



A Comprehensive Alternative Transportation Plan for the Village of Swansea, Illinois



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The content and completion of this plan would not have been possible without the support and assistance of the following:

The staff and elected officials of the Village of Swansea:

- Mayor Jim Rauckman
- Village Administrator John Openlander
- Trustee Brian Wells

Our Citizen Advisory Committee Members:

- P.K. Johnson
- Jaynie Wells
- Debbie Pellegrino

Horner & Shifrin, Inc. Engineers



Executive Summary

This document represents the Explore Swansea Comprehensive Alternative Transportation Plan. The objective of this plan is to provide a conceptual framework guiding future on- and off-street bicycle and pedestrian facilities, with the overarching goal being to transform the Village of Swansea into an even more bicycle- and pedestrian-friendly community.

This planning process began in December 2011 and included two public open houses and a public walking workshop. Multiple surveys were completed by Swansea residents and comments were solicited and received at every juncture. The vast majority of residents are in favor of helping make Swansea more friendly to cyclists, walkers, and other trail and on-street facility users. Existing facilities see a high rate of usage and will serve the Village well as the foundation of its future connected network. While this is a long-term plan meant to take up to 20 years to implement, it provides the blueprint, in the form of phases, for constant progress. As more phases of this plan are implemented, the more positive impacts will be realized.

It is our hope that this plan, once implemented, will enable users of all skills, interests and needs to get out and Explore Swansea!



Introduction & Existing Conditions



Purpose

The Village of Swansea is located in the Metro East area of the St. Louis Metropolitan Region. Situated in the Southwestern Illinois county of Saint Clair, Swansea is a residential and commercial community, surrounded by other Southwestern Illinois communities, such as Belleville, Shiloh and Fairview Heights.

Swansea commissioned this study to investigate and determine the most suitable and appropriate routes for residents and visitors to explore the Village by bicycle or foot. The results of this citizen-driven process illustrate how the Village can grow, enhance and plan for the future of its alternative transportation network.

This planning process and subsequent report were guided by two basic methods of exploration: transportation and recreation. With an increasingly sedentary and overweight population nationwide, especially in children, access to recreational facilities, including trails, is becoming more and more important for many citizens. Additionally, the rising cost of fuel has inspired many commuters to search for alternative methods of transportation to their workplace and shopping destinations.

This plan builds on the many existing high-quality bicycle and pedestrian facilities in Swansea, as well as those currently under development. The plan incorporates and builds upon the information gathered in the community park survey conducted by the Village in March of 2009.

It also outlines a blueprint for a connected system of both bicycle and pedestrian facilities. Included is a phased implementation strategy based on citizen- and data-driven priorities. The piece-by-piece approach to the construction of this network will enable the Village to be proactive in searching for grant funding, and to leverage all available resources.

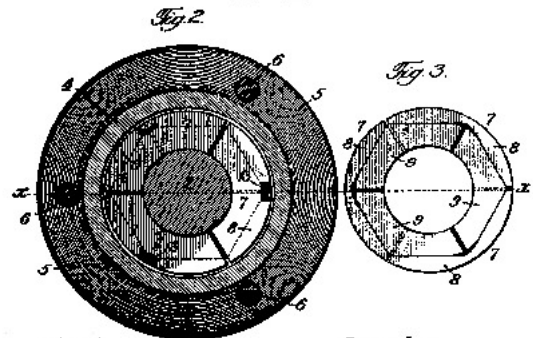
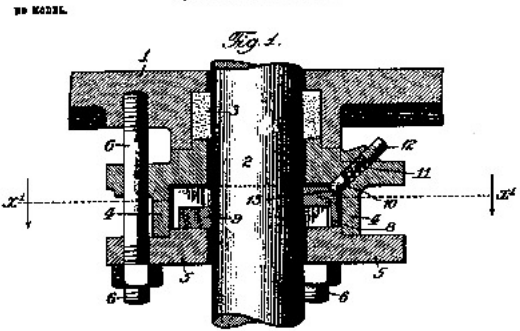
Village History & Development

Swansea has a rich history of agriculture, coal mines, foundries, and brickyards. The Gundlach Drill Works established in Swansea and manufactured the most efficient grain drills of that time. When a petition for annexation to the city of Belleville was being circulated in the territory, a group of 35 area residents petitioned the county government "that they are desirous of having said territory organized as a village...That the name of the proposed village shall be New Swansea." The residents voted on December 16, 1886, to form their own community and name it "New Swansea". In 1898 the first Village Hall was constructed.

