Old North St. Louis
Walkable Bikeable Community Plan
Acknowledgements

Numerous residents and staff participated in the development of this *Old North St. Louis Walkable Bikeable Community Plan*. Their creativity, energy, and commitment to the future of the Old North St. Louis neighborhood were the driving force behind this planning effort.

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Chapter 1. Introduction

From the time the neighborhood was established as the Village of North St. Louis in 1816, residents of the Old North St. Louis (ONSL) neighborhood have walked and bicycled for transportation and recreation. The vibrant neighborhood was recognized in 2004 as one of St. Louis’ best places to live in the St. Louis Magazine’s “up-and-coming” category.\(^1\) A major visitor destination, the neighborhood is a tight-knit community focused on economic development and improving quality of life for all residents.

Old North is in an excellent position to capitalize on existing pedestrian and bicycle-friendly attributes and to increase the number of residents and visitors who travel by bicycle not just for recreation, but for transportation as well. ONSL has high-density residential areas, land uses conducive to bicycling and walking, existing outreach programs, and high-quality multi-modal connections, all of which will aid in the development of a world class system of bikeways and walkways that can sustainably activate the streets with people of all abilities.

The Old North St. Louis Walkable Bikeable Community Plan provides a blueprint for the development of bicycle and pedestrian improvements throughout the neighborhood, making it safer and easier to reach local destinations. The plan identifies and analyzes current conditions for walking and bicycling as well as education and encouragement efforts, and makes recommendations for improving conditions to create a more interconnected, safe, and convenient network of trails, on-street bike facilities, sidewalks, paths and street crossings.

Key Outcomes

This plan lays out comprehensive strategies for system-wide improvements and specifies exactly what needs to be done to achieve the neighborhood’s goal of becoming a better community for walking and bicycling. These strategies will help ONSL leverage the necessary funding and other resources needed to achieve this goal. Key approaches to developing the Old North St. Louis Walkable Bikeable Community Plan are:

- To effectively build upon the existing local pedestrian and bicycle network, while streamlining connections and establishing new links to surrounding areas.
- To build on previous work by tying together bicycle/pedestrian elements from other local and regional plans.
- To address the bicycling and walking needs and perspectives of the community’s diverse population by providing a strong public outreach process.
- To develop a plan addressing the needs of walkers and bicyclists of all ages, abilities, skills, and confidence levels.
- To provide a scheme of innovative and economically feasible projects and recommendations matched to specific funding opportunities.

\(^1\) Old North St. Louis Restoration Group, A Short History of Old North. http://www.onsl.org/history/
Public Involvement in the Plan

The goal of the public involvement plan was to facilitate a shared vision of the non-motorized transportation system throughout ONSL. The public outreach approach accommodated multiple methods of public involvement and fostered a spirit of cooperation among agency stakeholders. Community endorsement of any plan is critical to the long term success of the recommended system and to the ability of the neighborhood to implement the plan. Agencies, stakeholders, and the general public were encouraged to provide input in several ways, as shown in Table 1. Additional information is provided in Appendix A.

Table 1. Summary of Public Engagement

<table>
<thead>
<tr>
<th>Event/Meeting</th>
<th>Timing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public Workshops</td>
<td>June and October 2010</td>
</tr>
<tr>
<td>Steering Committee Meetings</td>
<td>May, June, September 2010, and February 2011</td>
</tr>
<tr>
<td><strong>Other Events</strong></td>
<td></td>
</tr>
<tr>
<td>Crown Square Ribbon Cutting &amp; Street Festival</td>
<td>July 2010</td>
</tr>
<tr>
<td>St. Louis Open Streets Event - Crown Square Activity Hub</td>
<td>October 2010</td>
</tr>
<tr>
<td>City of St. Louis Bicycle Implementation Group</td>
<td></td>
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<tr>
<td>Presentation</td>
<td>April 2011</td>
</tr>
<tr>
<td>Online Project Survey</td>
<td>June 2010 - October 2010</td>
</tr>
</tbody>
</table>

Contents of the Plan

The Old North St. Louis Walkable Bikeable Community Plan is organized as follows:

- **Chapter 1: Introduction** provides an overview of this plan and its purpose.
- **Chapter 2: Existing Conditions** describes ONSL’s existing pedestrian and bicycle networks and summarizes strengths and weaknesses of the system.
- **Chapter 3: Recommended Walkway and Bikeway System** explains the recommended system of on-street bikeways and walkways in ONSL and presents evaluation criteria for developing a phased implementation approach.
- **Chapter 4: Best Practices – 4 E’s Report** describes education, encouragement, enforcement and evaluation measures ONSL should implement or encourage to promote walking and bicycling, increase safety, and increase the awareness of walking and bicycling as viable travel modes.
- **Chapter 5. Implementation Plan** outlines implementation strategies and identifies potential funding opportunities to develop the plan recommendations.

Appendices at the end of this document include a summary of the public outreach, a review of relevant plans and policies, and additional information about potential funding sources.
Chapter 2. Existing Conditions

This chapter describes the existing pedestrian and bicycle networks in the Old North St. Louis (ONSL) neighborhood. It first provides an inventory and assessment of existing pedestrian and bicycle facilities in ONSL then discusses important destinations for bicyclists and pedestrians, in particular, connections to transit, schools and parks. An analysis of system strengths and weaknesses follows, which highlights key areas where improvements may be needed.

Throughout the Old North St. Louis Walkable Bikeable Community Plan, the term “pedestrian” refers to a person moving from place to place, on foot and/or with the use of an assistive mobility device (when that person has a disability and/or medical condition). “Walking” or “to walk” are the terms used to describe this movement of a pedestrian.

Existing Walking and Bicycling Conditions

Existing walkways and key destinations in ONSL are shown in Map 1 on page 5.

Walkways

The American Association of State Highway and Transportation Officials (AASHTO) recognizes sidewalks, shared-use paths, and roadway shoulders as pedestrian facilities. Sidewalks are the primary pedestrian facility in urban areas. Recommended sidewalk width is determined by land use and volume of pedestrian traffic, with an unobstructed minimum of four feet on local neighborhood streets and six feet on major streets or in the central business district. Recommended sidewalk widths in busy districts and routes be 16 to 20 feet or more.

The planting or buffer zone is the area between the sidewalk and the roadway, which might contain street trees, signal poles, utility poles, street lights, controller boxes, hydrants, signs, parking meters, driveway aprons, grates, hatch covers, or street furniture. A buffer zone improves the pedestrian environment by providing separation between people walking on the sidewalk and motorized traffic. Buffer zones also serve as snow storage areas and reduce the likelihood of splashing from wet pavement.

Pedestrian travel is accommodated and enhanced by intersection treatments such as crosswalks and curb ramps. Guidelines and minimum dimensions for pedestrian facilities are provided in the Americans with Disabilities Act guidelines, primarily the Public Rights-of-Way Accessibility Guidelines (PROWAG). These facility types comprise the majority of ONSL’s existing walkway network, described in the following section.
Sidewalks
A fairly complete sidewalk system (with sidewalks on both sides of streets) exists on many of the east-west streets in the ONSL neighborhood, and on Blair Avenue. The sidewalk environment includes a variety of complementary pedestrian facilities such as planter strips, ADA-compliant curb ramps, pedestrian-scale lighting, curb extensions, and amenities like benches, trash receptacles, and public art.

In several locations, including Blair Avenue at Montgomery Street and N. 14th Street at Mullanphy Street, sidewalks are in disrepair, with grass and roots disrupting the surface. Sidewalks were often installed as adjacent buildings were constructed, resulting in a sometimes disconnected network as one sidewalk ends abruptly, such as on Montgomery Street near Crown Square.

Intersections
Marked crosswalks are critical elements of the pedestrian network. It is of little use to have a complete sidewalk system if pedestrians cannot safely and conveniently cross intersecting streets.

Few crosswalks are marked in ONSL. At the intersection of Wright Street and Hadley Street in front of Ames-VPA Elementary School, parallel markings are provided on the south side of Hadley Street. Most crosswalk markings in the neighborhood show signs of deterioration and are in need of replacement.

Curb Ramps
Curb ramps represent a fundamental element of an accessible public realm. A sidewalk without a curb ramp can be useless to someone in a wheelchair, and force them back to a driveway and out into the street for access. ADA-accessible curb ramps include detectible warnings. Blair Avenue at N. Market Street provides an example of an ADA-compliant curb ramp.
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Shared-Use Paths

Shared-use paths (also referred to as “trails” and “multi-use paths”) accommodate bicyclists and pedestrians and are often viewed as recreational facilities, but they are also important corridors for utilitarian (work, shopping, or other function) trips. Shared-use paths can provide a desirable facility particularly for novice bicyclists, recreational trips, and bicyclists of all skill levels preferring separation from traffic. They are important assets for a community, encouraging healthy and active lifestyles, promoting non-motorized transportation over longer distances and making the area more attractive to visitors. While there are no shared-use paths within the ONSL jurisdiction, the University of Missouri St. Louis (UMSL) and ONSL residents developed the History Trail, a bicycle tour of the neighborhood that provides a connection to the North Riverfront Trail along the Mississippi Riverfront. In addition, the Trestle is an abandoned railroad line that crosses I-70 at N. Market Street and has been proposed as a bicycle/pedestrian connection from ONSL and downtown to the North Riverfront Trail.

On-Street Bikeways

AASHTO’s Guide for the Development of Bicycle Facilities (1999) defines several types of “bikeways.” Bikeways are distinguished as preferential roadways accommodating bicycle travel. Accommodation can take the form of bicycle route designation or bicycle lane striping, depending on the speed and volume of traffic on the roadway, space available to accommodate bicyclists, and types of user expected on the facility.

St. Louis currently designates on-street bikeways through shared-lane pavement markings and dedicated bicycle lanes. Bicyclists can also share the road with cars on other streets with low traffic speeds and volumes, or on roadways with a wide shoulder where a bicyclist can avoid riding in traffic. Streets that have low traffic speeds and that may be appropriate for bicycling without significant changes can be considered ‘bike friendly streets.’ Map 2 shows how the Old North neighborhood fits into the St. Louis bikeway system. It is important to note that bicycles are permitted on all roads in ONSL.
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Pedestrian and Bicyclist Destinations

It is particularly important for walkway and bikeway networks to provide access to destinations popular among pedestrians and bicyclists. Within ONSL, popular destinations include:

- Educational facilities:
  - Confluence Academy's Old North Saint Louis Campus
  - Ames Visual and Performing Arts Elementary
  - Nearby: Jefferson Elementary, Henry Elementary, and Clay Elementary

- Commercial areas:
  - Crown Square (formerly the 14th Street Mall)
  - Crown Candy Kitchen

- Attractions along the Old North St. Louis Restoration Group's (ONSLRG) bicycle 'History Trail' tour, in particular the Community History Museum

- Parks and trails:
  - Jackson Place Park, Strodtman Park,
  - Nearby: St. Louis Place Park, Fairgrounds Park, O'Fallon Park, Hyde Park, DeSoto Park, Forest Park, and the North Riverfront Trail

- Community gardens:
  - Hebert Street Garden
  - Wingmann Park
  - Enterprise Garden
  - Ames School Butterfly Garden
  - N. 13th Street Community Produce Garden
  - N. Market Street/N. Florissant Avenue Community Garden
  - Palm Street Tree & Flower Garden
  - The garden at the northwest corner of St. Louis Avenue and N. 13th Street
  - The triangular plot east of N. Florissant Avenue, south of Hebert Street, and west of N. 20th Street

- Regional destinations:
  - Downtown St. Louis
  - The North Riverfront Trail
  - Calvary and Bellefontaine cemeteries
  - Mary Meachum Freedom Crossing
  - Jefferson National Expansion Memorial/Gateway Arch

The Crown Candy Kitchen is a key destination that draws residents and tourists alike.
Transit Connections

Metro Transit serves the St. Louis metropolitan area, including the ONSL neighborhood. Metro operates a bus system, two MetroLink light rail lines, and Call-A-Ride paratransit service.

Within the neighborhood, the Number 30 bus line runs from the west along St. Louis Avenue and turns south on N. 13th Street, continuing into downtown St. Louis. The Number 74 bus line provides service along Florissant Avenue. Several other bus routes are located within walking distance of ONSL. There are currently no MetroLink stations in ONSL. The closest one is the Convention Center MetroLink station, approximately one mile south of ONSL in downtown. Florissant Avenue may be used as a MetroLink light rail corridor in the future.

Ensuring a strong pedestrian and bicycle link to transit is an important part of making non-motorized transportation a part of daily life in ONSL. The main components of bicycle and pedestrian transit integration are:

- Allowing bicycles on transit
- Providing benches, shelters, posted schedules, bicycle parking and other features at transit stops
- Improving connections between walkways, bikeways and transit
- Improving accessibility for people with disabilities

Metro Transit buses are equipped with front-mounted racks that hold two bicycles. The website provides information about riding the bus with a bicycle, including guidance for using the bike rack. Bicycles are not allowed inside the bus in the event that the bike rack is full, a practice employed by many other transit agencies. Bicycles are also allowed on MetroLink, and short-term bicycle parking (stationary bike racks) is provided at several stations.²

Map 3 shows the bicycle and pedestrian trip generators in ONSL.

² [http://www.metrostlouis.org/GettingStarted/FAQs/bikenrideFAQs.asp](http://www.metrostlouis.org/GettingStarted/FAQs/bikenrideFAQs.asp)
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System Opportunities and Constraints

This section provides an analysis of the existing conditions for walkways and bikeways in ONSL. The section summarizes key opportunities and potential barriers to accommodating bicycle and pedestrian trips.

Opportunities

Various characteristics foster an environment where bicycling and walking is safe and enjoyable in ONSL. These system strengths are described below.

Presence of Popular Destinations

As previously discussed, there are many destinations that people are likely to bicycle or walk to within ONSL. Crown Square and the Crown Candy Kitchen are commercial areas that attract visitors from outside the neighborhood. Historic buildings and streets are also a major attractor and the History Trail route is designed to encourage the use of non-motorized transportation. The district is adjacent to many other popular neighborhoods and destinations, such as the Mary Meacham Freedom Crossing Underground Railroad site, the North Riverfront Trail, Downtown St. Louis and many others.

Presence of Walk-and Bike-Friendly Streets

Most residential areas benefit from a pedestrian and bicycle-friendly environment. As many homes in ONSL are located on low-volume streets with relatively complete sidewalks, pedestrians and bicyclists of all ages and skills can generally get around comfortably and safely. Also, the neighborhood’s good street connectivity disperses traffic among the roads and bicyclists or pedestrians can choose routes on lower-traffic streets.

Proximity to North Riverfront Trail

The North Riverfront Trail runs for ten miles along the west shore of the Mississippi River from Laclede’s Landing in downtown St. Louis to the Old Chain of Rocks Bridge. Future plans include extending the trail one mile north to the Route 66 Bikeway, which will provide trail users access across the Mississippi River into Granite City, Illinois. ONSL residents can connect to the trail from ONSL via Branch Street.
Interstate Crossings
While Interstate 70 is a barrier to continuous bicycle and pedestrian access east of the ONSL neighborhood, several bridges and underpasses provide route connections for non-motorized users.

Crossings (north to south) include:

- Branch Street undercrossing – sidewalks both sides, although sidewalks between N. 14th Street and N. 11th Street/N. 13th Street are in poor condition, and no crosswalks or curb ramps are provided across the freeway ramps at N. 11th Street and west of Interstate 70.
- St. Louis Avenue overcrossing – Reconstructed in 2010, this crossing is now equipped with sidewalks on both sides of the bridge, marked crosswalks at both N. 11th and N. 10th Streets, and ADA-accessible curb ramps to facilitate safe pedestrian movement. Wide outside lanes provide additional safety and comfort for bicyclists using the St. Louis Avenue overcrossing.
- N. Market Street pedestrian overpass – this is a key connection from Jackson Place Park. However, no marked crossings are provided on N. 11th Street or N. 10th Street, which provide access to the interstate ramps and have heavy automobile use. In addition, the overpass is only accessed by stairs, requiring bicyclists to dismount and carry their bicycles. No ADA-accessible accommodations exist and the stairs and surfaces are in poor condition.
- Madison Avenue overcrossing – Also reconstructed in 2010, the Madison Avenue overcrossing now has sidewalks on both sides of the bridge, marked crosswalks at N. 11th and N. 10th Streets, and ADA accessible curb ramps.
- Howard Street/N. 9th Street overcrossing – narrow sidewalks are provided on both sides of this overpass. The Cass Avenue Bridge, which is currently under construction, will replace this overpass.
- Cass Avenue/N. 7th Street overcrossing – Closed in 2007 and torn down in 2010, the Cass Avenue/N. 7th Street overcrossing will be replaced by the new Cass Avenue Bridge, which will be equipped with sidewalks on both sides of the road and ADA accessible curb ramps at all intersections. The new Cass Avenue bridge is scheduled for completion in 2012.
Constraints
Described below, bicyclists and pedestrians in and around ONSL face a variety of challenges.

Barriers
Interstate 70 is a major barrier to bicycle and pedestrian traffic, as few crossings are provided and the streets adjacent to the interstate are uncomfortable to walk along. While crossings are provided as listed above, it can be challenging for bicyclists and pedestrians to access these crossings, due to high levels of traffic accessing Interstate 70. The Benton Street on-ramp to southbound Interstate 70 leads to high traffic speeds and volumes on 11th Street. Pedestrians, who walk along the street to access the Holy Trinity Catholic Church, Ames VPA Elementary, or Jackson Place Park, have difficulty crossing 11th Street north of the Benton Street entrance.

In addition to the freeway, arterial roadways have high traffic speeds and volumes, and can be difficult for pedestrians and bicyclists to cross. Arterials in ONSL include N. Florissant Avenue and Cass Avenue.

