32,895,077	38%
Sumner	\$15,204,289	18%
Williamson	\$ 1,717,600	1%
Wilson	\$ 5,237,912	6%
Regional Total	\$87,043,063	100%

Source: Nashville Area MPO Fiscal Years 2006 through 2008 TIP and Fiscal Years, 2008 through 2011 TIP

Funding Gap

Full Implementation of the proposed regional sidewalk and bikeway network totals nearly \$800 million. As previously discussed, current funding practices within the Nashville MPO indicates that approximately \$14.5 million annually is specifically allocated toward sidewalk and bikeway improvements throughout the region. Not accounting for investments in sidewalk and bikeway improvements implemented as part of a new roadway or roadway widening project and/or as part of a project that may be constructed exclusively by local funds and/or through development activity, it would take nearly 55 years to implement the Regional Bicycle and Pedestrian Study recommendations, assuming the same annual funding levels for sidewalk and bikeway improvements.

Looking at implementing the proposed recommendations over a 25 year horizon, which is consistent with the planning horizon of the MPO’s regional transportation planning requirements, there would be an annual funding gap of approximately \$17.2 million annually (or 2.19 times the current funding level). The following table illustrates the funding gap based on current funding levels and the necessary funding level to implement the recommendations within a 25 year planning horizon.

Table 29. Projected Funding Gap for Regional Sidewalk and Bikeway Recommendations

Funding Level	Annually	25 Year Horizon	Study Recommendations	Funding Gap
Current	\$14.50 Million	\$363 Million	\$793 Million	\$430 Million
2.19 Times Current Level	\$31.72 Million	\$793 Million	\$793 Million	-

Proposed Funding Level

To achieve implementation of the strategic vision’s recommendations the region must allocate a larger amount of funding toward sidewalk and bikeway facilities. Based on the review of historic funding levels within the MPO region toward sidewalk and bikeway facilities and the stated sidewalk and bikeway recommendations of the Regional Bicycle and Pedestrian Study, it is recommended that funding levels for such programs be significantly increased. The results of the funding assessment indicate that the MPO region would need approximately 2.19 times more funds annually allocated toward sidewalk and bikeway improvements.

In order to bridge this funding gap, the Nashville Area MPO is adopting a new and progressive funding strategy as part of this Regional Transportation Plan. The funding strategy takes 15 percent of all Surface Transportation Program (STP) funds and allocates them to Active Transportation. This funding could be used for infrastructure improvements such as bicycle lanes, greenways or sidewalks, or could be used from programming such as Safe

Routes to School, education for Law Enforcement, educational classes on bicycle safety, or encouragement programs such as Bike to Work programs. Combined with the 10 percent of Urban STP that will be flexed to transit, the MPO is exclusively dedicating 25 percent of its primary infrastructure funding source to Active Transportation. The remainder of the STP funds is spent on projects that are weighed on criteria with a heavy emphasis (60%) on active transportation, health, the environment, safety and congestion. This aggressive funding strategy is the MPO's response to the desires of the public who want to see more funding being spent on walkable and bikeable communities and transit, and less money spent on wider roadways for motorized vehicles.

These STP funds will complement other funding sources (below) and those listed in section 8.2 Grant Programs and Revenue Sources, such as Transportation Enhancement (TE) funds.

Project Prioritization

To ensure that transportation projects are including infrastructure for bicyclists and pedestrians, the MPO has adopted a systematic process by which candidate projects are evaluated, scored, and ranked by how well they serve the needs of bicyclists and pedestrians. This prioritization process is used to assist the MPO as it considers funding bicycle and pedestrian investments throughout the region.

The first step in the prioritization process includes an assessment of facility needs for both bicycle and pedestrian accommodations. The analysis is based on facility bicycle and pedestrian level of service and non-motorized demand. The second step in the process takes into consideration the following factors:

- LOS and Non-Motorized Potential Trips;
- Connectivity;
- Safety;
- Congestion Mitigation;
- Community Goals;
- Health Impact.

The project evaluation methodology and process was developed based on citizen input and the objectives and strategies of the Regional Bicycle and Pedestrian Study. The prioritization methodology provides a consistent yet flexible means for selecting bicycle and pedestrian facility improvement projects for funding. The process provides the MPO with an objective and quantifiable way for assessing both walking and biking project needs that are consistent with the MPO's regional goals and objectives.