The current Swansea Government Center building, located at 1400 N. Illinois Street, was built in 1986. The Police Department's addition was completed a few years later. Today, Swansea is recognized as one of the fastest growing communities in the metro-east.

Two Methods of Exploration: Transportation & Recreation

EX. 780,479. PATENTED JULY 18, 1904.
J. P. GUNDLACH.
PACKING FOR PISTON RODS OR THE LIKE.
APPLICATION FILED NOV. 27, 1902.



Attest:
John Gundlach
M. H. Holmes

Inventor:
John P. Gundlach
by Robert A. Burns
Attorney

Patent for Gundlach grain drill
(laborandindustrymuseum.org)



A Metrolink train station opened in Swansea in 2001, and the extension of the light rail line allowed residents in St. Clair County to reach Lambert St. Louis International Airport with stops at many of the region's destinations along the way. Commuters, travelers and tourists can leave their vehicles in the well-lit parking lot and ride the trains from Scott Air Force Base to the airport.

In 2010, the St. Clair County Transit District, in cooperation with the Bi-State Development Agency (Metro) and the Metro East Parks and Recreation District (MEPRD), constructed an extension to the Metro Bike Link trail, creating a 4.7 mile segment from the Swansea station to the station at Southwestern Illinois College. An additional 2.2 mile segment of the "rail-with-trail" is currently being constructed (see photo at left), connecting the Swansea and Memorial Hospital stations. The new trail section attracted a large volume of both bicycle and pedestrian activity in the summer and fall of 2011.



Census Statistics

According to the 2010 Census, the population of Swansea is 13,430, which is a 27% increase from 2000. Swansea is approximately 6.3 square miles in size, with a gross residential density of approximately 2,147 persons per square mile. This density is well-suited to incorporating methods of alternative transportation into the Village infrastructure. The population is evenly

split with regards to gender, and well distributed across age groups: 6% under age 5, 23% under age 18, and 16% over age 65. Historically, bicycle and pedestrian facilities would be targeted at the under 18 and between 18-65 age groups. However, the "baby boomer" generation has also shown an increased desire for exercise and recreation opportunities, as opposed to the previous generation, with walking and cycling high on the list of desired activities. Therefore, ***the target audience for this planning effort is any citizen older than age 5*** who is interested in walking or biking for play, recreation or transportation.

Swansea is largely a residential community and boasts a homeownership rate of 82%. Additionally, 87% of residents have lived in the same home for over one year, indicating an investment and commitment to their community. Ninety-three percent of residents have a high-school diploma and 35% have earned bachelor's degrees or higher. The median household income is \$64,000 and there are an average of 2.5 people per household. ***Seventy percent of households include children under the age of 18.***

The mean travel time to work is 24 minutes, and 85% of residents drive alone. Both carpooling and public transit have similar "ridership" at 5% each. Three percent of residents work at home and only 0.6% of residents walk to work. The long average travel time to employment destinations more than 10 miles away is not conducive to a modal switch to cycling or walking as ***most people will not participate in alternative transportation for commuting if the trip is longer than 10 miles.*** Education and encouragement efforts should therefore be focused on

those residents who have a shorter distance to travel to work or to transit centers, as well as facilities such as bicycle parking made available at these destinations.

Cycling or walking for other transportation needs is very viable in Swansea - trips to the grocery store and other errands are far less than 10 miles and could easily be achieved.

This data indicates an ideal audience for the implementation of a comprehensive alternative transportation network.

“X” Marks the Spot: Popular Destinations

Within the Village limits, there are a number of destinations that will influence the planned network (see Existing Conditions Map on page 17). The following is a list of these important activity centers:

Shopping Centers

- Aldi’s Market
- Schnucks Plaza
- Rural King/Swansea Farmer’s Market
- Retail centers along Frank Scott Parkway

Parks/Recreation Centers

- Melvin Price Memorial Park
- Centennial Park
- Schranz Memorial Park
- C. Herb Temple Memorial Park
- Metro BikeLink Trail
- Richland Creek Greenway
- Thompson Center (YMCA)

Education Centers

- High Mount School
- Wolf Branch Schools
- Whiteside Schools
- St. Mary - St. Augustine School
- Belleville High - East
- Belleville High - West
- Althoff High
- Lindenwood University

Community Centers

- Swansea Improvement Center
- Swansea Metrolink Station
- C.K. & L. of I. Hall
- Clinton Hill Country Club
- Churches/Places of Worship
- Medical Offices
- Restaurants



2009 Park Survey

In March of 2009, the Village of Swansea offered a survey to its residents through its community newsletter, the “Swansea Report”. The goal of the survey was to obtain citizen input to shape a park “plan”. Produced and analyzed by Swansea’s Park Board Strategic Planning Committee, the resulting information has informed policy decisions and given a clear direction for the committee and community as a whole. The results of the survey are summarized in the following graphic.