Lack of Wayfinding Tools
While the History Trail provides a text supported map of the recommended route, ONSL could provide a designated route with wayfinding signage to aid users. ONSL’s walkway and bikeway system also lacks signage and other wayfinding tools to orient users and direct them to and through major destinations like Crown Square, schools, parks, and historic areas. While the Bike St. Louis network does provide some wayfinding signage to aid bicyclists in accessing city-wide destinations, local destinations are not as well served by this signage.

Fragmented Sidewalk Network in Some Areas
Discussed earlier, the sidewalk network in ONSL is somewhat fragmented, particularly on north-south streets. Generally, a relatively complete sidewalk system exists around N. Market Street and Blair Avenue. Many streets in outer areas do not have sidewalks, such as Palm Street, N. 11th Street and Tyler Street.

Lack of Marked Crossings
Legally every intersection, marked or unmarked, is a designated crossing in the City of St. Louis. Bicyclists and pedestrians benefit from marked crosswalks, especially on busier streets, routes to school and popular pedestrian districts. There are currently a limited number of marked crosswalks in the neighborhood, most
of which are located near Confluence Academy, Ames-VPA Elementary School, and at the intersection of St. Louis Avenue and N. 11th Street at the recently reconstructed I-70 overpass. Other major streets, including Florissant Street, N. Market Street, and St. Louis Avenue, do not have marked crossings.

Crossing Florissant Street can be challenging for pedestrians and bicyclists due to relatively long distances between signalized intersections and marked crossings. This creates challenges for pedestrians traveling east-west across the roadway corridor. High vehicle speeds and lack of signalized intersections discourage pedestrians from walking to services along this corridor. In some cases, pedestrians choose to dart across the roadway to reach their desired destinations.

**Difficulties for Disabled or Physically Impaired Pedestrians**

Pedestrians with disabilities experience crossing difficulties in some parts of ONSL. Curb ramps at some intersections are in poor condition or disrepair, while other intersections lack curb ramps altogether. In some cases, marked crosswalks lead to sidewalks with no curb ramps, or are not aligned with existing curb ramps. This can make traveling by wheelchair or motorized mobility device challenging, if not impossible, forcing many wheelchair users to operate on the road instead of the sidewalk. Visually- and mobility-impaired pedestrians also experience difficulty navigating through intersections with curb ramps oriented diagonally toward the intersection's center rather than toward a crosswalk.

**Lack of On-Street Bikeways**

Mentioned earlier, ONSL lacks a formalized system of designating, improving, marking or signing bikeways. Great Rivers Greenway District and the City of St. Louis do maintain the Bike St. Louis Network, a 77-mile system of on-street bikeways that connect the City’s 79 neighborhoods, as well as the Cities of Clayton and Maplewood, which border western St. Louis City. ONSL is served by marked shared lanes (sharrows) on segments of St. Louis Avenue, N. Florissant Road, Blair Avenue, and Branch Street. While the northern half of the neighborhood is served by these on-street facilities, the southern half of the neighborhood has no bicycle facilities at all and lacks a direct connection to the Columbus Square neighborhood and Downtown St. Louis.

**Damaged/Deteriorated Sidewalks**

Existing sidewalks in various parts of ONSL suffer from cracking, heaving, and/or vegetation growing between pavement seams. Uneven pavement joints (often caused by tree roots below the sidewalk) create tripping hazards and complicate travel for wheelchair and other users. Water ponding on sidewalk surfaces can further challenge walking, especially when wet surfaces freeze in cold weather. In addition, many of the neighborhood’s older brick sidewalks have been buried underneath grass and dirt, creating segment gaps in the sidewalk network.

*Sidewalks in poor condition can be difficult for pedestrians in wheelchairs or those pushing strollers.*

Old North St. Louis
Walkable Bikeable Community Plan
Background Plan and Policy Review
The project team reviewed several background plans and studies relevant to the Old North St. Louis Walkable Bikeable Community Plan. The following documents were reviewed for this analysis:

- St. Louis Regional Bicycling and Walking Transportation Plan (2005)
- City of St. Louis Strategic Land Use Plan (2005)
- The Trestle: A New View of St. Louis (2007)

- St. Louis Riverfront Trail Enhancements Plan (2001)
- St. Louis – City of the Future (2009)
- St. Louis City Revised Code (Updated 2008)
- House Concurrent Resolution 67: Missouri Complete Streets (2011)

Additional information about these plans and policies is provided in Appendix A.

Existing “4-E’s” Programs
This section describes on-going education, encouragement and enforcement efforts affecting the ONSL neighborhood and its residents. With a focus on programs and activities related to bicycling and walking that impact the Old North community, the section identifies efforts that promote bicycling and walking, and which could potentially be expanded to reach out to even more community members.

Education
Education programming is a critical element necessary to create a bikeable and walkable community. Whether espousing the benefits of bicycling and walking or teaching bicyclists and pedestrians to travel in a safe, predictable and responsible manner, education programming provides residents and visitors with the resources and facts to make more informed transportation decisions. While there are no currently active education programs in ONSL, a number of local and national organizations provide educational resources to communities and individuals throughout the St. Louis Metropolitan Region. The St. Louis Regional Bicycle Federation, Trailnet, the St. Louis Children’s Hospital, and other local organizations provide educational materials throughout the region, including bicycle commuter tips, road bicycling courses, safety tips for parents and children, and targeted motorist awareness media campaigns to encourage all road users to share the road.

Encouragement
Encouragement activities and information can vary widely from organized bicycle rides to historical and cultural tour maps for self-guided exploration.

St. Louis Open Streets

The 14th Street Mall was alive with activities for people of all ages at the St. Louis Open Streets event in October, 2010.
In 2010, the City of St. Louis hosted three St. Louis Open Streets events, closing streets to vehicle traffic and creating car-free public spaces for residents and visitors to bike, walk, jog, and experience some of the city’s great neighborhoods, parks, and other amenities. The route for the October 9th 2010 event highlighted ONSL, Downtown St. Louis, and the North Riverfront Trail. Crown Square hosted an activity hub that featured a bike rodeo, helmet giveaways, bicycle tune-up stations, bike commuter education material, youth fitness stations, a bounce house, and the North City farmers’ market.

**Organized Bicycle Rides**

A number of local organizations have sponsored bicycle rides in and around Old North that cater to both residents of the neighborhood and visitors from the St. Louis Region and beyond. These rides play a pivotal role not only in encouraging residents to bike, but also by familiarizing riders with the basic rules of the road, building riders’ confidence to travel on city streets, and setting the expectation for residents and visitors that Old North presents a community atmosphere that welcomes bicyclists. Many of the rides that run through Old North showcase the North Riverfront Trail. The trail is located roughly 0.5-miles to the east of the neighborhood, and is most easily accessed via Branch Street.

**Ranger-Led Bike Tours**

The National Parks Service (NPS) leads visitors along the North Riverfront Trail on a six-mile round-trip bicycle tour focusing on the natural historical connections between the Mississippi River and the people who have inhabited the region. It also showcases one of Missouri’s two sites on the NPS Underground Railroad Network to Freedom. While the tour does not lead bicyclists into the Old North Neighborhood, the Ranger Led Bike Tours do provide a valuable resource for neighborhood residents. 2010 was the inaugural year for the Ranger Led Bike Tours, and they were held every Saturday morning from May 29 to August 28. Tours are provided free of charge but reservations are required. Bicycles may be rented from the NPS.

**Past to Present Pedal in Old North St. Louis**

This group-led interpretive tour of ONSL focuses on historically and architecturally significant places and events in the neighborhood, with stops outside the neighborhood that showcase the Trestle at Branch Street and the McKinley Bridge Bikeway. The seven-mile ride, which begins and ends in Crown Square, is free-of-charge for riders and occurred twice in the spring and summer of 2010. The ride is sponsored by Trailnet, the Confluence Partnership, Gateway Arch Riverfront Bike Rentals, Grace Hill AmeriCorps Trail Rangers and the Old North St. Louis Restoration Group.

**Past to Present Pedal to Malcolm Martin Park**

Similar to the Past to Present Pedal in Old North Saint Louis, this 14-mile, group-led interpretive ride highlights a number of historical and architectural heritage sites in and around Old North. The longer 14-mile route crosses the Mississippi River and continues south into East St. Louis to visit the Malcolm Martin Park & Observation Platform, with stunning views of the Downtown St. Louis skyline towering over the Mississippi. This ride also begins and ends in Crown Square. This ride was held twice in July and August 2010. The ride is sponsored by Trailnet, the Confluence Partnership, Gateway Arch Riverfront Bike Rentals, Grace Hill AmeriCorps Trail Rangers, and the Old North St. Louis Restoration Group.
Maps and Guides
Route maps and guides can provide residents and visitors with information to help plan biking and walking trips, as well as identify multi-modal connections.

Old North Saint Louis History Trail Guide
First printed in 2004, the Old North Saint Louis History Trail Guide incorporates some of the neighborhood’s most historically significant places into a bicycling and walking tour route. The Trail provides a great opportunity for residents and visitors alike to learn more about the people and places that shaped the community over the years, with detailed descriptions of 30 different buildings, places, parks and other landmarks throughout the neighborhood. Produced as a collaborative effort between the Old North Saint Louis Restoration Group and the Public Policy Research Center at the University of Missouri-St. Louis, the guide is available at Old North Saint Louis Restoration Group’s office in Crown Square.

Bike St. Louis: Bike + Pedestrian Map
The 2010-2011 Bike St. Louis Bike + Pedestrian Map showcases over 80 miles of trails, bike lanes, and shared roadways in the City of St. Louis and the neighboring municipalities of Clayton and Maplewood. Designated routes on N. Florissant Ave, N. 14th St, and Branch St provide connections into and out of Old North, linking the neighborhood with adjacent neighborhoods, Downtown St. Louis, and the North Riverfront Trail. In addition to the route map, the fold-out pamphlet contains tips for safe, responsible and predictable bicycling techniques, as well as information about linking bicycling trips with public transit. This comprehensive guide is available at the Old North Saint Louis Restoration Group’s office, as well as other locations throughout St. Louis.

Enforcement
Enforcement activities play a key role in maintaining a safe environment in which people can walk and bicycle. Regulating pedestrian, bicyclist, and motorist activity and reducing conflict between these different road users are the primary responsibilities for enforcement agencies with respect to bicyclists and pedestrians. Currently, the City of St. Louis Metropolitan Police Department has no additional enforcement programs or activities that supplement their standard operating procedures.
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Chapter 3. Recommended Bikeway and Walkway Systems

Old North St. Louis (ONSL) has a great opportunity to retrofit streets for bicycle and pedestrian facilities, encouraging both residents and visitors to walk and bicycle as a viable form of transportation. This chapter lays out a system of bikeways and walkways that build upon previous and on-going neighborhood, local, and regional planning efforts.

The recommended bicycle and pedestrian network includes a diverse set of facility types connecting key destinations within ONSL and the greater St. Louis area. System improvements include establishing a circuit of comfortable walkways and bikeways within the neighborhood to encourage bicycling and walking for recreation, health and everyday trips. Suggested improvements include low-cost measures yielding immediate results, such as shared lane markings on streets to accommodate bikes or providing signage with pedestrian destinations. Other suggested improvements, such as developing the trestle connection into the North Riverfront Trail, represent longer-term strategies for transforming the ONSL neighborhood into a truly bicycle and pedestrian-friendly community.

The proposed community bikeway and walkway networks were developed using the existing conditions evaluation, input from Steering Committee meetings and public outreach events, infrastructure data, and proposed and planned facility information. While this chapter provides a long list of suggested improvements, high-priority projects are identified in Chapter 5 that will substantially improve the bicycling environment within the first few years of plan implementation.

Recommended Bikeway Improvements

Although ONSL currently lacks an on-street bikeway network, the neighborhood has the potential to create an excellent system. The recommended bicycle network connects to popular destinations, including the schools, parks, Crown Candy Kitchen and the new business district on N. 14th Street. Depending on their location and context, ONSL’s on-street bikeway network includes the following facilities:

- **Bike lanes** are designated on-street travel lanes for bicyclists that are used on busier streets which require additional separation between bicyclists and automobiles.
- **Shared lanes** use a combination of signage, striping, traffic calming measures and other streetscape treatments to slow vehicle traffic while facilitating safe and convenient bicycle travel.

As noted in Chapter 2, bicycles are permitted on all roads in St. Louis except some interstate freeways. As such, ONSL’s entire street network is effectively the community’s bicycle network, regardless of whether or not a bikeway stripe, stencil or sign is present on a given street. The designation of certain roads as bike routes is not intended to imply that these are the only roadways intended for bicycle use or that bicyclists should not be riding on other streets. Rather, the designation of a network of on-street bikeways recognizes that certain roadways are preferred bicycle routes for most users, for reasons such as directness or access to significant destinations, allowing the city to focus on building the primary network.

Map 4 shows the proposed bicycle network in ONSL.
Bike Lanes

Designated exclusively for bicycle travel, bike lanes are separated from vehicle travel lanes with striping and are also denoted by pavement stencils. Bike lanes are most appropriate on arterial and collector streets where higher vehicle traffic volumes and speeds warrant greater separation.

Bike lanes define road space for bicyclists and motorists, reduce the chance that motorists will stray into bicyclists’ paths, discourage bicyclists from riding on the sidewalk or riding against traffic, and remind motorists that bicyclists have a right to the road. One key element in designing bike lanes in an urban setting is providing adequate width for bike lanes and adjacent parking lanes to allow a bicyclist to avoid a suddenly-opened vehicle door. Bicyclists have stated their preference for marked on-street bike lanes in numerous national surveys. Many bicyclists, particularly less experienced riders, are more comfortable riding on a busy street if it has a striped and signed bike lane than if they have to share a lane with automobiles. This plan seeks to encourage new riders, and providing marked facilities such as bike lanes is one way to encourage residents to try bicycling.

Retrofitting Streets with Bike Lanes

Bike lanes in ONSL will be provided by retrofitting streets within the existing curb-to-curb widths. The recommended measures effectively reallocate existing street width through striping modifications (lane narrowing, lane removal, and occasionally parking reduction) to accommodate bike lanes. Depending on funding opportunities, bike lane project implementation could occur in multiple phases.

The proposed bike lanes will provide regional connectivity into the greater St. Louis network and longer connections for commuters and long-distance recreational bicyclists. Bike lanes are proposed along Branch Street, N. Florissant Avenue, and just west of ONSL on Broadway.

N. Florissant Avenue should be striped for bike lanes, as also recommended in the St. Louis Regional Bike Plan. Plans for a north-south light rail line, as discussed in the Plan for the Neighborhoods of the Fifth Ward (2002), show N. Florissant Avenue as a likely corridor for light rail transit. Light rail will travel down the center of the roadway, with on-street parking and two through-travel lanes in either direction. A station has been proposed at St. Louis Avenue, which would be a major destination for area bicyclists and pedestrians. Marked crossings, signage, and pavement markings should be used to accommodate safe bicycle and pedestrian travel around the light rail and particularly around the station.

---

3 Landis, B.W., Vattikuti, V.R., Brannick, M.T. (2007). Real-Time Human Perceptions: Toward a Bicycle Level of
Map 4. Proposed Bikeways

Old North St. Louis
Bikeable Walkable Community Plan

Source: Data obtained from the City of St. Louis
Author: HK and DM
Date: August 2011

Proposed Future Light Rail Station
Confluence Academies North
Ames VPA Elementary
Crown Square
Jefferson Elementary

St. Louis Place Park
Strodtman Park
Jackson Place Park
Crown Square

Map 4. Proposed Bikeways

Planned Trail
Intersection Improvements
Destinations
Bike Lanes
Shared Lane
School
Railroad
Park
Parcel in ONSL
Parcel Outside of ONSL
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Shared Lanes/Bicycle Boulevards

Shared lanes are low-volume streets and quiet neighborhood streets where motorists and bicyclists share the same space. Streets specifically designated as good routes to bicyclists (due to street connectivity, destinations, and low automobile speeds and volumes) should be signed with “Bike Route” signs. Signs should be placed along N. Market Street, as low motor vehicle speeds and volumes do not indicate a need for additional identification of the street as a bike route.

Pavement markings can be placed in the travel lane to alert motorists to bicycle traffic, while also encouraging bicyclists to ride at an appropriate distance from the “door zone” of adjacent parked cars. Placed in a linear pattern along a corridor, shared lane markings also encourage bicyclists to ride in a straight line so their movements are predictable to motorists. Bike St. Louis is currently using a standard marking to indicate bicycle routes, which should also be used in ONSL.

Pavement markings and wayfinding signage are recommended along the following streets:

- N. 20th Street
- Blair Avenue
- N. 13th Street
- St. Louis Avenue
- Howard Street

When these corridors are being developed, additional bicycle boulevard treatments should be considered if automobile speeds and/or volumes create an undesirable bicycling environment. In addition to signs and pavement markings, bicycle boulevards incorporate treatments to facilitate safe and convenient crossings where bicyclists must traverse major streets. One way of giving priority to bicycle travel on designated bicycle boulevards is to turn stop signs so that bicyclists do not have to stop at interchanges with other local roads. However, this also increases the appeal of the route for drivers, and traffic calming treatments can be used along the corridor to discourage cut-through automobile traffic. These treatments also reduce vehicle speeds so that motorists and bicyclists can generally travel at the same speed, creating a safer and more comfortable environment for all users and neighbors.

Recommended Walkway Improvements

The ONSL neighborhood has discontinuous sidewalks along several streets, and other sidewalks are of substandard width or in poor condition. This plan recommends a pedestrian network that provides four-foot minimum width sidewalks on both sides of every street in the neighborhood, with wider sidewalks in commercial areas such as Crown Square and along popular pedestrian routes, such as N. Market Street and N. Florissant Avenue.

Sidewalk infill should be prioritized in high-pedestrian traffic areas, such as the immediate area around Confluence Academy North and Ames VPA Elementary. Recommended pedestrian improvements also include
sidewalk repair and replacement and ADA-compliant curb ramp upgrades throughout the neighborhood. The roads recommended as bicycle boulevards should be prioritized for ADA improvements to ensure that they are comfortable for all travel modes.