The versatility of the prioritization process has allowed the MPO to use the process in several capacities. The process was used to develop the Regional Sidewalk and Regional Bikeway Network facility recommendations. The process was also used during the development of the Regional Transportation Plan to analyze proposed projects for how well they provide accommodations for bicyclists and pedestrians. Finally, the process will be used by the MPO Bicycle and Pedestrian Advisory Committee to determine how to spend the 15 percent of Urban STP funds set aside for the specific purpose of supporting active transportation.

The STP set-aside for active transportation is intended to support the Objectives of the Regional Bicycle and Pedestrian Study – Provide Facilities, Build Support, Create Policies and Programs, and Increase Awareness. The Committee can decide how to divide the funds among these activities. Example expenditures could be to add sidewalks or bikeways to an infrastructure project that does not have a budget for these facilities; fund stand-alone, multi-use facilities such as greenways; support education programs such as Safe Routes to School;



provide classes on bicycle and/or pedestrian safety; and purchase gear to be provided to the public for bicycle and pedestrian safety classes such as helmets and reflective safety items.

Below is a list of stand-alone greenway projects submitted for the 2035 Regional Transportation Plan that may be considered for funding from the STP set-aside.

Table 30. Candidate Greenway Projects for Future Funding

Project Name	Location
Main Street Pedestrian Walkway	City of Goodlettsville
Springfield Greenway	City of Springfield
Cedar City Trail	City of Lebanon
Cedar City Trail - Bartons Creek South	City of Lebanon
Station Camp to Vol State Greenway	City of Gallatin
Town Creek Greenway - Phase 3	City of Gallatin
Town Creek Greenway	City of Gallatin
Lock 4 Road Greenway - Bicycle and Pedestrian	City of Gallatin
Stones River Greenway North	City of Murfreesboro
W. Division Street Greenway, Phase II and III	City of Mt. Juliet
Woodridge Road Sidewalk/Path - Phase I	City of Mt. Juliet
Woodridge Road Sidewalk/Path - Phase II	City of Mt. Juliet
Cedar Creek Multi-Use Trail	City of Mt. Juliet
Franklin Greenway - Bicentennial Park Connection	City of Franklin
Franklin Greenway - Downs Boulevard Connection	City of Franklin
Franklin Greenway - Harlinsdale Park Connection	City of Franklin
Franklin Greenway - Nichols Bend Connection	City of Franklin
Franklin Greenway - Spencer Creek Connection	City of Franklin
Franklin Greenway - West Main Street Connection	City of Franklin
BNA Greenway Pedestrian/Biking Trail	Nashville Area MPO
Greenway	Town of Smyrna
Greenway	Town of Smyrna
Greenway/Walking Trail	City of Spring Hill
Otter Creek Greenway Multi-Use Path	City of Forest Hills
Multi-Use Path Granny White Pike (Phase 3 John C. Lovell Bikeway)	City of Forest Hills
Rolling Mill Hill Greenway Extension	MDHA
Hendersonville Bike/Ped Phase 3 (Drakes Creek Greenway)	City of Hendersonville
Goodlettsville Greenway Phases I-VI	City of Goodlettsville
Hendersonville Bike/Ped Phase 4 (Saundersville Rd Greenway)	City of Hendersonville
Upper Station Camp Greenway	Sumner County
Lower Station Camp Greenway	Sumner County
Cumberland River Greenway Opry Mills Connector	Metro Board of Parks and Recreation
Cumberland River Greenway East Bank to Shelby Bottoms	Metro Board of Parks and Recreation
Harpeth River Greenway Old Harding to Harpeth Bend	Metro Board of Parks and Recreation
Whites Creek Greenway Clarksville Highway to University School	Metro Board of Parks and Recreation
Seven Mile Creek Greenway Extension	Metro Board of Parks and Recreation
Mill Creek Greenway Lenox Village to Mill Run	Metro Board of Parks and Recreation
Cumberland River Greenway Bells Bend to Brookemeade	Metro Board of Parks and Recreation
Stones River Greenway Connections	Metro Board of Parks and Recreation
Timberland Park Visitor Improvement Phase I	Williamson County

Project Name	Location
Cumberland River Greenway at TSU	Metro Board of Parks and Recreation
La Vergne Pedestrian Trail	City of La Vergne
Hurricane Creek Greenway	City of La Vergne
Jefferson Springs Greenway Extension	Town of Smyrna

Potential Revenue Sources

The MPO has produced a funding toolbox that provides a range of funding sources available for implementing sidewalk and bikeway improvements. The region has made good use of a large number of these funding programs and should continue to use these funding sources to implement the recommendations plan. Also, bikeway and sidewalk improvements have routinely been implemented as part of roadway improvement projects. In addition to these funds and reliance on roadway improvement projects for bikeway and sidewalk improvements, the MPO is likely going to need to establish a dedicated funding source or target level funding from its current funding programs to implement this Study's recommendations. Regardless of the option, the MPO will need to annually fund approximately \$31.72 million to implement the recommendations of the Study within the MPO's 25 year long range planning horizon.