283 Respondents**Avg Time as Resident = 15.8 years****Homeowner – 95%; Rent – 5%****Male = 35 %; Female = 65%****Response by Age:****25-34: 9% 35-44: 22%****45-54: 24% 55-64: 21%****65+: 24%****Households Responding to Survey:****15% have children under age 5****26% have children ages 5-12 years****19% have teenagers 13-17 years old****31% have someone 65 or older in their household****62% are within WALKING distance of a Swansea Park****Park Closest to Residence:****Schranz: 40% Mel Price: 33%****Centennial: 23% Other: 4%****Part of Swansea Reside:****Historic: 25% Old Collinsville: 23%****Huntwood: 25% Josephine Dr: 14%****Wolf Creek, Polo Run & Rosewood: 9%****Priorities:****Assuming Village had available funding, where should they spend it?****1. Add more sidewalks in high traffic areas****43% - 1st choice & 23% - 2nd choice****2. Develop bike paths and bike lanes****25% - 1st choice & 30% -2nd choice**

From the results of the survey, the Park Board Strategic Planning Committee developed a list of goals and strategies to achieve those goals. All action items were developed with careful attention toward the financial capability of the Village.

Goal 1: Maintain our parks and recreation facilities and programs.

- 1A. Perform planning, programming and maintenance for the Village Parks and Recreation program.
- 1B. Increase volunteer and partnership opportunities to maintain, improve, and beautify the parks.
- 1C. Secure a stable source of funding and pursue opportunities for increased funding to meet maintenance requirements.
- 1D. Form a Parks and Recreation Department.

Goal 2: Make the Village fully pedestrian and bicycle friendly

- 2A. Develop a management plan for the long-term development of pedestrian/bike-friendly connectors throughout the Village.

2B. Connect every Village school, park, and neighborhood in a pedestrian-friendly manner.

2C. Connect every Village school, park, and neighborhood in a bicycle-friendly manner.

Goal 3: Fill in the Gaps in our Parks and Increase footprint

3A. Provide baseball and football/soccer sports fields with adequate bleacher seating and parking.

3B. Establish additional recreational elements in the parks.

3C. Increase public safety in the parks.

3D. Acquire neighboring park properties upon availability.

Goal 4: Build a Comprehensive Village Recreation Program

4A. Establish a planning committee with leadership to develop and implement a recreational program.

4B. Partner with external organizations to build a comprehensive recreational program.

4C. Work to ensure year-round access to recreational activities for all members of our community.

Goal 5: Go Green - Lead the Community in Environmental Sustainability

5A. Educate the community in ways to be more environmentally sustainable.

5B. Provide opportunities for the community to become more environmentally sustainable.

5C. Identify, Plan, and Implement “Green” opportunities in Park operations.

Goal 6: Create a Village Square

6A. Pursue partnerships, grants and other funding opportunities for Village Square.

6B. Design master plan for Village Square.

6C. Research and gather ideas from surrounding communities.

6D. Pursue public policy changes to incentivize commercial participation.

6E. Build it.

The Explore Swansea Plan will aid the Village in achieving both Goals 2 and 5. It can also serve as the foundation for the implementation of strategies under all six goals.

As part of the committee’s planning process, they have also developed a list of proposed projects. All of the relevant (bicycle and pedestrian) proposals have been incorporated into the Explore Swansea Plan, and some of the key projects are shown here:

| Proposed Project | Description | Location | Cost Estimate |
|--|--|--------------------|---------------|
| Master Bike Trail | Connect to Metrolink bike trail and Belleville bike trails to entice riders through Swansea | Throughout Swansea | N/A |
| Walking Trail at Smith Property | Develop a walking/bike trail at the Smith property to connect the Metrolink bike trail to the trail at Melvin Price Park (Pending acquisition of property) | Mel Price Park | N/A |
| Walking Trail at Schranz Park - Paved/Rubber | Construct a paved/rubber walking trail at Schranz Park using recycled materials. This will keep walkers in a designated area, reducing landscaping maintenance requirements. | Schranz Park | \$25,000.00 |

Metro East Park & Recreation District Long Range Development Plan 2011

While the Village of Swansea does not have its own park district, there is a regional entity that serves the citizens of both St. Clair and Madison Counties in this capacity. The Metro East Park & Recreation District (MEPRD) was created through a voter referendum in 2000. One-tenth of one percent of relevant sales tax is collected in each county. Half of the revenue is directed to MEPRD and the other half is returned to the county from which it was collected. In St. Clair County, the funds are allocated by the Parks Grant Commission and the Property and Recreation Committee.