**Sidewalk Improvement Projects**

This plan recommends that all locations in ONSL that either lack sidewalks or that have substandard sidewalks be upgraded to provide a continuous sidewalk network. However, due to the large number of gaps in the existing network, the plan recommends pedestrian priority corridors that target areas to enhance pedestrian connectivity and safety for ONSL residents and visitors alike, listed in Table 2. Shown in Map 5, these projects should address gaps in the sidewalk network, improve curb ramps and crosswalks, and contribute to a neighborhood-wide network of pedestrian facilities that allow for safe, convenient, and comfortable travel by foot or by wheelchair. This list of projects is exhaustive, but rather identifies the most significant opportunities for improving pedestrian mobility. The City of St. Louis should consider additional improvements to the sidewalk network as development and redevelopment opportunities arise, and through the City’s 50/50 Sidewalk Program, which assists landowners in developing sidewalks in front of their properties.

**Table 2. Recommended Pedestrian Priority Corridors**

<table>
<thead>
<tr>
<th>Street Name</th>
<th>Limit (N/W)</th>
<th>Limit (E/S)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Branch Street</td>
<td>N Florissant Avenue</td>
<td>N. Broadway</td>
</tr>
<tr>
<td>N. 14th Street</td>
<td>Branch Street</td>
<td>St. Louis Avenue</td>
</tr>
<tr>
<td>St. Louis Ave</td>
<td>N Florissant Avenue</td>
<td>N. Broadway</td>
</tr>
<tr>
<td>N. 13th Street</td>
<td>Branch Street</td>
<td>Cass Avenue</td>
</tr>
<tr>
<td>N. Florissant</td>
<td>Branch Street</td>
<td>14th Street/Mullanphy Street</td>
</tr>
<tr>
<td>N. 14th Street/Blair Ave</td>
<td>Chambers Street</td>
<td>Cass Avenue</td>
</tr>
<tr>
<td>Blair Avenue</td>
<td>Branch Street</td>
<td>St. Louis Avenue</td>
</tr>
<tr>
<td>Howard Avenue</td>
<td>Blair Avenue</td>
<td>Hadley Street</td>
</tr>
<tr>
<td>Cass Avenue</td>
<td>N. 14th Street</td>
<td>Broadway</td>
</tr>
<tr>
<td>Hadley Street</td>
<td>Hebert Street</td>
<td>St. Louis Avenue</td>
</tr>
</tbody>
</table>

Note: See Table 5 for complete recommendations for each of these corridors.

**Intersection Improvement Recommendations**

Intersection improvements are recommended for locations that were identified as potentially dangerous or confusing. Priority locations for intersection improvements include the following:

- N. Florissant Avenue at Hebert Street
- N. Florissant Avenue at St. Louis Avenue
- N. Florissant Avenue at N. Market Street
- N. Florissant Avenue at Madison Street
- Mullanphy at N. 14th Street

Intersection improvements include high-visibility crossings, curb extensions, ADA-compliant curb ramps, pedestrian-phased signal timing and other treatments.
Map 5. Pedestrian Priority Corridors

Old North St. Louis
Bikeable Walkable Community Plan

Source: Data obtained from the City of St. Louis and GoogleEarth
Author: HK and DM
Date: August 2010
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Community-Wide Improvements

Proposed community-wide improvements include supporting facilities that encourage bicycle and pedestrian trips and improve comfort and usability of the physical network.

Bicycle and Pedestrian Wayfinding Signage

Landmarks, natural features, civic destinations, neighborhood business districts and other visual cues help residents and visitors navigate through ONSL. Placing signs throughout the community indicating to bicyclists and pedestrians their direction of travel, location of destinations, and the distance to those destinations will increase users’ comfort and convenience of the bicycle and pedestrian network. Wayfinding signs also visually remind motorists that they are driving along a bicycle and/or pedestrian route and should use caution.

Signage can serve both wayfinding and safety purposes including:

- Helping to familiarize users with the bikeway system
- Helping users identify the best routes to destinations
- Helping to address misperceptions about travel time and distance
- Helping overcome a “barrier to entry” for people who do not bicycle often and who fear becoming lost

Wayfinding signs are a relatively cost-effective means for improving the walking and bicycling environment. Signs are typically placed at key locations leading to and along bicycle routes, including at the intersection of multiple routes.

The City of St. Louis uses the Bike St. Louis logo on their wayfinding signage for bicyclists. ONSL should either incorporate this design into a slightly different sign or use these signs with additional pedestrian wayfinding information.
Cost Opinions

This section summarizes planning level cost opinions associated with the recommended pedestrian and bicycle improvement projects. Cost opinions were drawn from similar bicycle/pedestrian master plans and experience in nearby communities. An overview of the phased cost opinions is presented at the beginning of this section, followed by specific project costs by facility type and phase. A discussion of potential funding sources for implementing projects in this plan is provided later in this chapter.

Table 3. Unit Costs for Bicycle and Pedestrian Improvements*

<table>
<thead>
<tr>
<th>Facility Type</th>
<th>Unit Price</th>
<th>Unit</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Bicycle Costs</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bike Lanes</td>
<td>$44</td>
<td>LF</td>
<td>Includes striping removal, re-striping,</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>pavement markings, and signs</td>
</tr>
<tr>
<td>Bicycle Loop Detector</td>
<td>$2,500</td>
<td>EA</td>
<td>Recommended at all signalized intersections</td>
</tr>
<tr>
<td>Drainage Grate Cover</td>
<td>$1,500</td>
<td>EA</td>
<td>Bicycle-friendly</td>
</tr>
<tr>
<td>Shared Lanes (with markings)</td>
<td>$8</td>
<td>LF</td>
<td>Includes two signs per block (300') and</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>pavement markings every 100'</td>
</tr>
<tr>
<td><strong>Bicycle Boulevard additional treatments:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Turn Stop Signs</td>
<td>$300</td>
<td>LF</td>
<td>Assumes four per mile</td>
</tr>
<tr>
<td>Traffic Circle</td>
<td>$20,000</td>
<td>EA</td>
<td></td>
</tr>
<tr>
<td><strong>Pedestrian Costs</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sidewalk</td>
<td>$181</td>
<td>LF</td>
<td>One side. Includes curb and gutter, drainage,</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>manhole, catch basin</td>
</tr>
<tr>
<td>Sidewalk Upgrade</td>
<td>$78</td>
<td>LF</td>
<td>Concrete or asphalt, includes sawcut,</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>pavement removal, new sidewalk</td>
</tr>
<tr>
<td>Sidewalk Upgrade, Brick</td>
<td>$183</td>
<td>LF</td>
<td>Includes sawcut, brick removal, new sidewalk</td>
</tr>
<tr>
<td><strong>Intersection treatments:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CurbRamp</td>
<td>$1,000</td>
<td>EA</td>
<td>ADA-accessible</td>
</tr>
<tr>
<td>High-VisibilityCrosswalk</td>
<td>$5.00</td>
<td>LF</td>
<td></td>
</tr>
<tr>
<td>Refuge Island</td>
<td>$6,000-$10,000</td>
<td>EA</td>
<td></td>
</tr>
</tbody>
</table>

* Costs include engineering (20%), mobilization (15%), and architecture and engineering fees (20%) allowances.

An overview of the phased cost opinions is presented at the beginning of this section followed by specific project costs by facility type and phase. A discussion of potential funding sources for implementing projects in this plan is provided later in this chapter.
Maintenance Costs

On- and off-street walkways and bikeways require regular maintenance and repair to remain functional for users. Walkway maintenance includes fixing potholes, sidewalk decay, damaged benches and re-striping crosswalks. Sidewalk repair is usually the responsibility of adjacent property owners, although the City of St. Louis sponsors a 50/50 sidewalk improvement program, which covers half the cost of replacing sidewalks.\(^4\) Adjacent property owners are also responsible for keeping their sidewalk free of snow and ice.

On-street bikeways are typically maintained as part of standard roadway maintenance programs; however, extra emphasis should be placed on keeping bike lanes and curb lanes clear of debris and vegetation overgrowth from blocking visibility or creeping into the roadway. Typical maintenance costs for on-street bikeways are shown in Table 4.

Table 4. On-Street Bikeway Maintenance Frequency and Cost Opinions

<table>
<thead>
<tr>
<th>Activity</th>
<th>Materials Type</th>
<th>Frequency</th>
<th>Cost Opinion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pavement resurfacing</td>
<td>Asphalt</td>
<td>Every 20 years</td>
<td>$50,000/mile</td>
</tr>
<tr>
<td></td>
<td>Concrete</td>
<td>Every 20 years</td>
<td>$50,000/mile</td>
</tr>
<tr>
<td></td>
<td>Aggregate</td>
<td>Every 3 years</td>
<td>$3,000/mile</td>
</tr>
<tr>
<td>Pavement sweeping</td>
<td>All</td>
<td>Weekly/monthly as needed</td>
<td>Part of regular street sweeping activities</td>
</tr>
<tr>
<td>Snow removal</td>
<td>All</td>
<td>Weekly/as needed</td>
<td>Depends on conditions, ~$146/mile</td>
</tr>
<tr>
<td>Tree/shrub trimming</td>
<td>All</td>
<td>5 months – 1 year</td>
<td>Part of regular street maintenance activities</td>
</tr>
<tr>
<td>Sign repair/replacement</td>
<td>Worn</td>
<td>Every 10 years</td>
<td>$600/sign</td>
</tr>
<tr>
<td></td>
<td>Stolen/damaged</td>
<td>As needed</td>
<td>$600/sign</td>
</tr>
<tr>
<td>Re-striping</td>
<td>Paint</td>
<td>Annually</td>
<td>$2,600/mile</td>
</tr>
<tr>
<td></td>
<td>Thermoplastic striping</td>
<td>Every 10-15 years</td>
<td>$10,600/mile</td>
</tr>
<tr>
<td></td>
<td>Move signs, patch and sweep</td>
<td>2 times/year</td>
<td>$200/mile</td>
</tr>
</tbody>
</table>

\(^4\) City of St. Louis Sidewalk Repair Program: [http://stlcin.missouri.org/faqs/displaytopicdetail.cfm?TopicId=567](http://stlcin.missouri.org/faqs/displaytopicdetail.cfm?TopicId=567)
### Project Cost Opinions

Based on the project costs outlined above, the planning-level construction and annual maintenance cost for the recommended walkways and bikeways are shown in Table 5.

<table>
<thead>
<tr>
<th>Street</th>
<th>Extent</th>
<th>Facility Type</th>
<th>Length (mi)</th>
<th>Construction Cost</th>
<th>Maintenance Cost (Annual)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Pedestrian Recommendations</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>N. Florissant Avenue</td>
<td>Branch Street – 14th Street/Mullanphy</td>
<td>Sidewalk upgrade, concrete</td>
<td>0.07</td>
<td>$29,000</td>
<td>$200</td>
</tr>
<tr>
<td></td>
<td></td>
<td>New sidewalk</td>
<td>0.05</td>
<td>$48,000</td>
<td>$100</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Curb Ramp</td>
<td>33 ramps</td>
<td>$33,000</td>
<td></td>
</tr>
<tr>
<td>N. 13th Street</td>
<td>Branch Street – Cass Avenue</td>
<td>Sidewalk upgrade, brick</td>
<td>0.03</td>
<td>$29,000</td>
<td>$100</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Sidewalk upgrade, concrete/asphalt</td>
<td>0.24</td>
<td>$99,000</td>
<td>$600</td>
</tr>
<tr>
<td></td>
<td></td>
<td>New sidewalk</td>
<td>0.48</td>
<td>$459,000</td>
<td>$1,200</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Curb Ramp</td>
<td>24 ramps</td>
<td>$24,000</td>
<td></td>
</tr>
<tr>
<td>Cass Avenue</td>
<td>N. Florissant Avenue – N. Broadway</td>
<td>Sidewalk upgrade, concrete</td>
<td>0.12</td>
<td>$49,000</td>
<td>$300</td>
</tr>
<tr>
<td></td>
<td></td>
<td>New sidewalk</td>
<td>0.07</td>
<td>$67,000</td>
<td>$200</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Curb Ramp</td>
<td>3 ramps</td>
<td>$3,000</td>
<td></td>
</tr>
<tr>
<td>St. Louis Avenue</td>
<td>N. Florissant Avenue – N. Broadway</td>
<td>Sidewalk upgrade, concrete</td>
<td>0.10</td>
<td>$41,000</td>
<td>$300</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Curb Ramp</td>
<td>3 ramps</td>
<td>$3,000</td>
<td></td>
</tr>
<tr>
<td>Blair Avenue</td>
<td>Branch Street – St. Louis Avenue</td>
<td>Curb Ramp ADA upgrade</td>
<td>16 ramps</td>
<td>$16,000</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Sidewalk upgrade, concrete</td>
<td>0.04</td>
<td>$16,000</td>
<td>$100</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Sidewalk upgrade, brick</td>
<td>0.3</td>
<td>$290,000</td>
<td>$800</td>
</tr>
<tr>
<td></td>
<td></td>
<td>New sidewalk</td>
<td>0.21</td>
<td>$201,000</td>
<td>$500</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Curb Ramp</td>
<td>5 ramps</td>
<td>$5,000</td>
<td></td>
</tr>
<tr>
<td>N. 14th Street</td>
<td>Branch Street – St. Louis Avenue</td>
<td>New sidewalk</td>
<td>0.05</td>
<td>$48,000</td>
<td>$100</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Curb Ramp</td>
<td>7 ramps</td>
<td>$7,000</td>
<td></td>
</tr>
<tr>
<td>Street</td>
<td>Extent</td>
<td>Facility Type</td>
<td>Length (mi)</td>
<td>Construction Cost</td>
<td>Maintenance Cost (Annual)</td>
</tr>
<tr>
<td>------------------------</td>
<td>-------------------------------</td>
<td>----------------------------------------</td>
<td>-------------</td>
<td>-------------------</td>
<td>---------------------------</td>
</tr>
<tr>
<td>Blair Avenue/N. 14th Street</td>
<td>Chambers Street – Cass Avenue</td>
<td>Sidewalk upgrade, concrete</td>
<td>0.02</td>
<td>$8,000</td>
<td>$100</td>
</tr>
<tr>
<td></td>
<td></td>
<td>New sidewalk</td>
<td>0.15</td>
<td>$143,000</td>
<td>$400</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Curb Ramp</td>
<td>3 ramps</td>
<td>$3,000</td>
<td></td>
</tr>
<tr>
<td>Howard Street</td>
<td>Blair Avenue – Hadley Street</td>
<td>Sidewalk upgrade, concrete/asphalt</td>
<td>0.02</td>
<td>$33,000</td>
<td>$200</td>
</tr>
<tr>
<td></td>
<td></td>
<td>New sidewalk</td>
<td>0.10</td>
<td>$96,000</td>
<td>$300</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Curb Ramp</td>
<td>5 ramps</td>
<td>$5,000</td>
<td></td>
</tr>
<tr>
<td>Hadley Street</td>
<td>Hebert Street – St. Louis Avenue</td>
<td>New sidewalk</td>
<td>0.03</td>
<td>$29,000</td>
<td>$100</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Curb Ramp</td>
<td>2 ramps</td>
<td>$2,000</td>
<td></td>
</tr>
</tbody>
</table>

**Bicycle Improvements**

<table>
<thead>
<tr>
<th>Street</th>
<th>Extent</th>
<th>Facility Type</th>
<th>Length (mi)</th>
<th>Construction Cost</th>
<th>Maintenance Cost (Annual)</th>
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</thead>
<tbody>
<tr>
<td>13th Street</td>
<td>Branch Street - Howard Street</td>
<td>Shared Lane</td>
<td>0.89</td>
<td>$40,000</td>
<td>$700</td>
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<td>$800</td>
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<td>Branch Street</td>
<td>N. Florissant Avenue - N. 13th Street</td>
<td>Bike Lanes</td>
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<td>Howard Street</td>
<td>Blair Avenue - Hadley Street/iron Horse Trestle</td>
<td>Shared Lane</td>
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<td>N. 20th Street</td>
<td>Branch Street - N. Florissant Ave</td>
<td>Shared Lane</td>
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<tr>
<td>N. Florissant Avenue</td>
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<td>Bike Lanes</td>
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<td>$27,100</td>
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<td>N. Market Street</td>
<td>N. Florissant Avenue - Hadley Street</td>
<td>Shared Lane (no markings)</td>
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<td>$2,000</td>
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<tr>
<td>St. Louis Avenue</td>
<td>N. Florissant Avenue - Broadway</td>
<td>Shared Lane</td>
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<td>$24,000</td>
<td>$400</td>
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Chapter 4. Best Practices- 4 E’s Report

There are a number of current efforts to promote walking and bicycling in the Old North St. Louis (ONSL) neighborhood, the City of St. Louis, and the St. Louis region. This chapter describes opportunities for the neighborhood to support, promote, and build upon efforts by local agencies, active community groups, and individual residents. The “4 Es” are programs that aid bicycling and walking in the neighborhood by promoting education, encouragement, enforcement, evaluation, and public outreach.

The chapter presents a menu of possible future and expanded “4 Es” programs for walking and bicycling. These recommendations are based both on results of the previous tasks that identified problem areas as well as experience gained in communities around the United States.

Partner Organizations

For the implementation of the programs recommended in this chapter, the ONSL neighborhood should work with existing education and advocacy groups and other partners in the region to create a more bikeable and walkable community. Some potential partners include:

- **The Old North St. Louis Restoration Group (ONSLRG)** - [http://www.onsl.org/](http://www.onsl.org/)
  ONSLRG is a community-based non-profit that has worked for more than 29 years to revitalize the physical and social dimensions of Old North through commercial and residential redevelopment, the North City Farmers’ Market, The Old North Grocery Co-Op, and other projects.