The following table presents a quick overview of the various funding opportunities which are described in more detail as of part of the regional study documentation.

Table 31. Potential Funding Sources for Active Transportation Improvements

Potential Funding Sources for Bicycle and Pedestrian Projects and Programs – Summary Table					
Funding Program	Source	Agency	Primary Purpose	Eligibility	Match Requirements
Interstate Maintenance (IM)	Federal	TDOT	Funding is targeted at maintaining and improving the Nation's Interstate highway system.	IM funds may be used for resurfacing, restoration, rehabilitation, and reconstruction (4R) projects. The inclusion of pedestrian safety and bicycle facilities that are incorporated in the design of new/reconstructed interchanges and/or overpasses are eligible.	90% Federal / 10% Non-Federal
National Highway System (NHS)	Federal	TDOT	Improvements to roads that are part of the NHS and NHS Intermodal connectors.	Construction of pedestrian and bicycle facilities on land adjacent to any highway on the NHS system.	80% Federal / 20% Non-Federal or 90%/10% for Interstates
Surface Transportation Program (STP)	Federal	MPO/TDOT	Construction, resurfacing, and operational improvements for highways and bridges, including transit and other modes.	Construction of pedestrian/bicycle transportation facilities: Non-construction projects for safe bicycle use, Upgrade public sidewalks to comply with the ADA.	80% Federal / 20% Non-Federal
Transportation Enhancement (TE) Activities	Federal	TDOT	Funds twelve specific activities that include pedestrian and bicycle facility development, and safety/education activities.	3 of the 12 categories are pedestrian and bicycle facilities, safety and education for pedestrians and cyclists, and rail-trails.	80% Federal / 20% Non-Federal
Congestion Mitigation and Air Quality (CMAQ)	Federal	MPO/TDOT	Funds projects in nonattainment and maintenance areas that reduce transportation related emissions.	Construction of pedestrian/bicycle facilities; Non-construction projects for safe bicycle use. Projects do not have to be within the right-of-way of a Federal-aid highway, but must demonstrate an air quality benefit.	* 80% Federal / 20% Non-Federal
High Priority Projects (HPP) Program	Federal	Congress	Congressionally designated funding for specific project in federal highway transportation bill.	Only those projects specifically identified in SAFETEA-LU Act.	80% Federal / 20% Non-Federal
Highway Bridge Program (HBP)	Federal	TDOT	Funding for States to improve the condition of their highway bridges through replacement, rehabilitation, and systematic preventive maintenance.	Pedestrian/bicycle facilities on highway-bridges. If a highway bridge deck is replaced or rehabilitated, and bicycles are permitted at each end, then the bridge project must include safe bicycle accommodations.	80% Federal / 20% Non-Federal
Recreational Trails Program (RTP)	Federal	TDEC	Develop and maintain recreational trails and trail-related facilities for non-motorized/ motorized recreational trail uses.	Motorized and non-motorized trails. Eligible categories are trail maintenance and rehabilitation, trailside or trailhead facilities, construction and maintenance equipment, trail construction, trail assessments, and trail safety and environmental protection education.	80% Federal / 20% Non-Federal
Transportation, Community, and System Preservation (TCSP) Program	Federal	FHWA	To address the relationships among transportation, community, and system preservation plans and practices and identify private sector-based initiatives to improve those relationships.	Sidewalk and bikeway improvements are eligible for funding under this program as are other activities such as traffic calming measures.	80% Federal / 20% Non-Federal
National Scenic Byways Program	Federal	FHWA	The program recognizes roads having outstanding scenic, historic, cultural, natural, recreational, and archaeological qualities and provides for designation of these roads as National Scenic Byways, All-American Roads or America's Byways.	Development and provision of tourist implementation, construction of bicycle and pedestrian facilities, interpretive facilities, overlooks and other enhancements for byway travelers.	80% Federal / 20% Non-Federal
Federal Lands Highway Program (FLHP)	Federal	FHWA	Provides for transportation planning, research, engineering, and construction of roads and parkways and transit facilities that provide access to or within public lands, national parks, and Indian reservations.	Sidewalks, greenways, trails, and bicycle facilities that provide access to or within public lands, national parks, and Indian reservations.	80% Federal / 20% Non-Federal