In 2011, MEPRD undertook a long-range planning process for its jurisdictional area. The result was the development of a list of priority trails to be constructed. Seven “immediate” priority trails, twelve “future” priority trails, and seven “long-term” priority trails were identified.

Included in MEPRD’s “future” priority trails category is the “Schrantz/Old Collinsville/Huntwood Road Trails. This four mile trail has popular local support and will connect the MetroLink Bike Trail to several of Swansea’s parks and the Richland Creek Bikeway. MEPRD’s plan states, “If ROW [right-of-way] can be secured, the feasibility of this trail is high and construction would be fairly accessible and easily accomplished.” See map below. Accordingly, this alignment has been incorporated into the Explore Swansea Plan.

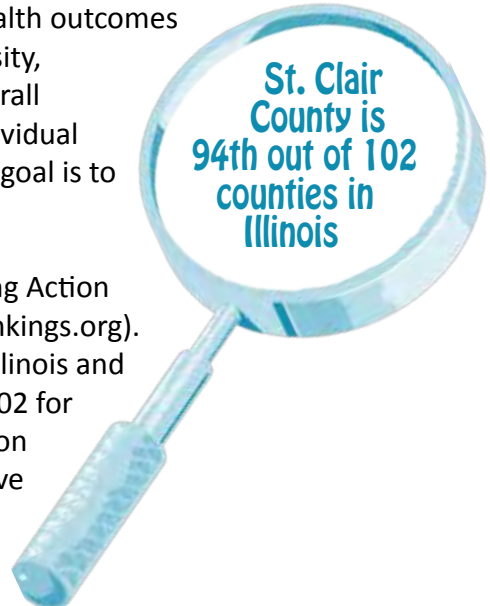


Metro East Park & Recreation District | Long Range Development Plan 2011 37

Other Motivating Factors: Community Health Needs

The University of Wisconsin’s Population Health Institute has analyzed a series of factors to produce a ranking for the counties of Illinois in two categories: health outcomes (premature death, overall morbidity, etc.) and health factors (obesity, smoking, etc). The analysis is intended to produce a picture of overall community health based on factors like quality of health care, individual behavior, education, employment and environmental factors. The goal is to capture a picture of both physical and mental health.

The results are published in the County Health Rankings: Mobilizing Action Toward Community Health - Illinois 2010 report (countyhealthrankings.org). St. Clair County is 94 out of 102 (1 being the healthiest county in Illinois and 102 being the least healthy) for health outcomes and 100 out of 102 for health factors. These poor results indicate that citizens in this region would benefit greatly from access to a high quality system for active transportation and recreation.



Projected Economic Impact Benefits

In June 2009, the League of Illinois Bicyclists published “The Economic Benefits of Bicycle Infrastructure Investments”. The article highlights the benefits for state and local economies, the benefits for business districts and neighborhoods, and identifies the cost savings for the individual user.

“The evidence demonstrates that investments in bicycle infrastructure make good economic sense as a cost effective way to enhance shopping districts and communities, generate tourism and support business.”

- A study commissioned by the Colorado Department of Transportation in 2000 determined that bicycling contributed **\$1 billion** to the economy from manufacturing, retail, tourism and bike races.
- Maine, which since 1991 has made a concerted effort to improve its bicycle infrastructure by widening shoulders and creating shared-use paths, generates **\$66 million a year** in bicycle tourism.
- North Carolina’s Outer Banks spent \$6.7 million on bicycle infrastructure and have seen an annual **nine to one return on that one-time investment**. Expenditures by the 680,000 annual visiting bicyclists support **1,400 jobs** in the area.
- As a result of policies to encourage bicycling and maintain urban density, which reduce auto-dependency, Portland, Oregon residents save on transportation costs and have more money to spend on things they value. Compared to the distance and time spent commuting to work in the median American city, Portlanders travel 2.9 billion fewer miles and spend 100 million fewer hours, saving **\$2.6 billion** a year.

