

# **BICYCLE AND PEDESTRIAN PLAN**



Springfield, Illinois Metropolitan Planning Area

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# Bicycle and Pedestrian Plan

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Springfield, Illinois

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Thanks to the following volunteers who conducted fieldwork to identify the current location of bicycle racks and to determine destinations where bike racks would be useful in the study area.

> Alan Whitaker, Volunteer Coordinator Mike Eymann **Kevin Greene** Marla Gursh **Michael Higgins Kristina Mucinskas Stephen Paca**

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John Allen

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#### **EXECUTIVE SUMMARY**

While bicycling and walking are often viewed as recreational activities, recreation is only one purpose served by a bicycling and pedestrian network. Research finds that communities as a whole benefit from the development of a connected system of bicycle and pedestrian ways that encourage residents and visitors to walk or bike as a means of transportation. For example, the presence of such a network provides a means of transportation for those without access to motor vehicles, gives rise to health benefits accruing from increased physical activity, frees up substantial financial resources for families that otherwise would go to personal vehicle use, offers a means of addressing auto congestion on roadways, and even reduces some of the detrimental environmental factors associated with auto use.

For these and other reasons, the creation of a bicycle and pedestrian-way plan for the Springfield Metropolitan Planning Area (MPA) by 2012 was an objective included in the Springfield Area Transportation Study (SATS) 2035 Long Range Transportation Plan (LRTP) adopted on March 11, 2010. The need for such a plan was suggested by the results of a citizen survey conducted as part of the public input activities for development of the LRTP, was additionally recommended by a LRTP Citizens Advisory Committee, and was subsequently recognized by SATS Technical and Policy committee members.

#### **Development of the Plan**

The process that led to the network addressed in this plan included significant public and technical input. It began in the fall of 2010 with the creation of a steering committee that included representatives from SATS member agencies as well as various other governmental bodies and organizations having an interest in the subject as well as the knowledge and expertise seen as necessary for the plan's successful development. At the beginning of the planning process, SATS and the steering committee sought direct public input. For example, a public engagement workshop was held at Springfield's Lincoln Library where 80 attendees were briefed on the scope of work to be undertaken and the types of improvements to be considered. Each attendee was then given a map of the MPA and asked to indicate on it the bicycle and pedestrian routes that they saw as most important. Participants were then organized into five groups based on geographic areas of interest and asked to identify priorities for each area. Suggestions from the workshop, along with local plans, reports, fieldwork, and other resources, were used in development of the plan presented here.

As an outgrowth of the steering committee's work, a vision statement was created expressing the intentions of the plan. Its vision was:

To develop a network of bicycle and pedestrian facilities in the Springfield Metropolitan Planning Area that is safe, connected, and efficient; that addresses the needs of people who are dependent on and those who choose these modes of travel; that enhances the livability of our communities by encouraging people to bike and walk; and that promotes the economic vitality of the area.

With public input received, local resources in hand, and a vision established, the steering committee developed four goals that it believed the plan should seek to address. The four goals are:

<u>GOAL 1:</u> To transform the area into an environment in which the transportation network functions for all modes of travel and special attention is given to improving bicycle and pedestrian accommodations.

<u>GOAL 2:</u> To develop a connected system of bicycle and pedestrian corridors that allows travel throughout the area.



<u>GOAL 3:</u> To provide bicycle and pedestrian facilities that offer safe and accessible travel.

**GOAL 4:** To create friendly conditions for bicyclists who travel on-road.

The objectives necessary for attaining each of the goals were identified, but the steering committee also thought it important to have a quantifiable way by which SATS could assess the progress of bringing the plan to fruition. For this reason performance measures were identified and assigned for each objective. The objectives and identified performance measures are included in Part III of this plan, which starts on page 13.

# Major Components of the Plan

Four components of the proposed network were envisioned as needed to achieve the steering committee's vision: a continuous bicycle network that meets a mix of needs; a pedestrian network that gives priority to certain corridors; an interconnected, multi-use trail system; and the completion of components of the intrastate Route 66 Trail where it passes through the MPA.

#### **The Envisioned Bicycle Network**

Based upon its identified goals and the public and technical input it received, the steering committee adopted three general "guiding principles" it thought were relevant to the development of the Envisioned Bicycle Network (EBN). These are:

- Plan primarily for a target audience of casual adult cyclists, while at the same time understanding that the needs of those who are more advanced as well as those who are less traffic-tolerant, including children, should be addressed.
- Select a network that is continuous. Form a grid with target spacing of ½ to 1 mile to facilitate bicycle transportation between origins and destinations throughout the SATS planning area. As appropriate, both on- and off-road improvements should be considered.
- As much as possible, choose routes with lower traffic, ample width, directness, fewer turns and stop signs, 4-way stops or stoplights at busier multilane roads, and access to destinations.

Routes to study for inclusion in the EBN were identified based upon input from the public, existing plans, and staff/consultant expertise. Data was gathered on these routes and analyzed to produce an envisioned network.

For the reader's convenience, a map showing the EBN is included at the end of this Executive Summary. The envisioned network consists of both existing and recommended bicycle routes that will facilitate travel throughout the entire planning area. Many of the recommended projects – such as restriping a road to include bike lanes, posting way-finding signs, designating biking along roadway parking areas, and marking shared bike/car lanes – are seen as being relatively easy to undertake and could be implemented in the short-term. Other recommended actions involve larger endeavors – such as widening/adding paved shoulders, adding bike lanes, constructing side-paths, or extending/building trails – that would need to be implemented in conjunction with an associated road project or as funding becomes available.



Secure bicycle parking is also seen as a necessary part of the envisioned bikeway network, as it encourages people to use their bikes for transportation. In addition, the provision of secure bike parking reduces parking in undesirable locations by providing a solid bike rack in a safe location in close proximity to desired destinations. General bicycle parking considerations are presented in this plan, and specific recommendations for rack locations as identified by volunteers are also included.

#### **The Priority Pedestrian Network**

The creation of a Priority Pedestrian Network (PPN) for the planning area was a recommendation of the Citizens Advisory Committee (CAC). The CAC was formed to provide input to SATS for development of the 2035 Long Range Transportation Plan and the members of this group recognized through their work the need to provide a safe, connected network of travel for the many people in our communities who walk or use a wheelchair.

Facilities for pedestrians are important and are needed everywhere, but the designation of specific routes for the PPN is seen as a way to establish a well-defined network with safety and comfort amenities. These priority routes would: provide road crossing accommodations that support and encourage pedestrian travel; place emphasis on interconnected corridors that enable pedestrians to navigate our communities; provide better access to bus stops; help pedestrians reach key destinations as well as ease barriers to travel throughout the entire area. As with the Envisioned Bicycle Network, a Priority Pedestrian Network allows local jurisdictions to plan and prioritize projects that contribute to an interconnected, multi-jurisdictional walking system.

Three criteria were used to identify the Priority Pedestrian Network corridors. The PPN should:

- Reflect overall network emphasis with continuous corridors spaced from ¼ mile to 1 mile depending on land use and transportation development density.
- Route directly to, or nearby, area schools, parks and economic activity centers.
- Provide access to a majority of the existing public transit routes.

After the PPN corridors were identified, fieldwork was conducted to determine where the network already exists and where priority projects could be implemented to complete corridors. The PPN is shown on a map included on page vi at the end of this executive summary.

#### **Interconnected Multi-use Trails**

The MPA currently has several multi-use trails built along abandoned railroad rights-of-way. The trails serve as travel corridors and are also frequented by recreational users. While each individual trail provides a unique environment and local access, creating an interconnected trail system will provide a more extensive travel network for bicyclists and enhance recreational opportunities. For this reason the bicycle and pedestrian-way plan envisions a completely connected trail system. The interconnected trail system proposed is shown on page vii at the end of this Executive Summary.



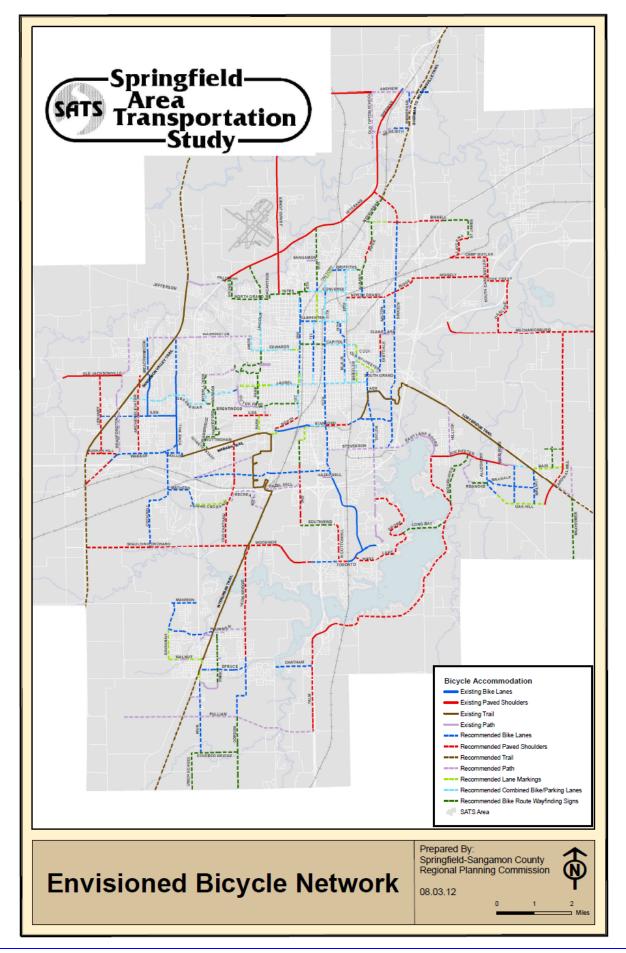
#### **Completion of the Route 66 Trail**

In 2010 the Route 66 Trail Executive Council, facilitated by the Illinois Department of Natural Resources, finalized a concept plan establishing the vision of a recreational and learning experience for non-motorized travel along the historic Route 66 highway in Illinois. A continuous 430-mile trail has been designated from Chicago to St. Louis along on-road and off-road corridors, as close to the historic road as feasible. The trail route enters Sangamon County at Williamsville, continues through Sherman, Springfield, and Chatham, and then splits south of Chatham to provide the opportunity of exiting the County either through Divernon or Auburn. Once completed, the Sangamon Valley Trail will be used as an alternative route through the County. The Route 66 Trail Concept Plan was created as a general guide for the entire trail corridor with communities encouraged to "undertake development and management actions that best serve their areas". Improvements recommended for Sangamon County are included in this plan.

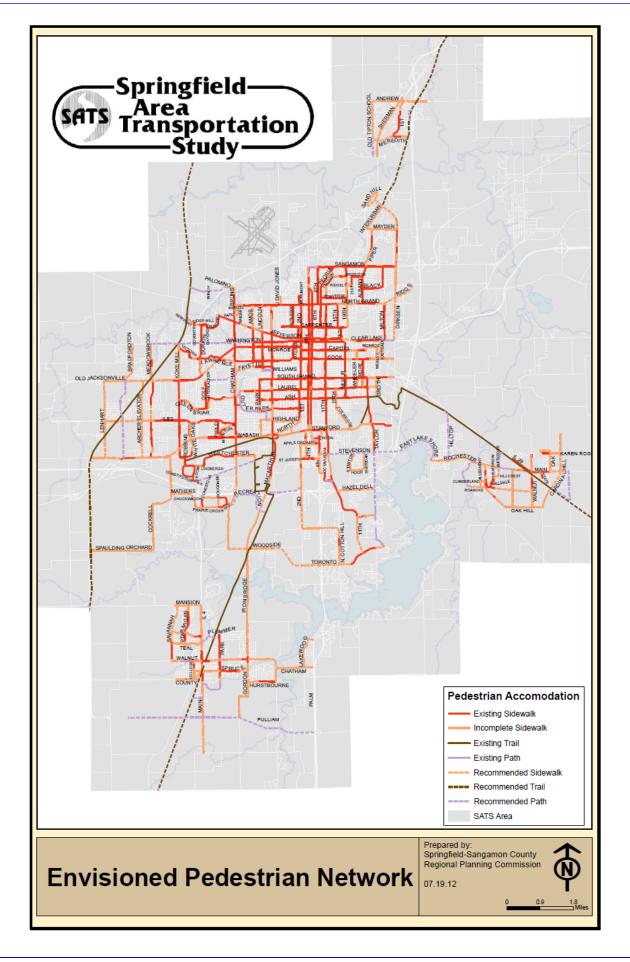
# Implementing the Plan

The Bicycle and Pedestrian Plan lays out a long-term vision for creating communities that are friendly, safe, and efficient for bicyclists and pedestrians. Little by little, project by project, the area will become more "walkable" and "bikeable". However, achieving this vision will require the commitment of financial resources, effort by communities in the planning area to advance the plan's goals and objectives, public support for the projects if resources are to be committed, and the assessment of progress toward the plan's goals. Implementation strategies are discussed in the plan, with emphasis on funding resources, local government action, public education, and evaluation.

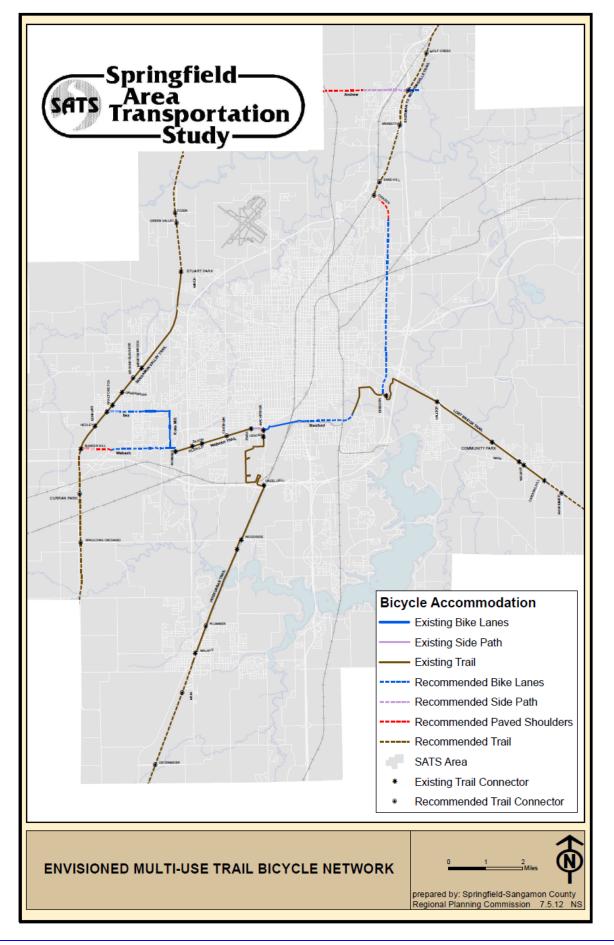
















# Springfield Area Transportation Study Bicycle and Pedestrian Plan Vision Statement

To develop a network of bicycle and pedestrian facilities in the Springfield Metropolitan Planning Area that is safe, connected, and efficient; that addresses the needs of people who are dependent on and those who choose these modes of travel; that enhances the livability of our communities by encouraging people to bike and walk; and that promotes the economic vitality of the area.





#### I. INTRODUCTION

The need for a bicycle and pedestrian plan for the Springfield Area Transportation Study (SATS) planning area was first suggested by a citizen survey conducted for the SATS 2035 Long Range Transportation Plan (LRTP). It was subsequently recommended by a LRTP Citizens Advisory Committee and recognized by SATS members. As a result, the creation of such a plan by 2012 was an objective included in the LRTP adopted on March 11, 2010. To accomplish the task of creating this plan, a steering committee was created in the fall of 2010 with representatives from SATS member agencies as well as other governmental bodies and organizations with expertise that would contribute to the successful development of such a plan.

Those drawing guidance from this plan must be cognizant of the fact that to be useful, a bicycle and pedestrian plan must be comprehensive, cooperative, coordinated and continuing.

The plan must be comprehensive in taking a long-term approach that builds on – rather than abandons – existing facilities to create an interconnected network of travel for bicyclists and walkers. As the road and highway system was not created overnight, neither will the system suggested here. As events unfold, we will find our envisioned system affected by both anticipated and unanticipated constraints and opportunities. However, adopting an area-wide vision for our system allows projects to be implemented over time through the cooperative actions of different communities and agencies working together in a coordinated way to continuously envision, design and implement a logical, realistic and connected area-wide system.

But, since all opportunities and constraints cannot be identified at the on-set of a planning effort, one must also recognize that to be useful our plan must be built upon continuous improvements that may be large or small. Regardless of their scale, if implemented in a comprehensive and cooperative way, these improvements will collectively build toward the system envisioned. This approach will allow for both constraints and opportunities to be identified, options considered, and advancements toward the envisioned system made over time.

The expectation is that this Bicycle and Pedestrian Plan will be incorporated into the 2035 Long Range Transportation Plan with individual projects selected for inclusion in shorter range plans, such as annual community transportation programs or the SATS four-year Transportation Improvement Program, as opportunities and funding permit.

There are many reasons why planning for bicycle and pedestrian facilities is important to a community.

# A. Reasons for a Bicycle and Pedestrian Plan

Bicycling and walking are often viewed as recreational activities, and some facilities, such as multi-use trails, are designed with recreation in mind. Trails are popular with bikers, walkers, runners, and rollerbladers of all ages and ability levels. Trails function as long, narrow parks that can be entered at many locations making recreational opportunities easily available to large areas of our communities. Some users, however, prefer much longer recreational experiences and desire interconnectivity between trails and additional non-trail accommodations.

Recreation, however, is only one purpose of a bicycling and walking network. Estimates from the U. S. Census Bureau's American Community Survey indicate that during 2005 – 2009 approximately 8.7% of households in the Springfield urban area had no vehicle available to them. Some of our citizens are unable to drive due to their age, abilities, or other factors. All of these people must rely on other means of transportation to reach their destinations, including biking and walking. Some people prefer to walk or bike as their mode of travel.



Like other travelers, cyclists and pedestrians need routes that are well-marked, safe, and get them where they need to go. They also need access to prime destinations. Prime destinations that are considered of general importance for all travelers are schools, parks, economic activity centers (locations of jobs, goods, and services), and public transit stops.

Development of an interconnected bicycle network and interconnected pedestrian network requires planning so that outcomes meet expectations and resources are spent wisely. In the SATS Metropolitan Planning Area (MPA) it also means coordination among the many governmental bodies that are responsible for implementing transportation projects.

Communities as a whole will benefit from a connected system of bicycle and pedestrian ways. These benefits are not strictly tied to the transportation networks themselves but affect the health, economics, sustainability, and livability of our communities. Listed below are just a few of the more significant benefits.

#### **HEALTH BENEFITS**

The health benefits of physical activity are well-known and many people choose, or would choose if accommodations were available, to walk or bike for this very reason. Providing facilities for these two modes of travel can lead to a more active, vibrant community.

To combat the growing trend toward obesity in this country, it is critical that children and adults get more exercise. The following statistics come from the Center for Disease Control.<sup>1</sup>

- Child obesity rates have more than tripled in the past 30 years.
- The prevalence of obesity among children aged 6 to 11 years of age increased from 6.5% in 1980 to 19.6% in 2008.
- The prevalence of obesity among adolescents aged 12 to 19 years of age increased from 5.0% in 1980 to 18.1% in 2008.
- Based on data gathered in 2008, it was estimated that 28.8% of the adult population in Sangamon County was obese.

Obesity-related medical conditions include, but are not limited to: heart disease and stroke, high blood pressure, diabetes, cancer, gallbladder disease and gallstones, osteoarthritis, gout and breathing problems.<sup>2</sup> In a 2009 study from Portland, Oregon entitled *Bicycling for Transportation and Health: The Role of Infrastructure*, the author states that, "The study demonstrated that bicycling for transportation can be used by adults to meet the recommendations for daily physical activity. A supportive environment, like that found in the Portland region, appears necessary to encourage bicycling for everyday travel, allowing more adults to achieve active living goals. The first part of that environment is bicycle infrastructure that addresses people's concern about safety from motor vehicles. In Portland, this includes a network of bike lanes, paths, and boulevards. Building such a network requires a comprehensive plan, funding, and political leadership." While Portland is a much larger city than Springfield, the same principles can be applied within the Springfield MPA.

With the many demands of modern life on adults, travel time, especially for short trips or commuting to and from work, provides a great opportunity for physical activity to be meshed into the fabric of a day. Walking or biking to and from school provides children with much-needed physical activity. Safe and efficient connectivity to local parks provides citizens with additional opportunities to increase physical activity and make use of valuable local resources and recreational amenities. Riding public buses also involves walking to and from bus stops.



#### **ECONOMIC BENEFITS**

The Rails to Trails Conservancy has found that "Since car ownership is the second largest expenditure for the average American household, driving less can free up substantial resources for other needs." Freeing resources can mean additional disposable income that could be spent locally, promoting local business growth and generating tax dollars. At a time when municipal governments are experiencing a shortfall in funding, these results become especially desirable.

Investments in new bicycling and pedestrian related amenities can provide substantial economic benefits. A 2010 Baltimore study found the following<sup>5</sup>:

- For each \$1 million spent on creating on-street bike lanes, a total of 14.4 jobs were created when accounting for both direct and indirect effects.
- Pedestrian projects and bike boulevards were estimated to create a total of 11 jobs for a \$1million investment.
- \$1 million spent on road repairs only generated seven jobs, half as many as are created with the onstreet bike lane investment.
- For pedestrian and road projects, manufacturing industries such as stone, cement, plastic pipes, and wiring devices all see important job creation effects. In addition to the construction, engineering, and manufacturing industries, employment is also created in industries such as wholesale trade, truck transportation, food services, accounting, and legal services.
- Creating a pedestrian and bicycle friendly environment can also advance the local tourism agenda.

The area's many Abraham Lincoln sites and other historic attractions make it a tourist destination, welcoming approximately one million visitors annually according to the Springfield Convention & Visitors Bureau<sup>6</sup>. Additionally, Springfield plays host to a number of conventions and events that are recognized at national and even international levels. Many of the area's most visited sites are conveniently located in downtown Springfield where visitors can easily reach these destinations on foot or by bicycle. Ensuring that connections between these sites are provided and maintained is essential to supporting the tourism industry.

As the area's growing dedicated trail network increases in mileage and becomes interconnected, it will draw visitors to the area who enjoy active vacations and be a reason for tourists to extend their stay. For example, this past year Adventure Cycling Association announced the promotion of a new long distance cycling tour route on Route 66 which comes through Sangamon County and the Springfield area.

Access to jobs, goods, and services is essential for meeting the needs of our citizens and supporting the local economy. Bicycle and pedestrian infrastructure, to and through areas of concentrated commercial and service activity, opens up employment opportunities to people without a personal vehicle who would otherwise have difficulty getting to a job. It also brings customers who walk and bike, either by necessity or chose, to businesses.

#### **ENVIRONMENTAL BENEFITS**

The provision of a connected network would likely increase the number of people choosing to bike or walk and would provide a better and safer option for those who travel by these means out of necessity. With each additional person choosing to use the bike/pedestrian network, the load on the vehicular network is lowered, not only reducing congestion, but also reducing detrimental environmental factors brought about by the use of motorized vehicles. A study by the 1000 Friends of Oregon group found improvements to active transportation facilities resulted in lower motor vehicle miles driven by area residents.<sup>7</sup> In relative



terms, the Springfield MPA experiences fairly modest levels of congestion compared to the major metropolitan cities throughout the United States. However, residents of the area will note that during peak commute periods, travel times are significantly increased. Bicycle and pedestrian facilities encourage

The Springfield Mass Transit District provides a more efficient and environmentally friendly form of travel via motorized vehicle compared to single occupancy automobile travel. SMTD service connects people with jobs, shopping, educational opportunities, social engagements, tourist destinations, and more. As most mass transit district journeys begin and end with a walk, it is important that areas near bus routes provide users safe and efficient linkages. Cyclists will also be accommodated in the near future when grant-funded bike racks are installed on SMTD buses.

# **B. SATS Complete Streets Policy Statement**

commuting by these modes of travel.

The Springfield Area Transportation Study has adopted the following policy statement:

"Complete Streets" refers to public rights-of-way that are designed and operated to provide a safe and accessible transportation network for all users, including pedestrians, bicyclists, and transit riders, regardless of age or ability. This context-sensitive approach considers all transportation projects as potential opportunities to improve safety, access, and mobility for all travelers.

The Springfield Area Transportation Study supports Complete Streets and its members will consider the following criteria when designing transportation projects as opportunity and funding permit:

- types of users of the transportation system, including pedestrians, bicyclists, transit users, motor vehicles, and freight interests;
- project surroundings in context with how the facility will be used and who will be using it to determine what accommodations will be provided; and
- service levels for all users anticipated by adopted comprehensive or system wide plans.

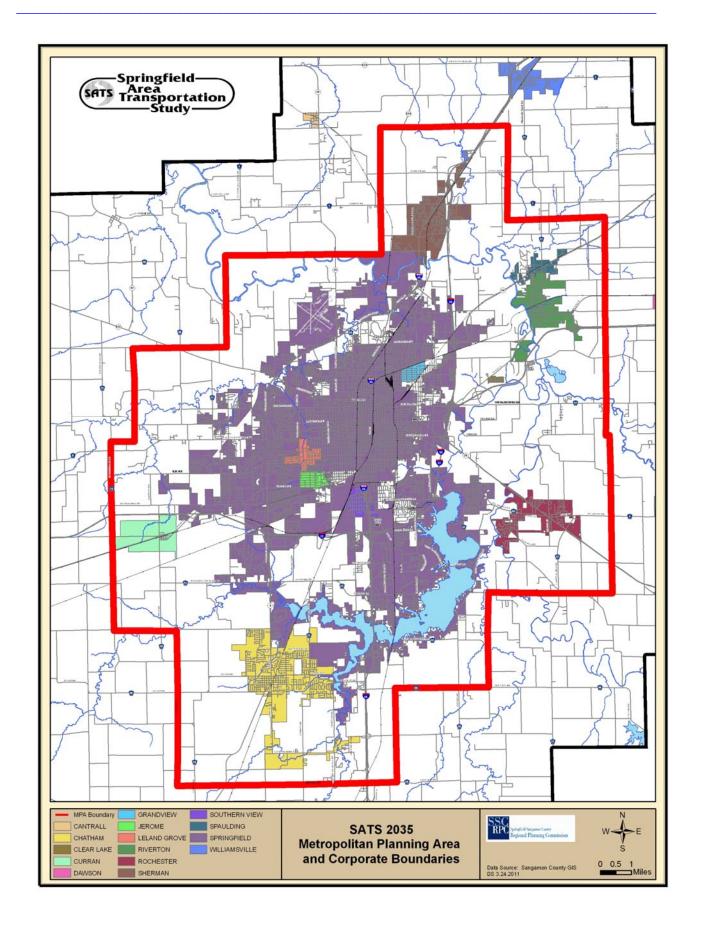
- adopted by SATS on January 13, 2011

The bicycle network and priority pedestrian network envisioned by this plan are not meant to detract from the complete streets concept that considers biking and walking accommodations in all developments and throughout the area. Safe travel to these networks is needed and integrating all modes of travel into the overall transportation system is the ultimate aim of SATS. Sidewalks and bike facilities, as well as city bus access, should be just as automatic a consideration in any new development as roadways. To this end, design standards for the various types of accommodations of the envisioned bicycle network, the priority pedestrian network, other transportation projects, and new developments are provided in Appendix B.

# C. Planning Area

The development of this plan focuses on the SATS planning area, also called the Springfield Metropolitan Planning Area (MPA). The MPA includes the following communities: Chatham, Clear Lake, Curran, Grandview, Jerome, Leland Grove, Riverton, Rochester, Sherman, Southern View, Spaulding, Springfield, and portions of Williamsville and unincorporated Sangamon County. A map of the MPA is on page 5. Although all communities were invited to take part in development of this plan, only Chatham, Jerome, Riverton, Sherman, Springfield, and Sangamon County participated on the Steering Committee. For reasons of interconnectivity, however, some recommendations in the non-participating communities are included. Additionally, to promote connections to other parts of the County, the Plan makes some recommendations for the transportation network beyond the MPA boundary.









#### II. PLANNING CONSIDERATIONS

Several factors were considered in the creation of this plan. These included creating a vision that helped direct plan development, and public input, existing plans, other local resources, and existing bicycle facilities that provided specific ideas for network corridors and interconnectivity.

#### A. The Vision

The steering committee began the process of developing this plan with a vision of the Springfield Metropolitan Planning Area as a place where all citizens are afforded opportunities to access the fundamental advantages of society and to participate fully in community life. An essential element of this vision is a transportation network that provides all mode choices for safe, unlimited, and easy travel throughout the area.

People who bike or walk in our communities come from various backgrounds, income levels, education levels, age groups, mobility levels, and lifestyles. Additionally, bikers and walkers include:

- People who are dependent on these modes of travel due to lack of access to a personal motor vehicle
- People who choose these modes of travel for financial, health, or environmental stewardship reasons
- People who bike and walk for exercise or recreation
- People who are tourists to our communities

The one thing they all have in common is a desire to travel safely and easily.

This plan envisions the Springfield Metropolitan Planning Area as a place with interconnected networks of safe and efficient bicycle and pedestrian ways that link bicyclists and walkers to jobs, stores, services, schools, recreation facilities, tourist attractions, social events, and the mass transit system and that also provide opportunities for recreation and exercise. This network is supported with amenities and safety features and its users are respected and integrated into the fabric of the transportation system. Development of this network enhances livability, health, welfare, and economic vitality in our communities, leading to a higher quality of life for all.