Potential Funding Sources for Bicycle and Pedestrian Projects and Programs – Summary Table

Funding Program	Source	Agency	Primary Purpose	Eligibility	Match Requirements
Safe Routes to School (SRTS)	Federal	TDOT	Enable and encourage children, including those with disabilities, to walk and bicycle to school; Make bicycling and walking to school a safer and more appealing transportation alternative, thereby encouraging a healthy and active lifestyle from an early age; Facilitate the planning, development, and implementation of projects and activities that will improve safety and reduce traffic, fuel consumption, and air pollution in the vicinity of schools.	Sidewalk improvements; Traffic calming and speed reduction improvements; Pedestrian and bicycle crossing improvements; On-street bicycle facilities; Off-street bicycle and pedestrian facilities; Secure bicycle parking facilities; Traffic diversion improvements in the vicinity of schools; Public awareness campaigns and outreach; Traffic education and enforcement in the vicinity of schools; Student sessions on bicycle and pedestrian safety, health, and environment; Funding for training, volunteers, and managers of safe routes to school programs.	100% Federal
Highway Safety Improvement Program (HSIP)	Federal	TDOT	Reduction in traffic fatalities and serious injuries on public roads.	Improvements for pedestrian/bicyclist safety; Construction of yellow-green signs at pedestrian/bicycle crossings and in school zones. Correction of hazardous locations including roadside obstacles, railway-highway crossing needs, and poorly marked roads that constitute a danger to bicyclists/pedestrians. Highway safety improvement projects on bicycle/pedestrian pathways or trails.	* 90% Federal / 10% Non-Federal
State and Community Highway Safety Grants (Section 402)	Federal	GHSO	To assist states and communities in the development and implementation of highway safety programs designed to reduce traffic crashes, deaths, injuries and property damage.	Funds may be used for a wide variety of highway safety activities and programs including those that improve pedestrian and bicycle safety. A minimum of 40% of a state's 402 funds must be expended by local governments or be used for the benefit of local governments.	80% Federal / 20% Non-Federal
State Planning & Research (SPR) Funds	Federal	TDOT	Planning and research funds for state DOTs to address federal statewide planning requirements and to conduct research, development, and technology activities relating to highway, public transportation, and intermodal transportation systems.	Systems and sub-regional planning and research, development, and technology activities in accordance with the provisions of 23 U.S.C. 505(b). Funding is eligible under this program for bicycle and pedestrian planning and research.	80% Federal / 20% Non-Federal
Metropolitan Planning (PL) Funds	Federal	MPO	Funds are for MPOs to carry out federal transportation planning activities within a MPO area. Activities include administering the MPO process, development of a regional multimodal long range transportation plan, and maintaining a multiyear transportation improvement program.	Funding can be used for regional, sub-regional, and other modal planning activities including plans, studies, and programs for bicycle and pedestrian accommodations.	80% Federal / 20% Non-Federal
Urbanized Area Formula Grants (Section 5307)	Federal	Transit Agency/ MPO/TDOT	Transit capital and planning assistance to urbanized areas of over 50,000 and operating assistance to areas with populations of 50,000 - 200,000.	Improve bicycle and pedestrian access to transit facilities and vehicles, including bike stations.	* 80% Federal / 20% Non-Federal
Job Access and Reverse Commute Grants	Federal	TDOT	Intended to transport welfare recipients and eligible low-income individuals to and from employment.	Can fund pedestrian and bicycle-related services.	50% Federal / 50% Non-Federal
Paul S. Sarbanes Transit in Parks Program	Federal	FTA/Interior	Funds alternative transportation that helps visitors access destinations in federally-owned or managed parks and public lands.	The program funds capital and planning expenses for alternative transportation systems such as shuttle buses and pedestrian and bicycle trails in national parks and public lands.	100% Federal*
Land and Water Conservation Fund (LWCF)	Federal	TDEC/NPS	Build a variety of park and recreation facilities, including trails and greenways.	Greenway and trail facilities.	50% Federal / 50% Non-LWCF
EPA Climate Showcase Communities Grant	Federal	EPA	Assist local governments in developing plans, conducting demonstration projects, and implement projects that reduce greenhouse gas (GHG).	Activities must achieve reductions in GHG emissions by addressing one of ten priority areas including land use, transportation, and community planning and include reductions in vehicle miles traveled.	50% Federal / 50% Non-Federal
Community Development Block Grant (CDBG)	Federal	City/HUD	Directly provides funds to cities and towns for projects with community-wide benefits. Activities must benefit low to moderate income persons.	Sidewalks, greenways, trails, and bicycle facilities that provide increased safety, access, and transportation options.	100% Federal