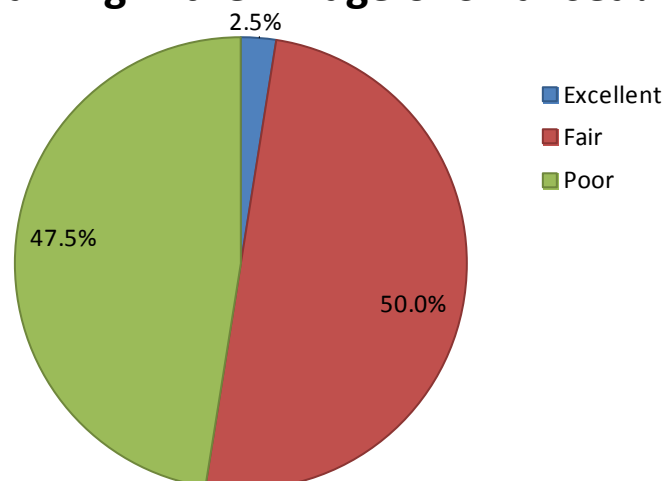


Treasure Hunt: Explore Swansea Data Collection

Data collection for the Explore Swansea plan began in January 2012 with the launch of a paper and on-line survey for residents and visitors. Responses to the survey were collected through March 28, 2012 and a total of 145 responses were submitted to the planning team. Of all the respondents, 87% believed the Village of Swansea should consider non-motorized transportation a priority and the top reasons residents are walking and biking is for recreation and/or fitness.

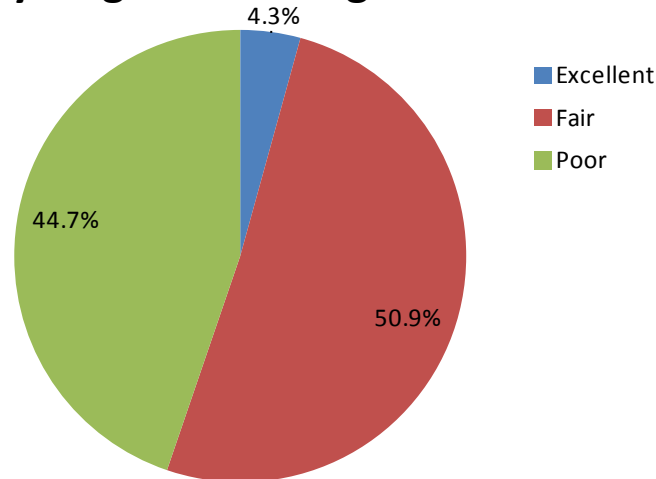
When it comes to walking in Swansea, 49% of the participants rated current walking conditions as poor. Forty-three percent of respondents walk a few times a week, however 93% said they would walk

How do you rate the current conditions for walking in the Village of Swansea?



more if sidewalks, trails, and street crossings were improved for pedestrians. When asked what was keeping them from walking the top responses were: lack of sidewalks (85%), automobile traffic (54%), and pedestrian unfriendly streets (60%).

How do you rate the current conditions for bicycling in the Village of Swansea?



Biking in the Village of Swansea is growing in popularity with 65% of participants considering themselves a basic cyclist.

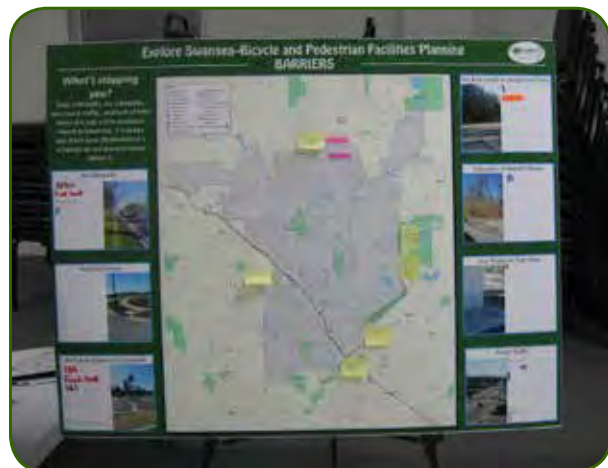
Forty-seven percent of respondents bike only a few times a month, and 88% indicated they would take more trips by bike if there were more bike routes, lanes, and safer street crossings. Seventy-six percent of participants agreed the biggest factor discouraging biking in Swansea is the lack of bike lanes. Other common discouraging factors included: inadequate shoulder width, high automobile speeds, traffic volume, crossing busy roads, and inconsiderate motorists.