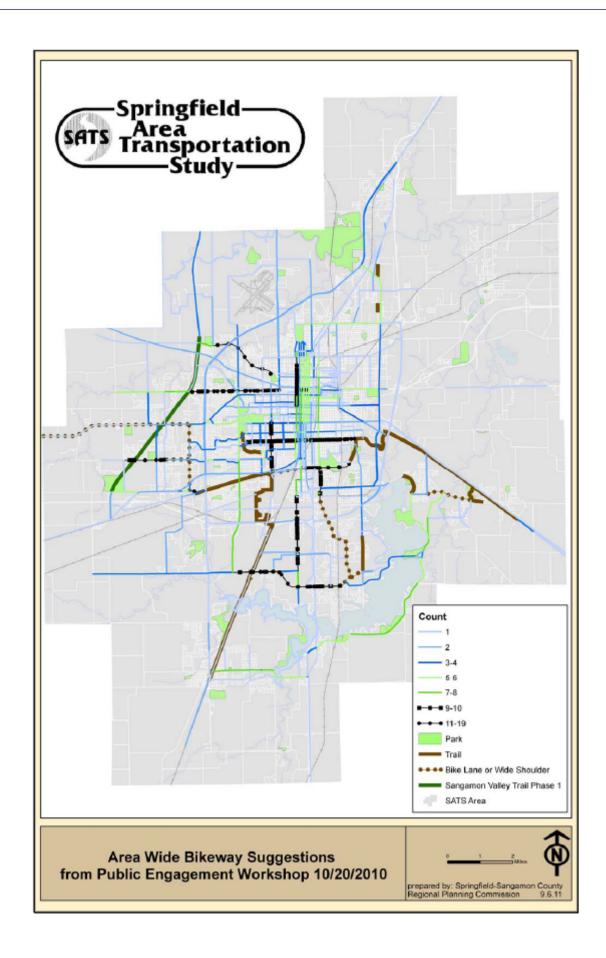
# **B. Public Engagement Workshop**

At the beginning of the planning process, SATS and the steering committee invited members of the public to attend a Public Engagement Workshop on October 20, 2010, at Lincoln Library in Springfield to provide their input. Eighty attendees were briefed on the scope of work to be undertaken and the types of improvements to be considered. Each attendee was then given a map of the MPA to indicate the bicycle and pedestrian routes that they saw as most important. The individual bicycle suggestions collected were later compiled and plotted on a map (see page 8). After the individual maps were completed, participants broke out into five groups based on geographic areas of interest in the MPA. A map of the five geographic areas is found on page 9. Each group was charged with identifying three priorities in their geographic area. The priorities identified were:

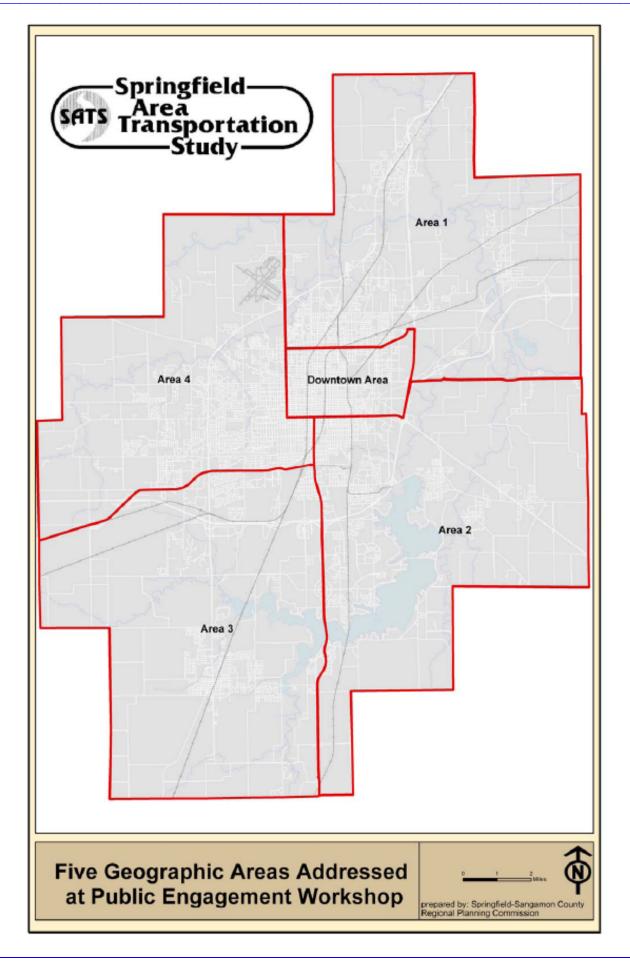
# Downtown:

- 1) 11<sup>th</sup> Street: North Grand Avenue to South Grand Avenue
- 2) 6<sup>th</sup> Street: North Grand Avenue to South Grand Avenue
- 3) Washington Street: Walnut Street to 16<sup>th</sup> Street
- 4) Include bike parking, loops on parking meters











#### Area 1:

1) Interurban Trail: Mayden to Steeplechase in Sherman

2) 8<sup>th</sup> Street: from Sangamon Avenue south

3) North Grand Avenue: 15<sup>th</sup> Street to Ridgely Road

#### Area 2:

- 1) East Lake Shore Drive in its entirety with a connection to the colleges via Long Bay /Fox Mill/bike path through LLCC campus to Shepherd Road and to the Lost Bridge Trail via Rochester Road and Hilltop Road
- 2) Complete connection of Lost Bridge Trail to the west by continuing trail behind Abundant Faith to the west via Stanford or Culver OR by extending trail west on Ash from Taylor then south on 8<sup>th</sup> Street to Stanford Avenue
- 3) 11<sup>th</sup> Street: north from existing bike lanes

#### Area 3:

- 1) Spaulding Orchard Road/Woodside Road/Toronto Road
- 2) Access off Chatham Road to Wabash Trail

#### Area 4:

- 1) Washington Street: Old Covered Bridge Road to Downtown
- 2) Old Jacksonville Road: Lenhart Road to Chatham Road
- 3) Chatham Road: from Washington Street south (side path to follow existing sidewalk)

Several pedestrian suggestions were also received and were considered in development of the Priority Pedestrian Network.

#### C. Coordination with Local Plans

A valuable resource for establishing interconnected travel networks was also found in previous work undertaken by the collaborating communities and agencies. Following is a list of plans that were utilized in this effort.

SATS 2035 Long Range Transportation Plan: The Springfield Area Transportation Study Long Range Transportation Plan (LRTP) for the Springfield Metropolitan Planning Area is updated every 5 years. The current plan, adopted in March 2010, recognizes that the needs of bicyclists and pedestrians have been overlooked in the past and includes an objective that prompted creation of this bicycle/pedestrian way plan. Proposed road projects that will include bicycle accommodations and sidewalks as well as an expanded trail network are identified in the LRTP: "However, there is a desire to create a vision of interconnected travel options for these users that will guide investment in bicycle and pedestrian facilities."

**Village of Chatham Comprehensive Plan:** The Chatham Comprehensive Plan was updated in 2007 and states: "Facilities for pedestrian and bicycle traffic need to be expanded into an interconnected network that will enhance and compliment the street network." One of the goals is to "Provide an interconnected network of sidewalks and bike trails in the Village." The Comprehensive Plan includes a proposed network of bike trails.



**Sherman Comprehensive Plan 2030:** The Village of Sherman adopted an updated comprehensive plan in May 2009. The need to provide safe accommodations for bicyclists and pedestrians is discussed in that plan and specific areas of concern as well as bike lane and trail opportunities are highlighted.

**Route 66 Trail Concept Plan:** The Route 66 Trail Executive Council was formed by the Illinois Department of Natural Resources to develop a plan for creation of a bike trail that will use the historic Route 66 highway where possible and trails and local roads when necessary to provide a continuous trail through Illinois from Chicago to St. Louis. Route 66 was designated a scenic byway in 2005 and generates much tourist activity. The plan was finalized in 2010 and shows the trail passing through the SATS planning area.

Sangamon County Greenspaces: Lost Opportunities or Corridors to the Future?: This Greenways and Trails plan was prepared in 1997 by the Springfield Sangamon County Regional Planning Commission with guidance from The Sangamon Valley Greenways & Trails Advisory Committee. The plan identifies potential off-road trail corridors.

**Springfield Park District Master Plan:** The Master Plan was updated by the Springfield Park District in 2005. The plan identifies existing trails and potential corridor opportunities.

#### **D.** Other Resources

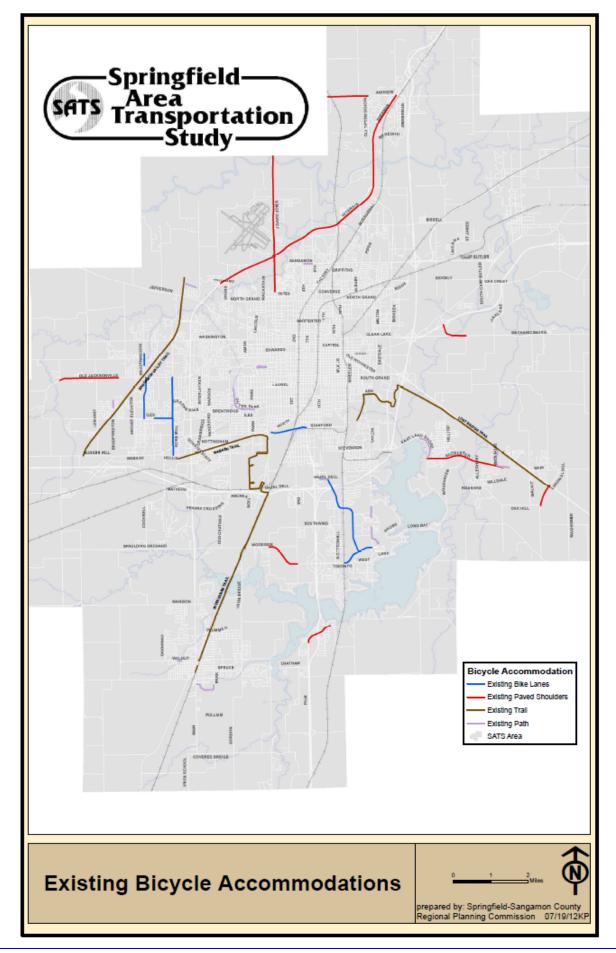
Additional considerations taken into account came from:

- Springfield Bicycle Initiative Survey conducted by Leadership Springfield.
- SATS 2009 Public Input Survey.
- Maturing of Illinois Initiative Neighborhood Livability Survey conducted by the SSCRPC.
- Suggestions made by LIB Consultant Ed Barsotti based on an initial review of traffic counts, stop lights, railroad crossings and other factors important to the development of bike and pedestrian ways.
- Planning Commission staff suggestions based on professional experience and knowledge of the area.
- Consultation with each participating jurisdiction.
- Economic Corridors and Freight Study prepared for SATS in 2010 by Hanson Professionals.
- Sangamon County maps of parks and schools.
- SMTD bus route maps.
- Springfield Metro Area Bicycle Map prepared by the League of Illinois Bicyclists in 2006.

# E. Existing Bicycle Facilities

There are some existing multi-use trails, roads with bike lanes, and roads with wide shoulders in the metropolitan planning area. These were considered as the starting point for the envisioned bicycle network. A map showing the existing bicycle facilities is on page 12.







# III. GOALS, OBJECTIVES, AND PERFORMANCE MEASURES

With public input received, a vision established, and local resources in hand, the Steering Committee established plan goals and identified objectives intended to achieve each goal. It was also deemed important to have a way to evaluate plan implementation so performance measures were assigned to each objective. Performance measures are quantifiable ways SATS can assess the progress of bringing the plan to fruition. The following goals, objectives, and performance measures were established.

GOAL	OBJECTIVE	PERFORMANCE MEASURE
I. To transform the area into	<b>1.1</b> Increase standard sidewalk	Number of communities
an environment in which the	size to American with	updating requirements for
transportation network	Disabilities Act (ADA)	sidewalks.
functions for all modes of	compliant 5 foot width.	
travel and special attention is	1.2 Amend land development	Number of communities
given to improving bicycle and	ordinances to encourage	updating ordinances.
pedestrian accommodations.	developers to integrate bicycle	
	and pedestrian ways beyond	
	this Plan and include incentives	
	to do so.	
	<b>1.3</b> Accommodate bicycles on	Percentage of Springfield Mass
	mass transit buses with bike	Transit buses with bike racks.
	racks.	
	<b>1.4</b> Create a bikeway network	Percentage of bus stops within
	that works in conjunction with	¼ mile of a bikeway.
	the mass transit system.	
	<b>1.5</b> Encourage residents to	Number of participants in
	bike or walk rather than drive a	"Curb Your Car During Bike to
	vehicle.	Work Week", number of bike
		parking facilities, creation of a
		Springfield area bike route
		map, number of trails
		"adopted".
	<b>1.6</b> Increase the number of	Number of miles of dedicated
	dedicated paths for bicycles	paths created.
	and pedestrians.	
	<b>1.7</b> Create a tourism	Percentage of tourism
	pedestrian way for access to	pedestrian way created,
	historic sites and install bike	number of historic sites with
	racks at historic sites.	bike racks.
II. To develop a connected	<b>2.1</b> Create a	Number of miles of connected
system of bicycle and	bikeway/pedestrian network	bikeways/pedestrian ways.
pedestrian corridors that	that connects users to school,	
allows travel throughout the	work, shopping, recreational	
area.	and tourism destinations	
	throughout the area.	



	222	N 1 C
	<b>2.2</b> Connect Springfield with safe and accessible	Number of communities
		connected to Springfield.
	bikeways/pedestrian ways to	
	its surrounding communities.	
	2.3 Identify locations along	Inventory of sidewalks along
	bus routes that need new or	bus routes included in a
	rehabilitated sidewalks.	sidewalk repair/construction
		plan.
	<b>2.4</b> Provide accessible bus	Percentage of bus stops that
	stops for transit riders.	are accessible.
	<b>2.5</b> Incorporate this Plan into	Number of land development
	other community plans.	ordinances amended to meet
		this objective.
	<b>2.6</b> Maintain bikeways/priority	Creation of a maintenance
	pedestrian ways and increase	schedule, number of lighting
	lighting along such routes.	fixtures installed.
	<b>2.7</b> Promote Route 66 Bike	Number of miles of Route 66
	Trail.	Bike Trail with signs installed,
		number of promotional
		materials including the Route
		66 Bike Trail distributed,
		number of events promoting
		the Route 66 Bike Trail.
III. To provide bicycle and	<b>3.1</b> Create a priority	Number of miles of the priority
pedestrian facilities that offer	pedestrian corridor that	pedestrian corridor completed.
safe and accessible travel.	provides amenities for safe	
	walking to school, work,	
	recreation, and shopping	
	destinations throughout the	
	area.	
	<b>3.2</b> Provide safe bike travel	Number of Economic Activity
	options to the eight Economic	Centers connected to safe
	Activity Centers identified in	biking facilities.
	the August 2010 Economic	
	Corridor and Freight Study	
	prepared for SATS.	
	<b>3.3</b> Use existing programs to	Number of times existing
	educate the bicycling public on	programs are used to promote
	safe travel on roadways.	bicycling safety.
	<b>3.4</b> Distribute "Share the	Number of brochures
	Trails: A Guide to Trail	distributed.
	Etiquette" brochure at bike	
	shops and trailheads.	
	shops and trainleads.	



		,
	3.5 Collaborate with local schools to create and implement School Travel Plans under the Safe Routes to	Number of School Travel Plans, number of Safe Routes to School applications submitted, number of Safe Routes to
	School program.	School projects completed.
	<b>3.6</b> Improve the safety of	Number of crosswalks
	pedestrian crossings.	installed, number of pedestrian
		crossing signals installed,
		percentage of identified
		dangerous intersections
		improved to enhance
		pedestrian crossing safety,
		number of events educating
		drivers in pedestrian safety.
IV. To create friendly	<b>4.1</b> Provide marked bike lanes	Number of miles of bike lanes
conditions for bicyclists who	on designated routes.	installed.
travel on-road.	<b>4.2</b> Provide wide shoulders on	Number of miles of wide
	designated routes.	shoulders installed.
	<b>4.3</b> Provide consistent bicycle	Agreement on bicycle signage
	signage and pavement	and pavement markings
	markings throughout the area.	between participating
		jurisdictions, number of miles
		of bike routes signed.
	<b>4.4</b> Install bicycle detection	Number of bicycle detection
	systems at signalized	systems installed on
	intersections on designated	designated routes.
	routes.	
	<b>4.5</b> Ensure drainage grates are	Establish an online system for
	bicycle friendly.	the public to report drainage
		grates that are not bicycle friendly.
	<b>4.6</b> Create a program to	Number of bicyclist rights
	educate the driving public on the rights of bicyclists on roadways.	materials distributed.
	Todavvays.	

The vision and goals established were a challenge to the steering committee and SATS, calling for a transformation of the transportation network from road-centric to all-inclusive, from minimal and fractured bicycle and pedestrian facilities to networks based on interconnectivity and community-wide access, and from perceived unsafe biking and walking conditions to defined, friendly, and safe corridors of travel. To tackle this challenge, and with public input and local resources as a base, a study of existing facilities, potential corridors, linkages, and overall community access was conducted. The result was creation of an envisioned bicycle network and a priority pedestrian network that meet the goals and further the vision of this plan.





#### IV. THE ENVISIONED BICYCLE NETWORK

The envisioned bicycle network (EBN) is shown on page 18 with a list of potential projects following. The EBN consists of existing and proposed bicycle routes that will facilitate travel throughout the entire planning area. Each proposed bicycle route is shown with a facility type based on current recommendations. In some cases, future circumstances or design engineering results may indicate a different facility type is more appropriate.

Many projects identified are relatively easy to undertake and could most likely be implemented in the short-term. These include:

- restriping a road to include bike lanes
- posting wayfinding signs
- designating biking along roadway parking areas
- marking shared bike/car lanes

Other projects involve larger endeavors and would be implemented in conjunction with an associated road project or as funding becomes available. These include:

- widening/adding paved shoulders
- adding bike lanes
- constructing sidepaths
- extending and building trails

The *Guide for the Development of Bicycle Facilities*<sup>8</sup> forms the technical basis for corridor analysis and the plan's specific project recommendations. These guidelines are generally recognized by the industry – and the court system – as the standard for bicycle facility design. The Illinois Department of Transportation encourages communities to consult these guidelines and the federal *Manual of Uniform Traffic Control Devices*<sup>9</sup> when developing bicycle plans. An overview of bicycle facility types is in Appendix C.

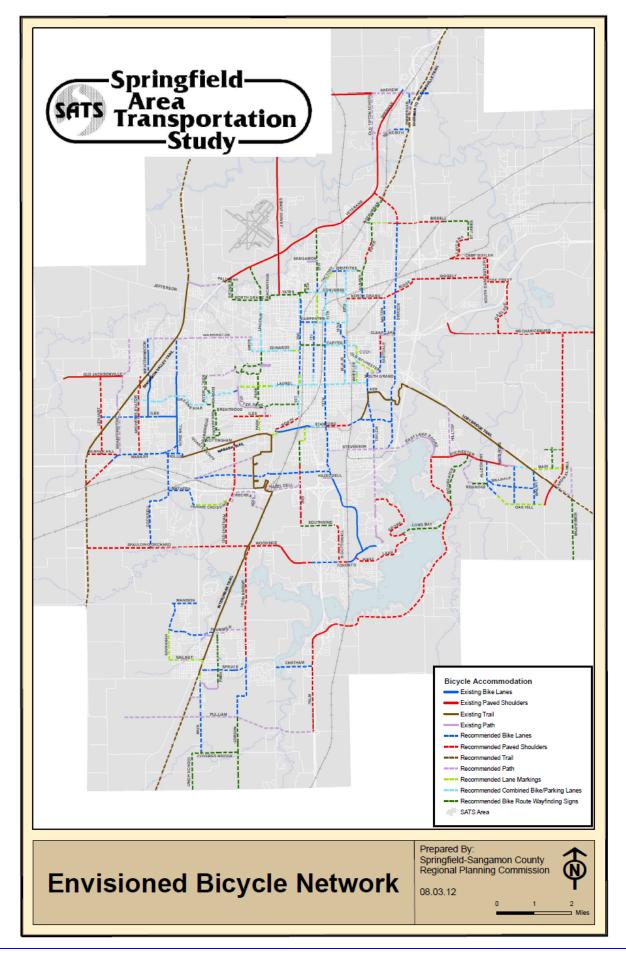
Extensive data collection on existing bicycling conditions informed the development of this plan. The information, which includes such things as roadway geometry, traffic conditions, Bicycle Level of Service (BLOS)<sup>10</sup> scores, sidewalk coverage, recommendation details and other notes for implementers, is housed in a spreadsheet prepared by the plan consultant and made available to the participating communities. This information was used to create some of the maps in this plan.

### A. Guiding Principles

Based upon identified goals and the public and technical input received, the steering committee adopted three general "guiding principles" relevant to the development of the Envisioned Bicycle Network (EBN).

- Plan primarily for a target audience of casual adult cyclists. At the same time, address the needs of those who are more advanced and those who are less traffic-tolerant, including children.
- Select a network that is continuous. Form a grid with target spacing of ½ to 1 mile to facilitate
  bicycle transportation between origins and destinations throughout the SATS planning area.
  Consider both on-road and off-road improvements, as appropriate.
- As much as possible, choose routes with lower traffic, ample width, directness, fewer turns and stop signs, 4-way stops or stoplights at busier multilane roads, and access to destinations.







# **ENVISIONED BICYCLE NETWORK POTENTIAL PROJECTS**

	Torminus 1		
1st St	Terminus 1 Eastman Ave	Terminus 2 Yates	Recommendation Bike Route Wayfinding Signs
1st St	Laurel	Ash St	Bike Route Wayfinding Signs
1st St	Ash St	North St	Combined Bike/Parking Lanes
2nd St	Eastman Ave	North Grand Ave	Bike Route Wayfinding Signs
2nd St (northbound)	North Grand Ave	Dodge	Bike Lanes
2nd St (northbound) 2nd St (southbound)	North Grand Ave	Dodge	Combined Bike/Parking Lanes
2nd St (Southbound)	Dodge	South Grand Ave	Bike Lanes
2nd St (northbound)	South Grand Ave	Laurel St	Combined Bike/Parking Lanes
2nd St (northbound)  2nd St (southbound)	South Grand Ave	Laurel St	Shared Lane Markings
2nd St (Southbound)  2nd St	Apple Orchard Rd	1st St	Bike Route Wayfinding Signs
2nd St 2nd St	1st St	Southwind	Paved Shoulders
4th St	Black Ave	Eastman Ave	Bike Route Wayfinding Signs
4th St	Stanford	Apple Orchard Rd	Shared Lane Markings
7th St		Madison	Combined Bike/Parking Lanes
7th St	Carpenter Madison St	South Grand Ave	Bike Lanes
7th St	South Grand Ave	Laurel St	Combined Bike/Parking Lanes
8th St	Veterans Pkwy	Black Ave	
8th St	Black Ave	Converse Ave	Bike Route Wayfinding Signs Bike Lanes
8th St	Converse Ave	Carpenter St	Shared Lane Markings
11th St.	Ridgely	Converse	Combined Bike/Parking Lanes
11th St	Converse Ave	North Grand Ave	Bike Lanes
11th St	North Grand Ave	Carpenter St	Combined Bike/Parking Lanes
11th St	Carpenter St	Lincolnshire	Bike Lanes
16th St	Carpenter St	Clear Lake Ave	Bike Lanes
19th St	Griffiths	Carpenter St	Combined Bike/Parking Lanes
Albany St	Griffiths	Keys	Bike Route Wayfinding Signs
Albany St	Keys Ave	North Grand Ave	Bike Lanes
Amos Ave	Washington	Edwards St	Combined Bike/Parking Lanes
Andrew Rd	IL 29	Old Tipton School Rd	Paved Shoulders
Andrew Rd	Old Tipton School Rd	Proposed trail	Sidepath
Andrew Road	Proposed trail	Waldrop Park	Bike Lanes
Apple Orchard Rd	2nd St	4th St	Shared Lane Markings
Archer Elevator Rd	Old Jacksonville Rd	Wabash Ave	Paved Shoulders
Bissell Rd	Dirksen Pkwy	IL-54	Paved Shoulders
Bissell Rd	IL-54	St James Rd	Bike Route Wayfinding Signs
Bradfordton Rd	Washington St	Old Jacksonville Rd	Sidepath
Bradfordton Rd	Old Jacksonville Rd	S of Greenbriar Dr	Sidepath
Bradfordton Rd	S of Johanne Ct	Wabash Ave	Sidepath
Bruns Lane	Palomino Rd	North Grand Ave	Bike Route Wayfinding Signs
Bunker Hill Rd	Sangamon Valley Trail	Wabash Ave	Paved Shoulders
Camp Butler Rd	Laverna	South Camp Butler Rd	
Camp Lincoln Rd	Veterans Pkwy	North Grand Ave	Bike Route Wayfinding Signs
Capitol Ave	2nd St	11th St	Bike Route Wayfinding Signs
Capitol Ave	11th St	Wheeler	Combined Bike/Parking Lanes
Cardinal Hill Rd	Route 29	Mechanicsburg Rd	Paved Shoulders
Carpenter St	2nd St	9th St	Bike Lanes
Carpenter St	9th St	19th St	Combined Bike/Parking Lanes
Chatham Pathway	Interurban Trail	Route 4 (Main St)	Path
Chatham Rd (Chatham)	Ivy Glen Dr	Palm Rd	Bike Lanes
Chatham Rd (Springfield)	Wabash Trail	Woodside Rd	Paved Shoulders
Clear Lake Ave	Eastdale Ave	Dirksen Pkwy	Sidepath
Cockrell Ln	Hollis Dr	Spaulding Orchard Rd	Bike Lanes
Converse Ave	8th St	19th St	Combined Bike/Parking Lanes
Covered Bridge Rd	Union School Rd	Gordon Dr	Bike Route Wayfinding Signs
Dirksen Pkwy	Peoria Rd	Bissell Rd	Paved Shoulders
Dirksen Pkwy	Bissell Rd	Stevenson Dr	Bike Lanes
East Lake Shore Dr	I-55 exit ramp	Brittany	Sidepath
East Lake Shore Dr	Hunt Rd	Rochester Rd	Paved Shoulders
East Lake Shore Di	prioriti ita	r tooriootor ita	i area enediació



Project	Terminus 1	Terminus 2	Recommendation
Eastdale Ave	Clear Lake Ave	Cook St	Paved Shoulders
Eastdale Ave	Cook St	South Grand Ave	Bike Lanes
Eastman Ave	1st St	5th St	Bike Route Wayfinding Signs
Eastman Ave	5th St	8th St	Combined Bike/Parking Lanes
Edwards St	Amos	College	Combined Bike/Parking Lanes
Edwards St	College	2nd St	Shared Lane Markings
	Griffiths		
Franklin School Path	Outer Park	Ridgely Iles	Shared Lane Markings Path
	Walnut		Bike Lanes
Gordon Dr	Pulliam Rd	Pulliam Rd	Bike Route Wayfinding Signs
Gordon Dr		MPA boundary	
Greenbriar Dr	Sangamon Valley Trail Interlacken Rd		Combined Bike/Parking Lanes
Greenbriar Dr/Warson Rd/Brentwood	interiacken Rd	Haverford Rd	Bike Route Wayfinding Signs
Dr	Factor: D.I	40th 0t	Diller Lance
Griffiths Rd	Factory Rd	19th St	Bike Lanes
Griffiths Ave	19th St	23rd St	Combined Bike/Parking Lanes
Griffiths Ave	23rd St	Henley Rd	Bike Route Wayfinding Signs
Haverford Rd/Lombard Ave/Montvale	Brentwood Dr	Wabash Trail	Bike Route Wayfinding Signs
Dr/ Nottingham Rd/ Drawbridge			
Rd/Quarterstaff Rd			
Hazel Dell Rd	Interurban Trail	2nd St	Sidepath
Henley	Sangamon Ave	Griffiths	Bike Route Wayfinding Signs
Hilltop Rd	Lost Bridge Trail	Rochester Rd	Sidepath
Hollis Dr	Wabash Ave	Robbins	Bike Lanes
Iles Ave	Lenhart Rd	Meadowbrook Rd	Bike Lanes
Iles Ave	Chatham Rd	MacArthur Blvd	Paved Shoulders
Interlacken Dr	Old Jacksonville Rd	Pebble Beach Dr	Bike Route Wayfinding Signs
Interlacken Dr	Laurel St	Greenbriar Dr	Combined Bike/Parking Lanes
Interurban	Dirksen Pkwy	Mayden	Bike Route Wayfinding Signs
Interurban Trail extension (Chatham)	Spruce	MPA boundary	Trail
Iron Bridge Rd	Woodside	Walnut	Paved Shoulders
J. David Jones Parkway	Cemetery Entrance	Yates	Paved Shoulders
Junction Circle	Stanford Ave	Interurban Trail	Shared Lane Markings
Karen Rose Dr	Cardinal Hill Rd	west of Parkview Dr	Bike Route Wayfinding Signs
Koke Mill Rd	Washington St	Old Jacksonville Rd	Bike Lanes
Laurel St	Interlacken Rd	Chatham Rd	Combined Bike/Parking Lanes
Laurel St	Chatham Rd	Illini	Bike Lanes
Laurel St	Illini	MacArthur Blvd	Shared Lane Markings
Laurel St	MacArthur Blvd	Taylor Ave	Combined Bike/Parking Lanes
Laverna Rd	St James Rd	Camp Butler Rd	Paved Shoulders
Lenhart Rd	Old Jacksonville Rd	Bunker Hill Rd	Paved Shoulders
Lincoln	North Grand Ave	Edwards St	Combined Bike/Parking Lanes
Lincoln	Edwards	Washington Park	Bike Route Wayfinding Signs
Long Bay Dr	WestLake Shore Dr	East Lake Shore Dr	Bike Route Wayfinding Signs
Lost Bridge Trail extension	Cardinal Hill Rd	County line	Trail
(Rochester)			
MacArthur Blvd	North Grand Ave	Yates	Bike Route Wayfinding Signs
Main St (Chatham)	Interurban Trail	Wintergreen Dr	Shared Lane Markings
Main St (Chatham)	Wintergreen Dr	Covered Bridge Rd	Bike Lanes
Main St connector (Chatham)	Interurban Trail	Main St	path
Main St (Rochester)	Education	Lost Bridge Trail	Combined Bike/Parking Lanes
Main St (Rochester)	Route 29	Cardinal Hill Rd	Shared Lane Markings
Main St (Rochester)	Cardinal Hill Rd	Maxheimer Rd	Sidepath
Mansion Rd	Buoy Ct	IL-4	Bike Lanes
Mathers Rd	Cockrell Ln	Veterans Pkwy	Bike Lanes
Maxheimer Rd	Main St	Route 29	Sidepath
Maxheimer Rd	Route 29	MPA boundary	Bike Route Wayfinding Signs
Mayden St	Interurban Ave	Piper Rd	Bike Route Wayfinding Signs
Mayden St	Piper Rd	Terminal Ave	Shared Lane Markings
Mayden St	Terminal Ave	Dirksen Pkwy	Paved Shoulders
mayacii ot	rominal Ave	DII KOGII E KWY	i avea onodiaeis



Project	Terminus 1	Terminus 2	Recommendation
Meadowbrook Rd	Washington	Highbury Dr	Bike Lanes
Meadowbrook Rd	Hazelbrook Dr	Old Jacksonville Rd	Bike Lanes
Meadowbrook Rd	Old Jacksonville Rd	Iles Ave	Bike Lanes
Mechanicsburg Rd	Cravens Ln	Pakey Rd	Paved Shoulders
Meredith Dr	Old Tipton School Rd	1st St	Sidepath
Meredith Dr	1st St	Zimmerman Dr	Bike Lanes
Milldale Dr	Oak Hill Rd	Walnut St	Bike Lanes
Milton Ave	North Grand Ave	Clear Lake Ave	Bike Lanes
Martin Luther King Jr. Dr.	Clear Lake Ave	South Grand Ave	Bike Lanes
Martin Luther King Jr. Dr.	South Grand Ave	Laurel St	Combined Bike/Parking Lanes
North St	Stanford Ave	1st St	Paved Shoulders
North Cotton Hill Road	Southwind	Toronto Rd	Paved Shoulders
North Grand	Bruns Lane	MacArthur Blvd	Bike Route Wayfinding Signs
North Grand/Ridge	19th St	Ridgely	Paved Shoulders
Oak Crest Rd	South Camp Butler Rd	Oaklane Rd	Paved Shoulders
Oak Grest Ru Oak Hill Rd	Rochester Rd	Woodland Trail	Bike Lanes
Oak Hill Rd	Woodland Trail	Cardinal Hill Rd	Shared Lane Markings
Oak Rd	Main St	north of Karen Rose	Bike Route Wayfinding Signs
Oak Ru Oaklane Rd	Oak Crest Rd	Mechanicsburg Rd	Paved Shoulders
Old Jacksonville Rd		Chatham Rd	Sidepath
Old Rochester Rd	Interlacken		
	Wheeler	South Grand Ave	Shared Lane Markings
Old Tipton School Rd	Andrew Rd	Carpenter Park 1st St	Sidepath
Outer Park Dr	Lincoln	Pulliam Rd	Bike Route Wayfinding Signs Paved Shoulders
Palm Rd	S of Lakewood		
Palomino Rd	Veterans Pkwy	Bruns Ln	Bike Route Wayfinding Signs
Park St	Washington Park	Outer Park Dr	Bike Route Wayfinding Signs
Park St	Iles Ave	Wabash Trail	Shared Lane Markings
Park St (Chatham)	Plummer	existing sidepath	Bike Route Wayfinding Signs
Path from Parkway Point to Interurban	Freedom Dr	Interurban Trail	Path
Trail	Interiorism Dd	Laural Ct	Dika Davita Wayfinding Cinna
Pebble Beach Dr	Interlacken Rd	Laurel St	Bike Route Wayfinding Signs
Piper Rd	Mayden	Neil	Bike Route Wayfinding Signs
Piper Rd	Neil Savannah	Sangamon Ave	Paved Shoulders
Plummer Blvd		west of Interurban Tr Gordon Dr	Bike Lanes
Plummer Blvd	west of Interurban Tr		Sidepath
Prairie Crossing Dr	Veterans Pkwy	Chatham Rd	Shared Lane Markings
Proposed Road (Rochester) Pulliam Rd	Main St	Oak Hill Rd	Bike Lanes
	Broaddus (extended)	Palm Rd	Sidepath
Recreation Dr	Chatham Rd	MacArthur Blvd	Sidepath
Recreation Dr	MacArthur Blvd	Interurban Trail	Path
Ridgely	Ridge Rochester River Path		Paved Shoulders
Roanoke		Oak Hill Rd	Bike Route Wayfinding Signs
Robbins Rd	Hollis Dr	Wabash Trail	Bike Lanes
Rochester River Path	Rochester Rd	Roanoke Dr	Path
Route 29 (Rochester)	Cardinal Hill Rd	Maxheimer Rd	Sidepath (on north side)
Sangamon Valley Trail (extension)	Stuart Park	Menard County Line	Trail
Sangamon Valley Trail (extension)	Centennial Park	Macoupin County Line	Trail
Savannah Rd	Mansion Rd	Plummer	Bike Lanes
Savannah Rd	Plummer	Walnut	Shared Lane Markings
Sherman to Springfield Trail	Andrew Rd	Dirksen Pkwy	Trail
Sherman to Williamsville Trail	Andrew Rd	Conrey St	Trail
South Camp Butler Rd	Camp Butler Rd	Oak Crest Rd	Paved Shoulders
South Grand Avenue	Taylor	Eastdale	Sidepath
Southwind	2nd St	North Cottonhill Rd	Bike Route Wayfinding Signs
Spaulding Orchard Rd	Curran Rd	4	Paved Shoulders
Spruce St	Main St	Gordon Dr	Bike Lanes
St. James Ct	Bissell Rd	Laverna	Bike Route Wayfinding Signs
Stanford Ave	6th St	11th St	Combined Bike/Parking Lanes
Stanford Ave	11th St	Fox Bridge Rd	Paved Shoulders
Stanford Ave	Fox Bridge Rd	Dirksen Pkwy	Bike Lanes



Project	Terminus 1	Terminus 2	Recommendation
Stevenson Dr	I-55 exit ramp	11th St	Sidepath
Stuart Park connector	Palomino Rd	Stuart Park	Path
Taylor Ave	South Grand Ave	Stevenson Dr	Bike Lanes
Toronto Rd	2nd St	Canadian Cross	Paved Shoulders
Toronto Rd	Canadian Cross	North Cottonhill Rd	Bike Lanes
Toronto Rd	North Cottonhill Rd	RR E of N Cottonhill	Widen Paved Shoulders
Union School Rd	Covered Bridge Rd	MPA boundary	Bike Route Wayfinding Signs
University Dr	S of Varsity Ct	North Ring	Sidepath
Wabash Ave	Moffet (Curran)	I-72	Paved Shoulders
Wabash Ave	I-72	Koke Mill Rd	Bike Lanes
Walnut Rd (Rochester)	IL-29	Oak Hill Rd	Bike Lanes
Walnut St (Chatham)	Savannah	Pheasant Run	Shared Lane Markings
Walnut St (Chatham)	Pheasant Run	east of creek	Sidepath
Walnut St (Chatham)	east of creek	Interurban Trail	Shared Lane Markings
Walnut St (Chatham)	Park St	park	Sidepath
Washington Park			Bike Route Wayfinding Signs
Washington St	Meadowbrook Rd	Amos	Sidepath
West Lake Shore Dr	Stevenson Dr	Varsity Ct	Sidepath
West Lake Shore Dr	West Lake Shore Dr	Toronto Rd	Paved Shoulders
Wheeler Ave	Capitol Ave	Cook St	Shared Lane Markings
Wheeler Ave	Cook St	South Grand Ave	Combined Bike/Parking Lanes
Wheeler Ave	South Grand Ave	Laurel St	Shared Lane Markings
Woodhaven Rd	Rochester Rd	East Lake Shore Dr	Bike Route Wayfinding Signs
Woodside Rd	Veterans Pkwy	North Lake Road	Paved Shoulders
Yates	J David Jones Pkwy	1st St	Bike Route Wayfinding Signs
Zimmerman Dr	Andrew Rd	South St	Bike Lanes
Zimmerman Dr	South St	proposed trail	Sidepath

### **B.** Evaluating Existing Conditions

As mentioned previously, an initial network of "bicycle routes to study" determined by public input; existing community plans; and consultant, staff, and steering committee recommendations was identified. A Bicycle Level of Service (BLOS) analysis was then conducted of the "bicycle routes to study" to evaluate the bike-friendliness of existing conditions and potential for corridors to be included in the EBN.