  Trailnet is a non-profit dedicated to promoting healthy and active communities throughout the St. Louis Region through innovative policies, programs and plans that promote walking and bicycling. Trailnet has partnered with Old North to improve access to healthy foods and increase physical activity through its Healthy, Active and Vibrant Communities Initiative.

  A non-profit serving the City of St. Louis and St. Charles County, Grace Hill provides a full range of neighborhood-based health, education, and community development resources. Grace Hill’s Trail Ranger Project connects North City neighborhoods to the Mississippi River through habitat restoration, recreation, and cultural education.

- **Great Rivers Greenway District (GRG)** - [http://www.greatrivers.info/](http://www.greatrivers.info/)
  Created in 2000 by the passage of Proposition C (the Clean Water, Safe Parks and Community Trails Initiative), GRG is the regional parks and recreation district for St. Louis City, St. Louis County, and St. Charles County. GRG’s mission is to develop an interconnected system of trails, greenways and parks throughout the region. It does so through the development of linear trails and greenways, often in partnership with local governmental agencies.

  The LAB promotes bicycling for fun, fitness and transportation through a variety of advocacy and education activities at the national and local level. Programs like the Bicycle Friendly America Program, National Bike month, and Bike Safety and Education programs support the organization’s mission and help local communities develop the social and physical capital to make bicycling an integrated component of the American landscape.
Forks and Feet Forward Old North (FFON)

FFON is a collaboration between Trailnet and ONSLRG to create a Healthy, Active and Vibrant Old North Saint Louis, focusing on access to healthy foods and an environment that supports and encourages active living.

In addition, several of the recommended programs could be developed through a partnership with the St. Louis Regional Bicycle and Pedestrian Advisory Committee, which is organized through the East-West Gateway Council of Governments. The community should also consider organizing a group of interested volunteers to focus on bicycle and pedestrian issues in the neighborhood and the city. The group would provide advice for bicycle and pedestrian programs specific to ONSL, and would ensure consideration of bicycle and pedestrian issues in city planning efforts.

Recommended Programs

The following section presents a menu of possible programs for implementation in ONSL to create a social environment that supports walking and bicycling as viable modes of transportation and recreation. Each program recommendation includes the purpose, audience, a description of the program, and sample program with a link if applicable.

Encouragement Programs

Senior Bicycling and Walking Programs

**Purpose:** Encourage and educate seniors about walking and bicycling.

**Audience:** Seniors.

**Description:** Seniors often experience limitations in mobility as they age. Programs designed to increase walking and bicycling can help seniors maintain independence and mobility, improve health, and provide an opportunity for social interaction. A senior walking and bicycling program may include any of the following components:

- Group walks and bicycle rides
- Providing comfort bicycles and/or adult tricycles that are easy for seniors to use in light of balance, strength, or comfort issues
- Bicycling maps at senior centers
- Senior participation in Safe Routes to Schools programs (e.g. crossing guard or Walking School Bus volunteer)
- Targeted infrastructure investments aimed at senior mobility problems
- Policy and traffic operations changes to assist seniors, such as increased walk cycle time and Leading Pedestrian Intervals (LPIs) that allow pedestrians to begin crossing before other traffic proceeds
Sample Programs:
- Portland Safe Routes to Senior Centers Program:
  http://www.portlandonline.com/TRANSPORTATION/index.efm?c=eafeg
  http://www.streetfilms.org/archives/portland-or-older-adults-bike-program/ (video)
- Transportation Alternatives’ Safe Routes for Seniors Program:
  http://www.transalt.org/campaigns/pedestrian/safeseniors

Bicycling and Walking Maps

**Purpose:** Encourage visitors to bike and walk in the neighborhood by providing route and facility information and highlighting walking and bicycling destinations in a convenient and attractive format.

**Audience:** General public, particularly visitors and tourists.

**Description:** The neighborhood currently encourages residents and visitors to walk and bicycle through the Old North Saint Louis History Trail Map, which highlights unique historic landmarks throughout the neighborhood. A separate map should be developed that focuses on existing amenities, services, shopping districts, parks and community gardens. Bicycle facilities can be added to the map as they are developed, and the History Trail route should be included as well.

This information could be made into a brochure, which could be printed on paper or made available online as an interactive map to promote bicycling and walking. Great Rivers Greenway has developed a city-wide bike map that highlights the Bike St. Louis facilities and provides suggested routes for cyclists. The neighborhood would benefit from a smaller, focused map that highlights local destinations and amenities.

Once the map is produced, it should be made available online and distributed to residents by mail, at local bike shops, and/or at community events such as those recommended here. The bike map can also be promoted through flyers in utility bills, city newsletters, and other community media outlets. The map should be updated every few years to incorporate new bikeways or other changes.

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5 http://www.bikestlouis.org/map.htm
Sample Programs:
- NYC online map: http://www.nycbikemaps.com/maps/manhattan-bike-map/
- City of Portland maps: http://www.portlandonline.com/transportation/index.cfm?a=hacca&cc=deiaj

Walk and Bike to Health Campaign

Purpose: Encourage healthy lifestyles through making choices such as bicycling and walking for transportation and recreation.

Audience: General public.

Description: The Old North Restoration Group currently has several initiatives that encourage healthy and active lifestyles within the neighborhood. The Old North Grocery Co-op makes affordable, healthy, and fresh foods available to residents. The North City Farmers’ Market also offers fresh produce, as well as free health screenings and healthy cooking demonstrations. In partnership with Trailnet, the Restoration Group has also formed Forks and Feet Forward Old North, a task force created to encourage physical activity and increase access to healthy food choices. The Bike to Health Campaign would integrate with these existing efforts by promoting exercise and active lifestyles.

This campaign could include some of the following events/outreach:

- Organized walks/bike rides to the Farmers’ Market
- Regular walks from Senior Centers to the Co-op, coordinated with classes and events
- A table at the Farmers’ Market providing information about walking, bicycling, and transit routes in the neighborhood, as well as resources for bicycling such as helmet, light, or bell give-aways

Sample Program:


Open Streets Event

Purpose: Encourage walking and biking by providing a car-free street event

Audience: General public, within ONSL but can be promoted city-wide.

Description: These programs have many names: Summer Streets, Sunday Parkways, Ciclovias, and Sunday Streets. Open Streets are periodic street closures that create a temporary park that is open to the public for walking, bicycling, dancing, hula hooping, roller skating, etc. They have been very successful internationally and are rapidly becoming popular in the United States. Open streets events promote health by creating a safe and attractive environment for the neighborhood to come together around walking and bicycling.

6 http://www.onsl.org/community-health-initiatives/
space for physical activity and social contact, and are cost-effective compared to the cost of building new parks for the same purpose. These events can be weekly or one-time events, and are generally very popular and well-attended.

In 2010, the City of St. Louis hosted Open Streets, weekend events encouraging walking and bicycling on streets closed to automobile traffic. These events highlight local neighborhoods, including ONSL, which hosted a recreation station at the October 2010 Open Streets Event. A localized open streets event in ONSL has the potential to activate new commercial development along the 14th Street Mall and highlight the physical and cultural assets of the neighborhood.

**Sample Programs:**
- St. Louis Open Streets: [http://stlouis.missouri.org/open-streets/](http://stlouis.missouri.org/open-streets/)

**“Create a Commuter” Bike Program for Adults**

**Purpose:** Empower low-income residents to bicycle for transportation by reducing barriers to acquiring and maintaining bicycles.

**Audience:** Low-income residents.

**Description:** A “Create a Commuter” program provides basic bicycle safety education and fully-outfitted commuter bicycles to low-income adults striving to connect to work, workforce development, or other daily needs by bicycle.

Bicycles can be donated by members of the community and refurbished with volunteer or local group support. Participants are outfitted with everything a bicycle commuter would need including fenders, front and rear lights, locks, pumps, patch kits, tools, and racks.

The program can work with local social service agencies or service providers to identify candidates. Candidates should complete a half-day bicycle safety education and commuting basics course before receiving their bicycle.

The course should cover the following topics:

- Mechanical skills
- Safety checks
- Parts identification
- Cleaning and basic maintenance
- Safe riding skills and making safe decisions on the road
- Laws and rules of the road
- Helmet fitting
- Group riding skills
- Map reading
- Hand signals
Sample Programs:

- Cycles of Change “Bike Go-Round” Program, Oakland, CA:  
  http://www.cyclesofchange.org/programs/bike-go-round
- Community Cycling Center “Create a Commuter” Program, Portland, OR:  
  http://www.communitycyclingcenter.org/index.php/programs-for-adults/create-a-commuter/

Earn-A-Bike Program for Neighborhood Youth

**Purpose:** Teach area youth basic bicycle maintenance and bicycling skills while building their own bicycles.

**Audience:** Youth.

**Description:** While Earn-A-Bike programs vary significantly in scope, their main purpose aim to teach youth basic bicycle maintenance and bicycling skills by building a bicycle. These programs are often supplemented by on-street bicycle safety courses, organized rides, and character-building elements as well. Positive outcomes can include increased bicycle ridership in the community, more riders equipped with safe and effective bicycling skills, increased bicycle ownership, increased confidence and self-esteem of graduates, and the ability to work in a group setting.

Creative partnerships and collaboration are often the key to a successful Earn-A-Bike program. For example, Saint Paul Public Schools partnered with the Sibley Bike Depot to develop a program through which high school students not only earned a bicycle by completing after-school courses, but they also earned high school credits as well.

Sample Programs:

- St. Louis Bicycle Works Earn-A-Bike Program, St. Louis, MO -  
  http://www.stlbicycleworks.org/wp/?page_id=2
- Trailnet and St. Louis Bicycle Works’ “Earn 2 Bikes” Program, St. Louis, MO
- Sibley Bike Depot and Saint Paul Connections’ Bicycle Maintenance Classes -  
  http://www.sibleybikedepot.org/upcoming-classes-and-events
  http://www.neighborhoodbikeworks.org/programs/earn-a-bike/

Bike Light and Helmet Giveaways

**Purpose:** To increase bicycling safety and overcome barriers by providing free or low-cost bicycling gear, such as helmets and bike lights, to those in need or those riding without appropriate safety equipment.

**Audience:** General public, particularly low-income residents and/or those bicycling without helmets or lights.

**Description:** Free or low-cost helmets are a great way to address bicycling safety in a low-income community. Not having a helmet may be a barrier
to bicycling for some, while others may ride without a helmet because the cost is prohibitive. As part of a larger community event or in schools, helmets can be offered to adults and children for free or at a reduced cost. A helmet giveaway should include education on how to properly fit and wear a helmet, as well as information on when to replace an old helmet. Local or regional bike shops or interested groups may sponsor the program to get free or discounted helmets.

A bike light safety promotion program provides free bike lights to bicyclists. Lights are given out at dusk at dangerous intersections or on commonly used routes, promoting visibility and enhancing safety for everyone on the road. Programs often have memorable names such as Get Lit or Lights On, and many take place in the fall to coincide with the end of daylight savings time or back to school time.

Both types of programs can be launched jointly with a safety awareness campaign.

**Sample Programs:**
- Community Cycling Center “Get Lit” Program, Portland, OR: http://www.communitycyclingcenter.org/index.php/programs-for-adults/get-lit/

**Neighborhood Beautification Programs**

**Purpose:** Through various landscaping and neighborhood beautification projects, create an environment that supports pedestrian activity, encourages social interaction and community building in the public realm, and enhances ONSL’s sense of place.

**Audience:** General public.

**Description:** Great public spaces support pedestrian activity, enhance sense of community, and welcome residents and visitors to enjoy shared spaces in the neighborhood. Community gardens, for example, help achieve these goals, bringing community members together to foster a sense of ownership of shared spaces and shaping the character of the neighborhood as perceived by both residents and visitors alike. Similar programs and activities, like urban tree programs, neighborhood clean-ups, fire hydrant and concrete planter painting and other public art projects, can contribute to this sense of place and increase opportunity for social interaction in ONSL. In addition to the creation of nine community gardens, community residents have also collaborated to paint the circular concrete planters located in the center of a number of intersections in the neighborhood. Additional programs and activities should be explored to build on these efforts to create a safe, welcoming and enjoyable public realm for the entire neighborhood.

**Sample Programs and Online Resources:**
- City Repair’s Placemaking Program, Portland, OR - http://cityrepair.org/how-to/

**Education Programs**

**Safe Routes to School**

**Purpose:** Encourage and educate students and their parents about walking and biking to school; improve safety through physical improvements and programs focused on Ames VPA Elementary School and Clay Elementary.

**Audience:** School-aged children and their parents; Ames VPA and Clay Elementary school administrators, faculty, and staff.

**Description:** Safe Routes to School programs use a '5 Es' approach using Engineering, Education, Enforcement, Encouragement, and Evaluation strategies to improve safety and encourage children to walk and bike to school. The programs are usually run by a coalition of city government, school and school district officials and teachers, parents and students, and neighbors.

Trailnet provides resources and support for communities beginning to implement Safe Routes to School Programs. Trailnet could work with the school to administer student and parent surveys, and to apply for grant funding to begin a Safe Routes to School program and to fund engineering improvements around the school.

**Sample Program:**

- Trailnet’s Safe Routes to School Program: [http://www.trailnet.org/saferoutes_program.php](http://www.trailnet.org/saferoutes_program.php)

*Safe Routes to School encourage children to lead active, healthy lifestyles.*
Enforcement Programs

Safety Media Campaign

**Purpose:** Creating awareness of bicycling and promote safety.

**Audience:** General public.

**Description:** A marketing campaign that highlights bicyclist and pedestrian safety is an important part of creating awareness. It is an effective way to reach the general public and reinforce other education and outreach messages. A well-produced safety campaign will be memorable and effective.

One good example is the Sonoma County (CA) Transit “You’ve got a friend who bikes!” campaign. It combines compelling ads with an easy-to-use website focused at motorists, pedestrians and bicyclists. This type of campaign is particularly effective when kicked off in conjunction with other bicycling/walking events or back to school in the fall.

**Sample Program:**
- Sonoma County (CA) Transit: [http://www.sctransit.com/bikesafe/bikes.htm](http://www.sctransit.com/bikesafe/bikes.htm)

Speed Reader Board Deployment /Yard Sign Lender Program

**Purpose:** Reduces speeding on neighborhood streets.

**Audience:** Motorists.

**Description:** Speeding vehicles endanger bicyclists and pedestrians, and discourage bicycling and walking. A yard sign lender program provides signs to neighbors and schools that have messages such as, “Slow Down! Look for Kids & Seniors,” “Stop for Pedestrians,” and “Look for Bikes: Pass Safely.” The signs remind drivers to travel at appropriate speeds and to watch for vulnerable road users.

**Sample Program:**
Crime Prevention Through Environmental Design (CPTED) Training Program

**Purpose:** Encourage property owners to consider landscaping and other physical improvements that enhance public safety and prevent criminal activity.

**Audience:** Neighborhood property owners.

**Description:** Crime Prevention Through Environmental Design, or CPTED, is a method of deterring criminal activity through improvements to the built environment. Designing public spaces and spaces, landscaping, lighting, and access control in a manner that maximizes visibility and fosters social interaction can deter potential offenders from committing criminal acts. Clearing obstructions from windows to increase natural surveillance, improving pedestrian-scale street lighting, leaving window shades open, limiting fence heights, and creating visible, single-point access to buildings are just a few of the design considerations often utilized in CPTED programs.

It is recommended that the ONSLRG develop a training program to educate local property owners of the benefits and strategies of CPTED and to support the incorporation of CPTED principles into public and private development and landscaping projects. The incorporation of CPTED elements into built environment decisions can increase real and perceived safety in ONSL.

**Sample Programs and Online Resources:**
- International CPTED Association - [http://www.cpted.net/](http://www.cpted.net/)

**Evaluation Programs**

**Opinion Survey**

**Purpose:** Track walking and bicycle opinions and trends; measure success of the Old North St. Louis Walkable Bikeable Community Plan.

**Audience:** N/A.

**Description:** The ONSL Restoration Group or Trailnet could perform and/or coordinate a brief annual survey of bicyclists and trail users at the Farmers’ Market or in Crown Square. This informal survey would gather feedback from neighbors and visitors about the status of walking and bicycling in the neighborhood.

**Sample Programs:**
Chapter 5. Implementation Plan

The Old North St. Louis Walkable Bikeable Community Plan provides a vision for the development of a community-wide walkway and bikeway network usable by all residents and visitors for all trip purposes. The neighborhood has many unique opportunities; there are several active organizations that serve this close-knit neighborhood, and the high density of walkable destinations coupled with a relatively dense residential area ensures many walking trips. The neighborhood’s location near downtown St. Louis results in many residents commuting short distances to work, who often travel short distances that can be taken via bicycle or take transit. Finally, many visitors include a trip to the neighborhood, which could take the form of a historic walk or a bicycle ride to the North Riverfront Trail.

The neighborhood does have to overcome certain challenges to encourage residents to walk and bicycle, including discontinuous sidewalks, lack of designated bikeways, and narrow streets with automobile traffic. In addition, upcoming planning projects such as the proposed streetcar on N. Florissant Avenue represent significant opportunities to integrate bicycle and pedestrian planning into construction projects.

This implementation plan identifies strategies for neighborhood advocates and the City of St. Louis to address these concerns and leverage community resources to implement the recommendations identified in this plan.

Implementation Strategies

The following strategies and action items are provided to aid the Old North neighborhood toward developing the bicycle and pedestrian programmatic and infrastructure recommendations.

Strategy 1: Implement Education, Encouragement and Enforcement Activities

Education, encouragement and enforcement activities inform residents of walking and bicycling as viable modes of transportation and recreation while providing them with the resources to safely and comfortably walk and bicycle. These programs are also targeted toward visitors, such as a map of key destination or wayfinding signage.