Open House #1

On January 18, 2012 the first Explore Swansea Open House was held at the Thompson Civic Center in Melvin Price Memorial Park. For the duration of two hours in the early evening residents and visitors stopped by and shared with planners and city officials what they would like to see incorporated into the Explore Swansea Plan.

The announcement of the Open House in the Swansea Report and a positive article in the Belleville News Democrat contributed to a well-attended event. Visitors signed in and traveled around the room stopping at displays along the way. Guests were asked to identify 'Destinations: Where do you want to go?', then 'Corridors: How do you want to get there?', and finally 'Barriers: What is Stopping you?' (see photos at right).

A visual preference survey allowed participants to indicate what type of crossings, sidewalks, lights, bike parking, and bike lanes they would prefer in their community. In addition, 11x17" copies of the Swansea Existing Conditions Map were available for people to mark up as they wished, indicating what routes they would like to see improved and current obstacles. Paper copies of the Explore Swansea survey and comment cards were available to complete as well. Partners of the project and area



bicycle shops were invited to set up vendor tables and share information about their services and products with attendees, making the event very welcoming, informative, and fun for all involved.

Walking Workshop

On Saturday, March 10, residents of Swansea joined the Explore Swansea planning team to learn more about issues facing pedestrians and to document the typical walking experience in and around Melvin Price Memorial Park. The guided walk stopped at key points along the walk to point out the assets and challenges of the built environment and discuss how transportation infrastructure and specific design details affect the ability of Swansea residents to walk to destinations throughout the community.



Following the walk, the group reconvened at the Norman Lehr Center in Melvin Price Memorial Park to talk about their experiences, share personal experiences from walking and bicycling throughout the community,

and develop consensus on issues for consideration in the Explore Swansea plan. These issues included deep open drainage ditches, a lack of sidewalks along key corridors and bus routes, a lack of waiting areas and sidewalks at bus stops along Kinsella and Highway 159, gaps in the sidewalk network, and a lack of crosswalks at intersections.

Walkability Checklist - Most Common Problems

Nine Swansea residents completed the walkability checklist, which asked participants to review and rate their perceptions of safety, driver behavior, adequacy of pedestrian facilities, and overall enjoyment. Out of a possible thirty (30) points, the average score for all nine participants was 15, indicating that many issues need to be addressed. The checklist was divided into five categories, each of which is listed below along with the two most common problems from each category, as indicated by participants:

1. **Did you have room to walk?**
 - Sidewalks or paths started and stopped
 - No sidewalks, paths, or shoulders
2. **Was it easy to cross streets?**
 - Needed striped crosswalks or traffic signals
 - Needed curb ramps or ramps needed repair
3. **Did drivers behave well?**
 - Drove too fast
 - Sped up to make it through traffic lights or drove through traffic lights
4. **Was it easy to follow safety rules?**
 - Could not walk facing traffic where there were no sidewalks
 - No crosswalks or places to cross where you were visible to drivers
5. **Was your walk pleasant?**
 - Scary dogs
 - Not well lighted

Other comments from respondents included:

- “narrow street with no shoulder”
- “weather was an asset that day”
- “speeding, inattentive drivers”
- “[drivers] using cell phones – don’t see pedestrians”
- “most walks were on chip + tar roads”
- “many places it is difficult to cross the street”
- “drivers behave well when they see big groups, but not 1 or 2 people”
- “not many crosswalks”



Walking workshop photos by Jaynie Wells

Open House #2

The second open house for the Explore Swansea Plan was held on March 28, 2012 at the Village Government Center. For the duration of two hours in the early evening residents and visitors could stop by and view a summary of survey responses and the draft plan. Comments on the plan were accepted and encouraged at this event.

Aside from the primary task of presenting the draft plan to the public, a major goal of the open house was to collect opinions and feedback on potential priorities for implementation. Comments cards (see example below) were filled out by attendees and these comments assisted the planning team in the construction of the prioritization matrix (see page 27 for results).