The BLOS quantifies the "bike-friendliness" of a roadway, helping to remove a wide range of subjectivity on this issue. The measure indicates adult bicyclist comfort level for specific roadway geometries and traffic conditions. Roadways with a better (lower) score are more attractive – and usually safer – for cyclists. BLOS has been used in IDOT's bicycle maps for years, and was recently added to the national *Highway Capacity Manual*<sup>11</sup>. In general, "casual" adult bicyclists will feel comfortable on a roadway with a BLOS grade of "A" or "B". The comfort range of more traffic-tolerant experienced bicyclists is typically a BLOS of "A", "B", or "C". A BLOS of "D" or "E" indicates undesirable conditions for any level bicyclist.

The map on page 26 shows the results of this analysis and includes roads already having on-road bike lanes (parts of Iles, Meadowbrook, Koke Mill, Stanford, Toronto, and 11<sup>th</sup>).

The analysis showed some advantages and some challenges with existing conditions:

- Wide shoulders on north Veterans and Peoria provide some access north almost to Sherman, but narrower shoulders and right-turn lanes weaken the connection.
- Especially in the developed sections of Springfield with a grid network of roads, there are many side streets which are comfortable for cyclists. However, most of these lack traffic signals for crossing the busier multilane arterials, thus reducing their usefulness for biking.



- There is fairly good access from north Springfield to downtown, but good north-south routes are fewer in and south of downtown. Access is particularly difficult for southeast Springfield and for destinations south of Outer Park including the Wabash and Interurban Trails.
- There are a couple decent east-west routes through Springfield, but more are needed. Getting across the area including Chatham Road is challenging.
- On-road bicycling conditions for the arterials in the developed parts of Springfield are mostly poor, and some of these major roads are missing sidewalks.
- In the developing areas, particularly on the far west side of Springfield, new arterial cross-sections are making dramatic improvements over many of the old rural-style roads. The county's paved shoulders on several of its roads also provide good access.
- In many places in Springfield, extra road width and excess lane capacity provide opportunities for improving conditions.

### C. Selection of Bike Routes and Types

To achieve an adequate Bicycle Level of Service for a corridor and to meet the goals of bicyclist safety and friendly on-road conditions, the following guidelines were used when making route and bicycle facility type selections for the EBN. These were suggested by the plan consultant.

- Where on-road bikeways are recommended, work toward a Bicycle Level of Service of High C (marginal), B (ideal), or "A" (best) for designation in the network. This is an appropriate goal for accommodating the casual adult bicyclist. Depending on the situation, use bike lane, bike route, and/or wayfinding signs to indicate a bike route that is part of the EBN.
- For the on-road segments designated as being in the network, raise the priority of filling sidewalk or sidepath gaps on at least one side of the road. This recognizes that children, and more trafficintolerant adults, will ride on the sidewalk. However, sidewalks with widths under sidepath standards (see Appendix C) should not be designated or marked as part of the official bicycle network.
- Sidepaths are not recommended where there are too many crossing conflicts (driveways, entrances, cross streets). Where sidepaths are recommended, use the design techniques described above to somewhat reduce the risks at intersections.
- Where there is sufficient width and need, and speeds are moderate to low, use striping to improve
  on-road cyclist comfort level. Depending on available width and parking occupancy, the striping
  may be in the form of either dedicated bike lanes or combined bike/parking lanes. Where such
  roads have insufficient width for striping, shared lane markings or simply Bike Route wayfinding
  signs are recommended, depending on parking occupancy and assuming an on-road comfort level
  meeting the target BLOS.
- Use shared lane markings and bike signal actuation pavement markings to indicate proper on-road bicycle position, especially where heavy bicycle traffic is expected.

In addition to these technical guidelines, some strategic factors in selecting bikeway type include:

Do not remove on-road parking if at all possible, especially near businesses.



- Where appropriate, use road striping to serve not only bicyclists but adjacent residents, as well.
   Cite the traffic calming (slowing) and other benefits of striped, narrower roads.
- Do not widen sidewalks to 10-foot sidepath widths where residential front yards would be impacted.
- Do not widen existing residential roads solely for bikeways.

The map on page 27 portrays how the bicycle level of service will change if the recommended EBN projects are implemented, effectively providing a bicyclist-friendly network. Trails and sidepaths are shown, but the vast majority of sidewalks are not. This map can be used as a before-and-after comparison with the existing BLOS map.

#### D. EBN and Prime Destinations

The envisioned bicycle network takes into consideration the location of parks, economic activity centers and SMTD bus routes. Because on-road bicycle facilities are not particularly safe for children, the schools are not addressed as a whole in the EBN. However, sidewalks can generally be used by children to ride to school and there are some proposed paths in proximity to schools where feasible. An analysis of the accessibility to prime destinations can be found in Appendix D.

### E. How Public Input Was Incorporated Into This Plan

At the Public Engagmenet Workshop held prior to development of this plan, participants broke out into five groups and identified priorities for their geographic areas of interest. These are addressed in the EBN as follows:

- 11<sup>th</sup> Street: North Grand Avenue to existing bike lanes at Hazel Dell Road
  The 11<sup>th</sup> Street corridor is shown as a major bike route through Springfield, extending from Factory
  Avenue to Toronto Road.
- 6<sup>th</sup> Street: North Grand Avenue to South Grand Avenue
   The north/south corridors through downtown Springfield were analyzed carefully and in the end 2<sup>nd</sup> Street, 7<sup>th</sup>/8<sup>th</sup> Streets, and 11<sup>th</sup> Street were chosen for this direction of travel.
- Washington Street: Old Covered Bridge Road to 16<sup>th</sup> Street
   Washington Street was considered for an east/west connector through the City, however, the volume of traffic, speed of traffic, and narrowness of the roadway in various areas make it less than ideal. The decision was made to recommend a sidepath on Washington from Meadowbrook Road to Amos Avenue then jog south on Amos to Edwards with a jog north on 2<sup>nd</sup>, and then using Capitol as the east/west corridor through downtown to Wheeler.
- Include bike parking, loops on parking meters
   The City of Springfield has approved a design for bicycle racks that will be installed in the downtown area on City right-of-way and may also be installed on private property throughout the City.
- Interurban Trail: Mayden to Steeplechase in Sherman Included in the plan.
- 8<sup>th</sup> Street: from Sangamon Avenue south
   This is shown as an 8<sup>th</sup>/7<sup>th</sup> Street corridor from Veterans Parkway to Laurel Street.



- North Grand Avenue: 15<sup>th</sup> Street to Ridgely Road
   The North Grand bike corridor is shown with paved shoulders starting at 19<sup>th</sup> Street and continuing east via Ridge and Ridgely to South Camp Butler Road. The connection west is a short jog on 19<sup>th</sup> Street to Converse.
- East Lake Shore Drive in its entirety with a connection to the colleges via Long Bay/Fox Mill/bike
  path through LLCC campus to Shepherd Road and to the Lost Bridge Trail via Rochester Road and
  Hilltop Road
  - All of East Lake Shore Drive is shown with a connection to West Lake Shore Drive along Long Bay. A connection to the Lost Bridge Trail via Rochester Road and Hilltop Road is included.
- Complete connection of Lost Bridge Trail to the west by continuing trail behind Abundant Faith to the west via Stanford or Culver OR by extending trail west on Ash from Taylor then south on 8<sup>th</sup> Street to Stanford Avenue.

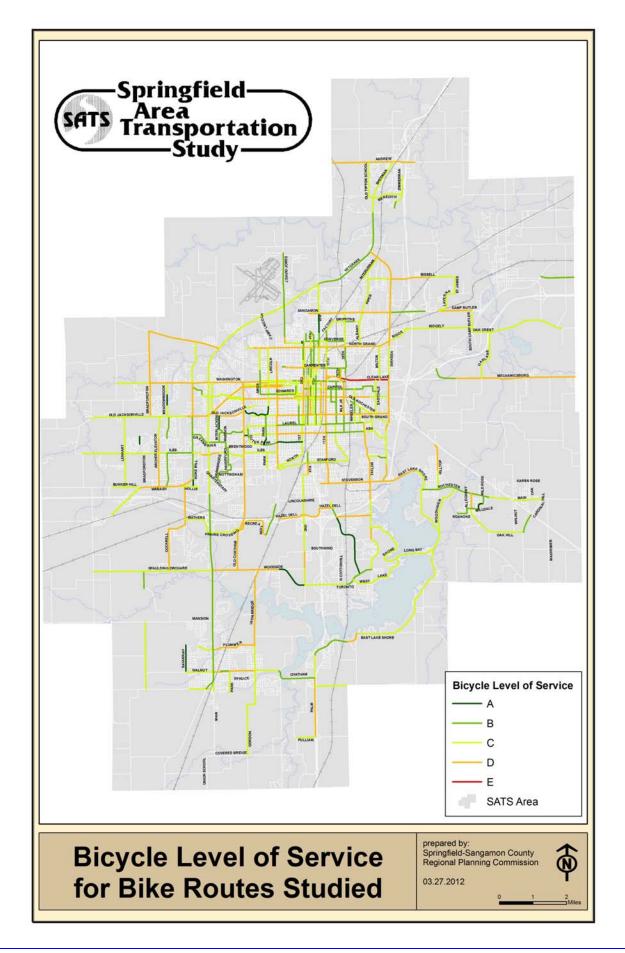
The extension of the trail behind Abundant Faith to Stanford Avenue is shown.

- Spaulding Orchard Road/Woodside Road/Toronto Road This corridor is shown in the plan.
- Access off Chatham Road to Wabash Trail Included in plan.
- Old Jacksonville Road: Lenhart Road to Chatham Road
   Old Jacksonville Road has paved shoulders from Lenhart Road to Bradfordton Road, which is shown in the plan with a recommended sidepath connecting to the EBN at Iles Avenue and Wabash Avenue. Old Jacksonville Road is shown with a recommended sidepath from Interlacken Drive to Chatham Road.
- Chatham Road: from Washington Street south (sidepath to follow existing sidewalk)
   Because of right-of-way issues along Chatham Road north of Wabash Avenue this suggestion was not considered feasible at this time. Wide shoulders are shown for Chatham Road from the Wabash Trail to Woodside Road.

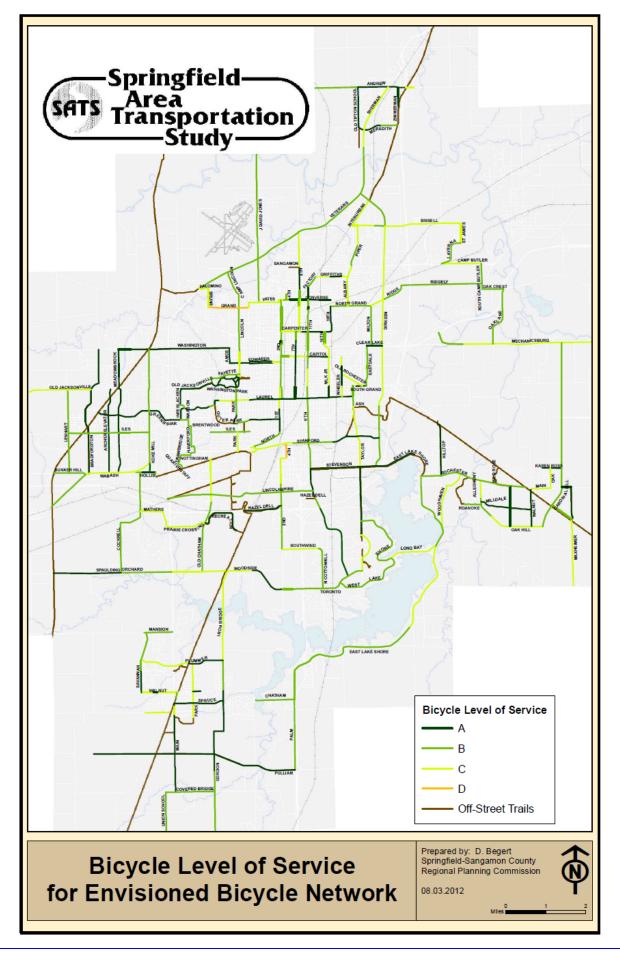
Additional corridors that were suggested by the most individuals through the public engagement process were:

- Path from Douglas Park to Stuart Park
   Stretches of this corridor are not currently available for public access. If this situation changes in the future the potential for developing this path will be revisited.
- Ash Street: Illini to Taylor
   After analysis the determination was made to use Laurel Street as the east/west connector from
   Outer Park to Taylor as conditions are already more bike-friendly along Laurel. With bike lanes
   proposed along Taylor a connection to the existing sidepath along Ash Street and then to the Lost
   Bridge Trail can be made.











- MacArthur Boulevard: South Grand to the Interurban Trail

  Under better conditions this would be an ideal connection from Washington Park to the Interurban Trail. However, with limited right-of-way along MacArthur Boulevard safe bicycle accommodations cannot be installed. Two other options were included instead. From Washington Park a corridor is suggested south on Park Street, then east on Outer Park to Franklin Middle School. A path currently exists (although is in need of repair) from the school to Iles Avenue. The corridor would head west on Iles to Park and then south on Park providing access to the Wabash Trail and the sidepath along Junction Circle which ends at the Interurban Trail. A second corridor would take bicyclists from Laurel Street, south on 1st Street to North Street, down to Stanford with a jog over to Junction Circle and then on to the Interurban Trail.
- Iles Avenue: Lenhart Road to Koke Mill Included in plan.
- Stanford Avenue: 6<sup>th</sup> Street to existing path behind Abundant Faith Included in plan.
- 2<sup>nd</sup> Street: North Grand to Lawrence Included in plan.
- 2<sup>nd</sup> Street: St. Joseph to Old Woodside Road Included in plan to Southwind Road.
- Hollis Drive: Robbins Road to Koke Mill Road Included in plan.



#### V. THE ENVISIONED PRIORITY PEDESTRIAN NETWORK

The goal of creating a Priority Pedestrian Network (PPN) was a recommendation of the Citizens Advisory Committee (CAC), which was formed to provide input to SATS for development of the 2035 Long Range Transportation Plan. CAC members recognized a need to provide a safe, connected network of travel for the many people in our communities who walk or use a wheelchair.

Facilities for pedestrians are important and are needed everywhere. Designating specific routes for the PPN, however, is intended to establish a well-defined network with safety and comfort amenities (described in Appendix E) and road crossing accommodations (described in Appendix F) that support and encourage pedestrian travel while placing emphasis on interconnected corridors that enable pedestrians to navigate our communities, access bus stops, reach key destinations, and travel throughout the entire area. A PPN allows local jurisdictions to plan and prioritize projects that contribute to an interconnected, multijurisdictional walking system.

This plan proposes an interconnected network of pedestrian corridors consisting of sidewalks, multi-use sidepaths, and multi-use trails that will allow travel to schools, recreational areas, economic activity centers, bus stops, neighborhoods, and communities.

The following criteria were used to identify the priority pedestrian network corridors that would meet the goals and objectives of this plan.

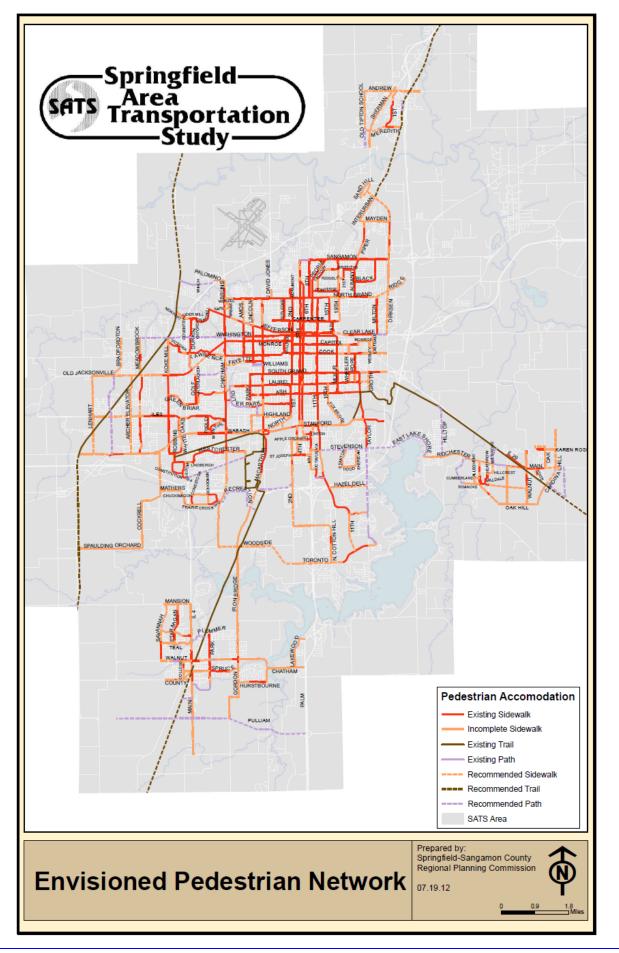
- Reflect overall network emphasis with continuous corridors spaced from ¼ mile to 1 mile depending on land use and transportation development density.
- Route directly to, or nearby, area schools, parks and economic activity centers.
- Access a majority of the existing public transit routes.
- Incorporate community development plans.

The PPN includes multi-use corridors (trails and sidepaths), but the majority of the PPN is comprised of sidewalks. Much of the sidewalk network already exists, however, sidewalk coverage and characteristics were unknown for most of the PPN. Planning Commission staff conducted an inventory of the PPN sidewalks during June and July 2011. The results of this fieldwork can be found in Appendix G.

In addition to sidewalks, the Springfield area also has 21 miles of multi-use trails, generally on retired railway corridors, which are actively used for both recreation and transportation. These trails provide an excellent pedestrian experience, as they are frequently farther from vehicular traffic than sidewalks, have smooth unbroken surfaces, and provide increased aesthetic value. Extension of the multi-use trail network with connections between trails is proposed. Further details regarding the multi-use trails that integrate into the PPN are in Part VI.

The PPN is shown on the following map with segments of the corridors identified as Existing, Incomplete (existing but with gaps), or Recommended (not existing at this time).







### A. Pedestrian Project Priorities

As noted above, the PPN includes sidewalk corridors in some places where pedestrian facilities do not currently exist. In some cases the associated roadway is shown as a future corridor on a comprehensive community plan and sidewalks will be built once the road is constructed. In other cases the associated roadway does exist but sidewalks will not be built until development occurs or the road is reconstructed. Some sidewalks will need to be built as prioritized by the local jurisdiction.

Coverage and completeness of the existing PPN however could be initially expanded by filling in some gaps that were identified during the fieldwork. These smaller projects involve building the missing portion of a sidewalk that, once completed, would create long, uninterrupted pedestrian ways. The chart below lists these potential projects. The map on page 35 illustrates how implementation of these projects would enhance the PPN.

# **Projects That Would Expand Coverage and Completeness of Existing PPN Corridors**

**City of Springfield** 

Corridor (listed alphabetically)	Segment	Street Side	Status
Ash Street: Park to Dirksen	Park to Lincoln	North	Incomplete
	Lincoln to Douglas	North	Incomplete
Asii street. Fark to blikseli	Douglas to Dial	North	Incomplete
	Douglas to Diai	South	Incomplete
Capitol Avenue: 2 <sup>nd</sup> to Cressey	19 <sup>th</sup> to McCreery	North	Missing
Capitol Avenue. 2 to cressey	McCreery to Wheeler	North	Incomplete
Carpenter Street: Salome to 19 <sup>th</sup>	17 <sup>th</sup> to 19 <sup>th</sup>	South	Incomplete
	Martin Luther King Jr to	North	Incomplete
	McCreery	South	Incomplete
	25 <sup>th</sup> Street to Christmas Seal	South	Incomplete
	Christmas Seal to White City	South	Missing
Cook Street: Pasfield to Dirksen	White City to Livingston	South	Missing
Cook Street. I disheld to birksen	Willie City to Livingston	North	Incomplete
	Livingston to Eastdale	South	Missing
		North	Missing
	Eastdale to Dirksen	South	Missing
		North	Missing
11 <sup>th</sup> Street: Stevenson to North	Stevenson to Cottonwood	West	Incomplete
Grand	Stanford to Bryn Mawr	East	Missing
5 <sup>th</sup> Street: Stanford to Sangamon	Stanford to Bryn Mawr	East	Incomplete
3 Street. Stamora to Sangamon	Stamora to Bryn Mawr	West	Missing
	West White Oaks to Veterans	South	Missing
Iles Avenue: Lenhart to Chatham	West White Buks to Veterans	North	Incomplete
	Veterans to Golf	North	Incomplete
	Rickard to Veterans	South	Missing
Lawrence Avenue: Koke Mill to	Kenyon to Chatham	South	Incomplete
Pasfield	·	North	Incomplete
i usticia	Chatham to Lismore	North	Incomplete
	Lismore to Rosehill	North	Incomplete



Martin Luther King Jr. Drive: Ash to Clear Lake	Stuart to Brown	East	Incomplete
	Bogden to Stange	North	Missing
Manager Change Manager Cond	Stange to Feldkamp	North	Missing
Monroe Street: Veterans to 2 <sup>nd</sup>	Amos to Adelia	North	Missing
	Adelia to Park	North	Incomplete
	Daving to Dag clasions	North	Incomplete
	Bruns to Brookview	South	Incomplete
	13 <sup>th</sup> to 15 <sup>th</sup>	South	Incomplete
	15 <sup>th</sup> to 19 <sup>th</sup>	North	Incomplete
	15 to 19	South	Missing
	19 <sup>th</sup> to Paul	South	Missing
	Doubte Indiana	South	Missing
	Paul to Indiana	North	Missing
North Grand: Bruns to Milton	Indiana to Ohio	South	Incomplete
North Grand. Bruns to Milton	Indiana to Ohio	North	Incomplete
	Ohio to Water	South	Missing
	Ohio to Water	North	Missing
	Water to Albany	South	Incomplete
	Wesley to Stephen	North	Incomplete
	Stephen to Daniel	South	Incomplete
		North	Missing
	Daniel to Milton	South	Missing
		North	Missing
Peoria Road/9 <sup>th</sup> Street: North Grand	Wood to Garfield	East	Incomplete
to Sangamon	Griffiths to Percy	West	Incomplete
	Stanfand to Brun Marris	East	Incomplete
	Stanford to Bryn Mawr	West	Incomplete
	Broad to Cornell	East	Incomplete
6 <sup>th</sup> Street: Stanford to 5 <sup>th</sup>	Ash to Oak	East	Missing
	Oak to Myrtle	East	Incomplete
	Myrtle to Laurel	East	Incomplete
	Laurel to Spruce	West	Incomplete
South Grand Avenue: Park to Dirksen	Palmeiter to Orendorff	North	Missing
	2 <sup>nd</sup> Street to 3 <sup>rd</sup> Street	South	Incomplete
	9 <sup>th</sup> Street to 11 <sup>th</sup> Street	South	Missing
	Taylor to Groth	North	Incomplete
	Schackleford to Dirksen	South	Incomplete
		North	Incomplete



**Village of Chatham** 

Corridor (listed alphabetically)	Segment	Street Side	Status
	Goldenrod to Existing Path Goldenrod to Existing Path	West East	Missing Missing
	Goldenrod to Lindal Lindal to Dutchman	East West	Incomplete Incomplete
Park Street: Plummer to Community Park	Walnut to White Oak White Oak to Deerfield	East East	Incomplete Missing
Tank Screece Franklich to Community Fank	Deerfield to Evergreen Evergreen to Hackberry	East East	Missing Missing
	Hackberry to Magnolia Magnolia to Timberhill	East East	Missing Missing
	Timberhill to Cypress Cypress to Oakbrook	East East	Missing Incomplete
	Ptarmigan to Gulliam	South	Incomplete
Plummer Boulevard: Ptarmigan to Gordon	T tarringari to Gamarii	North	Incomplete
	Gulliam to Koufax	South	Missing
	Gamain to Roulds	North	Missing
	Koufax to Jason	North	Incomplete

**Village of Rochester** 

Corridor	Segment	Street Side	Status
	Woodland to Heathrow	West	Missing
Oak Hill Road: Rochester/Main to State RT 29	Heathrow to Penacook	West	Missing
	Heatinow to Penacook	East	Incomplete
	Roanoke to Milldale	West	Missing
	Milldale to Cumberland	West	Missing
	Cumberland to Cumberland	West	Missing
	Wyndmoor to Cumberland	East	Incomplete
	Cumberland to Maplehurst	West	Missing
	Maplehurst to Maplehurst	West	Missing



**Village of Sherman** 

Corridor (listed alphabetically)	Segment	Street Side	Status
	Brookside Glen to South	East	Missing
	Brookside dien to South	West	Missing
1 <sup>st</sup> Street: Meredith to Andrew	South to Main	West	Missing
1 Street: Weredith to Andrew	South to Main	East	Missing
	Main to North	West	Missing
	IVIAIII to Nortii	East	Missing
Meredith Street: 1 <sup>st</sup> to Zimmerman	1 <sup>st</sup> to Harrow	North	Incomplete
	Harrow to Lost Tree	South	Incomplete
		North	Incomplete
	Lest Took to Fieldside	South	Missing
	Lost Tree to Fieldside	North	Missing
	Fieldside to Arlington Chase	South	Missing
	Fieldside to Arinigton Chase	North	Missing

In addition to the above criteria, project prioritization determination should include accessibility improvement, safety improvement, and high pedestrian traffic areas.

#### B. PPN and Prime Destinations

The PPN takes into consideration the location of schools, parks, economic activity centers and SMTD bus routes. An analysis of the accessibility to prime destinations can be found in Appendix H.

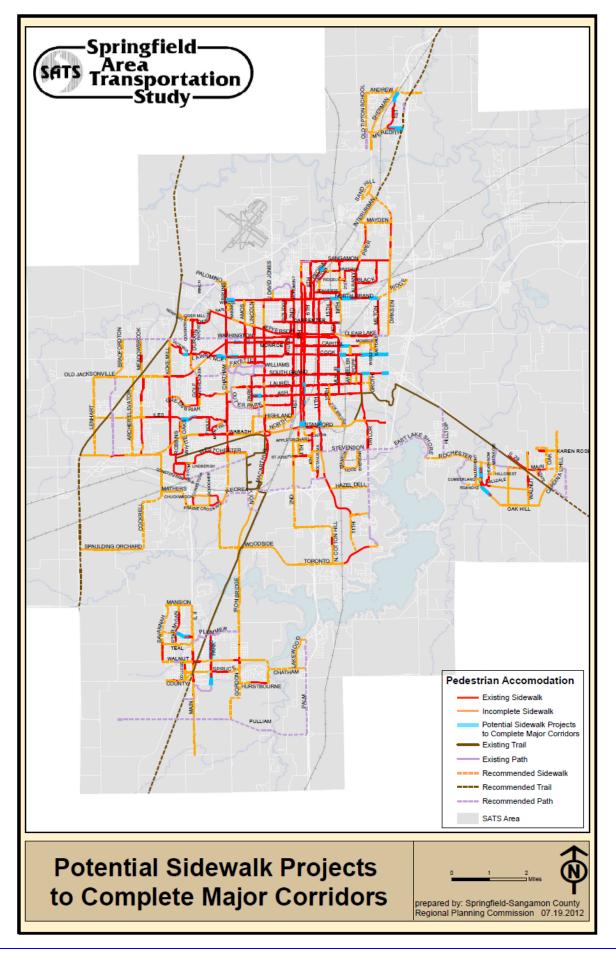
### C. Sidewalk Maintenance

Even well-designed, accessible sidewalks degrade as sidewalks deteriorate from use and exposure to weather. A regular maintenance program to assess and repair damage is a necessary component of ensuring a safe, accessible pedestrian network. Not only does regular clearing of debris, overgrown vegetation, ice, and snow keep the pedestrian network usable, such maintenance also can lengthen sidewalk longevity.

Maintenance responsibility varies depending on local ordinances and the sidewalk segment in question. For sidewalks that provide access to governmental services, the local jurisdiction is normally required to maintain the route, including its accessibility. Landowners along the PPN should be encouraged to assist in keeping the network clear.

To be effective, maintenance must be planned and occur regularly. Any prioritization plan must include a defined maintenance plan with benchmarks to ensure the safety and accessibility of existing facilities.









### VI. ENVISIONED MULTI-USE TRAIL NETWORK

The safety and efficiency offered by off-road trails makes them attractive to bike riders and walkers. Additionally, an extensive trail system provides a draw for tourists to visit or stay longer in the area.

## A. Existing Trail System

The MPA currently has several multi-use trails built along abandoned railroad rights-of-way. The trails serve as travel corridors and are also frequented by recreational users. The trails are listed in the table below and shown on the map on page 42.