Actions:

- **Action 1.1** Pursue grant funding and strategic partnerships for higher-priority programs first or as opportunities arise.
- **Action 1.2** Seek funding for other supporting programs as appropriate.
- **Action 1.3** Work with schools, youth groups, Old North Restoration Group, Trailnet and other parties to provide education and encouragement programs to ONSL residents.
- **Action 1.4** Work with the Police Department, media, advocacy and safety groups to create an educational program to educate pedestrians, bicyclists, and drivers of rights, responsibilities and safe practices to share the road comfortably and safely.
Strategy 2: Strategically Pursue Infrastructure Projects

The recommended infrastructure projects have been prioritized to identify projects that provide the highest benefits for the least cost, as described later in this chapter. Therefore, St. Louis staff and community advocates should pursue implementation of short-term improvements first. However, it is important to recognize that bicycle and pedestrian projects are less likely to be completed if they rely exclusively on Public Works’ capital improvement funding. Where possible, the projects identified in this plan should be incorporated into upcoming public works projects, such as re-stripping a street for bike lanes when it is repaved. In addition, St. Louis staff and community advocates should pursue grant funding and partnerships to provide the infrastructure and programmatic recommendations. If promising grant programs or partnership opportunities are identified, or construction of another roadway project makes construction of a lower priority project possible, then the City should pursue that project regardless of priority.

Actions:

At the end of each fiscal year, ONSL should publish a public report documenting the status and on-going actions for all bicycle and trail projects. This report may be combined with the prioritization review discussed below.

Action 2.1  Pursue capital improvements or funding grant funding for higher-priority bicycle and pedestrian improvements and programs first.

Action 2.2  In the case where grant requirements, partnership opportunities, or construction in conjunction with another roadway project make construction of a lower priority project possible or required by law, pursue funding sources for that project regardless of priority.

Action 2.3  Install approved bicycle and pedestrian projects simultaneously with road improvement projects scheduled in the same area, regardless of the priority of the bicycle/pedestrian project.

Action 2.4  Publish a public report documenting the status and on-going actions for all bicycle and pedestrian projects at the end of each fiscal year.

Strategy 3: Integrate Bicycle Planning into ONSL’s Planning Processes

This plan presents a strategy to promote bicycling and walking in ONSL. The plan must become a living document that is incorporated into the day-to-day activities of planning, design, funding, construction and maintenance in the community.

Actions:

Action 3.1  Incorporate a bicycle facilities checklist into the plan review process.

Action 3.2  Implement the Complete Streets policy to ensure that bicycle, pedestrian, and shared-use path facilities are included in all major construction and reconstruction projects. Bicycle, pedestrian, and trail facilities should be addressed at the project scoping stage.

Action 3.3  Adopt a bicycle parking ordinance that establishes guidelines for bicycle parking linked to land uses.

Action 3.4  Require sufficient right-of-way to be set aside for bicycle and pedestrian facilities as redevelopment projects occur.
Strategy 4: Pursue Innovative Funding Opportunities

Relying exclusively on Public Works’ capital improvement funding is insufficient to develop the programs and infrastructure recommended in this plan. The following strategies address innovative ways of funding these projects.

Action 4.1 Pursue grant funding opportunities for bicycle and pedestrian infrastructure projects.
Action 4.2 Encourage corporations, institutions and individual private donors to support the existing and proposed bicycle and pedestrian system.
Action 4.3 Evaluate opportunities for establishing a philanthropic giving program that can be used to support the construction and maintenance of sidewalks and bikeways in ONSL.

Project Prioritization

Bikeway Improvements Prioritization

With eight specific bikeway improvements recommended in the Old North St. Louis Walkable Bikeable Community Plan, it is necessary to determine the potential impact that each recommended improvement may have in creating a safe, interconnected network of bicycle facilities in and around ONSL. Each project has been evaluated to determine its potential to close gaps in the neighborhood and city-wide bikeway networks, to improve connections to destinations in and around the community, to enhance safety for bicyclists, and to encourage a wider range of potential users.

The eight bikeway projects have been ordered below in terms of their potential to impact bicycling conditions in ONSL, with first having the greatest potential impact. These project rankings should not be construed as a timeline for project implementation; projects should be undertaken as opportunities arise and funding can be obtained, regardless of project ranking.

1) Branch Street. With very few access points to the 11-mile North Riverfront Trail, the Branch Street connection is a critical link to the trail for ONSL and many other neighborhoods in North St. Louis City. Currently designated as a component of the Bike St. Louis Network, Branch Street has Bike St. Louis signage and pavement markings between Blair Avenue and the North Riverfront Trail. However, poor roadway conditions, debris, a lack of roadway striping, and heavy truck traffic present significant obstacles for current and potential users and deter inexperienced or more cautious bicyclists. The addition of dedicated bicycle lanes on Branch Street, along with a clearance of debris, will significantly improve safety for bicyclists and provide separation from truck traffic.

2) Blair Avenue. Traversing the entire length of ONSL, Blair Avenue is a vital connection to the heart of the neighborhood, Crown Square, and also throughway connecting Downtown Saint Louis to ONSL, Hyde Park, and the Riverfront Trail via Branch Street. As a minor street compared to N. Florissant Avenue, Blair Avenue presents opportunities to encourage bicyclists who prefer to ride lower-traffic environments. Blair Avenue is currently signed as a Bike St. Louis route from St. Louis Avenue north to Salisbury Street. Future improvements should extend this route southward to the N. 14th Street/Mullanphy Street. Improvements in the form of wayfinding and warning signage, pavement markings, and traffic calming will create safer, more attractive corridor for bicyclists of all skill levels.
3) **N. Florissant Avenue.** Currently designated as a Bike St. Louis route north of St. Louis Avenue, N. Florissant Avenue is an important bikeway connecting North St. Louis City with Downtown St. Louis. While N. Florissant north of Palm Street functions as a two-lane minor arterial, the section of N. Florissant Ave that abuts ONSL is a principal arterial with three lanes of traffic in each direction. Underutilized space should be converted to dedicated bike lanes to provide a safe and highly visible facility.

4) **St. Louis Avenue.** The main east-west thoroughfare in ONSL is St. Louis Avenue, which bisects the neighborhood. The addition of signage and shared lane markings will help to improve bicyclist safety and heighten awareness of bicyclists for other road users. These improvements will also increase connectivity to Crown Square, Crown Candy Kitchen, the Old North Grocery Co-Op, and east across Interstate 70 to proposed bike lanes on Broadway.

5) **13th Street.** Similar to Blair Avenue, N 13th Street runs the entire length of the neighborhood and provides a direct connection to many destinations throughout the neighborhood, including Strodtman Park, Confluence Academy, Old North Grocery Co-Op, and Jackson Park Senior Apartments. With considerable automobile and bus traffic on N 13th Street, shared lane markings and wayfinding and warning signage will increase bicyclist safety and provide a preferable north-south route to many destinations throughout the community, as well as to the northern edge of Downtown St. Louis.

6) **Howard Street.** While the Howard Street Bridge over Interstate 70 will be demolished in the near future, Howard Street will still provide direct access to the Iron Horse Trestle, the planned greenway utilizing an abandoned railroad trestle to connect ONSL with the North Riverfront Trail. The addition of signage and shared lane markings on Howard Street will enhance connectivity between the Trestle and recommended improvements on N 13th Street and Blair Avenue.

7) **N Market Street.** In ONSL, N. Market Street provides a direct connection between N. Florissant Ave and Jackson Place Park. A tree-lined median and wide lanes currently make N Market Street a comfortable and inviting street for bicycling. The addition of wayfinding signage will help direct bicyclists and other road users to Jackson Place Park and other destinations in the community.
8) **N 20th Street.** Currently designated as a Bike St. Louis route from Chestnut Street in Downtown West north to St. Louis Ave, N 20th Street is an attractive, low volume, north-south bikeway. The extension of this bike route with signage and shared lane markings northward into ONSL will provide additional linkages to multiple planned and existing bike routes, including N Florissant Ave and Branch St.

**Pedestrian Improvements Prioritization**

In addition to general network-wide pedestrian improvements like sidewalk infill and replacement, ADA-compliant curb ramps, and marked crosswalks, ten pedestrian corridors have been identified as integral components of the pedestrian system. These projects provide direct connections to commercial destinations, public transit routes, neighborhood parks, elementary schools, senior centers, and other important destinations. Based on their potential to support and encourage pedestrian activity, to increase pedestrian safety, and to improve connectivity to the aforementioned destinations, these projects are prioritized below. The order in which these projects are prioritized does not imply a sequential timeline for plan implementation, but rather conveys a general sense of the impact that each corridor can have on pedestrian mobility. The City of St. Louis and local partners should undertake any of these projects if and when opportunities may arise.

1) **Branch Street.** The sole connection between ONSL and the North Riverfront Trail, Branch Street currently lacks a continuous pedestrian facility to enable and encourage pedestrian movement. While some residents currently use Branch Street to access the trail, a continuous sidewalk would improve the safety and accessibility for pedestrians along this vital neighborhood connection.

2) **N. 14th Street.** The segment of N. 14th Street between Branch Street and St. Louis Avenue connects residents to Confluence Academy, and the MO 30 MetroBus Route, the North Riverfront Trail via Branch Street, Crown Square, and other commercial destinations in ONSL. Improvements to this corridor will enhance opportunities for both recreation and transportation-oriented pedestrian trips.

3) **N. Florissant Avenue.** Bordering ONSL to the west, N. Florissant Avenue is a key arterial in the City of St. Louis' street network and a MetroBus corridor, but a lack of curb ramps and generally poor sidewalk conditions hinder pedestrian movement. Improvements to the pedestrian environment can increase pedestrian access to retail and transit and improve pedestrian safety along this well-traveled arterial.

4) **N 13th Street.** Extending the length of ONSL from Branch Street to Cass Avenue, N. 13th Street is a significant north-south route for pedestrian traffic. Jackson Park Senior Apartments, Strodtman Park, the Old North Grocery Co-op, the Murphy-Blair Apartments, and the MO 30 MetroBus route are all located on N. 13th Street. Sidewalk infill and upgrades, as well as new ADA-compliant curb ramps and marked crosswalks, can significantly improve pedestrian mobility along this important corridor.

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*Old North St. Louis
Walkable Bikeable Community Plan*
5) **St. Louis Avenue.** St. Louis Avenue bisects ONSL and provides direct access to Crown Square, Ames VPA Elementary School, the Old North Grocery Co-op, and the MO 30, MO 40, and MO 74 MetroBus routes. While pedestrian conditions are currently fair, with curb ramps and continuous sidewalks in place on both sides of the street, the corridor this corridor is integral to safe and comfortable pedestrian mobility in ONSL. As future roadway projects and adjacent development occur, it will be important to consider pedestrian improvements and ADA compliance.

6) **Cass Avenue.** At the southern border of ONSL, Cass Avenue houses a number of commercial businesses and provides bus transit via the MO 32 MetroBus route for residents in the ONSL, Carr Square, Columbus Square, and St. Louis Place neighborhoods. In the coming years, automobile traffic will increase dramatically on Cass Avenue due to the New Mississippi River Bridge, which will provide an alternate entrance to Downtown from the north via Cass Avenue and a re-aligned Tucker Boulevard. Continuous sidewalks, well-marked crosswalks, and ADA-compliant curb ramps can have a significant effect on pedestrian safety and should be coordinated with local and state agencies as this New Mississippi River Bridge Project continues to take shape.

7) **Hadley Street.** This small segment of Hadley Street between Hebert and St. Louis Avenue, which is adjacent to Ames VPA Elementary School, currently lacks safe, well-marked crosswalks and ADA accessible curb ramps to facilitate pedestrian movement. Because of the considerable amount of pedestrian, vehicular, and school bus traffic generated by the elementary school, it is necessary to ensure safe, high-visible pedestrian crosswalks to reduce potential conflict between pedestrians and other road users.

8) **Howard Street.** Howard Street from Blair Avenue to Hadley Street will be an important connection to the planned Iron Horse Trestle. Continuous, accessible pedestrian facilities will ensure that residents of ONSL and visitors to the area can safely and conveniently access the Trestle.

9) **N 14th Street/Blair Avenue.** This short three-block segment of N 14th Street and Blair Avenue functions as the gateway to ONSL from the south, and as such is an important location for pedestrian enhancements. Currently, this three-block stretch lacks multiple sidewalk segments and curb ramps at most intersections. Addressing these deficiencies can create a more welcoming gateway for visitors to the neighborhood and provide a safe, continuous pedestrian route that leads to the planned Iron Horse Trestle to the east and to Crown Square to the north.

10) **Blair Avenue.** Connecting Branch Street to St. Louis Avenue, Blair Avenue is a north-south pedestrian route that currently lacks a number of sidewalk segments and curb ramps along this six-block stretch. As redevelopment occurs along this block, it will be important to ensure that new sidewalk facilities are installed.
### Funding Sources and Opportunities

Implementing projects and programs is considerably more likely if funding can be leveraged with a variety of local, state, federal and public and private sources. This section identifies potential matching and major funding sources available for bicycle and trail projects and programs as well as their associated need and criteria. Additional information about the funding sources discussed below can be found in Appendix C.

### Federal Funding Sources

Federal funding for bicycle and pedestrian facilities is primarily provided by the latest federal transportation act, the Safe, Accountable, Flexible, Efficient Transportation Equity Act – a Legacy for Users (SAFETEA-LU). SAFETEA-LU authorizes the Federal surface transportation programs for highways, highway safety and transit for the five-year period 2005-2009. Authorization of a new federal transportation bill is expected in 2011 or 2012; until that time, the programs listed below may not have additional funding available.

Federal programs under SAFETEA-LU that fund bicycle and pedestrian improvements include:

- Surface Transportation Program
- Highway Safety Improvement Program
- Transportation Enhancements
- Federal Recreational Trails Program
- State and Community Highway Safety Grant Program (Section 402)
- Safe Routes to School (SR2S)
- Community Development Block Grants
- Rivers, Trails and Conservation Assistance Program
- Land and Water Conservation Fund
- Transportation, Community and System Preservation Program
- The National Scenic Byways Program
- Transportation and Community and System Preservation Program (TCSP)

### TIGER Discretionary Grants

The Transportation Investment Generating Economic Recovery (TIGER) discretionary grant program is a new opportunity for federal funding of non-motorized transportation projects. Initially created under the American Recovery and Reinvestment Act of 2009 (also known as the Stimulus Bill), TIGER grants are an innovative tool for local governments to fund a variety of transportation projects; selection criteria prioritize innovative multi-modal projects. While the program is not officially annual, it is possible that the grant program will be re-established yearly, at least until the official federal transportation bill is updated. The program is intended for large capital projects that involve multiple governmental bodies, so projects in ONSL could potentially be included in a larger improvement project.

### State Funding Sources

The state of Missouri does not set aside specific funds for bicycle and pedestrian projects. Instead, the State relies on integrating bike and pedestrian projects with new highway projects. Recent legislation (Senate Bill 720) may change this scenario. If successful, the bill will require the consideration of all roadway users in the planning and design of new transportation facilities.

SB 720 - This act requires the Department of Transportation’s plans, programs, and projects to provide full consideration for the safety and contiguous routes for bicyclists, pedestrians, disabled persons, and transit users of all ages and abilities. Bicycle and pedestrian ways must be given full consideration in the planning and development of transportation facilities by the department, including their incorporation into state plans and programs.
Complete Streets Acts
In June 2010, St. Louis adopted a complete streets act, which states that the city will “consider complete street elements in the design, construction and maintenance of public transportation projects, improvements and facilities.” This act should encourage bicycle and pedestrian treatments to be provided in new projects and may lead to additional funding for dedicated projects. Passed in March 2011, the Missouri House Complete Streets National Complete Streets Act promotes active transportation improvement projects and may lead to new sources of funding.

Potential St. Louis Funding Sources
Communities throughout the country have looked to different local sources to find funding for bicycle, pedestrian and shared-use path projects. These sources vary from reallocation of an existing tax to local bond measures. Potential funding sources that could be implemented by the City of St. Louis include:

- Local Option Sales Tax
- Local Bond Measure
- System Development Charges/Developer Impact Fees
- Street User Fees
- Commercial Parking Tax
- Local Improvement Districts (LIDs)
- Business Improvement Districts (BIDs)
- Tax Increment Financing/Urban Renewal Funds

Private Sector Funding Sources
In addition to government-based funding sources, funding for bikeways and shared-use paths can come from private land trusts or foundations. Community fundraising is another option, as well as partnerships with neighborhoods and community organizations. Private sector funding sources include:

- American Greenways
- Bikes Belong
- Adopt a Bikeway, Sidewalk or Trail Program
- Local businesses
- Land Trusts
- Community fundraising and creative partnerships

Providing incentives, such as public art recognizing contributors, helps encourage private donations toward bicycle and pedestrian projects.
Appendix A. Public Outreach

The planning process included a number of opportunities for meaningful public engagement. Public workshops, steering committee meetings, and other events and activities designed to encourage public participation were incorporated into the planning process. These public engagement efforts are described below:

- **Project Webpage and Online Survey.** A project webpage and an online survey were developed to keep residents informed of the planning process and upcoming public events, as well as solicit input through the online survey tool, which captured residents’ current biking and walking habits, their perception of the built environment as it relates to walking and bicycling, and their ideas to improve conditions for non-motorized transportation and recreation. The survey responses were used to identify common issues and site-specific concerns related to walking and bicycling.

- **First Public Workshop.** The project team held an initial public workshop on Wednesday, June 16th, 2010, designed to inform the community about the benefits of a bikeable and walkable community, provide an overview of the planning process, and solicit input regarding barriers and obstacles to walking and bicycling, as well as ideas to improve non-motorized transportation and recreation in and around Old north.

- **Crown Square Ribbon Cutting & Street Festival.** The project team hosted Walkable Bikeable Community Plan Information Booth at the Crown Square Ribbon Cutting & Street Festival on Thursday, July 29th. Residents and visitors had the opportunity to learn about the plan, and share their ideas on city-wide maps. Project postcards were also passed out to direct people to the project website and complete the online survey.