Please indicate below which streets, sidewalks, trails or intersections you feel are the **most important** to improve (PLEASE SHARE YOUR TOP THREE CHOICES):

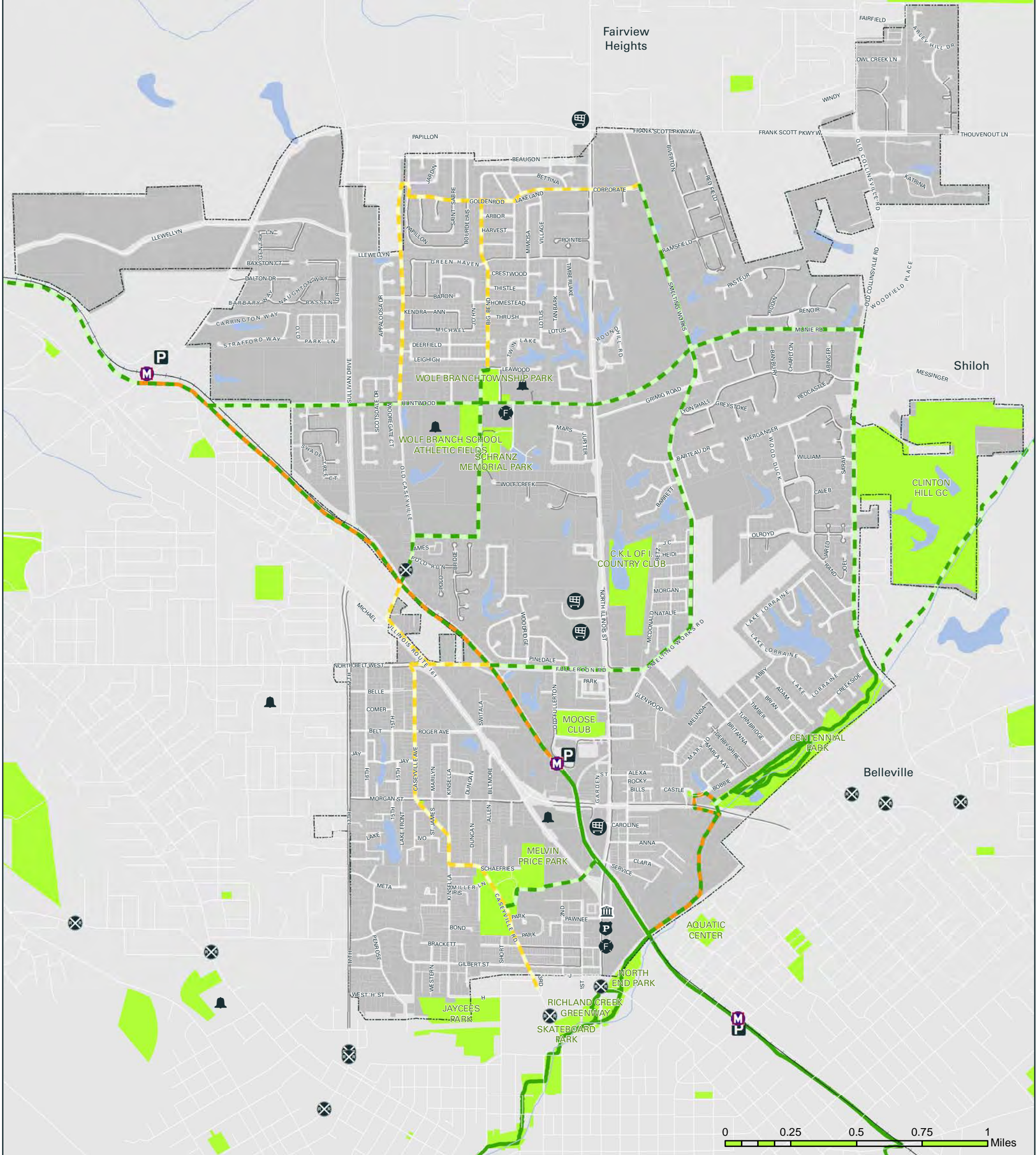
- Connection from 159 like crossing to Mel Price Park
- Smelting Works Road sidewalk
- Sidewalks along 159

Other Comments about the DRAFT Plan:
 Well planned & illustrated.