Existing Trail	Miles	Trail End Points
Interurban Trail	8.4	Junction Circle (Springfield) to Walnut Street (Chatham)
Lost Bridge Trail	5.5	Dirksen Parkway (Springfield) to Cardinal Hill Road (Rochester)
Sangamon Valley Trail	5.5	Centennial Park (Springfield) to Stuart Park (Springfield)
Wabash Trail	2.0	Robbins Road (Springfield) to Junction Circle (Springfield)

Each individual trail provides a unique environment and local access; however, creating interconnectivity of the trail system will provide a more extensive travel network for bicyclists and enhance recreational opportunities. This plan envisions a completely connected trail system with connections to the road network at access points as shown on page 42. A description of how this could be accomplished follows. The road connections for the trails also include sidewalks for the pedestrian connection.

### Sangamon Valley Trail (SVT)

**Envisioned:** The SVT corridor runs along the abandoned Chicago & Northwestern Railroad line that traverses Sangamon County from the Menard County line northwest of Cantrall to the Macoupin County line at Virden. Plans also include extension of the trail into each county.

**Characteristics:** Once completed, the SVT will be the longest multi-use trail in Sangamon County, taking users through parks, residential neighborhoods, farmland, woodlands, and providing spectacular views on the longest trail bridge in Illinois over the Sangamon River. When finished, the trail will be designated as an alternative route for the Route 66 Bike Trail as well.

**Existing:** The 5.5 mile middle section of this asphalt trail has recently been completed along with a 0.5 mile connecting path to Stuart Park.

Jurisdiction: Sangamon County Highway Department

Length of Envisioned Trail in Sangamon County: 33 miles



Family enjoying amenities along the Sangamon Valley Trail

#### Sangamon Valley Trail/Wabash Trail Connection

**Envisioned:** The connection between these two trails will use bike lanes along lles Avenue, Koke Mill Road, Hollis Drive, and Robbins Road. A future connection of bike lanes and paved shoulders along Bunker Hill Road, Wabash Avenue, Hollis Drive, and Robbins Road is also anticipated.



Characteristics: The connections will be on-road facilities.

**Existing:** Bike lanes currently exist along Koke Mill Road between Iles and Hollis and along Iles Avenue

between Koke Mill and Meadowbrook.

Jurisdiction: City of Springfield and State of Illinois

**Length of Envisioned Connection:** 2.9 miles (future connection: 2.6 miles)

### **Wabash Trail**

**Envisioned:** The Wabash Trail runs along the abandoned Norfolk & Southern Railroad corridor located south of Wabash Avenue. It is a shorter neighborhood trail connecting people to commercial areas and is also a vital part of the envisioned interconnected trail system.

**Characteristics:** This asphalt trail extends through the commercial area between Robbins Road and Veterans Parkway; through the Sherwood Subdivision and Westchester Subdivision border to Chatham Road; and then between the commercial area along Wabash Avenue on the north and a multi-family residential area on the south to the trailhead parking lot at Park Street.

Existing: The entire trail was completed in 1999.

Jurisdiction: Springfield Park District

**Length of Existing Trail:** 2.2 miles

### **Wabash Trail/Interurban Trail Connection**

**Envisioned:** The Wabash Trail/Interurban Trail Connection runs along Junction Circle to connect the two trails allowing for continuous travel from commercial areas on the west side of Springfield to Chatham.

**Characteristics:** This short, concrete sidepath serves to connect the Wabash Trail to the Interurban Trail. This wide sidepath travels along the south side of Junction Circle between Park Avenue and MacArthur Boulevard.

**Existing:** The Wabash Trail/Interurban Trail Connection was built in 2004.

Jurisdiction: City of Springfield

Length of Existing Connection: 0.4 miles

### **Interurban Trail**

**Envisioned:** The Interurban Trail extends south from Springfield to Chatham, following the old interurban railway line. The trail is connected to the Wabash Trail at MacArthur Boulevard via the Wabash Trail-Interurban Trail Connection. Plans include the extension of the trail south of Chatham, continuing along the abandoned railway line to the Sangamon County border and beyond.

**Characteristics:** The asphalt trail has its northern termini in an urban commercial and residential section of the City of Springfield at Junction Circle. The trail travels through the new Legacy Pointe Development and underneath I-72. The trail is currently served by an at-grade crossing at Woodside Road. Between



Springfield and Chatham the trail crosses Lake Springfield via a rehabilitated bridge and travels through natural areas adjacent to the Lake. Parking can be found in Chatham near the southern termini.

**Existing:** The 8.4 mile section of the Interurban Trail from Junction Circle to Chatham was completed in 2004. The trail underwent realignment in 2010 to accommodate the new MacArthur Boulevard Extension/I-72 interchange and the Legacy Pointe Development. The realigned trail now includes a MacArthur Boulevard underpass south of Legacy Pointe, a bridge over the Norfolk and Southern railway line, and an underpass at I-72.

Jurisdiction: Springfield Park District and Village of Chatham (within the village limits).

Length of Envisioned Trail: 16.2 miles in Sangamon County

### **Interurban Trail/Lost Bridge Trail Connection**

**Envisioned:** The 4 mile link would connect the City of Springfield from east to west as well as connecting Rochester to Chatham through Springfield.

**Characteristics:** Bike lanes are present on Stanford Avenue from MacArthur Boulevard at the Interurban Trail to 6<sup>th</sup> Street. Reconstruction of Stanford Avenue to Fox Bridge Road and extension to Taylor Avenue will include bicycle facilities. A trail starts at the proposed Stanford Avenue extension, runs behind the Abundant Faith development, through Eisenhower Park, along the west side of Taylor Avenue, and along the south side of Ash Street to the IDOT parking lot where the Lost Bridge Trail west trailhead is located.

**Existing:** Existing portions of the connection are the Ash Street trail over to the proposed Stanford Avenue extension and the Stanford Avenue bike lanes from MacArthur to 6<sup>th</sup> Street. These sections amount to 2.7 miles.

Jurisdiction: City of Springfield

**Length of Envisioned Trail Connection:** 4.0 miles

#### **Lost Bridge Trail**

**Envisioned:** The Lost Bridge Trail is the area's first trail and stretches between the City of Springfield and the Village of Rochester. The trail was constructed by IDNR along a railway corridor formerly owned by the Baltimore and Ohio Railroad. Future phases of the trail call for a continuation along the former rail line to Taylorville.

**Characteristics:** The Lost Bridge Trail is asphalt and runs from the east edge of Springfield through Rochester. In Springfield, trailhead parking is available at IDOT's Hanley Building off Dirksen Parkway. It runs behind that building then underneath I-55 and crosses Sugar Creek as well as the South Fork of the Sangamon River into Rochester to Cardinal Hill Road. Rochester has provided trailhead parking and a comfort station at the Intersection of IL-29 and West Main Street. Additionally, a trail connector provides access to Community Park

**Existing:** The initial 5 mile section was constructed in 1995 with a .75 mile extension from Main Street to Cardinal Hill Road built in 2004.

Jurisdiction: Springfield Park District and Village of Rochester



Length of Envisioned Trail: 12.6 miles in Sangamon County

#### B. Expanded Trail System

With the popularity of multi-use trails, opportunities to expand the trail network to other areas of the MPA would be beneficial. The Villages of Sherman and Williamsville have been working to transform an abandoned rail line between their communities into a safe corridor of travel for walkers and bikers. This is particularly an attractive idea for the number of students traveling between the two communities.

#### **Sherman to Williamsville Trail**

**Envisioned:** The Sherman to Williamsville Trail will run from Andrew Road in Sherman to Conrey Street in the Village of Williamsville along the abandoned Illinois Terminal Company Railroad Corridor currently owned by Ameren Illinois.

**Characteristics:** The Sherman to Williamsville Trail will be constructed of asphalt and will provide a safe route for walkers and bikers between the two villages.

**Existing:** The Village of Williamsville was awarded a Transportation Enhancement Program grant for funding of preliminary engineering for this trail.

Jurisdiction: Village of Sherman and Village of Williamsville

Length of Envisioned Trail: 4.5 miles

### Sherman to Williamsville Trail/Sangamon Valley Trail Connection

**Envisioned:** The 6 mile link would connect the Village of Sherman to the Sangamon Valley Trail, through an area outside of the SATS planning area.

**Characteristics:** A sidepath is recommended on the north side of Andrew Road from the Sherman to Williamsville Trail to Old Tipton School Road. Paved shoulders are recommended from Old Tipton School Road west to the planned extension of the Sangamon Valley Trail. The connection will serve the commercial/service area in Sherman and then run west along state and county highways to a trail that will eventually run north/south through the entire county and provide access to other communities through the Envisioned Multi-Use Trail Network.

**Existing:** There are no existing facilities along the proposed connection.

Jurisdiction: Village of Sherman, State of Illinois, and Sangamon County

**Length of Envisioned Trail Connection:** 6 miles

### **Sherman to Springfield Trail**

**Envisioned:** The Sherman to Springfield Trail would be an extension of the Sherman to Williamsville Trail into Springfield providing a much needed corridor for safe travel of bicyclists and walkers across the Sangamon River.

**Characteristics:** The Sherman to Williamsville Trail would be constructed of asphalt and would provide an off-road route for walkers and bikers from Williamsville through Sherman to Springfield.



**Existing:** Exploration of the feasibility of developing this trail is in the beginning stages.

Jurisdiction: Village of Sherman

Length of Envisioned Trail: 3 miles

### **Sherman to Springfield Trail/Lost Bridge Trail Connection**

**Envisioned:** The link between these two trails would be along Dirksen Parkway.

**Characteristics:** This connection would consist of wide shoulders and bike lanes along the Dirksen Parkway corridor providing access to many commercial areas as well as the greater trail network.

**Existing:** Currently there are no bicycle accommodations along Dirksen Parkway although a road project between Ridge and Clear Lake Avenue scheduled to be constructed within the next few years will include bike lanes.

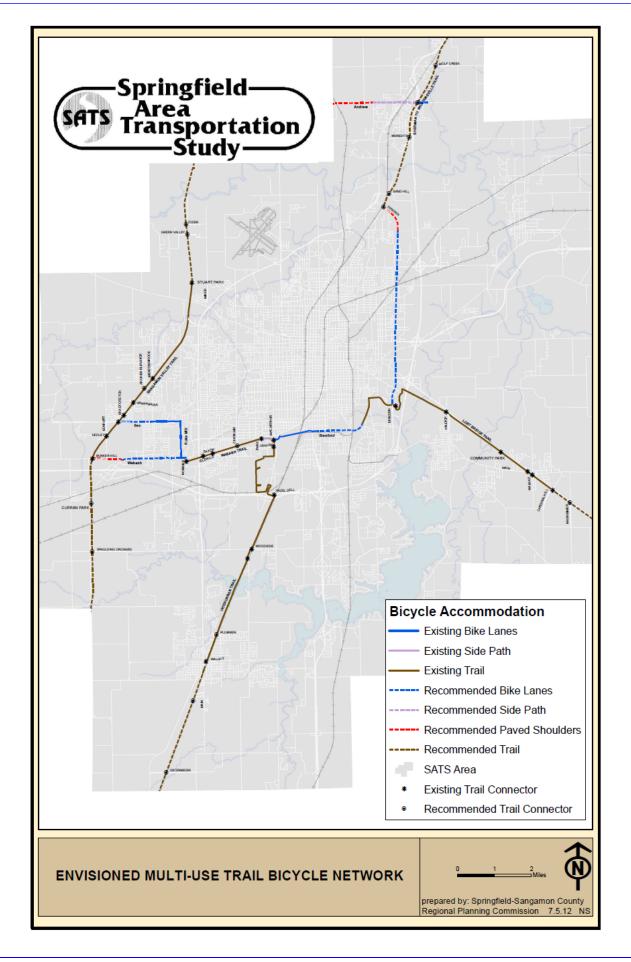
Jurisdiction: State of Illinois

Length of Envisioned Trail Connection: 5.5 miles

#### C. Trail Amenities

Amenities that are available to some degree along existing trails are parking areas, restroom facilities, water fountains, benches, bike racks, mile markers, and trail maps. These all add to the enjoyment and usefulness of the multi-use trails and should be included in trail expansion efforts. Also helpful to trail users would be directional signs to goods and services easily accessed from the trail. These could be tastefully designed and funded by local businesses.







#### VII. THE ROUTE 66 TRAIL

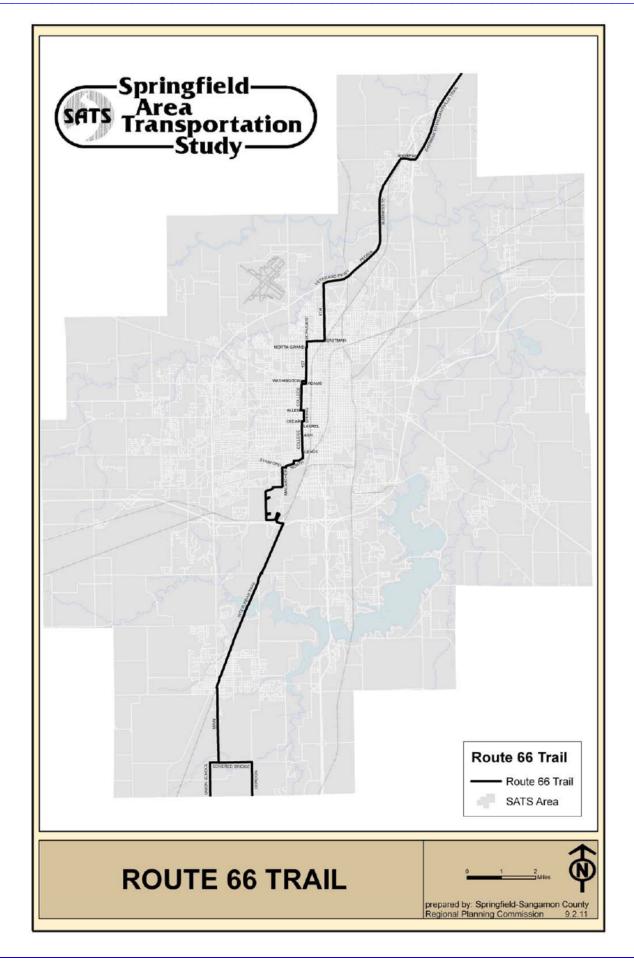
In 2010 the Route 66 Trail Executive Council, facilitated by the Illinois Department of Natural Resources, finalized a concept plan establishing the vision of a recreational and learning experience for non-motorized travel along the historic Route 66 highway in Illinois. A continuous 430-mile trail has been designated from Chicago to St. Louis along on-road and off-road corridors, as close to the historic road as feasible. The trail route enters Sangamon County at Williamsville; continues through Sherman, Springfield, and Chatham; then splits south of Chatham to provide the opportunity of exiting the County either through Divernon or Auburn. Once completed, the Sangamon Valley Trail will be used as an alternative route through the County. A map of the Route 66 Trail is shown on the next page.

In December 2010 the Adventure Cycling Association announced a new initiative to promote biking Route 66, recognizing there are bicyclists from across the globe who are drawn to ride this historic highway. Illinois is the first state to have a designated Route 66 trail with a brochure providing specific route directions including nearby attractions and accommodations. Bike tours are offered along the entire length of Route 66, and for many the logical starting point is Chicago. Local support and promotion of the trail creates a defined, safe, and welcoming experience for these travelers. Once here they can take advantage of the many services and tourist attractions that we have to offer. Communities in the MPA recognize this and look to implement suggestions in the Route 66 Trail Concept Plan.

The Route 66 Trail Concept Plan was created as a general guide for the entire trail corridor with communities encouraged to "undertake development and management actions that best serve their areas". Improvements recommended for Sangamon County include:

Route 66 Trail Concept Plan	SATS Bicycle/Pedestrian Way Plan
Route 66 Trail signs placed along the trail corridor	Sherman and Chatham will install these signs
Williamsville to Sherman Trail – construction	Included in Plan
Business 55/Veterans Parkway in Sherman and Springfield – sidepaths	Paved shoulders
8 <sup>th</sup> , Eastman, 1 <sup>st</sup> , Spring, and College Streets in	8 <sup>th</sup> – Wayfinding signs/Bike lanes
Springfield – striping	Eastman – Combined bike/parking lanes &
	wayfinding signs
	1 <sup>st</sup> – Not in Plan
	Spring – Not in Plan
	College – Not in Plan
North Street in Springfield – shoulders or bike	Paved shoulders
lanes	1 avea siloulaers
Main Street in Chatham – shoulders or bike lanes	Shared Lane Markings/Bike Lanes
Sangamon Valley Trail – construction	Included in Plan





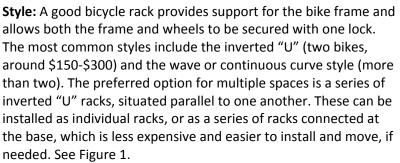


### VIII. ADDRESSING THE NEED FOR BICYCLE PARKING

Secure bicycle parking is a necessary part of a bikeway network, allowing people to use their bikes for transportation and reducing parking in undesirable places. Successful bicycle parking requires a solid bike rack in a safe location in close proximity to desired destinations.

### A. Bicycle Parking Considerations

General bicycle parking considerations are covered below. A good source for more details is *Bicycle Parking Guidelines, 2nd Edition: A*Set of Recommendations from the Association of Pedestrian and Bicycle Professionals. 12



Old-fashioned "school racks," which secure only one wheel, are a poor choice for today's bicycles (Figure 2). Securing both the wheel and frame is difficult, and bicycles are not well supported, sometimes resulting in bent rims.

**Installation:** There are various factors that should be taken into account when installing bicycle racks at specific locations.

The ideal placement for bicycle parking is:

- near main building entrances
- conveniently located
- highly visible
- lit at night
- protected from the weather



Figure 1. Inverted U, single (top) and in a series (bottom)



Figure 2. This style of rack is not recommended.

When placing a bicycle rack in the public right-of-way or in a parking lot, it should:

- be removed from the natural flow of pedestrians
- avoid the curb
- avoid the area adjacent to crosswalks
- be a minimum of 6 feet from other street furniture
- be at least 15 feet away from other features, such as fire hydrants or bus stop shelters

### Additional installation recommendations:

- Anchor racks into a hard surface
- Install racks a minimum of 24" from a parallel wall



- Install 30" from a perpendicular wall (as measured to the closest inverted U.)
- Allow at least 24" beside each parked bicycle for user access, although adjacent bicycles may share this access.
- Provide a 6 feet aisle from the front or rear of a bicycle parked for access to the facility.

#### **B.** Locations for Bike Racks

People using a bicycle for transportation are going to the same locations in our communities as those using motor vehicles. To determine places where bicycle parking already exists and where it would be desirable, seven local bicyclists surveyed the planning area, documenting where they found bicycle racks and locations where they felt bicycle racks would be useful. A summary, by community, follows. Specific findings are presented in Appendix I.

#### **CHATHAM**

Bike racks exist at many key locations including:

- Glenwood High School
- Chatham Middle School
- Chatham Area Library
- Chatham Railroad Museum
- Interurban Trailhead
- Walgreens
- Weber's Ice Deli
- Family Video
- McDonald's

### Locations where bike racks are *suggested*:

- Chatham Middle School Sports Fields and Playground
- Chatham Elementary School
- o Chatham Community Park
- Jaycee Community Park
- West Side Park
- County Market Strip Mall

#### **JEROME**

### Bike racks exist at:

- Jerome Memorial Park
- Food Fantasies

### Locations where bike racks are *suggested*:

- Jerome Municipal Complex
- Shop N Save



### **ROCHESTER**

Bike racks *exist* at many key locations including:

- Community Park
- Lost Bridge Trail several locations
- High School
- Junior High School
- Library
- Winery

Locations where bike racks are suggested:

- o Historic Village
- Lost Bridge Trail Comfort Station
- o Intermediate School

#### **SHERMAN**

Bike racks *exist* at:

- Waldrop Park
- Family Video

Locations where bike racks are suggested:

- o US Post Office
- o Walgreens
- o Dairy Queen
- o Villa Health Care

### **SPRINGFIELD**

Bike racks *exist* at many key locations including:

- Ace Hardware on Wabash
- Administrative Office of Illinois Courts
- American General
- Baskin Robbins on MacArthur
- Benedictine University
- Blue Cross Blue Shield on Liberty Dr.
- Capital City Shopping Center
- CVS, some
- Fairhills Mall
- Family Video Stores
- Fit Club
- Gold's Gym
- Hilton Parking Garage
- Hometown Pantry on Edwards
- Horace Mann
- IDOT Building on Dirksen Parkway
- IDOT Lake Fishing Shelter
- IEPA Building



- Internal Revenue Service on Constitution
- Lanphier High School
- Lincoln Land Community College
- Lincoln Library
- Meijer
- Memorial Health Koke Mill Center
- Memorial Medical Center Complex
- Menards on Dirksen Parkway
- Municipal Center
- Octopharma
- Recycled Records
- Robert Morris University
- Salvation Army on Jefferson
- Sangamon County Building
- Scheels
- Schnucks
- Schools
- Some Parks
- Sonic on Wabash Trail
- Sports Authority
- Spring Creek Complex
- Springfield Clinic-Wabash Medical Center
- Springfield Housing Authority
- Springfield Racquet Club
- St. John's Hospital Complex
- State Office Buildings
- Triangle Center
- UIC Division of Specialized Care for Children
- University of Illinois Springfield
- Wabash Trail East Trailhead
- Walmart on Dirksen Parkway
- Walgreens, some
- White Oaks Mall
- YMCA

# Locations where bike racks are *suggested*:

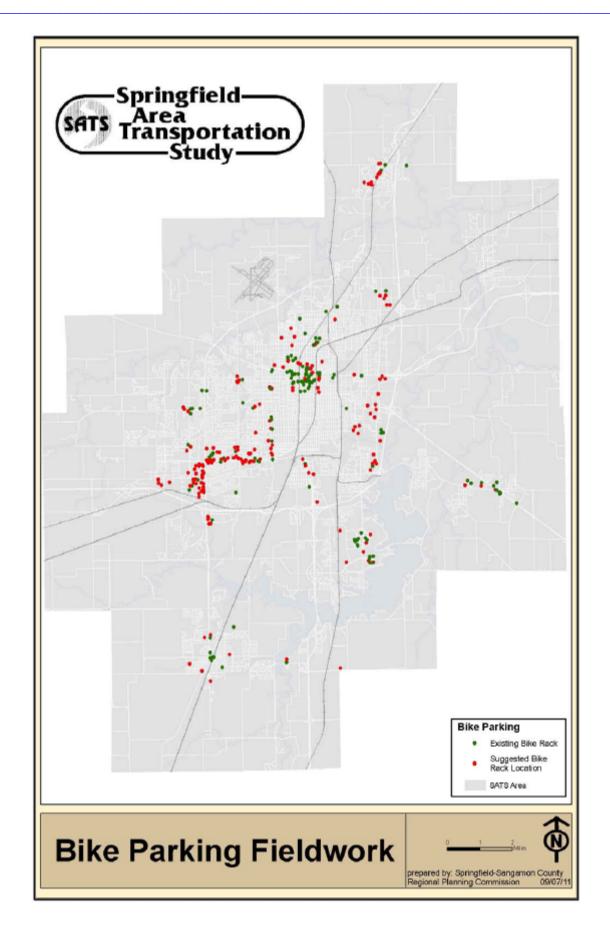
- o All Parks
- Adams Wildlife Sanctuary
- o AT&T
- o Businesses at the west end of the Wabash Trail
- Cardinal Fitness
- o Catholic Charities
- o Colony West Swim Club
- o County Market Strip Mall on South 6<sup>th</sup> Street
- o Golden Corral
- CVS that currently do not have racks



- o GM Package Liquor on South Grand
- Helping Hands
- o Illinois State Museum
- o J.C. Penney
- o Montvale Junction
- o Old State Capitol Plaza
- o Parkway Pointe
- o Sangamon County Department of Public Health
- o Shop N Save on Dirksen
- o Southeast High School
- o Southwest Plaza North
- o Springfield Urban League
- o Town and Country Shopping Center
- o Vinegar Hill Mall
- o Walgreens that currently do not have racks
- o Walmart on South 6<sup>th</sup> Street

**Downtown Springfield:** The Springfield Bicycle Advisory Council has been working with the Springfield Public Works Department to create a bike rack design that is reflective of the City's Lincoln heritage. The racks would be a single U-shape for placement in downtown locations where space is limited, although several could be put together to accommodate multiple bicycles. The racks could also be used anywhere throughout the community.







#### IX. WORKING TO ACHIEVE THE VISION

The Bicycle and Pedestrian Plan lays out a long-term vision for creating communities that are friendly, safe, and efficient for bicyclists and pedestrians. Little by little, project by project, the area will become more "walkable" and "bikeable". Achieving this vision however will take financial resources, community effort, public support, and progress assessment. Implementation strategies are discussed below with emphasis on funding resources, local government action, education, and evaluation.

### A. Financial Strategies

#### **IMPLEMENTATION COSTS**

Recommendations in this plan range from low- or no-cost improvements to major capital investments. Some of the more expensive bicycling and pedestrian improvements can be constructed as part of associated road projects. Some projects, such as striping of bike lanes, would have no additional cost when done as part of a road overlay project. This plan does not provide a cost estimate for each project, but general estimates for the type of projects recommended in this plan are taken from the Pedestrian and Bicycle Information Center website, as shown below. The cost of a project can depend upon a myriad of factors: the estimates from the Pedestrian and Bicycle Information Center provide an indication of the level of expenditure associated with particular types of projects.

- Signed Bike Routes and Shared Lane Markings: Signs and pavement stencils are less expensive
  than designated bike lanes. Shared lane markings can be done with other roadwork, while sign
  installation can be done at any time.
- **Curb Ramps:** An ADA-compliant textured ramp costs anywhere from \$800 to \$1,500 for either new or retrofitted construction.
- **Bike Lanes (and Combined Bike/Parking Lanes):** The cost of installing bike lanes is approximately \$5,000 to \$50,000 per mile, depending on the condition of the pavement, the need to remove and repaint the lane lines, the need to adjust signalization, and other factors. It is most cost-efficient to create bicycle lanes during street reconstruction, street resurfacing, or at the time of original construction.
- Raised Medians: Project context and design variation contribute to widely ranging costs for raised median construction. Coupling median construction with roadway or utility projects can help reduce costs significantly. Typical raised median construction runs anywhere from \$15,000 to \$30,000 per 100 feet.
- Trail or Sidepath: The cost of developing trails varies according to land acquisition costs, new structures needed, the type of trail surface, the width of the trail, and the facilities that are provided for trail users. Construction costs alone can run \$40,000 per mile for a soft surface trail to more than \$1,000,000 per mile in an urban area for a paved trail.
- **Sidewalks:** Typical costs for sidewalk to be constructed on both sides of a street can vary between around \$150,000 to \$250,000 per mile. Important considerations that can raise costs are the



existence of right-of-way, the number of driveway or roadway crossings requiring ramps or landing areas, and the presence of curb and gutter.

#### **FUNDING SOURCES – LOCAL RESOURCES**

Implementing agencies may dedicate a portion of their annual budget for development of the bicycle and priority pedestrian networks. One strategy could entail a smaller first-year budget for the highest priority projects as a way to build momentum for following years. Projects in this Plan can be incorporated into other municipal ordinances to be implemented opportunistically when a new residential subdivision or commercial development is undertaken.

#### **FUNDING SOURCES – GRANT OPPORTUNITIES**

An agency may find it easier, faster, and perhaps even less expensive to fund the Plan's lower-cost improvements internally. But, larger cost improvements may require external funding. Some of the most commonly used funding sources for bicycle and pedestrian projects are listed below. The funding landscape is always evolving, and is dependent on federal and state legislation. The League of Illinois Bicyclists' website (<a href="https://www.bikelib.org">www.bikelib.org</a>) keeps an updated list of these funding opportunities.

### • Illinois Transportation Enhancements Program (ITEP)

- Federal source with 80% federal/state, 20% local cost shares.
- Administered by IDOT. Irregular application cycle averaging every two years.
- Overall historical average of \$12 million per year in Illinois for bikeway projects, but widely varying including \$49 million in October, 2010.
- Very high demand to supply ratio (averaging 8:1).
- Emphasis on transportation potential and inclusion in a larger, officially-adopted plan.
- A number of jurisdictions in the SATS area have received ITEP funding for projects that will benefit pedestrians and bicyclists, including the Sangamon Valley Trail, the Sherman to Williamsville Trail, and the Plummer Boulevard Trail.

With more stringent federal engineering standards and long review processes, this source is better suited for larger (\$400K to \$1M+) bikeway projects and those requiring substantial engineering work, such as bridges.

#### • Illinois State Bike Grant Program

- > State source with 50% state, 50% local cost shares.
- > Reimbursement grant administered annually (March 1) by IDNR.
- Averages \$2.5 million per year, with a \$200,000 limit (except for land acquisition projects). However, the program was put on hold for 2008-2012 due to the State's financial crisis.
- > Typically a 2:1 ratio of applications to grants.
- Only off-road trails and bikeways are eligible.

Much simpler process and standards as these remain local, not IDOT, projects. Good for simpler projects and those that can easily be phased. Many agencies prefer these over ITEP, even though the cost share is higher, due to less grant administrative burden, lower project costs, and faster implementation.



### • Recreational Trails Program

- Federal source with 80% federal/state, 20% local cost shares.
- Administered by IDNR with IDOT. Annual March 1 deadline. Long delays between application and grants, in recent years.
- > \$1-2 million per year. About half is dedicated for non-motorized, off-road trails emphasizing underserved user groups. \$200,000 limit (except for land acquisition projects).
- Much less competitive, with application demand usually not much more than grant supply.
- In addition to government agencies, non-profit organizations may apply.

This has been an underutilized source. Trails serving other user groups (equestrian, hiking, cross-country ski, snowmobile) get priority, so including these uses will increase chances for funding. A good target range is \$100-200K.

## • Illinois Safe Routes to School Program

- Federal source paid entirely (100%) by federal/state, with no local cost share.
- Administered by IDOT. Grant cycles have been held once every 1-2 years.
- Usually \$7 million per year; reimbursement grants.
- > 70-90% of program funds are for infrastructure projects within two miles of schools serving any K-8 grades, with an application maximum of \$250,000 for up to three projects.
- ➤ 10-30% of program funds are for education and encouragement programs for the same grades, with an application maximum of \$100,000 for up to three projects. Schools, school districts, and non-profits may also apply for these non-infrastructure funds.
- ➤ Demand to supply ratio was 10:1 in 2007 and then 2:1 in 2008 and 2010, when current application maxima were adopted. Non-infrastructure grants are much less competitive.
- Preparation of IDOT's on-line "School Travel Plan" is a prerequisite for grant applications.

Many of this plan's recommendations are eligible for this funding source. Geographic diversity in grant selections gives the Springfield area an advantage.

### Community Development Block Grants

While not specifically a transportation program, the community development block grant program through the Department of Housing and Urban Development can be used to fund projects such as streetscape projects, sidewalk improvements, and safe routes to school projects.

#### Non-Government Sources

The following non-governmental sources are all potential funding partners, particularly for high profile projects and projects that directly impact them. Many organizations, such the Robert Wood Johnson Foundation, are committing resources to projects that promote public health.

- Private foundations
- Private and non-profit environmental land trusts
- Local businesses
- Local citizen groups and individual donors
- Developers



## **B.** Community Strategies

### **COMMITTEE OR STAFF TIME**

Perhaps the most important implementation strategy is the dedication of some fraction of a community staff member's time as the bicycle and pedestrian coordinator. This individual would work on plan implementation projects and other active transportation issues. Also, the coordinator would regularly collaborate with other staff and relevant agencies to ensure their efforts conform to the goals of the Plan. The routine review of development plans and road project designs would be an important component of this work.

In addition, agencies should consider establishing an on-going Bicycle and Pedestrian Advisory Committee (BPAC), consisting of appropriate staff and a range of bicyclist and pedestrian users. Recently, the Springfield Bicycle Advisory Council has been established as a City commission. Communities with years of BPAC commission experience, such as Naperville and Urbana, have found that volunteer involvement by a few energetic, knowledgeable, and dedicated residents can greatly enhance their staff time investment. Organizing regular meetings with the advisory committee can also be an effective way to keep up momentum.

#### **TECHNICAL RESOURCES AND TRAINING**

The staff person or persons in charge of plan implementation should have access to up to date resources to help with the details of design and implementation. In addition to adding the printed resources listed in Appendix A to the staff library, seeking out opportunities to participate in webinars and workshops on best practices is encouraged. Not only do these events provide useful information, they are an opportunity to interact with other planners and engineers grappling with similar issues.