- **St. Louis Open Streets Event.** The project team hosted a Walkable Bikeable Community Plan Information Booth at the October 9th Open Streets event. The project team shared information about the plan with neighborhood residents and visitors participating in the Open Streets event, encouraged residents to attend the upcoming public workshop, and provided hard copies of the survey to solicit feedback on desired improvements for walking and bicycling.

- **Second Public Workshop.** A second public workshop was held on Thursday, October 21th, 2010, to share with the community the initial plan recommendations and receive input to consider for final plan revisions.
A steering Committee was also established to engage community stakeholders and representatives throughout the course of the project. The Steering Committee met four times during the course of the project and provided a vital link between the planning team and the community. The Steering Committee's input shaped the plan direction and recommendations at significant junctures during the course of the project. The Steering Committee also helped to communicate the purpose and importance of the plan to the greater community and encouraged residents to get involved.
Appendix B. Plan and Policy Review

This appendix describes background plans and studies relevant to the Old North St. Louis Walkable Bikeable Community Plan. The text summarizes previous and on-going planning efforts affecting the ONSL neighborhood and its streets. The appendix focuses on plans and studies affecting bicycling and walking that impact the ONSL community.

The following documents were reviewed for this analysis:

- St. Louis Regional Bicycling and Walking Transportation Plan (2005)
- City of St. Louis Strategic Land Use Plan (2005)
- The Trestle: A New View of St. Louis (2007)
- St. Louis Riverfront Trail Enhancements Plan (2001)
- St. Louis – City of the Future (2009)
- St. Louis City Revised Code (Updated 2008)
- House Concurrent Resolution 67: Missouri Complete Streets (2011)

St. Louis Regional Bicycling and Walking Transportation Plan (2005)

The St. Louis Regional Bicycling and Walking Plan was developed as an extension of the regional Legacy 2030 Long-Range Transportation Plan. A goal of the Legacy 2030 Plan is to improve regional mobility and safety and to increase transportation mode choices. The Bicycling and Walking Plan builds upon this goal by providing a set of standard guidelines for communities that are interested in developing bicycle and pedestrian facilities. The plan envisions that, “The future bicycling and walking transportation system for the St. Louis region will be an interconnected system of on- and off-road facilities that provide an alternative transportation option for utilitarian and recreational trips.” The plan does not make specific recommendations but instead offers strategies regarding how and when to plan appropriate bicycle and pedestrian facilities.
A survey conducted by the planning team found that over one-third (34 percent) of respondents ride their bicycles at least once a week and twenty-nine percent ride nearly every day. The majority of respondents bicycle for recreation (84 percent) and/or exercise (81 percent), while less than a quarter (23 percent) bicycle for work and/or shopping (21 percent). Similarly, residents walk more for recreation (65 percent) and/or exercise (71 percent) than for work (10 percent) and/or shopping (34 percent). Respondents cited lack of on-road facilities and heavy traffic or speeding as the largest barriers to bicycling (Figure 1).

**Figure 1. Responses – Conditions that ‘Very Much’ or ‘Somewhat’ Discourage Bicycling.**
(Source: St. Louis Regional Bicycling and Walking Transportation Plan)

Major barriers to walking include heavy traffic/speeding (59 percent), no crosswalks/unsafe intersections (58 percent), bad weather (37 percent), travel distances (55 percent), and lack of sidewalks (54 percent).

**Figure 2. Responses – Place that are ‘Extremely Desirable’ to Ride Bicycles.**
(Source: St. Louis Regional Bicycling and Walking Transportation Plan)
Nine out of ten respondents (90 percent) consider bicycling improvements as ‘very important’ or ‘somewhat important’ to their way of life, while 86 percent feel similarly about walking improvements. An overwhelming majority (92 percent) of respondents would support having a designated bicycle route on their street. When asked what locations would be ‘extremely desirable’ for bicycling, bike lanes and multi-use paths were most popular (Figure 2).

Respondents also had favorable impressions for bicycling and walking; over 80 percent felt that bicycling and walking are good forms of recreation, make cities more livable, reduce health costs, are good forms of transportation, and improve air quality.

Key destinations for walking and bicycling are: parks (86 percent), grocery store/shopping mall (64 percent), work (59 percent), downtown/central business area (57 percent), and other activity centers (52 percent). Finally, the majority of respondents (80 percent) strongly agree that their local community should spend more money to make it easier and safer for people to bicycle and walk. A total of ninety-six percent of respondents (96 percent) strongly or somewhat agree.

**Goals and Objectives**

The St. Louis Regional Bicycling and Walking Plan “sets forth guidance pertaining to planning, design, and implementation, as well as public education and program marketing, with the overall goal to complete the region’s transportation system by better accommodating bicycling and walking.” The 10 central goals that guide the recommendations in the plan are:

- **A Safe Transportation System:** A transportation system based on concise design standards, guidelines, and ordinances that provides safe and secure bicycling and walking environments and facilities.
  - An accessible path of travel to and from the transit system.
  - Accessible shelters and other amenities at transit stops.
  - Accessible path of travel in the system of sidewalks.
  - Retrofitting of existing areas with accessible design options.
  - Accessible design for all new development.

- **Land-Use that Encourages Bicycling and Walking:** Land-use that promotes transit-, bicycle-, and pedestrian-oriented communities where people have choices between transportation alternatives as part of their routine activities.
  - Commercial developments that encourage bicycling and walking.
  - Land use that reduces trip distances.
  - Land use that allows transportation alternatives.
  - Neighborhood-oriented standards for residential areas.
  - Mixed-use developments.
  - Transit-oriented developments.
  - Pedestrian-scale amenities in developments.
  - Neighborhoods that provide bicycling and walking access to schools.

- **A Complete Transportation System:** A transportation system that provides bicycling, walking, and motorized connections and access to activity areas and regional destinations.
  - Bicycling and walking facilities in all road projects, unless exceptional circumstances are demonstrated.
  - Bicycling and walking facilities that provide access through physical barriers such as bridges and other structures.
  - Bicycling and walking facilities in all transit projects, unless exceptional circumstances are demonstrated.
• An Informed Transportation System User: Educational programs that inform bicyclists, pedestrians, the motoring public, the engineering community, and the law enforcement community about safety, awareness, proficiency, and the benefits of bicycling and walking.
  o Programs that enhance bicycling skills through training and presentations at elementary and middle schools.
  o Employer programs that encourage bicycling and walking among employees.
  o Efforts by bicycling and walking advocacy groups in developing and conducting educational programs.
  o Emphasis of bicycle and pedestrian rights and responsibilities during driver’s education and license examinations.
• Media campaigns to raise awareness about bicycling, walking, and public health.
• Enforcement of Laws and Regulations: Enforcement of the laws and regulations that protect bicyclists, pedestrians, and the motoring public.
• Programs that target the enforcement of right-of-way rules in the transportation system, stressing the relative vulnerabilities of the diverse multi-modal system users.
• A Properly Designed Transportation System: A transportation system that is designed in consultation with accepted federal, state, and local engineering standards.
• The design of bicycling and walking transportation facilities in strict adherence to federal, state, and local standards for geometric design, signing, traffic control, and accessibility.
• A Continuous Transportation System: A transportation system that provides connectivity to the regional trails and greenways by way of bicycling and walking facilities between neighborhoods and recreational destinations.
• The development of bicycling and walking transportation projects that emphasize linkages between residential and commercial developments and the region’s trails, greenways, and recreational destinations. Transportation projects that are sponsored by multiple communities and provide bicycling and walking connections across jurisdictional boundaries.
• An Accessible Transportation System: A transportation system that provides access to all levels of ability and age.
  o An accessible path of travel to and from the transit system.
  o Accessible shelters and other amenities at transit stops.
  o Accessible path of travel in the system of sidewalks.
  o Retrofitting of existing areas with accessible design options.
• Accessible design for all new development.
• A Well-maintained Transportation System: Properly maintained transportation facilities that ensure safe and comfortable bicycling and walking.
  o Adequate snow removal for bicycling and walking facilities.
  o Sufficient maintenance intervals throughout the year for bicycling and walking facilities to ensure removal of debris, gravel, and other obstructions.
• Sufficient maintenance of bicycling and walking amenities such as bicycle racks, benches, shelters, and lighting to ensure function and safety.
• Encourage Bicycling and Walking: Programs that increase the visibility of bicycling and walking transportation to attract larger portions of the population to its benefits.
  o Bicycling and walking amenities such as showers, clothing storage facilities and bicycle parking at destinations and activity areas.
  o Efforts by regional bicycling and walking advocacy organizations to organize and promote bicycling- and walking-related events.
  o Programs that reward communities and agencies for enhancing – bicycling and walking environments.
Bicycling and Walking Conditions at Transit Facilities
Metro’s data shows a substantial increase in the use of bicycles on MetroBus vehicles (Figure 3).

![Graph showing increase in number of bicycles on MetroBus vehicles from August 2002 to April 2004.](image)

Figure 3. Bicycles on MetroBus, August 2002 to April 2004.
(Source: Metro, in St. Louis Regional Bicycling and Walking Transportation Plan)

The St. Louis Regional Bicycling and Walking Transportation Plan makes the following recommendations for improving the bicycling and walking environment within the regional transit system:

- Ensuring that bicycling and walking considerations are included in the design of future extensions to the MetroLink network and bus-related improvements.
- Addressing bus stops that are currently situated in grassy or earthy areas that do not provide adequate space for those waiting for buses.
- Considering the importance of locating bus stops in a manner that minimizes unsafe mid-block pedestrian crossings.
- Enhancing the policies and facilities provided for carrying bicycles on MetroLink.
- Considering the importance of demand analysis in the strategic placement of bicycle facilities at MetroLink stops and MetroBus transfer centers.
- Investigating the applicability of higher-order bicycle storage facilities such as bicycle lockers.
- Determining appropriate design parameters for adequate bicycle racks at MetroLink stations.
- Defining the proper design of bus shelters to incorporate adequate space for those with mobility challenges.
- Addressing bus driver and bicyclist training with regards to appropriate protocols for picking up bicyclists at bus stops.
- Conducting training for bus drivers and bicyclists regarding proper operations near locations where bicycle lanes and bus stops coexist.
- Identifying specific goals to attract more pedestrian and bicyclists to use the regional transit system.
- Providing neighborhood connections to transit transfer stations.
Integrating best practices from other transit agencies. Examples include “Recommendations for Pedestrian, Bicycle and Transit Friendly Development Ordinances” from the Oregon chapter of the American Planning Association and compilations such as those available in www.bicyclinginfo.org.

City of St. Louis Strategic Land Use Plan (2005)\(^7\)

The overarching theme of the Strategic Land Use Plan is to “improve the quality of life for those who live and work in St. Louis by encouraging appropriate types of development and preservation in clearly defined locations.” The plan’s two main purposes are:

- To provide direction for those who wish to make new investments in our City, and;
- To provide stability and opportunities for those who already live, work and build their businesses here.

The Strategic Land Use Plan does not include a specific implementation strategy, but recognizes it will take shape through developers’ and neighborhood residents’ actions.

A Plan for the Neighborhoods of the Fifth Ward (2002)\(^8\)

A Plan for the Neighborhoods of the Fifth Ward is a comprehensive plan that provides goals and recommendations for the future of the Fifth Ward. The goals of the plan are:

- Create a Strong, Vital Community
- Provide Social Outlets for Youth and Adults
- Create a Self-Supportive Town
- Preserve the Existing Fabric
- Use Transportation as a Resource
- Provide Multiple Styles and Prices of Housing
- Create an Appropriate Urban Density
- Create a “Clean”, Beautified Community
- Attract Residents, Tourists & Businesses to the Community
- Provide Strong Progressive Education/Training Options For All Ages
- Be Visionary, Not Reactionary

Service Area Analysis, Recreation Standards

One of the plan’s chapters is a market needs analysis, including a service area analysis. Park lands are a community asset considered in this chapter. The plan recognizes that neighborhood parks should “be accessible to walkers and bike riders, and should not require them to cross or travel along barriers such as arterial roadways, highways or railroad tracks.” The inventory notes that no paths or trails are currently publicly provided in the Fifth Ward, although recreation standards of the State Comprehensive Outdoor Recreation Plan (SCORP) suggest 1 mile per 2,000 people. The estimated future recreation facility needs for the Fifth Ward include 1 mile of bicycle trail per 4,000 people and 1 mile of nature trail per 4,000.

The plan also recognizes the City of St. Louis’ limited ability to fund parks and other recreation facility initiatives. The text suggests that development of public/private partnerships would be the best strategy for developing such facilities in the area.

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\(^7\) [http://stlcin.missouri.org/landuse/index.cfm](http://stlcin.missouri.org/landuse/index.cfm)

\(^8\) [http://stlouis.missouri.org/citygov/planning/Plans/Nghbrhd5th_plan.pdf](http://stlouis.missouri.org/citygov/planning/Plans/Nghbrhd5th_plan.pdf)
**Pedestrian Circulation**

One of the plan’s major objectives directly addresses pedestrian circulation, aiming, “to make the Ward safe for pedestrians and children, especially in the residential areas, along routes to bus and MetroLink stations, and routes to commerce and recreation.” The plan notes that this will require traffic calming measures, as well as connecting pedestrians to key destinations, such as schools and parks.

The discussion of pedestrian circulation states that “The goal of safe, walkable communities will be accomplished by employing traffic calming features to the street and by defining truck traffic routes.” The plan generally calls for the following improvements to the visual and walking environment:

- Restricting road intersection widths.
- Clearly marked cross-walks and traffic stop bars.
- Introduction of landscape medians.
- Lighting improvement along proposed street upgrades.
- Improved sidewalk and curb ramps.
- Well defined street intersections
- Bicycle paths connecting open spaces with neighborhoods and schools.

**Specific Recommendations**

Specific recommendations for bicycle and/or pedestrian facilities on streets running through ONSL include:

- **St. Louis Avenue** – 10’ sidewalks with curb extensions at ‘key intersections’ including 14th Street and St. Louis Avenue, reserved for local traffic.
- **North Market Street** – key bicycle and pedestrian corridor, connecting to proposed riverfront bike trail via the existing railroad trestle, 16’ landscaped median, five-foot planting strips, and six-foot sidewalks for “safe pedestrian and bicyclist use.”
- **Cass Avenue** – 12’ landscaped center median, six-foot planter strips, five-foot sidewalks for pedestrians.
- **North Florissant Avenue** – 40’ double track of MetroLink cars in median, 12’ sidewalks “for outdoor seating and adequate space for a high volume of pedestrian traffic,” paving patterns at major intersections (14th Street, Madison Street, North Market Street, and St. Louis Avenue), public art, rumble strips or speed bumps to slow traffic, clearly define pedestrian crosswalks with clear visibility.

Figure 4 through Figure 7 show the proposed cross-sections described above.
Figure 4. St. Louis Avenue East of N. Florissant Avenue.
(Source: A Plan for the Neighborhoods of the Fifth Ward)

Figure 5. N. Market Street East of N. Florissant Avenue.
(Source: A Plan for the Neighborhoods of the Fifth Ward)
Figure 6. North Florissant Avenue Proposed Section.
(Source: A Plan for the Neighborhoods of the Fifth Ward)

Figure 7. N. Florissant Street Improvements.
(Source: A Plan for the Neighborhoods of the Fifth Ward)
The plan recommends closing 11th Street from south of Benton Street to southbound I-70, and north of Madison Street. This recommendation addresses concerns about traffic exiting I-70 and continuing south on N. 11th Street, which is immediately adjacent to a church, school, and park. In addition to the above proposed street modifications, the plan lists known modifications to I-70. These expected changes are likely to affect proposed circulation for bicyclists and pedestrians in ONSL. Modifications within the project area include:

- **Southbound I-70 to 11th Street/St. Louis Avenue** – Through truck traffic will not be allowed on St. Louis Ave. between 11th Street and Jefferson Avenue.
- **Northbound I-70 to Madison** – This exit is being replaced by a northbound exit to St. Louis Avenue. As noted above, trucks will have to turn right on St. Louis Avenue or make a U-turn to get back on I-70 at the Benton Street entrance.
- **Northbound I-70 to Branch** – It appears that MoDOT will be eliminating this entrance in order to construct a new entrance ramp from St. Louis Ave. to Northbound I-70. It is recommended that a pedestrian tunnel remain in place, as it provides an important connection to the Riverfront Trail for the neighborhood. The proposed tunnel is in accordance with the recommendations being developed for the Riverfront Trail Master Plan.
- **I-70 Crossings**:
  - St. Louis Avenue – Bridge is to be reconstructed (unchanged) as part of the Mississippi River crossing project.
  - N. Market Street Pedestrian Bridge – Bridge is proposed to be replaced with a new pedestrian bridge in a slightly shifted location. Currently, MoDOT does not intend to upgrade this crossing for bicycles or to ADA standards. It is recommended that these items be strongly considered and made part of the new bridge.
  - Madison Street – Modifications will be required as part of the Mississippi River crossing project.
  - Howard Street – May be replaced by a relocated N Cass Avenue viaduct as part of the Mississippi River crossing.
  - Cass Avenue – May be replaced by a S Cass Avenue viaduct as part of the Mississippi River crossing.
  - Branch Street – Branch Street should stay open under I-70 and should serve as the designated truck route to the riverfront from the western portion of the Ward.
  - Railroad Trestle – The proposed plan is to renovate and reuse the trestle as a primary connection to the Mississippi River and the riverfront bike trail.
- **N. Florissant Avenue** – The proposed expansion of MetroLink down the middle of N. Florissant Avenue/14th Street would reduce the number of traffic lanes to four and add a parking lane on each side. N. Florissant access is proposed to be limited to right in/right out at Madison and Warren Streets, with crossings and left turns limited to signalized intersections at St. Louis Avenue, N. Market Street, and in the area of Mullanphy Street.
- **St. Louis Avenue, N. Market Street, and Cass Avenue** – The proposed improvements are for attractive, well-lit, boulevard-type streets with planted medians. These streets would be lined with street trees and sidewalks to appeal to pedestrian traffic. Detailed surveys would need to be made to determine if the existing granite curbs could be used in place or reused elsewhere for their historic appearance. These boulevards, reserved for local traffic, would post limits on through-truck traffic.
- **Remaining Street Network** – The public has expressed significant concern regarding street closures, roadblock, and inability to move easily through the Ward.