Potential Funding Sources for Bicycle and Pedestrian Projects and Programs – Summary Table

Funding Program	Source	Agency	Primary Purpose	Eligibility	Match Requirements
Local Parks and Recreation Fund (LPRF)	State	TDEC	To provide grants to all eligible local governmental entities for the purchase of lands for parks, natural areas, greenways, and land for recreation facilities.	The funds may be used for trail development and capital projects in parks, natural areas, and greenways. At least 60% of the funds allocated go to municipal governments as authorized by the Act.	50% State / 50% Non-LPRF
Natural Resources Trust Fund (NRTF)	State	TDEC	To protect the endowment represented by the land and minerals owned by the State; and to ensure that development of state-owned non-renewable resources will proceed in a manner which is economically sound, and that revenues received from disposal of those resources is used for the public.	Grants from the NRTF may be awarded to all eligible local governmental entities and state agencies for outdoor recreation, historical or archaeological sites, the acquisition of lands, waters, or interests in lands and waters.	50% State / 50% Non-NRTF
Bikes Belong Coalition	Private	Bikes Belong Coalition	Bikes Belong will accept requests for funding of up to \$10,000 for facility and advocacy projects.	Fundable projects include paved bike paths and rail-trails as well as mountain bike trails, bike parks, BMX facilities, and large-scale bicycle advocacy initiatives.	None, but encouraged
Kodak American Greenway Awards	Private	Foundation	In general, grants can be used for all appropriate expenses needed to complete, expand or improve a greenway project including planning, technical assistance, legal and other costs. Most grants range from \$500 to \$1,000. The maximum grant is \$2,500.	Grants may be used for activities such as: mapping, ecological assessments, surveying, conferences, and design activities; developing brochures, interpretative displays, audio-visual productions or public opinion surveys; hiring consultants, incorporating land trusts, building a foot bridge, planning a bike path, or other creative projects.	None, but encouraged
Fish America Foundation	Private	Foundation	The Foundation grant system includes several changing grant categories, each with different application cycles and some of which can include greenways that enhance or conserve water resources.	Projects must result in on-the-ground habitat restoration, clearly demonstrate significant benefits to marine, estuarine or anadromous fisheries resources, particularly sportfish, and must involve community participation through an educational or volunteer component tied to the restoration activities.	One for One Match
National Trails Fund	Private	American Hiking Society	Gives resources necessary to build or repair new or existing trails, protect trail corridors, and support trail outreach and volunteer programs.	Grants range from \$500 to \$10,000 per project and are awarded to nonprofit organizations that help build and maintain hiking trails, preserve lands, and promote trail volunteerism throughout America.	None, but encouraged
Global ReLeaf Program	Private	American Forests	Funding for planting tree seedlings on public lands, including trailsides.	Emphasis is placed on diversifying species, regenerating the optimal ecosystem for the site and implementing the best forest management practices. This grant is for planting tree seedlings on public lands, including along trail rights-of-way.	None, but encouraged
Robert Wood Johnson Foundation (RWJF)	Private	RWJF	Active Living Research - supports research to identify promising policy and environmental strategies for increasing physical activity, decreasing sedentary behaviors and preventing obesity among children and adolescents.	Active Living Research supports research examining how environments and policies impact physical activity, especially among ethnic minorities and children living in low-income communities. Findings are expected to inform environmental and policy changes that will promote active living among children and families.	Varies

Notes: * Funding match levels may vary; Agency refers to lead agency with regards to funding source (MPO – Metropolitan Planning Organization, FHWA – Federal Highway Administration, FTA – Federal Transit Administration, TDOT – Tennessee Department of Transportation, TDEC – Tennessee Department of Environment and Conservation, GHSO – Governor’s Highway Safety Office, NPS – National Park Services, HUD - U.S. Department of Housing and Urban Development)