### **MULTI-YEAR WORK PLAN**

This plan recommends a variety of strategies that range from adopting policies, to coordinating with other agencies, to quickly implementing "high priority, ready to go" projects. One of the first steps of plan implementation for each relevant agency should be to consider the listed recommendations in their jurisdiction and draft a five year work plan. Projects that do not get completed in a given year move into a future year's work plan. Dividing plan implementation across a span of years makes it more manageable, especially in terms of funding.

#### **SATS PLANS**

SATS develops a Transportation Improvement Program each year, which details federally-funded, planned transportation projects for the next four years. SATS also creates a Long-Range Transportation Plan that presents recommended transportation projects for a 25-year period. The development of these plans includes many opportunities for public review and input. Each plan also includes information on any planned bicycling and pedestrian facilities.

# **ORDINANCES AND POLICIES**

Community ordinances and policies can provide guidelines to ensure new developments contribute to the Plan's goals. Here are some sample guidelines:

Developments shall contribute to the [local agency's] efforts to become more pedestrian and bicycle friendly. This includes:



- Considering bicycle and pedestrian traffic and facilities during the traffic impact analysis process.
- Installing sidewalks and bikeways as part of any required roadway improvements, per the recommendations in Appendix B, and consulting the SATS Bicycle and Pedestrian Plan and Long Range Transportation Plan for specifically-defined bikeway improvements.
- Installing sidewalks (with a minimum preferred width of 5 feet) according to the FHWA New Sidewalk installation guidelines shown in Appendix B.
- Considering pedestrian and bicycle access within the development as well as connections to adjacent properties.
- Considering connectivity between developments for pedestrians and bicyclists to minimize shortdistance trips by motor vehicles. These can be provided as "cut through" easements in suburban cul-de-sac developments and as part of connected street grids in traditional neighborhood development.
- Building out pedestrian and bicycle facilities concurrent with road construction, or in an otherwise timely manner, to prevent gaps due to undeveloped parcels.

Other policies and ordinances may be adopted by municipalities in the Metropolitan Planning Area to make adequate bicycle and pedestrian accommodation part of standard practice for any improvement in town. The University of Albany provides simple and specific policy text<sup>13</sup> appropriate for:

- The community comprehensive plan
- Subdivision regulations and site plan review
- Zoning laws
- School board policy on Safe Routes to School

The bicycle parking section of this plan suggests modifying the parking development ordinance to include bicycle racks.

#### **MAINTENANCE**

Bicycle and pedestrian facilities do need regular maintenance which requires equipment that some municipalities may not possess. Opportunities for communities to cooperatively purchase or share costly equipment such as sweepers should be explored.

### C. Educational Strategies

Development of this plan was recommended by a citizens' advisory committee and has seen strong interest from the biking and walking public, both important indicators of community support. The provision of interconnected bicycling facilities and creation of a priority pedestrian network, however, is a new concept for the SATS communities and their citizens. Education of the users of these accommodations and the driving public is crucial to improving real and perceived bicycling and walking safety in the SATS planning area. Several educational strategies are proposed to help create a safe, integrated transportation system.

**Bicyclists:** Distribute safety materials, such as the following, through schools and PTAs, at public places such as city halls and libraries, and on municipal and park district websites:

- *Kids on Bikes in Illinois* (www.dot.state.il.us/bikemap/kidsonbikes/cover.pdf), a free pamphlet from IDOT's Division of Traffic Safety.
- League of Illinois Bicyclists' single-page summaries for children and their parents at <a href="http://www.bikelib.org/safety-education/kids/bike-safety-sheet/">http://www.bikelib.org/safety-education/kids/bike-safety-sheet/</a>.
- Safe Bicycling in Illinois (<u>www.dot.state.il.us/bikemap/safekids/cover.pdf</u>), a free booklet directed to teens and adults, from IDOT Traffic Safety.



• *Bicycle Rules of the Road*, a free guide from the Illinois Secretary of State: <a href="http://www.sos.state.il.us/publications/pdf">http://www.sos.state.il.us/publications/pdf</a> publications/dsd a143.pdf .

Other resources for kids and adults are listed at <a href="http://www.bikelib.org/safety-education">http://www.bikelib.org/safety-education</a>. These range from bike safety classes to videos and also include a bike rodeo guide. Additionally, grant funding for grades K-8 education programs is available from the Illinois Safe Routes to School program.

**Pedestrians:** Emphasize pedestrian safety in new project media releases and events. Add pedestrian safety information to existing maps and fact sheets. Target safety campaigns at older adults, children, and other higher risk populations. Engage schools, parent groups, and senior centers to help communicate safety information and market safety events. Some resources for programs to assist in pedestrian education efforts follow.

- Pedestrian Safety Program from the U.S DOT, Federal Highway Administration
   (<a href="http://safety.fhwa.dot.gov/local\_rural/pedcampaign/">http://safety.fhwa.dot.gov/local\_rural/pedcampaign/</a>), Features a complete guide on establishing a pedestrian safety coalition and includes an extensive set of outreach materials.
- Pedestrian Safety Workshop (<a href="http://www.rsa.unc.edu/psw/">http://www.rsa.unc.edu/psw/</a>), web-based training modules focusing on safety issues for older pedestrians.
- National Center for Safe Routes to School Online Guide: Education
   (http://guide.saferoutesinfo.org/education/index.cfm ), Education strategies towards children covering both pedestrian and bicycle travel.

**Motorists:** Educate motorists on sharing the road with bicyclists and avoiding common mistakes that lead to collisions with bicyclists and pedestrians. Include a link to the League of Illinois Bicyclists' "Share the Road: Same Road, Same Rights, Same Rules" video (<a href="http://www.bikelib.org/safety-education/motorists/driver-education">http://www.bikelib.org/safety-education/motorists/driver-education</a> and available as a DVD) on municipal websites. Show the video on Access 4 and Channel 18, especially during the warmer months, and encourage local high schools and private driver education programs to include the video and other materials from LIB's driver education lesson plan, which include a road rage case study for classroom discussion.

Short articles meant to educate the public on bicycling safety issues are available on the League of Illinois Bicyclists website. These are suitable for newspapers, newsletters, and websites. Pedestrian outreach materials, including press releases, newspaper articles, television public service announcements, brochures, posters, and radio announcements can be found at the Federal Highway Administration Pedestrian Safety Program website listed above.

# **D. Encouragement Strategies**

Suggestions for encouraging visitors or residents to explore the area by bicycle include:

- Work with the League of Illinois Bicyclists to update and distribute its *Springfield Metro Area Bicycle Map* as more of the bikeway network is developed. Local businesses may sponsor the map.
- Work with area tourist destinations, particularly historical sites, to create a Walking History map showing walkable routes that connect related tourist attractions.
- Continue the successful Curb Your Car During Bike to Work Week event each spring to encourage biking, walking, and other forms of active transportation.
- Work with school districts to observe International Walk and Bike to School Day, the first Wednesday of each October.



 Promote the Springfield area as being pedestrian and bicyclist-friendly in its advertising and tourism outreach.

# E. Enforcement Strategies

A vital component of a safe pedestrian and bicycling environment is law enforcement with education to reduce car-bike and car-pedestrian collisions. According to Illinois law, bicycles have both the rights and responsibilities of other vehicle users. Many bicyclists do not know about the law as it applies to bicycles, and how following the law leads to safe cycling. Other cyclists ignore the law while riding in traffic, not only creating dangerous situations but also causing motorist resentment toward other cyclists trying to share the road safely. Police are encouraged to stop cyclists if the situation dictates, to provide information and to issue warning citations or tickets when appropriate. Resources include Illinois bike law cards and sample warning citations from the League of Illinois Bicyclists. See <a href="https://www.bikelib.org/safety-education/enforcement-resources">www.bikelib.org/safety-education/enforcement-resources</a>

Police are encouraged to learn enforcement techniques that help ensure safer roads for bicycling. The League of Illinois Bicyclists offers a Safe Roads for Bicycling police training presentation, including the video referenced above: "Share the Road: Same Road, Same Rights, Same Rules" (<a href="www.bikelib.org/safety-education/motorists/driver-education">www.bikelib.org/safety-education/motorists/driver-education</a> and available as a DVD).

Many people believe pedestrians have the right of way any time they cross a roadway. This is not the case. In order to have right of way, pedestrians must cross at an intersection or crosswalk and not present an immediate hazard. Drivers also bear responsibility for pedestrian safety and must exercise due care to avoid hitting a pedestrian.

# F. Evaluation Strategies

The four goals of this plan include a number of objectives, or activities, to help meet the goal. Each objective has an associated performance measure, or measures, to track the implementation of the objectives in a quantifiable way. At the end of each fiscal year, with assistance from plan participants, SATS staff will prepare a progress report on plan implementation. This report will be presented to SATS, plan participants, and the public.

As part of the long-term vision for the transportation system the Bicycle and Pedestrian Plan will become integrated into the SATS Long Range Transportation Plan and be updated on the same 5-year cycle.

A potential result of plan implementation is official designation as a "Bicycle Friendly Community". This national League of American Bicyclists award program has Honorable Mention, Bronze, Silver, Gold, and Platinum gradations. Winning designation is not easy, in fact; only Schaumburg, Chicago, Naperville, and Urbana have reached at least Bronze status in Illinois. However, the proposals in this plan encompass most of the award criteria.





### **APPENDIX A**

## **Technical Resources**

## **Manuals and Guidelines**

- AASHTO Guide for the Development of Bicycle Facilities, 3rd Edition, 1999 (new edition expected in the near future) available at <a href="https://www.transportation.org">www.transportation.org</a>
- AASHTO Guide for the Planning, Design, and Operation of Pedestrian Facilities, 2004, available at <a href="https://bookstore.transportation.org/item">https://bookstore.transportation.org/item</a> details.aspx?id=119
- Accessible Rights-of-Way: A Design Guide, 1999 (new version draft currently under public review), available at <a href="http://www.access-board.gov/prowac/guide/PROWGuide.htm">http://www.access-board.gov/prowac/guide/PROWGuide.htm</a>
- Bicycle Parking Guidelines, 2nd Edition: A Set of Recommendations from the Association of Pedestrian and Bicycle Professionals, 2010, available at <a href="https://www.apbp.org">www.apbp.org</a>.
- Manual on Uniform Traffic Control Devices, 2009, available at <a href="http://mutcd.fhwa.dot.gov/">http://mutcd.fhwa.dot.gov/</a>
- Designing Walkable Urban Thoroughfares: A Context Sensitive Approach, an ITE Recommended Practice, 2010, available at <a href="http://www.ite.org/emodules/scriptcontent/Orders/ProductDetail.cfm?pc=RP-036A-E">http://www.ite.org/emodules/scriptcontent/Orders/ProductDetail.cfm?pc=RP-036A-E</a>

# **Professional Organizations**

- The Pedestrian and Bicycle Information Center: Offers a wealth of information on engineering, encouragement, education and enforcement, including archived webinars and quarterly newsletters: <a href="https://www.pedbikeinfo.org">www.pedbikeinfo.org</a>
- The Association of Pedestrian and Bicycle Professionals: provides continuing education, technical resources and an online forum for exchanging questions and ideas. www.apbp.org
- League of Illinois Bicyclists: A planning and advocacy resource, with many on-line materials focused on best practices nationally as well as issues unique to Illinois: <a href="www.bikelib.org">www.bikelib.org</a>
- U.S. Department of Transportation: Federal Highway Administration, Bicycle and Pedestrian Program website. <a href="http://www.fhwa.dot.gov/environment/bikeped/index.htm">http://www.fhwa.dot.gov/environment/bikeped/index.htm</a>
- America Walks: A walking advocacy group who, in partnership with the National Center for Safe Routes to School, provides SRTS information and webinars. <a href="http://americawalks.org/programs/srts/">http://americawalks.org/programs/srts/</a>





# **APPENDIX B**

# Design Standards for Sidewalks and Bicycle Accommodations

By developing this Plan, SATS and the Steering Committee have established improvement recommendations for bicycle and pedestrian facilities. However, the SATS Complete Streets Policy Statement seeks to ensure that all road projects—whether or not they are addressed specifically in this plan—consider the needs of all potential travelers. Road design standards are included below to aid in the assessment of projects for meeting the complete streets criteria.

# Federal Highway Administration's Guidelines for New Sidewalk Installation

Roadway Classification and Land Use	Sidewalk Requirements	Future Phasing
Highway - Rural	Minimum 5' shoulders required.	Secure/preserve ROW for future sidewalks.
Highway - Rural/Suburban (less than 1 dwelling unit /acre)	One side preferred. 5' shoulders required.	Secure/preserve ROW for future sidewalks.
Highway - Suburban (1 to 4 dwelling units/acre)	Both sides preferred. One side required.	Second side required if density becomes greater than 4 dwelling units/acre.
Major Arterial - Residential	Both sides required.	
Collector and Minor Arterial - Residential	Both sides required.	5′
Local Street - Residential (less than 1 dwelling unit /acre)	One side preferred. 5' shoulders required.	Secure/preserve ROW for future sidewalks.
Local Street - Residential (1 to 4 dwelling units/acre)	Both sides preferred. One side required.	Second side required if density becomes greater than 4 dwelling units/acre.
Local Street - Residential (more than 4 dwelling units/acre)	Both sides required.	
All Streets - Commercial	Both sides required.	
All Streets - Industrial	Both sides preferred. One side required.	



# **Suggested Bicycle Accommodation in Road Designs**

Minor urban 25-30 mph roads				
No parking Sparse: <10% parking Significant parking				
Local Residential	None	None	None	
(Preferred route)	SLM-4	CBPL	SLM-11	
Minor Collector	None	None	None	
(Preferred route)	SLM-4 (or BL-5*)	CBPL	SLM-11 (or BL-5*)	

Arterial or Major Collector (Urban unless noted)			
	2000-8000 ADT	8000-15000 ADT	Over 15000 ADT
<35 mph	BL-5	BL-5 (or BL-6*)	BL-6 (or SP)**
35-40 mph	BL-5 or SP**	SP (or BL-6)**	SP (or BL-6)**
>40 mph	SP	SP	SP
55 mph rural	SH-4 (or SH-6*)	SH-6 (or SH-8*)	SH-8

(Parentheses) indicate the secondary recommendation, if certain conditions are met.

- \* Indicates the secondary recommendation may be used at the higher ends of a range and/or where the needs are greater
- \*\* As the frequency of crossings (side streets, commercial entrances, driveways) increase, the choice of bike lanes or sidepath moves closer to bike lanes.
- <u>BL-5 or BL-6:</u> Bike Lanes of width 5 or 6 ft, respectively, with pavement stencils and signage per AASHTO. Where there is no parallel on-road parking next to the bike lane, indicate through signage that parking is not permitted in the bike lane.
- <u>CBPL:</u> Combined Bike/Parking Lanes, solid stripes 7' from curb faces. Parking permission indicated with signage. D1 or D11 wayfinding signage preferred as a supplement.
- <u>SH-4, SH-6, or SH-8:</u> Paved shoulders of width 4, 6, or 8 ft, respectively. Any rumble strips should have longitudinal breaks and a minimum 4 ft clear zone for bikes.
- <u>SLM-4:</u> Shared Lane Markings 4' from curb faces. MUTCD D1 or D11 wayfinding signage preferred as a supplement.
- <u>SLM-11:</u> Shared Lane Markings 11' from curb faces (on-street parking present). D1 or D11 wayfinding signage preferred as a supplement.
- <u>SP:</u> Off-road sidepath trail designed per AASHTO, on at least one side of road.



# **Local Sidewalk Development Requirements**

Sidewalk coverage and characteristics vary throughout the MPA in part due to the range of regulations and jurisdictions in the area as well as the timeframe in which an area developed or roads were constructed. Much of the roadway network in the MPA includes adjacent sidewalks. However, there are areas with no sidewalks, sidewalks present on only one side of the street, or sidewalk segments that are incomplete. As sidewalk requirements and accessibility standards have evolved, street crossing designs throughout the area have also changed. For example, some sidewalks do not have curb ramps at road crossings, while those that have ramps do not necessarily meet the current design standards. The table below describes some of the basic sidewalk provisions found in current development ordinances.

Local Jurisdictions' Development Sidewalk Requirements			
Jurisdiction	Required	Width	Ramps
City of Springfield	Both sides for urban street sections. Also for subdivision borders when safety necessitates	4'	IDOT Accessibility Std
Sangamon County	Both sides for urban street sections. Also for subdivision borders when safety necessitates	4'	IDOT Accessibility Std
Village of Chatham	Both sides for subdivision streets and on development side of streets bordering subdivision	4'	Provided ADA example
Village of Jerome	No	N/A	N/A
Village of Rochester	Both sides for residential streets. Other street types are dependent on existing conditions	4'	Not specified
Village of Sherman	For all subdivisions where lot frontage is 75' or less	4'	Not specified
Illinois Dept. of Transportation	Determined by warrants	Suggest 5'	IDOT Accessibility Std





### **APPENDIX C**

# **Guidelines for Bicycle Facility Options**

### **Trails**

Multi-use trails are physically separated from motor vehicle traffic, except at road crossings. Trails accommodate a variety of users, including bicyclists, walkers, runners, and roller-bladers, for both recreation and transportation purposes. Trails away from roads, on easements or their own rights-of-way, tend to be more pleasant and popular. Examples in the SATS area include the Lost Bridge Trail, the Interurban Trail, the Wabash Trail, and the Sangamon Valley Trail.

AASHTO recommends a width of 10 feet for most twoway trails, although conditions may allow for 8 feet or suggest more than 10 feet. While a soft surface such as limestone screenings is an option, bicyclists usually prefer



Multi-use trail.

a hard surface such as asphalt, or concrete (if sawcuts are used to reduce the size of the concrete gaps). The higher cost of concrete may be recovered through reduced maintenance. Particularly for trails longer than a few miles, amenities such as the occasional water fountain, bench, garbage receptacle, and restroom, as well as mile markers, are appreciated and desired by users.

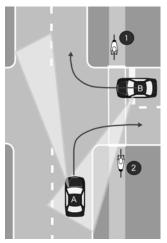


Figure 1. Right turns across sidepaths.

# **Sidepaths**

Sidepaths are trails running immediately parallel to a roadway, essentially a widened sidewalk. The bikeways along East Ash Street and Outer Park Drive are examples. Like other trails, the recommended width is 10 feet, but certain low-use conditions allow for the exception of 8 feet. Away from intersections, the sidepath should be at least 5 feet from the road or have a railing if the buffer is less than 5 feet.

Many believe sidepaths or sidewalks are *always* safer than on-road bicycling. Surprisingly, this is *not* the case where there are many side streets, residential driveways, and commercial entrances – especially for "contra-flow" cyclists biking against the flow of traffic. Figures 1 and 2 illustrate the visibility problems leading to intersection conflicts. Note that in each case, an on-road cyclist on the right side of the road is within the motorist's viewing area.

In Figure 1, Car B crosses the sidepath to turn right onto the parallel street. Rarely do motorists stop at the stopline – usually stops are in the crosswalk or at the street edge. Many do not fully stop. Many will look only to their left. Cyclist 2 might be seen. Cyclist 1 is much less likely to be seen. Car A turns right off the parallel road then crosses the sidepath. Again, Cyclist 2 might be seen but Cyclist 1 is less visible.

4

Figure 2. Left-turns across sidepath.

Particularly where a large turning radius permits fast turns, many motorists do not yield to cyclists entering or already in the crosswalk.



In Figure 2, Car C looks ahead, waiting for a traffic gap to turn left, then accelerates through the turn while crossing the crosswalk. Cyclist 4 might be seen. Again, the contra-flow cyclist (3) is less likely to be seen. If the traffic gap is short, sudden stops would be difficult.

The AASHTO guide describes these and other sidepath issues in discouraging their use in inappropriate locations. This plan considers the feasibility of the sidepath option in specific cases. In general, sidepaths may be better choices than on-road bikeways for faster, busier roads without lots of crossings and with well-designed intersections. Sidepath conflicts can be reduced by:

- Bringing the sidepath closer to the road at intersections, for better visibility during all turning motions and better stopline adherence for right-turners
- Using pedestrian refuge islands to break up major crossings and right-in-right-out entrances right-turn corner islands ("porkchops") are particularly effective
- Using high visibility crosswalks or color differences at commercial entrances, too
- Using bike lane signs
- Occasional police enforcement and publicity of stopline adherence at sidepath crossings

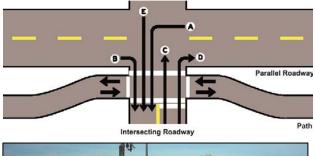






Figure 3. Intersection design methods to reduce sidepath conflicts.

Top left: bringing crossing closer. Bottom left: right-turn refuge islands. Bottom right: warning signage.

# **Bike Lanes**

Bike lanes are portions of the roadway designated for bicyclist use. Bike lanes are between five and six feet wide (including gutter pan) on each side of the road with a white stripe, signage, and white pavement markings. Cyclists in each bike lane travel one-way with the flow of traffic. Parts of Koke Mill Road, 11<sup>th</sup> Street, and Iles Avenue are three of the examples within the Metropolitan Planning Area. Sample results around the country for roads with bike lanes include:

- More predictable movements by both cars and bikes.
- Better cyclist adherence to laws about riding on the right side of the road.
- Dramatic increase in bike usage with lower car-bike crash rates.
- Decreased car-car crashes, possibly from a traffic calming effect.



Parking is not permitted in designated bicycle lanes. When a road has bike lanes and adjacent parking, the bike lanes should be striped between the parking space and the travel lanes. Regular sweeping is important, as bike lanes tend to collect debris.

Adding bike lanes to roads in developed parts of town may require a reduction in the number of lanes and/or narrowing of lane widths. Both treatments are included in this plan, as a last resort where no better bikeway options or alternative routes exist.

"Road diet" reductions in the number of lanes must consider roadway capacity now and with future traffic projections. One common type of road diet reduces lanes from four (two through lanes in each direction) to three (one lane per direction, plus continuous left turn lane). This 4-to-3 road diet provides room for bike lanes while also reducing rear-end crashes for left-turning cars. A conservative upper limit daily traffic count of 10,000 is used in this plan for 4-to-3 road diet recommendations.

Especially on non-truck routes, some of this plan's recommendations call for lane width reductions as low as 10 feet. This is the same width as many other roads – even arterial truck routes – in Springfield currently. The AASHTO "green book" (A Policy on Geometric Design of Highways and Streets) permits lane widths from 10 to 12 feet. The policy states that higher speed, free-flowing principal arterials should use 12 feet, but narrow lane widths are normally adequate and have some advantages for interrupted-flow, low speeds (45 mph or less). Recent studies (e.g., Potts, TRB 2007) agree, finding:

- Accident rates from narrower lanes were either reduced or unchanged (except for 10-feet or less on 4-lane undivided and 9-feet on 4-lane divided), and
- No measurable drop in capacity from 12-ft to 10-ft, all else being equal.

The AASHTO green book's preface further states "the larger values (should be) used where the social, economic, environmental impacts are not critical."



Figure 5. Bike Route signs.

### **Signed Bike Routes**

Some roads may be identified by green signage as preferred bike routes, because of particular advantages to using these routes compared to others. These "signed shared roadways" may be appropriate where there is not enough room or less of a need for dedicated bike lanes. A road does not require a specific geometry to be signed as a Bike Route, providing flexibility. A Bike Route may be striped with white paint, be an unstriped street, or be a road with paved shoulders.

It is recommended to use the updated signage styles available in the *Manual of Uniform Traffic Control Devices (MUTCD)*. Some signs can also provide wayfinding assistance at intersections with supplemental destination plates and arrows placed beneath them. The 2009 version of the MUTCD includes signs that combine bike route designation with wayfinding information. Some Illinois towns have put two or three destinations on a single sign, with mileages. Figure 5 illustrates some examples.

Wayfinding signs are useful throughout the bikeways network, whether along a trail, sidepath, bike lane, or other route. Consult the MUTCD for spacing and placement specifications.



# **Combined Bike/Parking Lanes**

Some residential collector streets with wide lane widths permit on-street parking, but parked cars are sparse – under 10% occupancy, preferably – except perhaps on special occasions ("party-parking"). While this may be an opportunity for dedicated bike lanes, removal of parking on even one side may be politically

infeasible – even though the wider lanes often encourage faster traffic speeds through neighborhoods.

A fallback option is to stripe (white) off 7-8 feet (including gutter pan) for the occasional parked car. This space may be used by bikes, too. Sign the road as a Bike Route, but do not include any designated Bike Lane signage or pavement markings. Cyclists in this space would pass parked cars just as they do on road shoulders and unstriped roads. Benefits include:



Figure 6. Combined Bike/Parking Lanes.

- An increased perception of comfort by the cyclist
- Lower likelihood of the occasional parked car being hit by another car
- The traffic-calming effect of narrower lanes, i.e., slowing car speeds

"Combined Bike/Parking Lanes" allow parking, but Bike Lanes do not. Steps should be taken to avoid confusion. Combined Bike/Parking Lanes should use signage indicating parking permission information. Bike Lanes should use "no parking" signs (where there is no adjacent on-road parking).

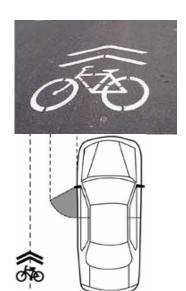


Figure 7. Shared Lane Marking (or "Sharrow").

# **Shared Lane Markings (SLM)**

White pavement markings inform cyclists of optimum lane positioning. Also, markings are more effective than signage alone in reminding drivers of the possibility that they will see a cyclist in the road.

Bicycle positioning on the roadway is key to avoiding crashes with cars turning at intersections and doors opening on parked cars. Figure 7 shows a Shared Lane Marking (or "sharrow"), approved in the MUTCD.

The SLM is used primarily for streets with insufficient width for bike lanes, with speed limits below 40mph. On such roads with significantly occupied onstreet parallel parking, the center of the marking shall be 11 feet (or more) from the curb; with no occupied parking, the center of the marking shall be 4 feet (or more) from the curb. Along diagonal parking, SLMs are recommended to be in the center of the travel lane. The markings should be placed right after an intersection and spaced at intervals of 250 feet thereafter. See MUTCD chapter 9 for more installation guidance, and supplement SLMs with wayfinding signage. Finally, the shared lane marking also can be used where bike lanes or combined bike/parking lanes have been temporarily dropped, perhaps due to turn lanes at intersections.





### **Paved Shoulders**

Besides providing benefits in vehicular safety and extending travel lane pavement life, white-striped paved shoulders make significant rural roads more bicycle-friendly. Several IDOT (e.g., Veterans Parkway, Peoria Road) and Sangamon County (e.g., Woodside/Toronto Roads, Rochester road) highways already have paved shoulders.

Paved shoulders, on both sides of the road, should have a minimum width depending on traffic conditions. IDOT's original bicycle policy provided a good minimum standard,

# used in this plan:

- 4 feet, for daily traffic counts between 1000-2999
- 4-6 feet, for daily traffic over 3000; with 6 feet used where posted speeds are 55 mph or greater, or
   45+ mph in areas with high truck, RV, or bus traffic or where usage by inexperienced bicyclists is
   expected

Where rumble strips are used for vehicular safety, the paved shoulders should be sufficiently wide to provide a minimum 3 feet smooth width (clear zone) to the outside of the rumble strip. Otherwise, cyclists will be unable to use the paved shoulders, often to the (unknowing) consternation of motorists. Similarly, paved shoulders become less useful to cyclists if too much debris collects, leading to flat tires. Occasional sweeping may be necessary.

## **Signal Activation by Bicycles**



Figure 8. Signal activation marking and sign.

Both bicycles and motorcycles have difficulty activating demand-actuated traffic signals. Cars may not be present to trip the signal, or cars may be stopped too far back of a bike. Pedestrian push-button actuation, if present, is often inconveniently located for on-road bikes.

The MUTCD-approved Bicycle Detector Pavement Marking (MUTCD Fig. 9C-7) in Figure 8, together with the R10-22 Bicycle Signal Actuation Sign, can indicate a detector trigger point for actuating the signal. Correct tuning of the detector is needed. Quadrupole loop detectors or new camera detection technology could be used, too, as they are more sensitive to bikes and

motorcycles. Springfield has begun working with camera detection.

It is recommended that such detection be added or retrofitted to any implemented on-road bikeway network segment having demand-actuated traffic signals.





### **APPENDIX D**

# Analysis of Bicycle Accommodations and Connections to Prime Destinations

Maps on the following pages show the location of schools, parks, economic activity centers, and SMTD bus routes in relation to the EBN. A short analysis of each is presented below.

#### **SCHOOLS**

Because on-road biking is not necessarily safe for children, the EBN did not specifically look at connecting schools to those types of bicycle facilities. The map on page 72 shows the proximity of schools to the bicycle network, which does include some sidepaths.

#### **PARKS**

There are 77 parks within the MPA. The following table indicates the number of parks on or near the Envisioned Bicycle Network. Nine outlying parks will be somewhat removed from the connected bicycle network.

Number of Parks	Proximity to Envisioned Bicycle Network
50 (65%)	Adjacent
11 (14%)	Within a ¼ mile

#### **ECONOMIC ACTIVITY CENTERS**

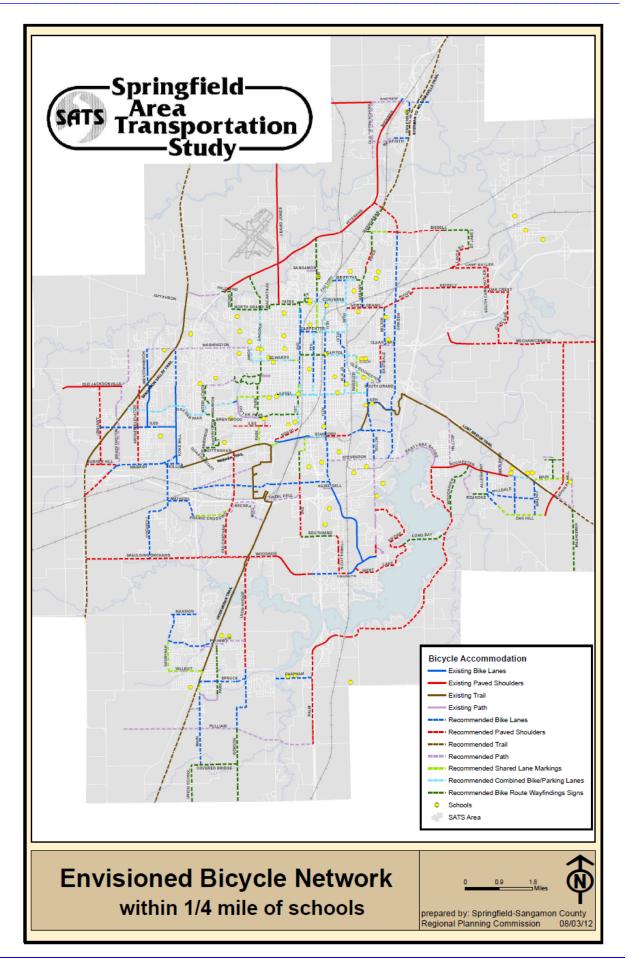
Unlike the Priority Pedestrian Network, very little of the EBN currently exists in proximity to the eight Economic Activity Centers. Bicycle facilites are proposed, however, to serve all EACs.

#### **SPRINGFIELD MASS TRANSIT BUS ROUTES**

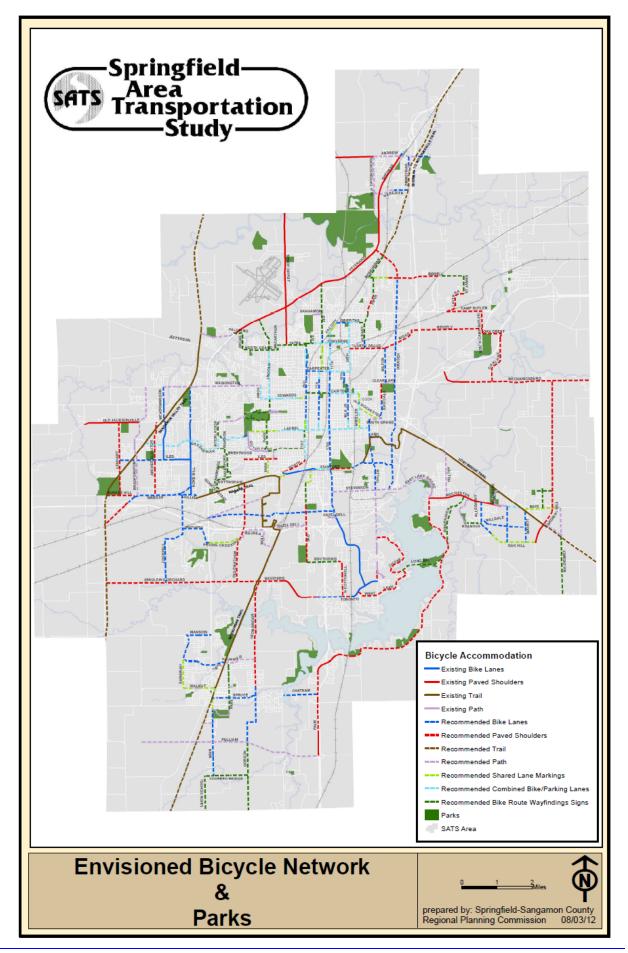
The SMTD has been awarded a grant to have bus racks installed on city buses so connections to the bus routes will provide greater opportunities for travel in Springfield. A successful integration of the bicycling network and transit is very important.