The plan notes the lack of coordination between the plans for the proposed MetroLink expansion on 14th Street/N. Florissant Avenue and the connection from the Mississippi River crossing to 14th Street. The plan states that “It is crucial for the Ward that these two projects coordinate and accommodate each other’s facilities.”
Old North St. Louis Neighborhood
Chapter 9 of the plan focuses on the neighborhood of Old North St. Louis. The plan notes the following key planning issues in the neighborhood:

- Historic significance of the area
- Major commuter routes form the neighborhood boundaries on three sides of the neighborhood
- 14th Street Mall and St. Louis Avenue
- North Market Street Boulevard and pedestrian linkage to the North Riverfront New Mississippi River Crossing
- Potential retail development along N. Florissant Avenue

The Trestle: A New View of St. Louis (2007)

Prepared by the Great Rivers Greenway District, the Trestle Plan provides guidance for developing the River Ring, which is “an interconnected system of parks, trails, and greenways that link communities and provide economic, social, and environmental benefits for the region.”

The Trestle is an abandoned railroad line that begins at Cass Avenue, crossing I-70 at N. Market Street. The plan envisions the Trestle as “a green ribbon in the sky,” which “showcases environmentally sustainable design principles, and exemplifies the creative reuse of an admired landmark structure.” The facility would also connect on-street bikeways in ONSL and throughout the city with the North Riverfront Trail.

One proposal that supplements the Trestle would be a ‘Bike Plaza,’ which provides amenities such as bicycle parking and community meeting space. A trailhead is proposed at Branch Street, and includes automobile parking, restrooms, and trail information.

This facility would be a significant symbol of the City’s commitment to sustainability and nonmotorized transportation and recreation.

9 http://www.greatrivers.info/Projects/GreenwayProjects.aspx?ProjectId=75&GreenwayId=1
St. Louis Riverfront Trail Enhancements Plan (2001)\textsuperscript{10}

The St. Louis Riverfront Trail Enhancements Plan was prepared by the National Park Service Rivers, Trails, and Conservation Assistance Program and the City of St. Louis Planning and Urban Design Agency. Adopted in June 2001, the plan provides guidance for the development of the Riverfront Trail portion of the Mississippi River Trail.

The Mississippi River Trail is a designated Millennium Trail, which runs for 1,000 miles through seven states from St. Louis to New Orleans. The Riverfront Trail section is 12 miles long, from Gateway Arch to the Old Chain of Rocks Bridge. Ten miles of trail were completed in 1999. The trail is a key opportunity for the Old North St. Louis Walkable Bikeable Community Plan to provide connection into the network of trails throughout the St. Louis area.

The plan recommends a secondary trailhead at Branch Street, just north of the ONSL neighborhood. The trailhead would provide an important connection to Hyde Park and the Near North Riverfront neighborhoods. Amenities recommended for a secondary trailhead include:

- Information kiosks
- Trash receptacles
- Bicycle racks/bicycle parking
- Native plant landscaping
- Benches and picnic tables

The plan also recommends neighborhood connector routes, which link the trail to key focal areas. The recommended connection into the ONSL neighborhood is along N. Market Street, via a reconstructed pedestrian bridge over I-70 that connects to a vacated railroad line elevated above Market Street. Branch Street would be another key connection, and includes connections on N 9th Street, St. Louis Avenue, and 13th Street. The on-street section would be designated by signage with arrows along streets and at major intersections. Major streets should be striped with bike lanes.

St. Louis – City of the Future (2009)

The St. Louis – City of the Future: Creating a Game-Changing 1800 acre, State-of-the-Art Job Center in the Inner City (2009) Plan is an economic development strategy for the historic North Side of St. Louis. The plan focuses on large, state of the art employment clusters to reduce ‘urban blight’ and uses a neighborhood approach to social, economical, and environmental sustainability.

\textsuperscript{10} \url{http://stlouis.missouri.org/citygov/planning/}

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Walkable Bikeable Community Plan
While the majority of the study area is outside of the ONSL neighborhood, the area between Chambers Street, I-70, Cass Avenue, and N. Florissant Avenue is within the redevelopment area. In addition, the project will impact residents of the neighborhood and bicycle/pedestrian connections should be provided for employees to easily travel to ONSL.

The plan was made possible by the City of St. Louis Development Corporation, a private sector development group that bought vacant land and vacant buildings in order to establish a unified development vision that will create 65,000 jobs in the distressed inner city area. In addition, the project will provide a variety of housing stock, emphasize renewable energy and promote an “extensive interconnected living green space system.” The project will also provide bus, trolley, rail, bicycle and pedestrian connectivity.

In the problem definition, the plan identifies the following issues related to bicycle and pedestrian transportation:

- Transportation infrastructure is mixed: streets are too large for current demand but transit service is dispersed and inadequate for a healthy, walkable community. Bike connections and overall mobility are very poor.
- Streets and sidewalks are in highly varied states of disrepair.
- Parks, green space, green connections and recreation opportunities are very poor.

A 2008 survey of sidewalk conditions found that the majority were in poor condition. In the area within ONSL, all sidewalks were in poor condition, with the exception of Blair Avenue from Howard Street to Mullanphy Street. Several sidewalks gaps were also identified in that area.

The project vision establishes six sustainability goals, including “Creating a Living Green Infrastructure”. Specific recommendations include creating green streets and improving connections to regional parks. The target indicator is to have 20 percent of all streets in this category. The “Integrate Mobility/Connectivity Networks” goal addresses transportation in the area. The goal is to “design a safe transportation system that encourages walking, biking, and the use of mass transit and connects residential, commercial, and retail areas.” The bicycling indicator is 50 miles of new bike lanes, while the walking indicator is for 100 percent of streets to be walkable. Figure 8 shows the multimodal network proposed for the area. The study proposes bike routes in ONSL on:

- N. Market Street
- St. Louis Avenue
- Herbert Street
- Blair Avenue
- Hadley Street
- Howard Street

It also proposes using the Trestle as a bikeway, as outlined previously.
The St. Louis City Code outlines responsibilities of bicyclists and pedestrians on and around roadways, as well as responsibilities of drivers with respect to bicyclists and pedestrians. In general, policies that are supportive of bicycling and walking are permissive of these activities, allowing the individual to determine where they feel safe or comfortable. Supportive laws also generally require that drivers stop for pedestrians in crosswalks (marked or unmarked) and watch for bicyclists prior to opening car doors into the street.

Chapter 17.20: Pedestrians’ Rights and Duties outlines expected pedestrians' behavior. The Code requires drivers to yield to pedestrians in crosswalks and provides guidance for where pedestrians can cross a roadway. Notably, the Code requires that pedestrians use sidewalks where they are provided, prohibiting pedestrians from walking on the roadway in these locations. Where ADA-compliant curb ramps are not available, this requirement can be detrimental for pedestrians with disabilities and pedestrians with strollers.

Text guiding pedestrian travel in St. Louis is provided below.

17.20.020 Right-of-way in crosswalks.

A. When traffic-control signals are not in place or not in operation the driver of a vehicle shall yield the right-of-way, to a pedestrian crossing the roadway within a crosswalk when the pedestrian is upon the half of the roadway upon which the vehicle is traveling, or when the pedestrian is approaching so closely from the opposite half of the roadway as to be in danger.
B. No pedestrian shall suddenly leave a curb or other place of safety and walk or run into the path of a vehicle which is so close as to constitute an immediate hazard.

C. Whenever any vehicle is stopped at a marked crosswalk or at an unmarked crosswalk at an intersection to permit a pedestrian to cross the roadway, the driver of any other vehicle approaching from the rear shall not overtake and pass such stopped vehicle. (Ord. 57831 § 1 (part), 1979: 1960 C. § 829.020.)

17.20.030 Crossing at other than crosswalks.
A. Every pedestrian crossing a roadway at any point other than within a marked crosswalk or within an unmarked crosswalk at an intersection shall yield the right-of-way to all vehicles upon the roadway.

B. Any pedestrian crossing a roadway at a point where a pedestrian tunnel or overhead pedestrian crossing has been provided shall yield the right-of-way to all vehicles upon the roadway.

C. No pedestrian shall cross a roadway intersection diagonally unless authorized by official traffic-control devices; and, when authorized to cross diagonally, pedestrians shall cross only in accordance with the official traffic-control devices pertaining to such crossing movements. (Ord. 57831 § 1 (part), 1979: 1960 C. § 829.030.)

17.20.040 Crossing prohibited—When.
A. No pedestrian shall cross a roadway other than in a crosswalk in the central traffic district.

B. No pedestrian shall cross a roadway other than in a crosswalk unless said crosswalk is more than one hundred and fifty (150) feet distant. (Ord. 57831 § 1 (part), 1979: 1960 C. § 829.040.)

17.20.050 Drivers to exercise due care. Notwithstanding other provisions of this chapter, every driver of a vehicle shall exercise due care to avoid colliding with any pedestrian and shall give warning by sounding the horn when necessary and shall exercise proper precaution upon observing any child or any obviously confused, incapacitated or intoxicated person. (Ord. 57831 § 1 (part), 1979: 1960 C. § 829.050.)

17.20.060 Pedestrians to use right half of crosswalks. Pedestrians shall move, whenever practicable, upon the right half of crosswalks. (Ord. 57831 § 1 (part), 1979: 1960 C. § 829.060.)

17.20.070 Pedestrians on streets.
A. Where a sidewalk is provided and its use is practicable, it shall be unlawful for any pedestrian to walk along and upon adjacent roadway.

B. Where a sidewalk is not available, any pedestrian walking along and upon a highway shall walk only on a shoulder, as far as practicable from the edge of the roadway.

C. Where neither a sidewalk nor a shoulder is available, any pedestrian walking along and upon a street shall walk as near as practicable to an outside edge of the roadway, and, if on a two-way roadway, shall walk only on the left side of the roadway.

D. Except as otherwise provided in this chapter, any pedestrian walking along and upon a roadway shall yield the right-of-way to all vehicles upon the roadway.

E. It shall be unlawful for any pedestrian to enter upon any portion of a limited access highway except in a case of an emergency, and the burden of proof of such emergency shall rest upon such pedestrian. (Ord. 57831 § 1 (part), 1979: 1960 C. § 829.070.)
**17.20.090 Right-of-way on sidewalks.** The driver of a vehicle shall yield the right-of-way to any pedestrian on a sidewalk. (Ord. 57831 § 1 (part), 1979; 1960 C. § 829.090.)

**Bicycles**

Chapter 17.36: Bicycles and Similar Devices of the St. Louis City Code addresses the operation of bicycles inside the city limits. The Code applies to bicycles on streets as well as bicycles on paths. The section specifies that bicyclists over 15 years old are prohibited from bicycling on the sidewalk. It also specifies the portion of the roadway bicyclists should ride on and requires (non-continuous) signaling of turning movements. Relevant text is provided below.

**17.36.050 Where ridden.**

A. Every person operating a bicycle upon a roadway shall ride as near to the right side of the roadway as practicable, exercising due care when passing a standing vehicle or one proceeding in the same direction.

B. Persons riding bicycles upon a roadway shall not ride more than two abreast except on paths or roadways set aside for the exclusive use of bicycles.

C. Riding on Sidewalks.

1. No person shall ride a bicycle upon a sidewalk except in an area zoned residential.

2. No person (15) or more years of age shall ride a bicycle upon any sidewalk, unless that sidewalk is established and signed as a bike path.

3. Whenever any person is riding a bicycle upon a sidewalk, such person shall yield the right-of-way to any pedestrian and shall give audible signal before overtaking and passing such pedestrian. (Ord. 57831 § 1 (part), 1979: 1960 C. § 837.050.)

**17.17.3070 Lamps and other equipment on bicycles.**

A. Every bicycle when in use at night time shall be equipped with a front-facing lamp (white light) on the front or carried by the rider.

B. A rear-facing red reflector, on the rear, at least two square inches in reflective surface area.

C. Colorless or amber reflectors on both the front and rear surfaces of all pedals.

D. A side-facing colorless or amber reflector on each side of the front wheel, mounted on the wheel spokes and a colorless or red reflector on the rear wheel; or continuous retroreflective material (at least three-sixteenths of an inch wide) on each side of both tires.

E. Every bicycle shall be equipped with proper brakes. (Ord. 57831 § 1 (part), 1979: 1960 C. § 837.070)

**17.36.080 Riding on highway prohibited.** It shall be unlawful for any person to enter or travel upon any portion of a limited-access highway with a bicycle or a tricycle, or a velocipede or any other contrivance except a motor vehicle. (Ord. 57831 § 1 (part), 1979: 1960 C. § 837.080.)
House Concurrent Resolution 67: Missouri Complete Streets (2011)

During the 95th General Assembly of the Missouri House of Representatives, the State Senate declared their support of Complete Streets in Missouri and encouraged MO DOT and local governments to adopt Complete Streets, “and to plan, design, build, and maintain their road and street system to provide complete, safe access to all road users…”

The General Assembly noted that bicycle and pedestrian facilities are important for Missouri’s economy and economic development and that walking and bicycling improve the public health and reduce treatment costs. The statement included the following facts in support of walking and bicycling:

- The United Health Foundation estimates direct medical costs associated with physical inactivity in Missouri at $1.9 billion in 2008, and projects an annual cost for Missouri of over $8 billion per year by 2018 if current trends continue
- The annual per capita cost of obesity is $450 per Missourian, the highest per capita cost of any state in the United States

The Resolution concludes that,

designing our communities, our neighborhoods, our commercial centers, and our employment centers to be safe and inviting for bicycling and walking is a proven and recommended solution for increasing citizens' physical activity levels, improving physical fitness, reducing obesity, improving overall health, and so reducing health care and economic costs related to obesity and poor physical fitness.

The State of Missouri is pursuing Complete Streets legislation through Senate Bill 720, which would require “the Department of Transportation to provide full consideration for bicyclists, pedestrians, disabled persons, and transit users in its plans, programs, and projects.”


Concurrent to the Missouri Senate’s promotion of Complete Streets, the City of St. Louis introduced a Complete Streets ordinance in April 2010. The Complete Streets policy “sets forth the guiding principles and practices to be considered in public transportation projects, where practicable, economically feasible, and otherwise in accordance with applicable law, so as to encourage walking, bicycling and transit use while promoting safe operations for all users.”

The ordinance states that the City will strive to incorporate Complete Streets elements into public transportation projects, public strategic plans, manuals, rules, regulations, and programs as appropriate.

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12 [www.senate.mo.gov/10info/BTS_Web/Bill.aspx?SessionType=R&BillID=3158031](http://www.senate.mo.gov/10info/BTS_Web/Bill.aspx?SessionType=R&BillID=3158031)
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Appendix C. Funding Sources

This Appendix provides greater detail about potential funding opportunities for bicycle and pedestrian projects, as well as their associated need and criteria.

Federal Funding
In Missouri, Federal funding is administered through the state via the Missouri Department of Transportation (MODOT). Most, but not all of these funding programs are oriented toward transportation versus recreation, with an emphasis on reducing auto trips and providing inter-modal connections. Federal funding is intended for capital improvements and safety and education programs, and projects must relate to the surface transportation system.

TIGER Discretionary Grants
A unit of government must apply for the TIGER grant for a capital investment or planning project of independent utility (a stand-alone project). The U.S. Department of Transportation (DOT) is authorized to award $600 million in TIGER II Discretionary Grants. Grants may be used for up to 80 percent of the costs of the project, but the competitive process rewards substantial non-Federal financial contributions. Funds for the TIGER program are awarded on a competitive basis for projects that will have a significant impact on the Nation, a metropolitan area or a region, so projects in ONSL should be incorporated into a larger citywide proposal.14

SAFETEA-LU
There are a number of programs identified within SAFETEA-LU that provide for the funding of bicycle and pedestrian projects, described in the following section.

Surface Transportation Program
The Surface Transportation Program (STP) provides states with flexible funds which may be used for a wide variety of projects on any Federal-Aid Highway including the National Highway System, bridges on any public road, and transit facilities.

Bicycle and trail improvements are eligible activities under the STP. This covers a wide variety of projects such as on-street facilities, off-road trails, crosswalks, bicycle and pedestrian signals, bike parking and other ancillary facilities. SAFETEA-LU also specifically clarifies that the modification of sidewalks to comply with Americans with Disabilities Act requirements is an eligible activity.

As an exception to the general rule described above, STP-funded bicycle and pedestrian facilities may be located on local and collector roads which are not part of the Federal-aid Highway System. In addition, bicycle-related non-construction projects such as maps, coordinator positions, and encouragement programs are also eligible for STP funds.

Ten percent of each State’s STP apportionment is set aside for two infrastructure safety programs: the Hazard Elimination Program (HEP) and the Railway-Highway Crossing Program. Under the HEP, States must

14 Additional information is available at:: http://www.dot.gov/recovery/ost/tigerii/index.html
“conduct and systematically maintain an engineering survey of all public roads to identify hazardous locations... which may constitute a danger to motorists, bicyclists, and pedestrians,” and implement prioritized improvements at identified hazardous locations. Eligible projects include improvements on any public highway, public transportation facility, and any public bicycle or pedestrian pathway or trail, as well as traffic calming projects.

**Highway Safety Improvement Program**

This program funds projects designed to achieve significant reductions in traffic fatalities and serious injuries on all public roads, bikeways and walkways. This program includes the Railway-Highway Crossings Program and the High Risk Rural Roads Program.