To further illustrate the extensive coverage of the bicycle/transit relationship a map on page 76 shows the ¼ mile buffer around the bus routes which includes almost all of the EBN in the SMTD service area.

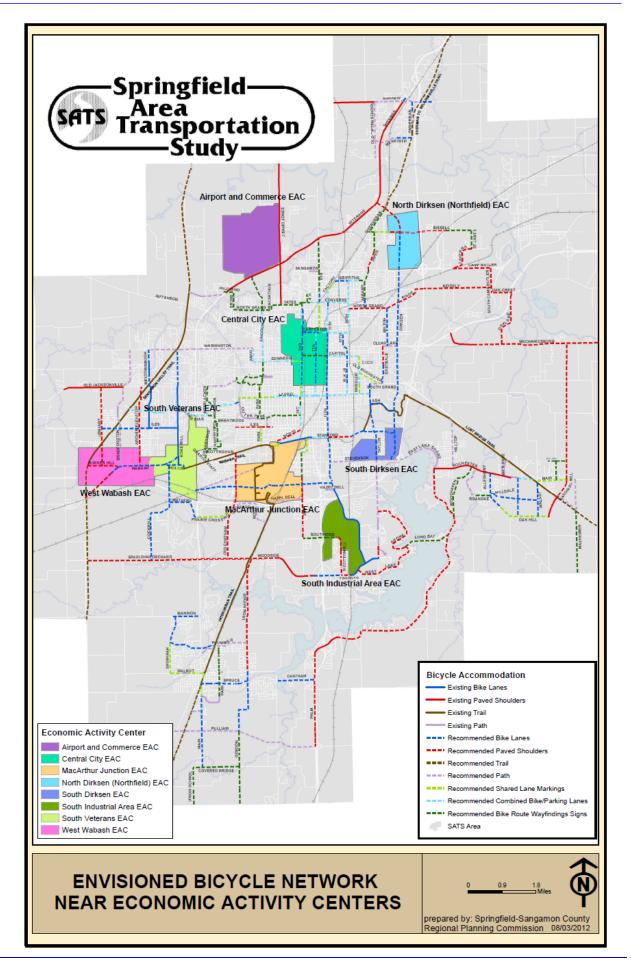




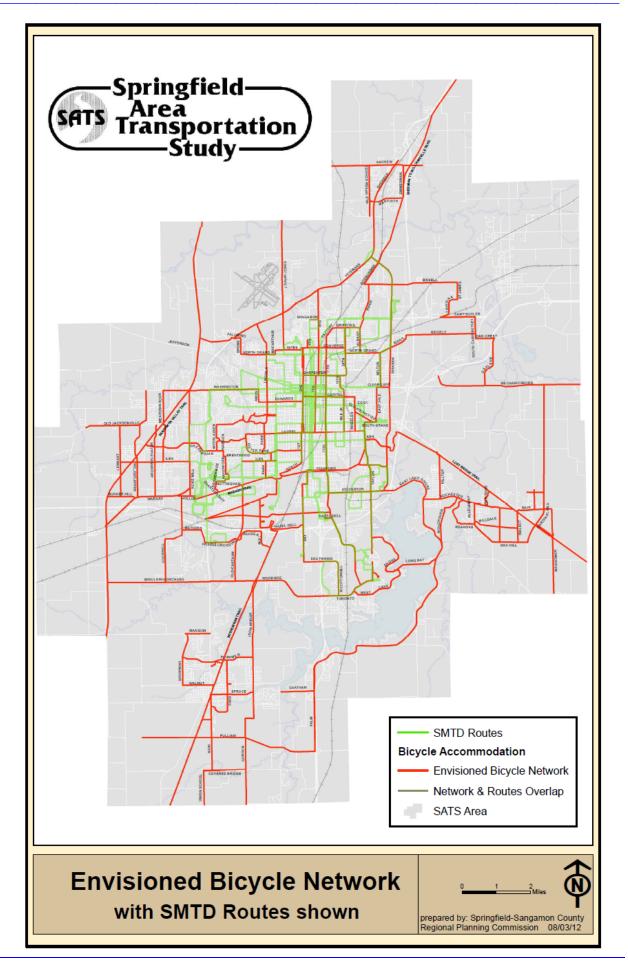




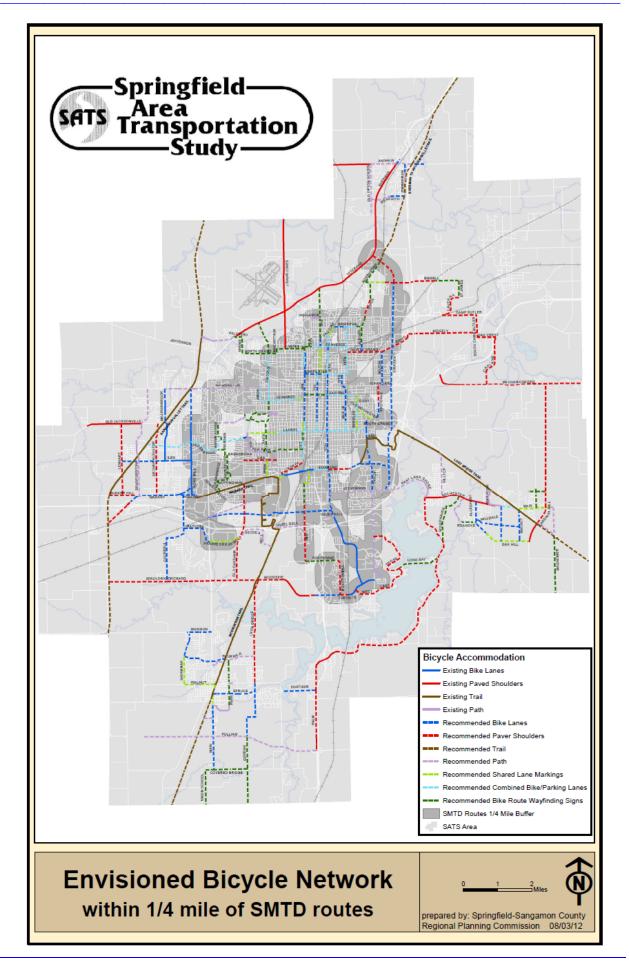














# **APPENDIX E**

# Characteristics of a Priority Pedestrian Network

The application of universal design principles and ADA design guidance will help ensure that everyone; including people with mobility, vision, and hearing issues; can safely travel throughout the PPN. Additionally, because children cannot safely bike on roads with higher traffic volumes and speed they are also considered pedestrians for this Plan.

There are many characteristics that enhance a PPN. Some of these characteristics, such as connectivity and completeness, are vital throughout the network while others are relative to location, such as lighting and benches.

## **Pedestrian Route Characteristics**

#### Sidewalk Width

Adequate sidewalk width is an important pedestrian corridor characteristic, particularly for accommodating people with mobility issues. The Federal Highway Administration (FHWA)<sup>14</sup>, Illinois Department of Transportation (IDOT)<sup>15</sup>, and the Institute of Transportation Engineers (ITE)<sup>16</sup> all support the federal Americans with Disabilities Act (ADA) sidewalk width recommendation of 5 feet. That distance allows for 180-degree wheelchair turning and bi-directional traffic. Local policies and ordinances generally call for 4-foot minimum sidewalk widths where sidewalk is required. Where possible, the PPN should have 5-foot sidewalks on both sides of roadways to allow pedestrian traffic going opposite directions to pass easily. In areas of high pedestrian utilization, wider walkways should be considered. New projects, including planning for needed right-of-way or reconstruction projects, should work to meet this recommendation when PPN routes are involved.



Extra wide sidewalk in busy area



Smooth, well-maintained walkway

## **Sidewalk Condition**

The PPN sidewalks and paths should have a smooth, unbroken, and level surface to accommodate all pedestrians. Changes in level, cracks, gaps, and vegetation can potentially render a sidewalk impassible for some users. Both proper design and effective regular maintenance are necessary for a safe and accessible PPN.

# **Buffer Type**

Sidewalk buffers are the area between the sidewalk and roadway. They provide pedestrians some protection from traffic and make a walkway more desirable. Tree-lined buffers also can provide relief from weather conditions such as intense sun and rain if a tree's canopy provides coverage over the sidewalk. However, damage to sidewalks by root structures is a common problem as trees mature. Any trees in buffers should be properly selected



Tree-lined buffer with adequate space and drainage



and spaced to allow for long-term growth that maintains the sidewalk's integrity. As the PPN develops, projects should consider the best options for providing a buffer to separate pedestrians from street traffic and to provide a safe and pleasant walking route.



Poor sign placement forces users onto street or grassy bank

### **Obstructions**

Obstructions can be temporary or permanent. Overgrown vegetation is the leading type of temporary obstruction. Parked cars and garbage cans are other common temporary obstructions. An effective maintenance program and local ordinances can reduce temporary obstructions. Maintenance and clearing of the PPN is vital and should be emphasized. Permanent obstructions, such as signs and poles, should be identified and removal options evaluated along the PPN.

### Connectivity

Connectivity is a measure of the number of connections between individual sidewalk segments. An interconnected sidewalk network provides smooth transitions across roadways. Robust pedestrian networks have high connectivity, indicating a relatively large number of pedestrian route options and reachable destinations. Having sidewalks on both sides of a roadway, when possible, is also



important. Sidewalks on only one side of a street can effectively add two more points of potential conflict with motorized traffic, as well as leave destinations on one side of the street inaccessible to some users. It is essential for the PPN to be interconnected.

## **Continuity (Completeness)**

Continuity indicates a particular sidewalk segment's completeness. Complete sidewalk segments are those without gaps and that extend fully to roadway crossings. They help to ensure that pedestrians have a developed surface along their route, and reduce the likelihood pedestrians will have to travel on roadways. Development ordinances usually have provisions that allow local government to enforce development standards to ensure that sidewalks are completely built in a reasonable amount of time. Gaps in the PPN should be addressed as priority projects.

### **Ramps**

Roadway crossings are critical points for all pedestrians. Sidewalks should have ADA-compliant curb ramps at roadway crossings to provide safe opportunities to cross streets. Integrating the PPN routes into each jurisdiction's ADA compliance plans will help ensure these issues are resolved as funds become available.

Fully accessible detectable ramp



### Lighting

Adequate road or path lighting can be a concern for pedestrians, particularly in alleviating safety concerns and fear of crime when walking in the dark.<sup>17</sup> When sidewalks are included as a part of road projects, they should also be included in the project's lighting considerations. Designs should address whether separate path lighting is needed, particularly for areas where a high degree of enclosure may increase safety concerns, such as underpasses. Those areas in the PPN that have a safety concern, enclosure, or at-grade crossing should be given priority for lighting installation.

### **Benches**

Placing benches along preferred pedestrian routes should be given consideration. For some users, such as elderly pedestrians or people with mobility issues, a place to rest can make an otherwise unfeasible route viable. Routes likely to have higher volumes of these users should be targeted for providing opportunities to rest. Also, benches would improve the viability of some of the longer stretches of the PPN.



Rest opportunity along walkway





### APPENDIX F

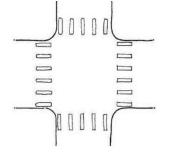
# **Examples of Pedestrian Road Crossing Accommodations**

There are numerous sources of design guidance available to planners and engineers when considering locations where pedestrian and vehicular traffic intersect (see Appendix A). The following accommodation descriptions are intended to provide general information and guidance regarding commonly found design considerations related to the safety of pedestrians when crossing roadways. These facilities represent only a subset of the available pedestrian infrastructure and design options that may be applicable to a particular project. Planners and roadway engineers should consider each project's context and review current regulations, design guidance, and research.

## **Crosswalks**

Crosswalks indicate the roadway area designated for pedestrians to cross the street. All streets, regardless of the existence of crosswalk markings, have implied pedestrian crossing areas. However, some crossings require markings to designate the safest pedestrian route to cross traffic. The MUTCD details where

crosswalks should be considered and provides design guidance. The FHWA recommends the continental crosswalk design, also referred to as ladder striping, as research has shown it is the most visible to motorized traffic. They also highly recommend enhancing the crossing with flashers and/or advance warning treatments in advance of the crosswalk. Crosswalks are recommended at all intersections in the PPN to reinforce the significance of the network.





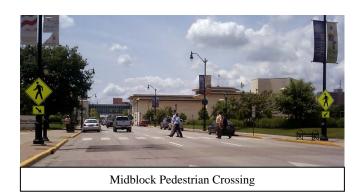
Pedestrian/Bike Tunnel under MacArthur Blvd.

## **Grade separated crossings**

Grade separated crossings enable pedestrians to traverse busy transportation corridors while avoiding non-pedestrian traffic. To benefit pedestrians, the crossing designs should minimize slope, feel open, and be well lit. Lighting and openness is particularly important for underpass design. Where possible, slopes should not exceed the American with Disabilities Act Accessibility Guidelines maximum of 8.33%.

# **Midblock Crossing**

Midblock crossings are designated pedestrian crossing areas between intersections. They provide marked crossings where heavy pedestrian traffic is anticipated. In addition to crosswalk marking and signage to alert drivers, other features, such as curb extensions, signaling devices, raised crossings and audible crossing alerts can enhance midblock crossing safety.





## **Medians**

Medians provide a refuge area between traffic flows on multi-lane roadways, effectively reducing the crossing distance between protected areas. The FHWA recommends raised medians with accessible curb ramps and landing areas on multi-lane roads to increase driver awareness of pedestrians.



# Refuge / Corner Islands

Pedestrian refuge areas between right-turn lanes and through lanes also provide some of the same benefits as medians. However, traffic speeds in right turn lanes



Right Turn Lane Corner Island

should be considered as many right turn lanes are designed to allow drivers to avoid stopping at the intersection. While tighter turn radii and narrower lane widths can limit vehicle speeds, due to

safety issues for pedestrians the FHWA recommends developing alternate solutions to corner islands where possible. If they must be used, corner islands should include detectable warnings, accessible curb ramps, and landing areas.



Bumpout at Washington & 5th

# Neckdowns/Bumpouts/Chokers

These design treatments use curb extensions at some point along the road to narrow the roadway. Chokers occur midblock, neckdowns are used at medians, and bumpouts extend pedestrian areas at intersections. Their benefits include slowing traffic, enhancing pedestrian visibility, and reducing pedestrian crossing distances. Neckdowns also reduce traffic speed by increasing turning radius. When these design elements include landscaping or beautification amenities, the height of these amenities should be kept low enough to assure pedestrians are visible to drivers.

## **Overpasses & Bridges**

Overpasses and bridges should include dedicated pedestrian space for crossing and include either pedestrian rails or guardrails. Where traffic speeds are high, barriers to protect pedestrians from traffic should be considered.

### **Pedestrian Zone Signs**

Pedestrian Zone signs alert motorists to expect pedestrians crossing the roadway. However, an FHWA study found pedestrian zone signs did not have an impact on driver speeds at pedestrian crossings.<sup>18</sup> Thus, to increase driver awareness, it is recommended that pedestrian zone signs be coupled with other measures, such as flashers or in-street crossing signs. In-street crossing signs are placed at non-signalized crossings. Their placement location also may have a minor traffic calming effect.



In-street Pedestrian Zone Signs



Pedestrian Signal with Countdown

## **Pedestrian Crossing Signals**

Pedestrian Signalized Crossings use pedestrian signal heads to alert pedestrians when it is safe to cross the roadway. Signal heads that include walk interval countdowns are particularly informative. For all pedestrian signals, the length of time provided to cross is critical. An assumed "normal" pedestrian rate of 4 ft/second is used within the MUTCD. Research has indicated most pedestrians travel slower than this rate, particularly the elderly and those with mobility issues. The FHWA recommends all crossings consider an assumed rate of 3.5 ft/second and that 2.8 ft/second is applicable where the slower 15<sup>th</sup> percentile of pedestrians is expected to be present.

# **Flashing Signals**

Flashing signals can improve a motorist's ability to recognize pedestrian crossings. There are a number of ways to add flashing signals in a pedestrian design, including flashing signals over the crosswalk, flashing embedded in the crosswalk surface, and flashing pedestrian signs.

### **Actuators**

Pedestrian signal actuators allow pedestrians to request pedestrian signal phasing via a pushbutton near the crossing. They are placed at intersections where full-time pedestrian signal phasing is not needed. Accessibility is a key issue with actuator design and placement.



The latest accessibility guidance should be consulted for new construction or retrofit projects.

## **Audible signal**

Audible signals include tones or verbal messages that provide pedestrians with audible alerts. These can include confirmation of pedestrian signal actuator buttons, indication of the current pedestrian signal phase (walk interval, pedestrian clearance interval, or pedestrian change interval), and indication of pushbutton location or directional information on crossing location. Audible signals are an accessible pedestrian signal feature, along with vibrotactile indicators. These features are normally installed upon request and for a specific route of travel for pedestrians who are blind or visually impaired.





# APPENDIX G

# Sidewalk Inventory

Several attributes of the existing sidewalk network were gathered in the field to assess those parts of the PPN that already exist. The three characteristics that were identified follow.

### 1. Sidewalk Completeness:

- To document the continuity of existing sidewalk segments. Knowing where gaps exist can identify needed projects.
- To check the connectivity of the proposed network. The existence of curb ramps that slope
  to meet the roadway making sidewalks accessible for wheelchair users was noted.
  Crosswalks and pedestrian signals were also recorded to check if the connection between
  sidewalk segments is safe and comfortable to travel for all users.

### 2. Sidewalk Width:

- To determine the width of existing sidewalks in the priority pedestrian network. This was recorded in two categories, 4 feet or less and greater than 4 feet. This helps to determine whether an adequate sidewalk width for accessibility is available or not.
- To document any permanent obstruction that reduces sidewalk width and usability.

#### 3. Sidewalk Condition:

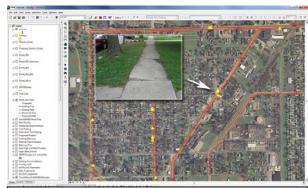
To check the surface condition of the existing sidewalk, including (1) noting where repairs
are needed and (2) checking the surface condition of curb ramps. This helps determine
where we have high-quality pedestrian routes and where we need improvements in order
to provide safe and accessible walking infrastructure for all users.

## I. <u>Data Collection and Mapping</u>

The base GIS map was loaded into the handheld Geographical Positioning System (GPS) unit capable of interacting with the Planning Commission's Geographical Information System (GIS) mapping software to collect the field data. Most data was collected for each segment and was entered directly into the GPS unit.

Approximately 300 pictures were also taken at various places along the PPN to show the range of existing sidewalk conditions. These pictures were mapped at their exact locations and linked to the sidewalk GIS database.





Picture Linked to GIS Map



# II. Sidewalk Survey Key Observations and Findings

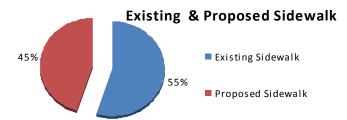
Although characteristics of the sidewalk vary throughout the priority pedestrian network, there are many general observations and findings that were gained from the sidewalk fieldwork. These are analyzed based on the three criteria used for data collection. The discussion that follows looks at sidewalks on each side of a road separately so one mile of roadway with sidewalks on each side would be included as 2 miles of sidewalk. Sidewalk segments (portions of sidewalk between two roadways) are treated the same.

The survey indicates that 243 miles (55%) of sidewalk is currently present within the total 438 miles of sidewalk corridor in the priority pedestrian network. Out of the total 3,458 sidewalk segments of the entire PPN sidewalk network, 2,608 sidewalk segments (75%) were found to be currently present.

Status of Proposed Sidewalk Network	Number of Miles	Percent of Total
Existing Sidewalk	243	55 %
Proposed Sidewalk	195	45 %
Total Sidewalk	438	100%

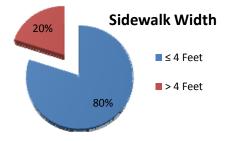


Area with complete sidewalk



#### 1. Sidewalk Width:

Sidewalk guidelines under the Americans with Disabilities Act call for 5 feet of width to accommodate two way travel and the turning radius of a wheelchair. Because current community development regulations call for 4' sidewalks and time was limited, the survey only noted whether the sidewalk segment was or wasn't greater than 4 feet. The survey indicates that a majority (80%) of the sidewalks are 4 feet or less, constituting 194 miles of the total 243 miles of existing sidewalk network. Twenty percent of the existing sidewalks however are wider than 4 feet (usually at least 5 feet) and therefore more pedestrian-friendly.



Sidewalk Width	Number of Miles	Percent of Total
≤ 4 Feet	194	80 %
> 4 Feet	49	20 %
Total Existing	243	100%
Sidewalk	243	10070





## A. Sidewalk Width and Overgrown Grass:

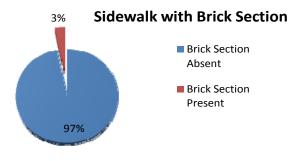
It was observed that in some situations, the available width for passage on a segment was reduced due to overgrown grass and/or brick sections.

When grass is not maintained around a sidewalk not only can the passable area be reduced but sections can uplift causing bad surface condition of the sidewalk.

## B. Brick Sections:

Brick sections have been found at various places although generally in the parts of Springfield that developed many years ago. As bricks have many finer gaps between them, more maintenance is required to remove grass. Moreover, the brick sections are found to be narrower than 4 feet with unlevel surfaces which can make the sidewalk impassable for wheelchair users.

The Survey indicates that 7 miles (3%) of existing sidewalk in the PPN have at least one brick section.



Existence of Brick Section	Number of Miles	Percent of Total
Brick Section	236	97 %
Absent	230	37 /0
Brick Section	7	3 %
Present	,	3 70
Total Existing	243	100%
Sidewalk	243	100/0

# C. <u>Sidewalk Width and Obstructions:</u>

In some places along the PPN temporary and permanent obstructions are found. It was worth recording the nature of some of these obstructions, particularly the permanent obstructions that are a major



concern. At any given time, even a small obstruction can make a sidewalk impassable, particularly for people using wheelchairs.

Permanent Obstructions: Examples include electric poles, signal poles, sign posts, parking meters, benches, extended shop entrances, flower pots etc.

Ten miles (4%) of the total 243 miles of existing sidewalk has at least one permanent obstruction.



Status of Permanent Obstructions	Number of Miles	Percent of Total
Permanent Obstruction Absent	233	96 %
Permanent Obstruction Present	10	4 %
Total Existing Sidewalk	243	100%

#### 2. Sidewalk Condition:

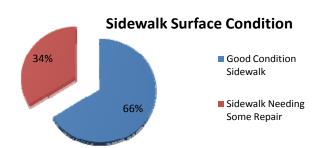
The survey indicates that 24 miles of the PPN are in need of a single repair, 58 miles of sidewalk need more than a single repair, and 161 miles of sidewalk have no damage out of the total 243 miles of existing sidewalk. Out of the total 2,608 existing sidewalk segments, 278 segments (11%) need a single repair, 598 segments (23%) need more than a single repair and 1,732 segments (66%) do not have any damage



Sidewalk Damage	Number of Segments	Percent of Total
Sidewalk Needing One Repair	278	11 %
Sidewalk Needing More Than One Repair	598	23 %
Sidewalk With No Damage	1,732	66 %
Total Existing Sidewalk	2,608	100%

The field data above indicates that a total of 82 miles of sidewalk (34%) needs some repair and 161 miles of sidewalk (66%) has good surface condition out of 243 miles of existing sidewalk.





Condition Status	Number of Miles	Percent of Total	
Good Condition	161	66 %	
Sidewalk	101	00 /0	
Sidewalk Needing	82	34 %	
Some Repair	02	J+ 70	
Total Existing	243	100%	
Sidewalk	243	100%	

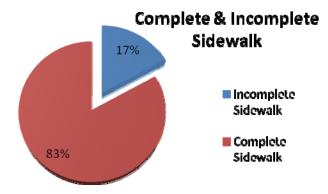
During data gathering some observations were made regarding damage caused to sidewalks.

- Sidewalks can be uplifted by tree roots causing dangerous surface conditions for all users and impassable sections for people using wheelchairs. Temporary patches do not necessarily improve conditions.
- Alley crossings can be problem areas.
- Some curb ramps were found to have bad surface condition, making sidewalks unsafe and inaccessible for users, especially for people using wheelchairs. Gaps in a ramp section tend to fill with grass which, when left to grow, can cause damage and make the ramp unusable.

## 3. Sidewalk Completeness:

## A. Continuity:

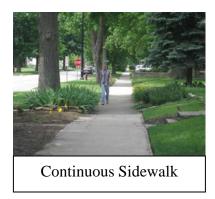
The Survey indicates that within the existing 243 miles of the network 204 miles (84%) include sidewalks that are continuous while 39 miles (16%) have gaps in the middle or do not continue up to the end of the segment. There are 293 sidewalk segments (11%) out of 2,608 existing sidewalk segments that are not continuous in some manner.



Status of Existing	Number	Percent	
Sidewalks	of Miles	of Total	
Incomplete Sidewalk	39	16 %	
Complete Sidewalk	204	84 %	
Total Existing	243	100%	
Sidewalk	243	100%	



It was also observed during the fieldwork that on the incomplete sidewalks people using wheelchairs have great difficulty traveling. They can be forced to be in the road between parked cars and ongoing traffic.





## B. Connectivity

The connectivity and accessibility of the sidewalk network was checked by recording the presence of ramps and crosswalks or pedestrian signals on both ends of a sidewalk segment (between two roadways). While many sidewalks do provide connectivity with accessible ramps, others have been observed with dead ends, steps or curbs. The situations where there are dead ends, segments with no ramps, or steps are totally inaccessible for people using wheelchairs.

It was also found that some segments have curb ramps or crosswalks and pedestrian signals installed in anticipation of sidewalks being built.

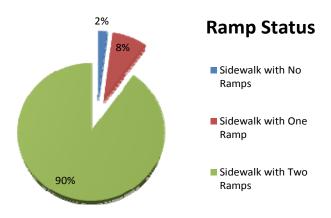




The survey indicated that only 3.5 miles of the 204 miles of complete sidewalks in the PPN were found to have no ramps, crosswalks, or pedestrian signals on either end of the segment. The other 200.5 miles of the complete sidewalk network have a ramp and/or a crosswalk or pedestrian signal on at least one end of the sidewalk segment.

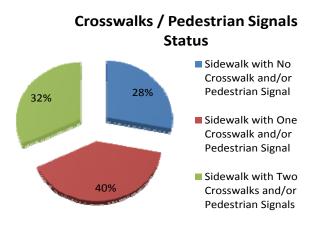
The chart on the next page indicates the presence of ramps in that part of the PPN identified as complete.





Ramp Status	Number of Miles	Percent of Total
Sidewalk with No Ramps	3.5	2 %
Sidewalk with One Ramp	16	8 %
Sidewalk with Two Ramps	184.5	90 %
Total Complete Sidewalk	204	100%

The presence of crosswalks and/or pedestrian signals at the end of each sidewalk segment was also recorded. These are currently most likely to be found on major streets rather than smaller residential streets. The following chart shows the overall status of crosswalks and/or pedestrian signals in that part of the PPN identified as complete.



Crosswalk/Pedestrian	Number	Percent
Signal Status	of Miles	of Total
Sidewalk with No		
Crosswalk and/or	57	28 %
Pedestrian Signal		
Sidewalk with One Crosswalk and/or	81	40 %
Pedestrian Signal		
Sidewalk with Two		
Crosswalks and/or	66	32 %
Pedestrian Signals		
Total Complete Sidewalk	204	100%





## **APPENDIX H**

## Analysis of Pedestrian Accommodations and Connections to Prime Destinations

The following maps show the location of schools, parks, economic activity centers, and SMTD bus routes in relation to the PPN.

### **SCHOOLS**

A main criterion to determine routes in the PPN was schools. The concern of course is to have safe routes for students walking near schools. There are 72 schools within the SATS area. Only 4 schools out of the 72 schools are not in close proximity to the pedestrian network. Three of them are in Riverton and one in rural Chatham. The schools in Riverton are not included as Riverton did not participate in the development of this plan. Of the remaining 68 schools, there are 3 schools that do not have pedestrian routes within their ¼ mile buffer area. Hence, there are a total of 65 schools that have the pedestrian network within their buffer areas. The sidewalk field study shows that there are already 54 schools that have some level of existing pedestrian facilities within their buffer areas whereas 11 schools do not have existing sidewalks but would be served by the builtout PPN within their buffer areas. Overall the map shows that the schools that are located centrally are much better connected within the pedestrian network compared to the schools located farther from the center of communities. The table below shows the details of the schools that are described above.

	School Name	Location	Street Address
Schools	not in close proximity to the pedes	trian network	
1.	Ball Elementary School	Chatham	1015 New City Road
2.	Riverton Elementary School	Riverton	7 <sup>th</sup> & Jefferson
3.	Riverton High School	Riverton	841 N. 3 <sup>rd</sup> Street
4.	Riverton Middle School	Riverton	1014 E. Lincoln Street
School I	ouffers that do not have proposed p	edestrian routes	
1.	Lee School	Springfield	1201 Bunn Ave
2.	Lindsay School	Springfield	3600 Fielding Road
3.	McFarland Center School	Springfield	901 Southwind Road
School I	ouffers that do not have existing rou	ites but have propos	ed pedestrian routes
1.	Concordia Lutheran School	Springfield	2300 Wilshire Road
2.	Dodds Elementary School	Springfield	2630 S. Whittier
3.	Glenwood Elementary School	Chatham	East Plummer Blvd
4.	Glenwood High School	Chatham	1501 East Plummer Blvd
5.	Glenwood Intermediate School	Chatham	465 Chatham Road
6.	Glenwood Middle School	Chatham	595 Chatham Road
7.	Hazel Dell Elementary School	Springfield	850 W. Lake Shore Drive
8.	Jefferson Middle School	Springfield	3001 Allis
9.	Marsh Elementary School	Springfield	1100 Avon Dr.
10.	Rochester Intermediate School	Rochester	Maxheimer Road
11.	The Hope School	Springfield	50 Hazel Lane



### **PARKS**

There are 77 parks of various sizes, types, and settings within the SATS area. Fourteen parks are not in close proximity to the envisioned pedestrian network. These are located near Riverton, in rural Sangamon County, north of the Airport, on Lake Springfield, and a few other locations farther from central areas. Most parks in the central area already have existing pedestrian connections and many others in the outer areas are proposed to have pedestrian access. Out of the 63 parks which are within the pedestrian network, 51 parks already have some pedestrian routes within their buffer areas whereas the other 12 parks do not have any existing network and would be connected by the proposed pedestrian network within their ¼ mile buffer areas.

### **ECONOMIC ACTIVITY CENTERS**

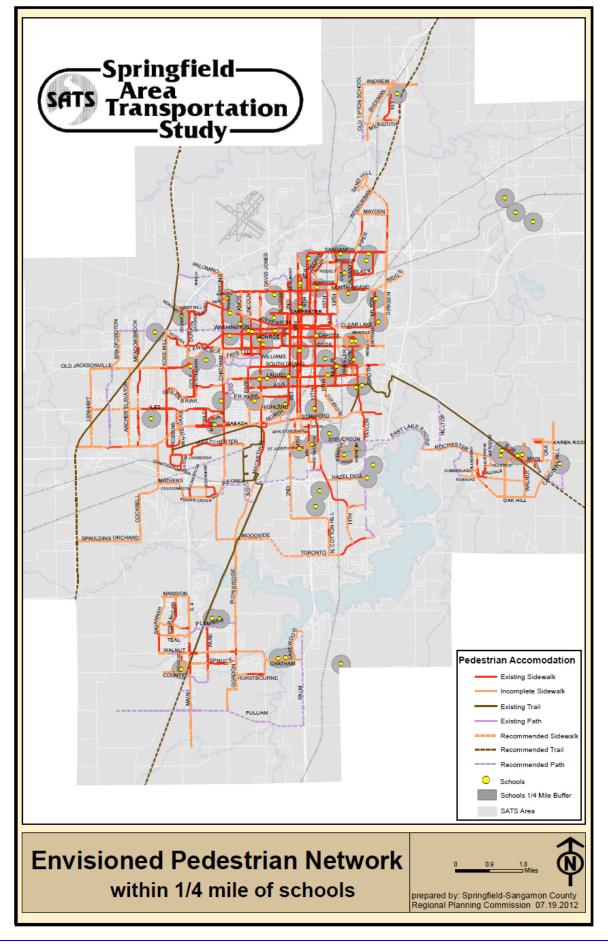
There are eight existing and developing economic activity centers (EACs) identified in the SATS area. These centers are hubs of commerce and job opportunities so connecting pedestrians to these areas is very important. All but one of the EACs are located within the envisioned pedestrian network. The existing entrance to the Airport Commerce Park is located almost 2 miles north of the closest segment of the PPN while the developable area of this EAC is situated north of Veterans Parkway which is not pedestrian friendly. It was not considered feasible to plan for pedestrian access to the area at this time.

The other seven EACs have varying levels of existing pedestrian network as well as additional proposed accommodations. The PPN in the Central City EAC is complete and in good condition along most routes. This is due to its character as the urban core, redevelopment that has occurred around commerce and tourism, and the many major road arteries that traverse the city. The South Veterans in Vicinity of Wabash EAC has a high level of existing pedestrian network because commercial development in the area was subject to City sidewalk requirements. The MacArthur Junction with I-72 EAC has interior PPN corridors built along MacArthur Boulevard and the Interurban Trail although perimeter sidewalks are incomplete or proposed and will be built as development occurs. The South Industrial Area EAC will only be served peripherally by the PPN and does not include direct connections to the core of activity along the northen part of 6<sup>th</sup> Street Frontage Road. The South Dirksen to Stevenson EAC will mainly be served by proposed accommodations along Dirksen Parkway and Stevenson Drive. The North Dirksen (Northfield) and West Wabash EACs have the least existing pedestrian infrastructure even though they are the most recently developed. Adding sidewalks to Dirksen Parkway and Wabash Avenue will go a long way to improving access to these areas.

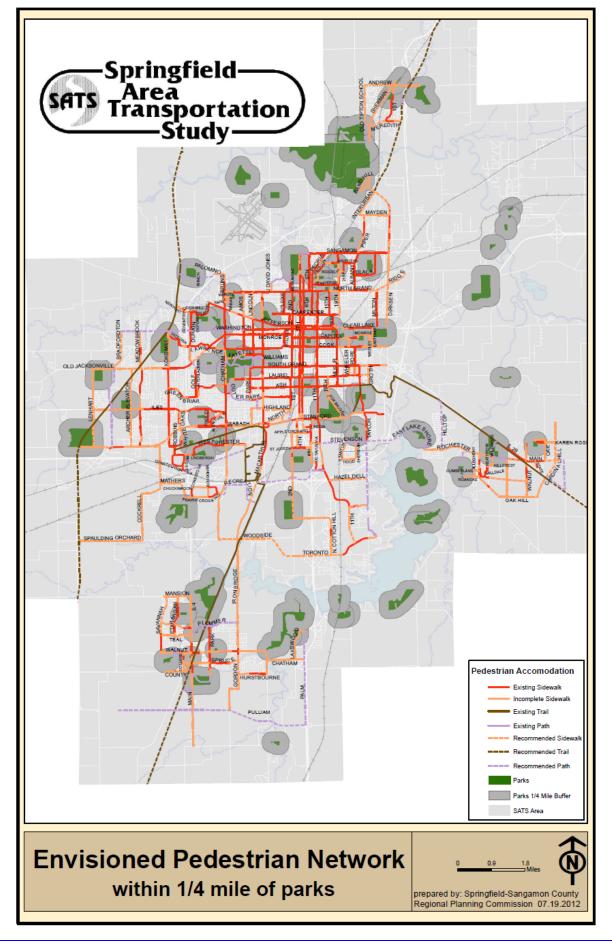
#### SPRINGFIELD MASS TRANSIT BUS ROUTES

The SMTD mainline routes including the day time regular routes, night time routes, historic sites route, and Southwind Park Saturday route are considered in establishing the pedestrian network. (The supplementary service routes are are not considered as they are more subject to change.) The main objective is to provide safe pedestrian access to bus stops. A map on page 98 shows where SMTD routes and the PPN overlap, with most of the routes being well covered. Exceptions are in the downtown area where all bus routes converge using many different roadways. Because there is already a high level of pedestrian connection in the central city access to bus stops here is established and extensive. Other transit corridors, such as Veterans Parkway, are major thoroughfares with no bus stops. And a few bus route segments are not addressed because they are along smaller local roads which do not otherwise fit the criteria for the PPN. The map on page 99 shows the PPN in relation to a ¼ mile buffer around the bus routes which is an industry standard for measuring transit service area. The map shows that the PPN covers a large part of the transit service area.

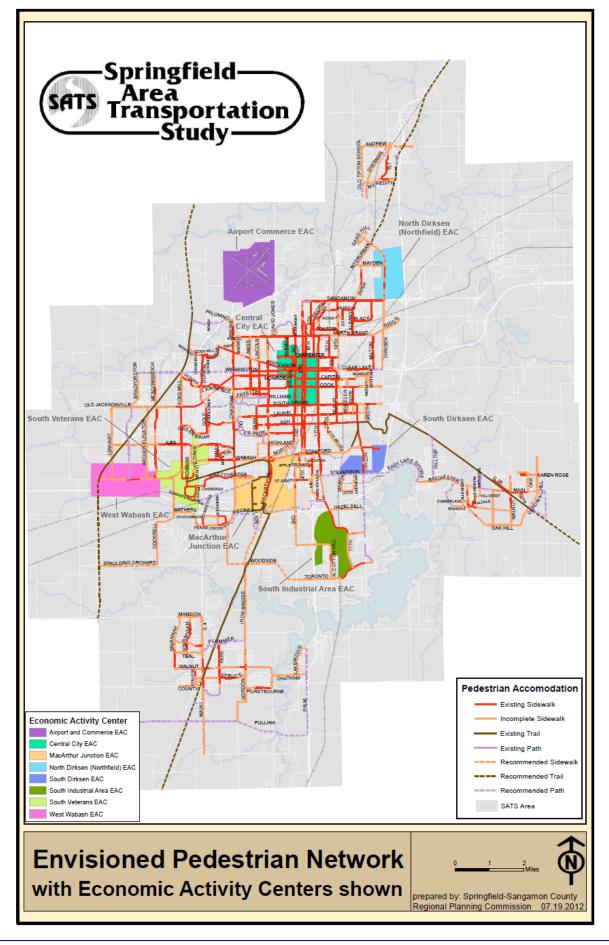




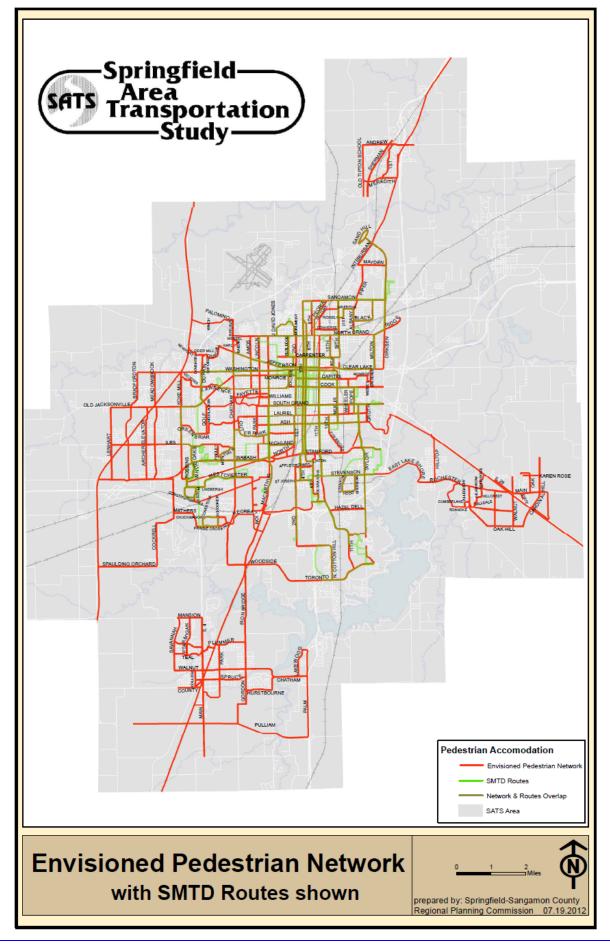




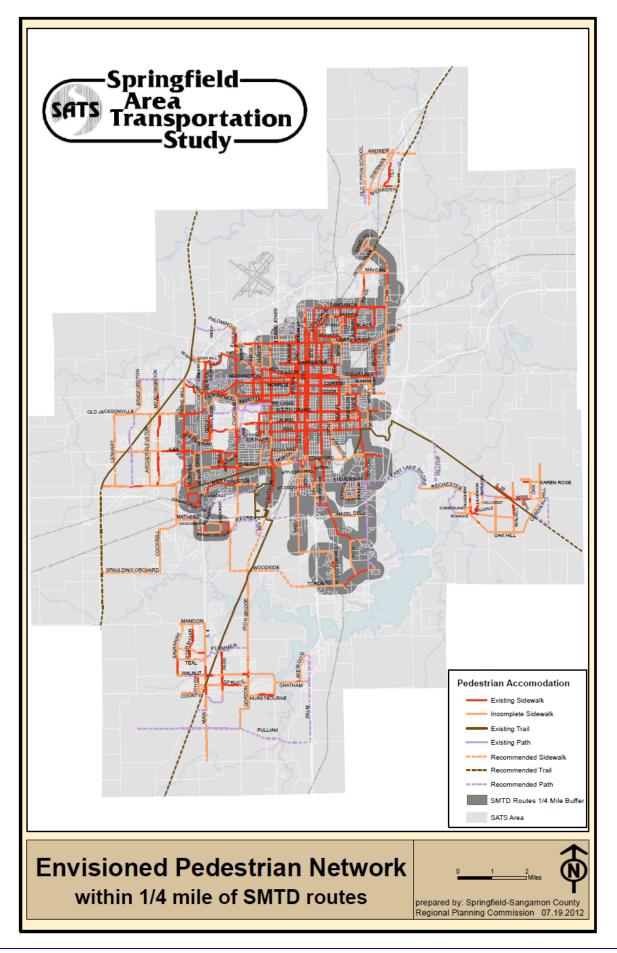
















## **APPENDIX I**

## Bike Rack Field Notes

Several members of the Springfield Bicycle Club spent a couple months documenting locations of bicycle racks and locations where bicycle racks are suggested. These locations are generally shown on the map on page 50. A detailed listing follows with specific comments included. If "Type of Bike Rack" is shown as "None" this means the destination is recommended for bike parking accommodations.





Location	Address	Type of Bike Rack	Size	Comments
709 Liquors	Clear Lake	Rusted rack	small, broken	GM Liquors clerk referred to the rack at the 709
Ace Bikes	across from Chuck E. Cheese	Old School	1 sm, 2 lg	1 sm rack is used for displaying bikes for sale
Ace Hardware	Wabash	Wave	4-up/3-down	Located 75% sheltered under front entrance awning.
Adam's Wildlife Sanctuary	Clear Lake	None		Should be some
Administrative Office of Illinois Courts	3101 Old Jacksonville Rd	Inverted U	2 loops	
AMC Parkway Pointe	Robbins & Lindbergh	None		located at the end of the Wabash Trail
AMC Showplace 12	W Wabash	None		
American General	Hollis Drive 3501	Inverted U	3 loop	
Applebee's	Freedom Dr	None		this shopping area has no dedicated bicycle facilities
AT&T	Cook between 5th and 6th	Old School		Medium fair condition
AT&T	7th & Edwards	Old School	small	
Baker''s Square Restaurant	Freedom Dr	None		this shopping area has no dedicated bicycle facilities
Ball Elementary School	New City Road	None		
Bank of Springfield	W Wabash	None		
Bank of Springfield	9th & Madison	None		
Barnes & Noble	Southwest Plaza – North	None		
Baskin Robbins	Laurel & MacArthur	Old School	1 lg	behind building, location is okay because there are outdoor tables in back, but it is unsheltered
Baylis Bldg-main	Memorial Campus	Old School	2 -small	Near entrance
Bed Bath & Beyond	Southwest Plaza – South	None		railing in back of store suitable for employees' bikes
Benedictine University	N. 5th St.	Old School	Sm	Near classroom building entrance, in sitting area with benches
Best Buy	Southwest Plaza – North	None		
BJ's Salon	Robbins Rd	None		located at the end of the Wabash Trail
BlueCross/Blue Shield - east	Liberty Dr – East side	Inverted U	5 loop	
BlueCross/Blue Shield – west	Liberty Dr – West side	None		
Boulder Creek Fun Park	Dirksen Pkwy	None		



Location	Address	Type of Bike Rack	Size	Comments
Buffalo Wild Wings	Pleasant Run / Meadowbrook S of Wabash	None		This office and restaurant section has no bicycle facilities
Butler Elem. School	Laurel & MacArthur			No racks, but chain link fencing around entire back playground of school.
Capital Area Career Center	11 <sup>th</sup> St & Toronto Rd			Bus service to the CACC, many auto commuters, but I bet a few students might ride their bikes.
Capital City Shopping Center	Dirksen Pkwy	Inverted U		Central plaza sitting area, w/benches, tables
Cardinal Fitness	3246 Ginger Creek Dr	None		
Carrolton Bank / Monty's Subs / Thai restaurant	Montvale & Wabash			some brick columns you could long to if you had a long cable
Cass Gym	LLCC 5250 Shepherd Rd	Old School	1 sm	unsheltered
Catholic Charities	11th & Adams	None		
CEFCU bank	White Oaks Mall			lampposts in the parking lot you could lock to.
Central Illinois Kidney Dialysis	Conifer Dr	None		
Chatham Area Library District	Chatham	Inverted U		nice
Chatham Community Park	south	None		Major park facilities - should be provided
Chatham Elementary	south, off Route 4	None		
Chatham Middle School sports fields and playground	east	None		Should be provided
Chatham Middle School	east	Old School	Lrg	1 old, 1 newer
Chatham Railroad Museum	Chatham	Old School	small	Design matches the museum paint scheme
Chatham Square Center	Chatham & Wabash			only current parking options are large brick columns or lampposts in parking lot. recommend something here.
Childcare Development Center				some fencing surrounding the outdoor play area to lock to
CMS	120 W. Jefferson	Old School Inverted U	4-6 bikes 2-4 bikes	both good condition
Colony West Swim Club	Berkley & Bennington			chain link fence is only option; recommend parking here
Comcast	Dirksen Pkwy	None		Decorative fence can be used



Location	Address	Type of Bike Rack	Size	Comments
Comer Cox Park		Old School	Large	
Community Park - Concession Stand	Rochester	Old School	10'	Maximum 18 bikes
Community Park - Friendship Fort	Rochester	Old School	5'	Maximum 15 bikes
County Market strip mall	just south of Stanford, west/southbound side			no suitable makeshift parking, except for shopping cart corrals and parking lot lampposts; recommend parking here, plenty of room under strip mall awning to place sheltered bike parking
County Market strip mall	Route 4 in Chatham	None		
Coz' Restaurant	Pleasant Run / Meadowbrook S of Wabash	None		This office and restaurant section has no bicycle facilities
Curves Fitness	Robbins Rd	None		located at the end of the Wabash Trail
Curves Fitness	I-55 Business	None		
CVS	Chatham & Washington			only thing you can lock to are the handicap parking sign posts; recommend parking here.
CVS	Wabash & Mac	Inverted U, small		plus pipes formed into a rectangular IU, small IUs suitable for locking one wheel only. Would need a cable+U-lock combo to properly lock a bike to these small IUs; sheltered by bldg awning.  Recommendation could be made for upgrading the bike parking at this location. Given its proximity to the Wabash trailhead and InterUrbanTrail connector, it is a good refueling pit stop and healthier alternative to Sonic.
CVS	2nd & Carpenter	None		
CVS	North Grand	None		
Dairy Queen	I-55 Business	Old School		on the sidewalk next to the building, not clear that it could be used
Dairy Queen	Chatham Square Center, Chatham & Wabash			railing by the outdoor seating area is the only place you can currently lock to.



Location	Address	Type of Bike Rack	Size	Comments
D'Arcy's Pint				need to check this and other businesses
Denny's	White Oaks Mall			Some railing in the front outdoor area you could lock to.
Dept. of Children & Family Services	11th & Edwards	None		
Dept. of Children & Family Services	4th & Monroe	Old School	4-6 bikes	good condition
Dept. of Corrections Training	11th & Carpenter	None		
Dick's Sporting Goods	White Oaks Mall	Old School	1 lg	Near mall entrance, but no shelter
Dirksen Business Park co's	Dirksen Pkwy	None		
Douglas Alternative School		None		
Douglas Park		None		Should be at bandshell
Eisenhower Park	Ash & Taylor	None		Ash St. trail (sidepath, from IDOT/Lost Bridge Trail) ends
Eisenhower Pool	next to SE High School	None		didn't see any
Elzina Building	1st & Jefferson	Old School	6-8 bikes	good condition
Fairhills mall / County Market grocery store	Chatham & Monroe	Old School	1 lg	unsheltered
Fairview Park	19th St.	None		
Family Medical Center	Route 4 north - Chatham	None		
Family Video	Walnut at Route 4 - Chatham	Old School	small	at front door
Family Video	just south of County Market west/southbound side	Old School	1 sm	usual set up for FV's around town
Family Video	I-55 Business	Old School	3 bikes	
Family Video	3201 W lles	Old School	3 bikes	
Family Video	2701 W Lawrence	Old School	5 bikes	
Family Video / Antonio's Pizza	Laurel & MacArthur	Old School	1 sm	In front, near entrance, sheltered by overhang
Family Video / Little Caesar's Pizza	Jefferson @ MacArthur	Old School	1 sm	in front near entrance, sheltered by small front awning
Fed Ex	Freedom Dr	None		this shopping area has no dedicated bicycle facilities
Fit Club – West	2811 W Lawrence	Old School	5 bikes	
Fit Club South / Athleticare	south 6th st frontage road	Old School	1 sm	near front entrance, but located just outside of front awning, unsheltered



Location	Address	Type of Bike Rack	Size	Comments
Food Fantasies grocery store	Wabash	Old School		
Founders Hall	UIS	Inverted U		unsheltered
Friar Tuck	Constitution	None		decorative posts could be use for 2 customer bikes
Glenwood High School	Chatham	Old School	Lrg	at west entrance
GM Package Liquor	South Grand	Pole w/ bike sign		Store clerk says people come to the store on bikes and park
Gold's Gym	Clear Lake	Inverted U		Handy to entrance
Good Shepherd Lutheran	I-55 Business	None		3 posts could be used
Goodwill	Chatham & Wabash			Some handrails under the front entrance awning are the only options to lock to. Recommend something here.
Goodwill Store	Dirksen Pkwy	None		
Gordman's	Southwest Plaza – South	None		railing in back of store suitable for employees' bikes
Great Harvest Bread Company	Montvale Junction			large brick columns and parking lot lampposts are the only current options for locking bikes
Head West Sandwiches	Robbins Rd	None		located at the end of the Wabash Trail
Helping Hands	11th & Adams	None		
Hilton Garage	7th Street	Old School	medium	
Historic Village	Rochester	None		When parking develops include racks
Hobby Lobby	Chatham & Wabash			large brick columns in front of store are impractical to lock to, only current options are the lampposts in the parking lot
Hometown Pantry	Edwards & MacArthur	Old School	1 lg	Not an ideal location, in back behind building, but right off the sidewalk. unsheltered.
Horace Mann	Jefferson	Old School	7 bikes	
HR Block	Freedom Dr	None		this shopping area has no dedicated bicycle facilities
IDOT building	Dirksen Pkwy	Old School	2 medium	At north and south entrances
IDOT lake	Behind IDOT building	Inverted U		At the fishing shelter, on Lost Bridge Trail
IEPA N & S Rcvg Docks	9th & No. Grand	Old School	Sm	
IEPA-Main ent	9th & No. Grand	Old School	Lrg	Overhang protection



Location	Address	Type of Bike Rack	Size	Comments
IL Dept.Healthcare &Family	Old Rochester Road	None		Should provide
Illinois Bank	Andrew Rd	None		decorative posts could be used by customers
Illinois Department of	Lower Level	Old School	small	bad location
Revenue	Main Level	Old School	small	good condition
Illinois Public Health	W. Jefferson	Old School	4-6 bikes	bad condition
Illinois State Museum	2nd & Spring	None		
INB / Papa Murphy's Pizza	Montvale Junction			large brick columns to lock to; extended sidewalk area in front of parking spots would provide plenty of area for bike parking; though the extended sidewalk is unsheltered, the bldg awning in front of stores is sheltered.
Interurban Trail	Walnut St in Chatham	Old School	small	Trailhead. Could be better parking.
IRS	Constitution – 3101	Old School	5 bikes	In back by the dumpster. Visitors would not find it.
J.C. Penney	Dirksen Pkwy	None		Plenty of room at storefront - should provide
Jaycee Community Park	Chatham - Walnut St. east side of town	None		
Jerome Memorial Park	Reed & Leonard	Old School	1 sm	small park with fencing, doesn't really need more than this
Kiku Restaurant	Robbins Rd	None		located at the end of the Wabash Trail
K-Mart	Wabash & Veterans			Nothing but lampposts in the parking lot that you could lock to.
K-Mart	Clear Lake	None		
Lanphier HS		Old School	Lrg	Isolated and old
Lincoln Home Site		None		
Lincoln Library	7th Street	Old School	medium	
Lincoln Park		None		
Lincoln Res. Hall	UIS	Old School	1 lg	
Lincoln Souvenir Shop	Monument	None		
Lincoln Tomb		None		



Location	Address	Type of Bike Rack	Size	Comments
LLCC				The total amount of racks may be enough to handle peak parking loads for the entire campus; for non-drivers, there are a large number of bus commuters compared to bike riders.
Logan Hall	LLCC	Old School	1 sm	unsheltered
Longhorn Steakhouse	White Oaks Mall			
Lost Bridge Trail Comfort Station	Rochester	None		
Lost Bridge Trail Parking Lot	Rochester	Inverted U	5'	3 waves, excellent condition
Lost Bridge Trail/ Bank & Trust	Rochester		10'	Maximum 18 bikes
Lost Bridge Trail/Rochester Station		Inverted U	10'	Maximum 8 bikes
Lowe's	Dirksen Pkwy	None		
Mariah's Restaurant	Robbins Rd	None		located at the end of the Wabash Trail
Marine Bank	Carpenter& 4th	None		
Marine Bank	W Wabash	None		
McDonald's	Route 4 - Chatham	Old School	small	at outdoor seating area
McDonald's	Chatham & Wabash			Fence around outdoor playground is the only current option to lock to.
McDonald's	Freedom Dr	None		this shopping area has no dedicated bicycle facilities
Meijer	S. Veterans Pkwy & Prairie Crossing Dr.	Old School	1 lg	located near front entrance awning, but just outside, so unsheltered
Memorial Medical Ctr. Main		Old School	Sm	Should be better
Memorial Campus	Parking Lot #3	Old School & Inverted U	Large and separate "S" shape	Nice w/ benches
Memorial Express Care	Dirksen Pkwy	None		
Memorial Health Koke Mill Center	Koke Mill and Old Jacksonville	Old School	5 bikes	
Memorial Medical Center	240 West Jefferson	Inverted U	Standard	Protected overhead
Menard Hall	LLCC	Old School	1 sm	sheltered
Menards	Dirksen Pkwy	Old School	Small	



Location	Address	Type of Bike Rack	Size	Comments
Menard's	Freedom Dr	None		this shopping area has no dedicated bicycle facilities
Millenium Center	LLCC	Old School	1 sm	unsheltered
Montvale Plaza / Robert Morris University Bookstore	Montvale & Wabash			some lampposts or handicap parking signs you could park to
multiple offices	Pleasant Run / Meadowbrook S of Wabash	None		This office and restaurant section has no bicycle facilities
Nelson Ctr	Lincoln Park	Old School	Sm	Right next to the door
Noodles & Co. / Chipotle	White Oaks Mall			Some railing you could lock to around the front outdoor patio; would be nice to have parking here.
Northfield Suites	Dirksen Pkwy	None		
O'Charley's	Conestoga Dr.			some columns under awning you could lock to
Octopharma / Dollar Store	Jefferson @ MacArthur	Inverted U	5 (3-up/2- down)	In front of Octopharma, unsheltered. re- check dollar store
Office Depot	Southwest Plaza – North	None		
Old Navy	Southwest Plaza – South	None		
Old State Capitol Plaza		None		
Orthopaedic Center of Illinois	Koke Mill and Old Jacksonville	None		
Osaka restaurant	Wabash			columns are too big to lock to.
other businesses on	between Ash & Outer Park			most of the businesses have no bike
MacArthur				parking, but there are numerous lampposts or signposts to lock to
PAC south entrance	UIS	Old School	1 lg	
Panera Bread Co	W Wabash	None		
Panera, AMC Movie Theatre	Dirksen Pkwy	None		
Pasta House	Southwest Plaza – South	None		
Penny Lane / Subway	just north of Wabash & MacArthur			Some columns in front of each building that you could lock to.
Perkin's Restaurant	Freedom Dr	None		this shopping area has no dedicated bicycle facilities
PNC bank	Ash & MacArthur			Some railing in front sidewalk leading to main entrance



Location	Address	Type of Bike Rack	Size	Comments
Prairie Heart Institute	7th & Mason	Old School	Large	Employees entrance
Pre-school	approx. center of Washington Park			some wooden rails at building, metal rails at fishing bridge just south are decent makeshift racks
Recycled Records	625 E. Adams	Old School	small	
Ridgley Building	5th & Monroe	Inverted U	2-4 bikes	bad location
Robert Morris University	Lombard & Montvale	Old School	1 sm	near entrance of a campus building, unsheltered; railing and lampposts are other options for overflow bike parking; recommend more parking here
Rochester Elementary School		None		
Rochester High School		Inverted U	5'	3 waves, front of Athletic Complex
Rochester Intermediate School		None		
Rochester Junior High School		Existing rack		
Rochester Library		Old School	5'	Maximum 8 bikes
Ruby Tuesday entrance, lower level, SE side of mall	White Oaks Mall	Old School	1 med	Near mall entrance, but unsheltered; there is a bench next to the rack that is sheltered, plenty of room under the awning for both bench and bike parking.
Salvation Army	11th & Washington	Old School	15 bikes	
Salvation Army	6th & Carpenter	None		
Sang.Co. Public Health	South Grand	None		Should provide at this new facility
Sangamon County Complex	9th Street	Inverted U		2 racks
Sangamon Hall	LLCC	Old School	1 lg	approx 15-18 slots; sheltered
Scheel's	MacArthur extension			Just a note here to keep a tab on what Scheel's will set up. They'd be crazy not to have ample bike parking, along with amenities such as a refueling options, a little outdoor area with benches/tables, maybe even a free air compressor pump accessible from outside
Scheels Career Center	Pleasant Run / Meadowbrook S of Wabash	None		This office and restaurant section has no bicycle facilities
Schnuck's	Sangamon Ctr	Old School	Lrg	Near door



Location	Address	Type of Bike Rack	Size	Comments
Schnuck's / AZ-T-CA restaurant	Montvale Commons	Old School	1 lg	sheltered
Sears, lower level	White Oaks Mall	Old School	1 lg	Near mall entrance, but no shelter
Sears, upper level (NE side of mall)	White Oaks Mall	Old School	1 lg	Near mall entrance, but unsheltered; there is a bench next to the rack that is sheltered, plenty of room under the awning for both bench and bike parking.
Sec of State Motor Vehicle Serv	Dirksen Pkwy	None		Large smoking area w/benches. Should provide.
Sgt. Peppers	Stevenson & 11th?			some fencing to lock up to
Sherwood Plaza / Staples	Wabash			Metal columns in front sidewalk of plaza are sheltered and are the only place you can lock to.
Shop & Save	No Grand	None		
Shop n Save	Dirksen Pkwy	None		Plenty of room at storefront - should provide
Shopko	W Wabash	None		
Shopko, Big Lots	Dirksen Pkwy	None		
Shop-n-Save	Chatham & Wabash			Shopping cart corrals and lampposts in parking lot are the only options. Recommend bike parking here.
Simmons Cancer		None		
SIU School of Medicine	in Memorial complex	Old School	Large	Parking lot behind bldg
Small strip mall	Clear Lake & Dirksen	None		
Sonic	WBT east trailhead	Old School	1 sm	Partially sheltered by overhang. Probably don't need any more than this, Sonic is a drive-in, so no need to leave bikes
South Side Christian Church	lles & MacArthur			some lampposts in parking lot you could lock to
Southeast High School	Ash	None		didn't see any
Southwest Plaza - North		None		
Spfld Ball Charter School	Ash	None		Ash St. trail (sidepath) in front of school
Spfld Housing Authority	11th & Jefferson	Inverted U		Handy to entrance
SpfldClinic&LincolnLegalAsist	3180 Adloff Lane	None		Should provide



Location	Address	Type of Bike Rack	Size	Comments
Sports Authority	Southwest Plaza – South	Inverted U	3 loop	
Spring Creek Medical	2901 Old Jacksonville Rd	Inverted U	4 loops	
Complex				
Springfield Clinic	St. John's Dr	None		stairway railing suitable for bicycles
Springfield Clinic 1st	Memorial Campus	Old School	Sm	Should be better
Springfield Clinic-Wabash Medical Center	Wabash	Old School	1 sm	In front near entrance, but unsheltered, located just outside of the entrance awning.
Springfield Municipal Bldg	9th & Monroe	Old School	10 bikes	
Springfield Racquet Club	3725 Chatham Rd	Old School	1 lg	unsheltered, located just outside of a sheltered structure near front entrance
Springfield Urban League	11th & Cook	None		
Springfield Urban League	11th & Washington	None		
St John Vianney Catholic Church	St. John's Dr	None		
Starbucks	Chatham & Monroe			only option is the fencing around the front outdoor patio
Starbuck's	Freedom Dr	None		decorative fencing suitable for bicycles
Starbucks, McDonald's	Clear Lake	None		
State Capitol		Old School		needs an upgrade
State Library	3rd & Monroe	Old School	4-6 bikes	good condition
Steak-n-Shake	Wabash			only current options are fencing around front outdoor patio
Stifel-Nicolaus	W Wabash	None		
Student Affairs bldg	UIS	Old School	1 lg	
Student Life bldg	UIS	Old School	1 sm	
Subway	I-55 Business	None		
Target	Freedom Dr	None		this shopping area has no dedicated bicycle facilities
Texas Roadhouse	White Oaks Mall			lampposts and fencing you could lock to



Location	Address	Type of Bike Rack	Size	Comments
Town & Country Shopping Cntr (Chuck E. Cheese Strip Mall)	Outer Park & MacArthur			Large shopping center, no racks. There are large brick columns supporting the strip mall awningcould only lock to these if you had a long cable. Lampposts in the large parking lot are another (suboptimal) option. Recommend something here, it is such a large place.
TRAC (new gym building) south entrance	UIS	Inverted U		
TRAC north entrance	UIS	Inverted U		
Triangle Center	11th & Jefferson	Inverted U		good condition
Triangle Center	11th & Jefferson	Old School	small	
Trinity Lutheran School	Governor & MacArthur			Many fences & lampposts to lock to, but not even a single small OS rack for kids who might ride their bike to school.
UIC Division of Specialized Care for Children	Koke Mill and Old Jacksonville	Inverted U	2 loops	
UIS Police	UIS	Inverted U		unsheltered, near front entrance
US DOT	Dirksen Pkwy	None		
US Post Office	Andrew Rd	None		
various offices	Constitution Dr	None		no facilities
Velasco Tennis Center	~South Grand & Wiggins			no parking, but lots of fencing and some rails to lock to
Verizon	Freedom Dr	None		this shopping area has no dedicated bicycle facilities
Villa Health Care East	I-55 Business	None		available fencing could be used
Villa Health Care West	St. John's Dr	None		posts and benches could be used
Vinegar Hill Mall	Spring Street	None		
Wabash trail	WBT east trailhead	Old School	1 sm	small wooden rack, unsheltered, don't really need more than this at the trailhead, as it's a cycling start and end point.
Waldrop Park	E Sherman Rd	Old School	6 bikes	