**Transportation Enhancements**15

Administered by MODOT, this program is funded by a set-aside of STP funds. Ten percent of STP funds are designated for Transportation Enhancement Activities (TEAs), which include “provision of facilities for pedestrians and bicycles, provision of safety and educational activities for pedestrians and bicyclists,” and the “preservation of abandoned railway corridors (including the conversion and use thereof for pedestrian and bicycle trails.” (23 USC Section 190 (a) (35)). The reauthorization of the Federal transportation bill will determine funding availability for 2011 and later. Project sponsors must be a local government or public agency.

TE funding in Missouri is for reimbursement of up to 80 percent of the proposed cost of eligible activities, and applicants must provide at least 20 percent matching funds. The minimum project cost is normally $25,000, and projects must be maintained by sponsors for 20 years. Projects must provide a mode of transportation or make a facility more accommodating for pedestrians or bicyclists and be included in a local, regional or statewide plan. These funds can be used to build a variety of pedestrian, bicycle, streetscape and other improvements that enhance the cultural, aesthetic, or environmental value of transportation systems. Safety and educational activities for pedestrians and bicyclists are eligible for state TE funds. Projects must have a local government or state agency sponsor, and the statewide grant process is competitive.

**Federal Recreational Trails Program**16

The Recreational Trails Program of the Federal Transportation Bill provides funds to states to develop and maintain recreational trails and trail-related facilities for both non-motorized and motorized recreational trail uses. Example trail uses include hiking, bicycling, in-line skating, and equestrian use. These funds are available for both paved and unpaved trails, but may not be used to improve roads for general passenger vehicle use or to provide shoulders or sidewalks along roads.

Recreational Trails Program funds may be used for:

- Maintenance and restoration of existing trails
- Purchase and lease of trail construction and maintenance equipment
- Construction of new trails, including unpaved trails
- Acquisition or easements of property for trails
- State administrative costs related to this program (limited to seven percent of a State’s funds)

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15 [http://www.modot.mo.gov/services/community/EnhancementFunding.htm](http://www.modot.mo.gov/services/community/EnhancementFunding.htm)

16 [http://www.mostateparks.com/grantinfo.htm](http://www.mostateparks.com/grantinfo.htm)
- Operation of educational programs to promote safety and environmental protection related to trails (limited to five percent of a State’s funds)

These funds are administered by the Missouri Department of Natural Resources.

**State and Community Highway Safety Grant Program (Section 402)**

Administered by National Highway Traffic Safety Administration (NHTSA) and Federal Highway Administration (FHWA), as well as by the designated State Highway Safety Offices (SHSO), Section 402 monies support State highway safety programs that are intended to reduce traffic crashes and resulting deaths, injuries, and property damage. Grant funds are provided to states each year according to a statutory formula based 25 percent on population and 75 percent on road mileage. States must submit a Performance Plan with goals and performance measures as well as a Highway Safety Plan, which should describe how they will achieve the Performance Plan.

Funds may be used for a wide variety of highway safety activities and programs including those that improve pedestrian and bicycle safety. States are to consider highly effective programs (previously known as National Priority Program Areas), including bicycle and pedestrian safety, when developing their programs, but are not limited to this list of activities.

**Safe Routes to School (SR2S)**

Safe Routes to School grants can be used to identify and reduce barriers and hazards to children walking or bicycling to school (70 to 90 percent of funds) or for non-infrastructure encouragement and education programs (10 to 30 percent). Eligible projects must be within two miles of a school and are fully funded with no local match requirement. One infrastructure and/or non-infrastructure application will be accepted, with three projects maximum that can be funded per school district. There is a $250,000 funding limit for the total infrastructure project application and $100,000 maximum for non-infrastructure projects.

MODOT was estimated that $3.3 million was apportioned for the Safe Routes to School Program in FY 2009.

**Community Development Block Grants**

The Community Development Block Grants program provides money for streetscape revitalization, which may be largely comprised of pedestrian improvements. Federal Community Development Block Grant grantees may “use Community Development Block Grants funds for activities that include, but are not limited to: acquiring real property; reconstructing or rehabilitating housing and other property; building public facilities and improvements, such as streets, sidewalks, community and senior citizen centers and recreational facilities; paying for planning and administrative expenses, such as costs related to developing a consolidated plan and managing Community Development Block Grants funds; provide public services for youths, seniors, or the disabled; and initiatives such as neighborhood watch programs.”

**Rivers, Trails and Conservation Assistance Program**

The Rivers, Trails and Conservation Assistance Program (RTCA) is a National Parks Service program providing technical assistance via direct staff involvement to establish and restore greenways, rivers, trails, watersheds and open space. The RTCA program provides only for planning assistance—there are no

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18 [http://www.modot.mo.gov/safety/saferoutestoschool.htm](http://www.modot.mo.gov/safety/saferoutestoschool.htm)
implementation monies available. Projects are prioritized for assistance based on criteria that include conserving significant community resources, fostering cooperation between agencies, serving a large number of users, encouraging public involvement in planning and implementation, and focusing on lasting accomplishments.

**Land and Water Conservation Fund**

The Land and Water Conservation Fund (LWCF) is a Federally-funded program which provides grants for planning and acquisition of outdoor recreation areas and facilities, including trails. Funds can be used for right-of-way acquisition and construction. These funds are administered by the Missouri Department of Natural Resources.

**The National Scenic Byways Program**

Administered by the Federal Highway Administration (FHWA), the National Scenic Byways Program funds 50 percent of an eligible project’s costs. Projects must be along a designated scenic highway and meet accessibility guidelines under ADA. Eligible projects include, “Improvements for enhancing access to a recreation area include bicycle and pedestrian facilities ... to the extent that the project and recreational area have a clear, demonstrated role in enhancing the byway traveler experience (rather than primarily serving the existing customer base of the operator of the recreational area).”

**Transportation and Community and System Preservation Program (TCSP)**

The TCSP is a competitive grant program designed to support innovative projects that integrate transportation projects and plans, community development, and preservation activities to improve quality of life in communities. The discretionary grant is awarded to projects that:

- Improve the efficiency of the transportation system of the United States.
- Reduce environmental impacts of transportation.
- Reduce the need for costly future public infrastructure investments.
- Ensure efficient access to jobs, services, and centers of trade.
- Examine community development patterns and identify strategies to encourage private sector development patterns and investments that support these goals.

The annual grant program is administered by the FHWA, in partnership with the FTA and Environmental Protection Agency, and may be used to fund state, MPO, or local government agencies. Bicycling, walking and traffic calming projects are eligible activities and are often an integral part of many proposed projects that address larger land use and transportation issues.

**EPA Brownfield Program**

The EPA Brownfields Program will fund bicycle and pedestrian facility development. Brownfields Cleanup Grants provide funding for a grant recipient to carry out cleanup activities at brownfield sites. An eligible entity may apply for up to $200,000 per site. Funds may be used to address sites contaminated by petroleum and hazardous substances, pollutants, or contaminants (including hazardous substances co-mingled with petroleum). Cleanup grants require a 20 percent cost share, which may be in the form of a contribution of

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19 [http://www.mostateparks.com/grantinfo.htm](http://www.mostateparks.com/grantinfo.htm)
money, labor, material, or services, and must be for eligible and allowable costs (the match must equal 20 percent of the amount of funding provided by EPA and cannot include administrative costs). A cleanup grant applicant may request a waiver of the 20 percent cost share requirement based on hardship. An applicant must own the site for which it is requesting funding at time of application or demonstrate the ability to acquire title. The performance period for these grants is two years.

**State and Regional Funding Sources**

The State of Missouri does not set aside specific funds for bicycle and pedestrian projects. Instead, the State relies on integrating bike and pedestrian projects with new highway projects. Recent legislation (House Concurrent Resolution No. 23, passed in May 2011) changed this scenario. The bill encourages the consideration of all roadway users in the planning and design of new transportation facilities.

> General Assembly encourages and urges the United States Department of Transportation, the Missouri Department of Transportation, the governing bodies of Metropolitan Planning Organizations, and Regional Planning Commissions, municipalities, and other organizations and agencies that build, control, maintain, or fund roads, highways, and bridges in Missouri to adopt Complete Streets policies and to plan, design, build, and maintain their road and street system to provide complete, safe access to all road users.

Four jurisdictions in Missouri have current Complete Streets ordinances: De Soto, Festus, Ferguson, and the City of St. Louis. In 2010, St. Louis Mayor Francis Slay signed into law the City’s first Complete Streets policy. The ordinance provides guiding principles for the design and construction of public transportation projects that meet the needs of all roadway users.

**East-West Gateway Council of Governments Funding**

East-West Gateway Council of Governments is the Metropolitan Planning Organization for the St. Louis bi-state region. Much of the federal and state source transportation funding available to local communities is programmed through the council. Projects receiving federal source transportation funding must become part of the regional Transportation Improvement Program (TIP). The agency provides technical assistance to local governments seeking to plan and fund bicycle and pedestrian projects.

The St. Louis Regional Bicycle and Pedestrian Advisory Committee (BPAC) was established by the East-West Gateway Council of Governments in July of 1995. The guiding mission of the BPAC is to enhance access and mobility throughout the region by encouraging the coordinated development of bicycle and pedestrian facilities, programs, and activities that will enhance safe access to major residential areas, educational, government and cultural institutions, employment and retail activity centers, as well as parks and recreational areas. Membership in the BPAC consists of a cross-section of public, private, and non-profit representatives from the region.

**Great Rivers Greenway District**

The Great Rivers Greenway District was established in 2000 to develop an interconnected system of parks, greenways and trails. It is funded through a one-tenth of one cent sales tax authorized in 1999 by passage of a proposition in St. Louis City, St. Louis County and St. Charles County. The District collaborates with municipalities, public agencies and non-profit organizations to fund the trail and greenway system. Funding has been provided for planning, construction and for acquiring property.
Transit Enhancements/Urban Area Formula Grants
Ten percent of the Urbanized Area Formula Grants apportioned to urban areas of at least 200,000 population are set aside for a new category of transit enhancements. This program is distinct from the Transportation Enhancement Program, as the eligible activities under the Transit Enhancement Program include pedestrian access, walkways, and bicycle access, including bicycle storage facilities and equipment transporting bicycles on mass transportation vehicles.

MPOs, in collaboration with transit operators, have the responsibility to determine how the funds in this new category will be allocated to transit projects, and to ensure that one percent of the urbanized area’s apportionment (as opposed to one percent of each transit agency’s funds) is expended on projects and project elements that qualify as enhancements.

Other Funding Sources

Trailnet
Trailnet is a bi-state St. Louis regional not-for-profit organization that builds and restores multi-use recreational trails and greenways and encourages walking and bicycling for recreation and transportation. It is supported through contracts and donations from private resources.

Advocacy Organizations
Advocacy organizations can provide lobbying support, technical assistance and funding. Locally, The St. Louis Bicycle Federation and Walk St. Louis are citizen organizations that work to improve conditions for bicycling and walking respectively.

American Greenways Program
Administered by The Conservation Fund, the American Greenways Program provides funding for the planning and design of greenways. Applications for funds can be made by local, regional or statewide non-profit organizations and public agencies. The maximum award is $2,500, but most awards range from $500 to $1,500. American Greenways Program monies may be used to fund unpaved trail development.

National Trails Fund
The National Trails Fund was created in 1998 by the American Hiking Society. The grant provides funding to grassroots organizations, to aid them in maintaining trails and organizing volunteers.

Bikes Belong Grant Program
The Bikes Belong Coalition of bicycle suppliers and retailers has awarded $1.2 million and leveraged an additional $470 million since its inception in 1999. The program funds corridor improvements, mountain bike trails, BMX parks, trails, and park access. It is funded by the Bikes Belong Employee Pro Purchase Program.

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22 http://www.americanhiking.org/NTF.aspx
Potential St. Louis Funding Sources

Local Option Sales Tax
A Local Option Sales Tax is a special-purpose tax implemented and levied at the city or county level. A local option sales tax is often used as a means of raising funds for specific local or area projects, such as improving area streets and roads, or refurbishing a community’s downtown area.

Bike Tax
The City of Colorado Springs has a $4.00 per bike tax to provide funding for bikeway improvements. The tax generates nearly $100,000 annually and has been used for both on- and off-street projects. It is used primarily to provide a local match for other grants such as the Colorado State Trails Program or SAFETEA-LU grants. A bike tax is an annual fee; implementation would require a public vote.

Local Bond Measures
Local bond measures, or levies, are usually initiated by voter-approved general obligation bonds for specific projects. Bond measures are typically limited by time based on the debt load of the local government or the project under focus. Funding from bond measures can be used for right-of-way acquisition, engineering, design and construction of pedestrian and bicycle facilities.

System Development Charges/Developer Impact Fees
System Development Charges (SDCs), also known as Developer Impact Fees, represent another potential local funding source. SDCs are typically tied to trip generation rates and traffic impacts produced by a proposed project. A developer may reduce the number of trips (and hence impacts and cost) by paying for on- or off-site pedestrian improvements that will encourage residents to walk or use transit rather than drive. In-lieu parking fees may be used to help construct new or improved pedestrian facilities. There must be a clear nexus or connection between the impact fee and the project’s impacts.

Street User Fees
Street user fees can be administered though residents’ monthly water bills. The revenue generated by the fee would be used for operations and maintenance of the street system, which could include maintenance of on-street bicycle and pedestrian facilities, including routine sweeping of bicycle lanes and other designated bicycle routes.

Local Improvement Districts (LIDs)
Local Improvement Districts (LIDs) are most often used by cities to construct localized projects such as streets, sidewalks or bikeways. Through the LID process, the costs of local improvements are generally spread out among a group of property owners within a specified area. The cost can be allocated based on property frontage or other methods such as traffic trip generation.

Business Improvement Districts
Pedestrian improvements can often be included as part of larger efforts aimed at business improvement and retail district beautification. Business Improvement Districts collect levies on businesses in order to fund area-wide improvements that benefit businesses and improve access for customers. These districts may include
provisions for pedestrian and bicycle improvements, such as wider sidewalks, landscaping, and ADA compliance.

**Private Sector Funding Sources**

**Adopt a Bikeway, Sidewalk or Trail Program**

A challenge grant program with local businesses may be a good source of local funding, where corporations ‘adopt’ a bikeway, sidewalk or trail and help maintain the facility. Foundation grants, volunteer work, and donations of in-kind services, equipment, labor or materials are other sources of support that can play a supporting role in gathering resources to design and build new bicycle and pedestrian facilities.

Residents and other community members are excellent resources for garnering support and enthusiasm for a bicycle and pedestrian facility, and neighborhood advocates can work with volunteers to substantially reduce implementation and maintenance costs. Local schools, community groups, or a group of dedicated neighbors may use the project as a goal for the year, possibly working with a local designer or engineer.

**Local Businesses**

There is increasing corporate and business involvement in trail and conservation projects. Employers recognize that creating places to bike and walk is one way to build community and attract a quality workforce. Bicycling and outdoor recreation businesses often support local projects and programs. Some examples include:

- In Evansville, Indiana, a boardwalk is being built with corporate donations from Indiana Power and Light Co. and the Wal-Mart Foundation.
- In Greenville, South Carolina, the Greenville Hospital System contributed $1 million over 10 years for promotional and educational activities related to the Swamp Rabbit Trail.
- In Arizona, trail directional and interpretive signs are being provided by the Salt River Project, a local utility. Other corporate sponsors of the Arizona Trail are the Hughes Missile Systems, BHP Cooper, and Pace American, Inc.
- The Kodak Company now supports the American Greenways Awards program of The Conservation Fund, which was started in partnership with the Dupont company. This annual awards program provides grants of up to $2500 to local greenway projects for any activities related to greenway advocacy, planning, design or development.

**Community Fundraising and Creative Partnerships**

Community fundraising and creative partnerships are plentiful. A common approach is to find creative ways to break a large project into small pieces that can be ‘purchased’ by the public. Some examples:

- In Ashtabula, Ohio the local trail organization raised one-third of the money they needed to buy the land for the trail, by forming a ‘300 Club.’ Three hundred acres were needed for the trail and they set a goal of finding 300 folks who would finance one acre each. The land price was $400 an acre, and they found just over 100 people to buy an honorary acre, raising over $40,000.

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23 Information from the Trails and Greenways Clearinghouse at the Rails-to-Trails Conservancy:
• Jackson County, Oregon had a ‘Yard Sale’ where the Bear Creek Greenway Foundation sold symbolic ‘yards’ of the trail and placed donor’s names on permanent markers that are located at each trailhead. At $40 a yard, they raised enough in private cash donations to help match their $690,000 Transportation Enhancements program award for the 18-mile Bear Creek trail linking Medford, Talent, Phoenix and Ashland.

• Selling bricks for local sidewalk projects, especially those in historic areas or on downtown Main Streets, is increasingly common. Donor names are engraved in each brick, and a tremendous amount of publicity and community support is purchased along with basic construction materials. Portland, Oregon’s downtown Pioneer Square is a good example of such a project.

• In Colorado Springs, the Rock Island Rail-Trail is being partly funded by the Rustic Hills Improvement Association, a group of local home-owners living adjacent to the trail. Also, ten miles of the trail was cleared of railroad ties by a local Boy Scout troop.

• A pivotal 40-acre section of the Ice Age Trail between the cities of Madison and Verona, Wisconsin, was acquired with the help of the Madison Area Youth Soccer Association. The soccer association agreed to a fifty year lease of 30 acres of the parcel for a soccer complex, providing a substantial part of the $600,000 acquisition price.

**Foundations**

A wide range of foundations have provided funding for bicycling and walking. A few national and large regional foundations have supported the national organizations involved in pedestrian and bicycle policy advocacy. However it is usually regional and local foundations that get involved in funding particular bicycle, pedestrian or trail projects. These same foundations may also fund statewide and local advocacy efforts as well. The best way to find such foundations is through the research and information services provided by the national Foundation Center. They maintain a huge store of information including the guidelines and application procedures for most foundations, and their past funding records.