Address Type of Bike Rack Location Size Comments Walgreen - Koke Mill 2500 Koke Mill Rd None Sangamon/Peoria Rd Old School Walgreens Lrg Against the bldg Walgreens Route 4 north - Chatham Old School Lrg Walgreens Rack near back of building, unsheltered. It's Ash & MacArthur Old School 1 lg not close to the entrance, but there is more space for the rack where it is located because parking takes up the space in front of the entrance. Recommendations should be made for all Walgreens/CVS convenience stores that have no bike parking. Walgreens I-55 Business under construction None Walgreens Clear Lake None Walgreens Freedom Dr None this shopping area has no dedicated bicycle facilities just south of FV, parking lot lampposts are only current Walgreen's place to park, Walgreen's large brick west/southbound side columns would be difficult to lock to, even with a cable; recommend small amount of bike parking here Walgreens 9th & No. Grand Old School Sm 2 Walmart Dirksen Pkwy Old School Against bldg by carts this shopping area has no dedicated bicycle Walmart Freedom Dr None facilities Walmart & Golden Corral Could really use some bike parking here, 11th st, south 6th st on-campus UIS students live 1-2 miles away. 11th st has a bike lane all the way to Wal-Mart/Golden Corral. Employees who work at these places often lock bikes in some obscure location behind the building. War Memorials Oak Ridge Cemetery None



Type of Bike Rack Location Address Size Comments Washington Park -South Grand & Wiggins 1 lg The rack at the pavilion is unsheltered, Old School Main playground / pavilion unfortunately picnic tables take up all the space under the sheltered pavilion. For a large park, there is little official bike parking, but is a recommendation necessary for more parking when people may just keep their bikes near them, or lock them to any nearby tree/lamppost/bench/fence? Washington Park Botanic Fayette & Chatham Old School 1 sm wood + metal Gardens Weber's Ice Deli Walnut in Chatham Old School small Near Interurban trailhead Wells Fargo W Wabash None West Grand Plaza (IAAW) 1305 W. Wabash no suitable makeshift objects to lock to; large brick columns are too big for even long cables old playground West Side Park Chatham None Williamsville State Bank 3341 Old Jacksonville Road None Williamsville State Bank I-55 Business None 8' Winery in Rochester Maximum 12 bikes Workforce Development Old School 1 sm unsheltered Center YMCA 4th & Cook Old School Medium 2 racks



## **APPENDIX J**

## Public Comments on Draft Plan with Steering Committee Response

PUBLIC COMMENTS ON THE DRAFT SATS BICYCLE AND PEDESTRIAN PLAN	STEERING COMMITTEE			
(Public Comment Period: March 30 through May 1, 2012)	RESPONSE			
BICYCLE				
CHATHAM - BICYCLE				
1. The Village of Chatham uses the on-road, east side only on-road bike path adjacent to its Public Works facility (2 blocks of State St., between Walnut St on the north and Chestnut St on the South) for municipal vehicle parking. The bike ped plan proposes extending the trail segment south of there south to the elementary school, which makes sense, but the on-trail parking by the village would be good to deal with. Luckily, it is easy to do so. The simplest solution is to replace the stripe indicating an east side only on-road bike path. with either (a) an on-road bicycle with chevron designation, and bike route signs (easiest to do, and my personal preference) or (b), a wider parking lane/bicycle path, with bike route signs. This would bring the Village back into compliance with proper use of bicycle facilities.	Citing heavy public works vehicle traffic and potential danger to cyclists on the west side of the road, Chatham prefers a solution that keeps the path on the east side of the road. The existing markings on the east side will be improved, widened, and signage added to more clearly delineate the bicycling route.			
ROCHESTER - BICYCLE				
<ol> <li>Please set a high priority on completing about a mile of bike trail SE of the Rochester Village Hall to Maxheimer Road. This will:         *allow bicyclers to have a more direct access on back (and less traveled) road to Sangchris Lake and the state park;         *remove bicycle traffic from the highly used and fast Cardinal Hill Road;         *improve safety for bicyclers and vehicular traffic;         *connect the existing Lost Bridge Trail to areas beyond Rochester;         *be built on a railroad bed that is already in state ownership and planned, with minimal cost;         *be maintained by the Village of Rochester.         Thanks for your attention to this very strong need.</li> </ol>	ROW is in State ownership; during a recent IL-29 road project the ROW was improved making it suitable for trail construction; Rochester considers this project a high priority.			
SANGAMON COUNTY - BICYCLE				
1. I think the highest priorities are: Widen Woodside Road just east of the Interurban Trail.	Committee determined that this suggestion had been addressed in the plan.			
2. Are there any plans for extending the current bike paths around East Lake Shore Dr?	The plan recommends wide shoulders rather bike paths.			
SHERMAN - BICYCLE				
1. What is now Old Tipton School Road used to be Route 66 until the 1930's when they closed that road in order to replace the bridge crossing the Sangamon River. During that year the Route 66 traffic was diverted to Andrew Road and then went south on Route 29, then east on North Grand to 9th Street. If you go south on Dirksen Parkway and turn west at the traffic light by Carter Brothers Lumber, you will find the original pavement going south down to the river. It seems to me that the Old Tipton School Road shoulder paths could be part of the Route 66 Bike Trail proposal that is now in the works.	The planned off-road trail from Williamsville to Springfield is identified in the Route 66 Trail Plan for this area.			
2. The Village of Sherman has the following requests: a sidepath on the north side of Andrew Road from Old Tipton School Road east to the planned Williamsville/Sherman Trail, pedestrian crossing signals at Andrew Rd. and Business 55, pedestrian crossing signal at Andrew Rd. and Old Tipton School Rd., pedestrian signal at Business 55 and Meredith Dr.	Included in the plan with the caveat that the uncontrolled intersection at Andrew Rd and Old Tipton School Rd will have to be addressed at the time of implementation.			



PUBLIC COMMENTS ON THE DRAFT SATS BICYCLE AND PEDESTRIAN PLAN STEERING COMMITTEE (Public Comment Period: March 30 through May 1, 2012) **RESPONSE** SPRINGFIELD - BICYCLE 1A. A lack of easy access via foot/bicycle from Hilltop Road has really discouraged me from using the Lost Bridge trail. Hilltop Road is sub-standard as is, and I couldn't imagine trying to walk or ride with a child in tow along Hilltop Road hoping to make it safely to the This project is included in the SATS 2035 trail access point at Hilltop Road/Route 29. Any way that access along Hilltop Road can Long Range Transportation Plan, but funding is unavailable at the current time. be prioritized would be much appreciated. 1B. Hilltop Road should be priority. It is dangerous. 2A. I want to give you one push to get approval to mark the area between 2nd St. and N. Jurisdiction of this section of Toronto Road is split between Sangamon County (to the Cottonhill on Toronto Road as a bike lane. The reality is that people will use it - they are west of the structure), IDOT (the structure doing so right now even tho it is unmarked. It just helps us bicyclists. Keep the auto itself), and the City of Springfield (to the drivers focused and more aware of cyclists. east). It was agreed that the Toronto Road 2B. Toronto Rd, North Cottonhill to 2nd. Designate this section to the plan as a Bicycle segment be added to the recommended route and install Share the Road signs to accommodate cyclists traveling between the network, with future improvements being coordinated to create a paved shoulder/bike Interurban Trail, UIS and Lake Springfield. It will provide not only for area residents, but lane of consistent width. cross country cycle tourists wishing access to this area. 3A. Please consider taking a route down 3rd Street through Enos Park & Lincoln Park to access the original gates to Oak Ridge Cemetery & then access to Lincoln Park. If the 3<sup>rd</sup> Street cemetery entrance were to 3B. Consider 3rd Street from Oak Ridge Cemetery to Dodge, east 1 block to 4th and open then the proposal would be considered. south, or 1 block west to 2nd Street. 3C. If the 3rd Street Entrance to the Cemetery is opened I would like to see the bike trail go along 3rd and enter the park at the horseshoe area 4. I think the highest priorities are: Connect Wabash Trail and the Sangamon Valley Trail. Committee determined that this suggestion had been addressed in the plan and that the Hollis Dr & Wabash Ave bike lanes are part road projects currently development. 5. I think the highest priorities are: Bike lanes from west side of Springfield to downtown. The City of Springfield has made this connection a priority, but making the connection is difficult due to the indirect and uncomfortable nature of the area road network. 6. More bike lanes and improvements: Chatham (Bruns Lane) between Jefferson (North) This suggestion was reviewed by the to Wabash (South) Committee and determined to be unfeasible 7. More bike lanes and improvements. 3) Also road condition Amos/N. Grand (Amos Amos Ave had been considered with Lincoln Ave being selected for the north-south North to N. Grand) No lane for bike. Traffic is often very fast on both lanes. connections in this area. 8. SOUTHWIND PARK - No matter what direction you take, there isn't even a shoulder to ride/walk on to get to the new park. From the South: Cotton Hill Rd > Southwind Rd > 2nd Committee determined that this suggestion St is very dangerous without any pedestrian access. From the North: 2nd St after had been sufficiently addressed by the plan. Southernview narrows and the shoulder is removed. This route is also great for access to downtown and most of the Springfield businesses. 9. Consider extending the small street just east of MacArthur Blvd. and north of Stanford Committee determined the extension of State Street to be unfeasible due to to provide bike access from neighborhoods east of MacArthur to 2 bike paths southwest of necessary land being held in private MacArthur and Wabash. ownership. 10. Would recommend extension of the Old Rochester bikeway across Dirksen Parkway Because this would not be a very and connecting with the Lost Bridge Trail more aligned with the abandoned rail right of comfortable path for casual cyclists, the way. This would provide a more direct routing from Rochester toward downtown ROW in guestion is held by multiple property Springfield. owners and would be difficult for the city to obtain, there is no stop light on Dirksen, and the curves and low visibility on Old Rochester presented safety concerns, the Committee concurred that the suggestion was unfeasible.



STEERING COMMITTEE	
RESPONSE	
Committee determined that this suggestion had been sufficiently addressed by the plan with bicycle facilities recommended in close proximity to both locations.	
The extension of paved shoulders on J David Jones Parkway from their current termination at the cemetery entrance south	
to the uncontrolled intersection at Yates was added to the plan.	
Committee determined that the current Greyhound station location is along a recommended bicycle accommodation.	
The City of Springfield does not currently envision any on-street bicycle improvements being made to these segments, but recommended way-finding signs were added to the plan to complete an east-west connection to Bruns Lane, Palomino Road, and the Sangamon Valley Trail.	
Citing traffic and safety concerns the committee determined these suggestions to be unfeasible.	
A feasible alternative was not found.	
Paved shoulders on Veterans south of Palomino Dr were removed from the envisioned bicycle network due to concerns about automobile speed of travel. Veterans north of Palomino, however, will remain due to the network connections created to the Sangamon Valley Trail, Capital Airport, Route 66 Trail, and Village of Sherman, lower daily traffic figures, and better safety conditions on these portions of Veterans.	



PUBLIC COMMENTS ON THE DRAFT SATS BICYCLE AND PEDESTRIAN PLAN STEERING COMMITTEE (Public Comment Period: March 30 through May 1, 2012) **RESPONSE** STATE - BICYCLES 2A. \* More bike lanes and improvements. 2) Downtown west on Jefferson (No real bike lane yet) Jefferson had been ruled out of inclusion in the EBN because of concerns over the 2B. Major arterial roadways are key indicators of transportation needs regardless of the speed and volume of traffic. mode of transportation. The Envisioned Bicycle Network (EBN) does a fine job providing bicycle/pedestrian facilities along, or nearby alternate routes, to these arterial roadways such as the Rt. 29/Lost Bridge Trail southeast into Springfield. Arterial routes (or viable 2C. The plan mentions connection between communities in the study area, yet there is no connection with either Riverton or Pleasant Plains... A routing toward Pleasant Plains Committee determined that this suggestion had been addressed in the plan. could be established along abandoned railway, bikeway routing along rural routes or new facilities within the Rt. 97/125 right of way. 3. \* More bike lanes and improvements. 4) Wabash west past Veterans practically, there is no lane for bikes. Yes (I know there is a trail passing Veterans & for sports is good) but Committee determined that this suggestion had been addressed in the plan. for people (like me) who use bike as a means of transport, then it's an issue! 4. Major arterial roadways are key indicators of transportation needs regardless of the mode of transportation. The Envisioned Bicycle Network (EBN) does a fine job providing bicycle/pedestrian facilities along, or nearby alternate routes, to these arterial roadways Committee expressed safety and comfort such as the Rt. 29/Lost Bridge Trail southeast into Springfield. Arterial routes (or viable concerns along the Sangamon Avenue/Rt 54 corridor. alternates) along ... the Sangamon Avenue/Rt. 54 corridor are lacking in such facilities for bicycle traffic. Recommend identifying proposed facilities to accommodate bicycle traffic... 5. Palomino & Veterans Parkway: Traffic signal modification. The light at this location Traffic signal activation locations were needs to be modified for cyclists to activate it. This will ensure a safe crossing of Veterans discussed in general. The intersection of Parkway and provide access to this neighborhood, Stuart Park and the Sangamon Valley Route 29 and Cardinal Hill in the Village of Rochester was offered as an example of a priority intersection for traffic signal modification. The City of Springfield and IDOT will consider traffic signal modifications to any signal modernization projects affecting streets included in the Bicycle/Pedestrian Plan, however intersections will not be prioritized at this time. 6. Add Walnut north of Yates to J. David Jones Parkway. This provides a connection via The extension of paved shoulders on J shoulders on Veterans Parkway to Palomino to the Sangamon Valley Trail. This is a good David Jones Parkway from their current route from north and east neighborhoods to the Trail. termination at the cemetery entrance south to the uncontrolled intersection at Yates was added to the plan. **GUIDELINES FOR BICYCLE FACILITY OPTIONS** 1. Also in Appendix C - Signal Activation by Bicycle - 8th and N. Grand is a good example of an intersection not activated by bikes. The intersection of 8th and Sangamon recently See State - Bicycles #5 above got traffic signals, and the cameras do a good job of picking me up and activating the sianals. **BIKE RACKS** 1. Thanks also for paying attention to bike racks. 2. Bicycle parking facilities should be recommended at intermodal connections. In the There is a bike rack outside this parking case of passenger train connections, covered parking facilities at the parking garage at Washington and 4th or bike lockers at the station may be warranted. **MAINTENANCE ISSUES** 1. My current route is paved shoulders from Meredith to 8th St on Bus55/Peoria Rd and 8th Street into town, eventually hopping onto 7th St. Based on my experience with that route, I felt I should comment on Appendix C - Paved Shoulders. The commentary about It was noted that not all communities possess sweeping equipment and ar shoulder debris is very important. I've noticed a decrease in frequency in shoulder attempt should be made to coordinate such sweeping over the past couple seasons. Not only does the accumulation of debris equipment. increase the frequency of flat tires, it also causes stability issues trying to maintain control on what is essentially loose gravel.



PUBLIC COMMENTS ON THE DRAFT SATS BICYCLE AND PEDESTRIAN PLAN STEERING COMMITTEE (Public Comment Period: March 30 through May 1, 2012) **RESPONSE PEDESTRIAN ROCHESTER - PEDESTRIAN** 1. As a Rochester parent who lives near the new Intermediate School, I think a walking Committee determined that this suggestion path between the Rochester Public Library and the school on Cardinal Hill Rd. would be of had been addressed in the plan, noting that great benefit. This would provide safe travel for pedestrians between Main St. & the Rt 29 sidewalks were planned for this section. The number one priority of the Village of bike path. Please give this consideration. Rochester is connecting the school to the surrounding pedestrian network. 2. Rochester is in need of sidewalk improvements. The example of the sidepath recommendation for Maxheimer & Buckhart Road is nice. But, I think it would be beneficial to have the sidewalk along Buckhart & Cardinal Hill. It would make it more Committee determined that this suggestion accessible to get to the library and trail for residents on E. Main, Maple, Magnolia & Oak had been addressed in the plan. This is a St. It would also be beneficial to have a sidewalk from the fire station along E. Main. If priority for the village. you built a sidewalk there, students may be allowed to walk to & from school. As of now, I don't think kids can walk to school. 1st priority should be connecting school & library. 3. I can also see a need for a sidewalk continuation along W. Main form the park to Oak Hill Rd. There is plenty of room to allow for this. It would allow residents in the Committee determined that this suggestion is in the plan. subdivisions along Oak Hill Rd access to the park. There is also a break in the sidewalk on Oak Hill Rd that would need completed. 4. There is also a need for a sidewalk along Oak St. to Oak Mill Subdivision. There are a Committee determined that this suggestion lot of early & late dog walkers along this street. It is also very dark, which makes it is in the plan. dangerous. 5. When deciding which side of the street sidewalks should go please take into The Village does have lighting requirements consideration the lighting. Rochester has done a poor job of this. The sidewalks are often for new subdivision developments and is on the opposite side of the street lights. willing to work with older subdivisions on lighting plans if there is interest. SPRINGFIELD - PEDESTRIAN 1A. The RR crossing / closed road at Highland/lles and 1st need to have a pedestrian crossing. There is no convenient way to get to the south side of town where many The Highland/Iles crossing was closed and residents in the area shop at County Mkt and Walmart. The alternative route is 5th cannot be reopened because of the danger (sidewalks are broken and traffic is dangerous) or taking 1st down to Stanford and over of crossing two separate sets of tracks. To the overpass (extremely lengthy and not easily accessible). the south of this intersection, Pasfield St. will eventually be extended to connect North Street to Stanford Avenue. The Committee 1B. Pedestrian access has been eliminated from 1st and Highland/lles where the train agreed to indicate in the plan tracks are located and they have closed the road. I know several bikers and walkers cross recommendation for sidewalks on the those tracks daily and illegally but there isn't another safe/convenient alternative route to Pasfield St. extension. get to County Market or other businesses on 6th/5th. 2A. A lack of easy access via foot/bicycle from Hilltop Road has really discouraged me from using the Lost Bridge trail. Hilltop Road is sub-standard as is, and I couldn't imagine trying to walk or ride with a child in tow along Hilltop Road hoping to make it safely to the This project is included in the Long Range trail access point at Hilltop Road/Route 29. Any way that access along Hilltop Road can Transportation Plan, but funding unavailable at the current time. be prioritized would be much appreciated. 2B. Hilltop Road should be priority. It is dangerous. 3. SOUTHWIND PARK - No matter what direction you take, there isn't even a shoulder to ride/walk on to get to the new park. From the South: Cotton Hill Rd > Southwind Rd > 2nd Committee determined that this suggestion St is very dangerous without any pedestrian access. From the North: 2nd St after had been sufficiently addressed by the plan. Southernview narrows and the shoulder is removed. This route is also great for access to

downtown and most of the Springfield businesses



PUBLIC COMMENTS ON THE DRAFT SATS BICYCLE AND PEDESTRIAN PLAN (Public Comment Period: March 30 through May 1, 2012)	STEERING COMMITTEE RESPONSE
TRAILS	
<b>1A.</b> I don't see mention of access points to trails. For example, there is no bike/pedestrian access to the Sangamon Valley Trail from the far north end all the way to just north of Old Jacksonville Road. Connecting existing bike trails should be a high priority, so I agree with that part of the plan.	
<b>1B.</b> The proposed EBN depicts many apparent intersections between the Sangamon Valley Trail and several bikeways. This is deceiving in that from Meadowbrook northward to the terminus at Stuart Park, there are no connections. Recommend at least one additional connection between Washington St. and Jefferson St., with Cider Mill being a reasonable average point between the two previously mentioned roadways.	Existing and recommended trail acces points were added to the plan.
<ol> <li>Another thing (2, really) to make sure that is provided - comfort stations and benches.</li> <li>Other than that, we're looking forward to using the trails!</li> <li>We are anxiously awaiting the completion of the Sangamon Valley Trail!</li> </ol>	Committee noted that comfort stations and benches are suggested in the plan.
A bike/pedestrian way between Stuart and MacArthur Parks was clearly identified by	
the public as desired improvement. Narrative suggests that this was looked at, but land use issues along this largely publically owned route eliminated it from consideration for this plan. From what I can discern, these concerns along the Jacksonville Branch open channel are legitimate. However, near term improvements (i.e., one or two years) to satisfy IEPA concerns appear to be on a fast track to mitigate the concerns preventing the establishment of this route. As this is long term Plan, suggest that it retain this proposed routing, perhaps with a caveat that other improvements needed prior to implementing the trail.	Committee determined that this suggestion had been addressed in the plan.
PARKS	
1. The Plan identifies other applicable studies which include bike/pedestrian facilities. Absent from the list is the Springfield Park District Master Plan. The Springfield Park District Master Plan and the SSCRPC Greenway plan name specific recommendations (i.e., Spring Creek greenway trail, Jefferson Park - Timberbrook Park trail connection, etc.). If such recommendations are to be excluded from this Plan, a brief explanation of the technical reasons why they were excluded would add credibility to the level of review these improvements listed in the published reports were not included in this Master Plan.	Committee determined that all elements of the Springfield Park District Master Plan relevant to trails and paths were addressed by the Bicycle/Pedestrian Plan. As a result, wording in the Bicycle/Pedestrian Plan will be changed to reflect coordination with the Springfield Park District Master Plan.
2. Good job addressing routings to parks. Absent from consideration are Southern View Park and Lewis Christian Village Park.	Committee determined that the parks in question were considered and included in the planned networks. Parks were abserfrom maps in the plan because of limitation in the available geographic information data but will be added.
MISCELLANEOUS	
<ol> <li>We are working on improving Lincoln Park 3rd Street entrance to coincide with the Lincoln Anniversary. Please consider helping change the old entrance to the Oak Ridge Cemetery.</li> </ol>	Committee determined that this suggestion fell outside the purview of the plan.
2. Not exactly sure what the time frame of this plan is. Is it a 2035 event horizon as suggested by the <i>Long Range Transportation Plan</i> , or is it something else.	Committee determined that this had bee addressed in the plan introduction.
3. *Special Note RE bus riding. The downtown bus station on Capitol Ave, in the rush and morning time: car traffic on both directions often cause danger for bus riders (many are students and senior people) who do transfer bus. Suggest: diverting or limited car speed zone area during the morning and rush time. Thanks for your attention!	The City of Springfield and SMTD arworking together to find a permanent, off street home for the station currently located on Capitol Ave.
4. The plan mentions connection between communities in the study area, yet there is no connection with either Riverton or Pleasant Plains. In the case of Riverton, abandoned bridge piers and abutments offer an opportunity for facilities spanning the Sangamon River (a major barrier) forming a connection between Old River Road and Lincoln St. A routing toward Pleasant Plains could be established along abandoned railway, bikeway routing along rural routes or new facilities within the Rt. 97/125 right of way.	Riverton did not participate in this plar Pleasant Plains is not in the planning are but will be considered during development of a rural bicycle/pedestrian plan.
5. Narrative mentions that one of the objectives of this study was to identify connections between all communities within the study area. However, it appears that the EBN is extremely Springfield-centric with a "hub and spoke" layout to the surrounding communities. With the exception of Sherman and Williamsville, no other "non-Springfield municipalities are connected to one another.	Recommended connections to a participating communities are included bot through Springfield and through rural areas.



PUBLIC COMMENTS ON THE DRAFT SATS BICYCLE AND PEDESTRIAN PLAN (Public Comment Period: March 30 through May 1, 2012)	STEERING COMMITTEE RESPONSE			
MISCELLANEOUS				
	This issue was caused by an error in the geographic data, which has since been corrected.			
<b>7.</b> Tourism is mentioned, but no exhibit showing tourist sites. Perhaps beyond the scope of this plan, but a follow on recommendation might be to create a pamphlet/map/website depicting these locations, preferred bike/pedestrian routes, bike repair facilities, lodging, camping, dining, and laundry facilities.	Committee acknowledged the merit of the comment, and it was noted that groups, including some neighborhood associations, have begun working on the creation of bicycle and pedestrian historic route applications for smart mobile devices.			
<b>8.</b> Would like to see locations of schools shown on all networks and recommendations revised to include connections from the schools to the envisioned networks.	A map of area schools in relation to the networks was included in the appendix of the plan, but addressing direct connections to schools was not included in the initial plan scope.			
RESOLVED ISSUES				
1. An item I did not see addressed that is a concern, especially on paved shoulders is storm grates. On the bus 55 Sangamon River bridge, several of the storm grates have opening in that same direction as traffic flow, which could allow a bike tire to become lodged, potentially flipping the bike or causing a loss of control. Coupled with the recent milling of rumble strips, it is a challenge to navigate that section of Bus55 on the shoulder. LATER: In a previous comment, I mentioned the storm grates on the paved shoulder over the Sangamon River on Bus55. After paying attention the past few days, it appears the grates all run perpendicular to the lanes and not parallel like I initially thought.	The commenter retracted his initial remark, noting that he incorrectly recollected the orientation of the storm drains, which in fact run perpendicular to the street.			
2. Difference noticed between Envisioned Bicycle Network (EBN) on page v depicting Veterans Parkway and J David Jones Parkway and the page 18 exhibit of the same name which does not depict these routes. Please resolve discrepancy.	The map on page 18 has since been replaced with a map showing Veterans and J David Jones as part of the network.			



# PUBLIC COMMENTS ON THE DRAFT SATS BICYCLE AND PEDESTRIAN PLAN NOT REQUIRING A RESPONSE (Public Comment Period: March 30 through May 1, 2012)

#### **STATEMENTS**

- 1. Thank you for this wonderful study. As a regular bicycle commuter from Sherman to Downtown, I look forward to the hopeful implementation of several of the proposals. Again, thanks for the study and the opportunity to provide commentary
- 2. Great job, overall!
- 3. Sounds great! A lot of time & work thank you!
- 4. You have all done a phenomenal job getting input from the public and the communities. Once again great job!
- 5. As a long distance runner, I'm excited about the changes and actions being taken to ensure the safety and support of pedestrians and athletes. The benefits to the community are numerous and an additional reason for tourism, other than Lincoln related, should not be understated. Look at the impact of the vast trail system of states north of us for some justification further supporting this important plan. Keep up the good work!
- 6. I appreciate the mention of even sidewalks. Try riding a bicycle up the sidewalks on Chatham Rd!
- **7.** I hope more lanes and safe lanes designed for bikes would 1) protect bike riders and 2) make more people to use bikes (not for sports alone) but for transportation. That way it helps reduce the traffic jams and the amount of carbon in the city.
- 8. I have been looking over the SATS Master Plan, and it looks great! I have attached a couple of maps to show where Route 66 used to be. The one map in color is a page out of one I have compiled into a book, and the other is a scan from the maps at Lincoln Library in the Sangamon Valley Collection.
- **9.** I would like to commend you and your staff for undertaking this large effort. It takes insight to know that this plan was needed and dedication to draft it and see it through to completion. Initial documents are always more difficult to create than subsequent revisions, so take pride in getting near the publication stage of this report. Attached are my review comments regarding the Draft Bicycle and Pedestrian Plan. Please do not consider them as critical commentary, but rather as means to enhance the overall quality of the finished product. Trust you will find them useful as you prepare the final document. If you have any comments or questions concerning the above, please feel free to contact me.
- 10. On behalf of the Springfield Bicycle Club and transportation cyclists we wish to thank the SSCRPC staff, agency transportation officials and Ed Barsotti for the hard work in developing the plan. It is a significant step forward in making Springfield more accessible for cyclists. It is our hope that officials of the many jurisdictions involved will make every effort to implementing the plan. We encourage the bicycle community to collaborate with those jurisdictions in making the plan workable for motorists, pedestrians and cyclists. Again, thank you for your efforts in developing this plan. We are grateful for all those who have contributed to enhancing cycling in our community.
- 11. I am so pleased with the draft of the bikeway/pedestrian plan. It looks really great. I have one concern/comment to share, and I am sure you would agree with it on broad grounds: Riverton. Rochester and Chatham and Sherman/Williamsville seem to be very well planned. Riverton is seriously lacking. It seems that Riverton lacks in planning of many sorts. Is this a matter of local village leadership not being interested? In any case, this is an awesome first step to getting Springfield on a "good footing." (pun intended). It is so pleasing to see a planning commission in a community really take on these vital issues and present solutions for leadership on all levels of government to make progress on those issues. We may be no Portland, Oregon, but this is a great first step!



## **APPENDIX K**

## **Endnotes**

- <sup>1</sup> Centers for Disease Control and Prevention. "County Level Estimates of Obesity State Maps." Last accessed September 15, 2011.
  - http://apps.nccd.cdc.gov/DDT STRS2/CountyPrevalenceData.aspx?mode=OBS
- WebMD. "Weight Loss: Health Risks Associated With Obesity." Last accessed September 15, 2011. http://www.webmd.com/cholesterol-management/obesity-health-risks
- <sup>3</sup> Dill, Jennifer. "Bicycling for Transportation and Health: The Role of Infrastructure." Journal of Public Health Policy (2009) 30, S95-110. Last accessed September 15, 2011. doi 10.1057/jphp.2008.56
- Rails to Trails Conservancy. "Making the Case for Active Transportation." Last accessed September 15, 2011.
  - http://www.railstotrails.org/ourWork/advocacy/activeTransportation/makingTheCase/issue\_briefs.
- <sup>5</sup> Garrett-Peltier, Heidi. "Estimating the Employment Impacts of Pedestrian, Bicycle, and Road Infrastructure." Political Economy Research Institute, University of Massachusetts, Amherst, December 2010.
- Springfield Convention & Visitors Bureau. "Springfield, Illinois Fact Sheet." Last accessed September 15, 2011.
  - http://www.visit-springfieldillinois.com/Documents-PDF/SpringfieldFactsheet.pdf
- <sup>7</sup> 1000 Friends of Oregon. "Making the Land Use Transportation Air Quality Connection: The Pedestrian Environment." Prepared by Parsons Brinckerhoff Quade and Douglas, Inc. with Cambridge Systematics, Inc. and Calthorpe Associates. December 1993.
- <sup>8</sup> American Association of State Highway and Transportation Officials (AASHTO), "Guide for the Development of Bicycle Facilities", 1999. (An updated guide is scheduled to be released in late 2011.)
- <sup>9</sup> Federal Highway Administration, "Manual of Uniform Traffic Control Devises", 2009.
- <sup>10</sup> More information on Bicycle Level of Service and an online calculator are available at http://www.bikelib.org/bike-planning/bicycle-level-of-service/.
- <sup>11</sup> Transportation Research Board, "Highway Capacity Manual", 2010.
- <sup>12</sup> Available at www.apbp.org..
- <sup>13</sup> Initiative for Health Infrastructure. "Planning and Policy Models for Pedestrian and Bicycle Friendly Communities in New York State." University at Albany, State University of New York. Last accessed September 16, 2011.
  - http://albany.edu/%7Eihi/ModelZoningCode.pdf
- United States Department of Transportation, Federal Highway Administration. "Environment: Chapter 4
   Sidewalk Design Guidelines and Existing Practices." Last accessed September 15, 2011.
   http://www.fhwa.dot.gov/environment/sidewalks/chap4a.htm
- <sup>15</sup> Illinois Department of Transportation. "Bureau of Design and Environment Manual: Chapter 17 Bicycle and Pedestrian Accommodations." Last accessed September 15, 2011.
  - http://www.dot.state.il.us/desenv/BDE%20Manual/BDE/pdf/chap17.pdf
- <sup>16</sup> Institute of Transportation Engineers. "Traditional Neighborhood Development Street Design Guidelines: Recommended Practice." Washington, D.C., October 1999.
- <sup>17</sup> Painter, K. "The influence of street lighting improvements on crime, fear, and pedestrian street use after dark." *Landscape and Urban Planning*, 1996.
- <sup>18</sup> United States Department of Transportation, Federal Highway Administration. "Pedestrian Safety Engineering and ITS-Based Countermeasures Program for Reducing Pedestrian Fatalities, Injury Conflicts, and Other Surrogate Measures Final System Impact Report." Last accessed September 15, 2011.
  - http://safety.fhwa.dot.gov/ped\_bike/tools\_solve/ped\_scdproj/sys\_impact\_rpt/chap\_2.cfm