PLEASE RETURN THIS COMMENT FORM TO A MEMBER OF THE PLANNING TEAM, VILLAGE STAFF OR THE SWANSEA GOVERNMENT CENTER

Swansea Existing Conditions

O'Fallon



Legend

- | | | |
|-------------------|--------------------------|--------------------------|
| Village Limit | Metro Stations | Existing Sidewalk |
| Fire Station | Metro Park and Ride Lots | Existing Trail |
| Government Center | Railroad Crossings | Trail Planned by Others |
| Police Department | Metro Rail Lines | Trail Under Construction |
| School | Streams | Parks & Open Space |
| Shopping | Bodies of Water | |



Plan Principles



Plan Principles

For all intents and purposes, the planned users of Explore Swansea facilities are what the Federal Highway Administration terms “Group B/C Bicyclists”. These are “Basic Bicyclists” and children. They are described as the following in the FHWA’s document “Selecting Roadway Design Treatments to Accommodate Bicycles” (FHWA-RD-92-073):

Group B – Basic Bicyclists: These are casual or new adult and teenage riders who are less confident of their ability to operate in traffic without special provisions for bicycles. Some will develop greater skills and progress to the advanced level, but there will always be many millions of basic bicyclists. They prefer:

- Comfortable access to destinations, preferably by a direct route, using either low-speed, low traffic-volume streets or designated bicycle facilities.
- Well-defined separation of bicycles and motor vehicles on arterial and collector streets (bike lanes or shoulders) or separate bike paths.

Group C – Children: These are pre-teen riders whose roadway use is initially monitored by parents. Eventually they are accorded independent access to the system. They and their parents prefer the following:

- Access to key destinations surrounding residential areas, including schools, recreation facilities, shopping, or other residential areas.
- Residential streets with low motor vehicle speed limits and volumes.
- Well-defined separation of bicycles and motor vehicles on arterial and collector streets or separate bike paths.

Generally, group B/C bicyclists will be best-served by a network of neighborhood streets and designated bicycle facilities, which can be provided by:

- Ensuring neighborhood streets have low speed limits through effective speed enforcement or controls and/or by implementing “traffic-calming” strategies.
- Providing a network of designated bicycle facilities (e.g. bicycle lanes, separate bike paths, or side-street bicycle routes) through the key travel corridors typically served by arterial and collector streets.
- Providing usable roadway shoulders on rural highways.

The recommendations made in this plan should be used as a framework for developing more detailed design-engineering plans during subsequent implementation. The recommended routes and trails are consistent with the bicycle facility design material and typical sections in the Illinois Department of Transportation’s (IDOT’s) Bureau of Design and Engineering Manual (See Appendix). They also reflect the guidance presented in the American Association of State & Highway Transportation Official’s (AASHTO’s) Guide for the Development of Bicycle Facilities and the Manual on Uniform Traffic Control Devices (MUTCD) (See Appendix).

These three documents are fundamental in the current acceptable reference information for developing bicycle facilities. [Note: The full documents should be consulted in the design-engineering/implementation phase of this plan.]



Complete Streets: Illinois Law

According to the American Planning Association (www.planning.org) complete streets accommodate pedestrians, bicyclists, transit, and cars, creating multi-modal transportation networks. In October of 2007, complete streets policy became law in Illinois. It mandates that the principles of complete streets must be incorporated into all new projects receiving state or federal monies and/or projects on state or federal roads and highways. Both requirements relate to projects in urbanized areas. On June



1, 2010, IDOT formally adopted a series of design policy changes to their Bureau of Design and Environment manual, Chapters 5 and 17, in response to the 2007 “Complete Streets” state law.

While this law and the related design policies only have jurisdiction on Highways 159 and 161 in the Explore Swansea planning area, the principles of complete streets have been applied to all plan recommendations, creating seamless integration of both pedestrian and bicycle accommodations in the implementation guidelines herein.

There are six categories of complete streets facility types recommended for the Village of Swansea. They are as follows:

1. Share-The-Road Signs & Sidewalks
2. Shared Lane (Sharrows) & Sidewalks
3. Improved Shoulders & Sidewalks
4. Ped Paths
5. Trail
6. Sidewalks

Definitions of Facility Types:

- **Share-The-Road Signs:** The use of signs designates these facilities as recommended on-street bicycle routes for advanced cyclists. The purpose of these signed routes is simply to increase awareness of both the automobile operator and the cyclist to the presence of the other and a reminder of their rights to the roadway. Many of these routes are/will be used by Advanced Cyclists - the recommended signs are strictly to improve safety conditions.
- **Marked Shared Lane:** Otherwise known as “sharrows”, this facility recommends the use of on-street pavement markings that designate Bicycle Routes along with the area of the Shared Lane that is recommended for use by cyclists choosing to ride on the roadway with automobile traffic. Sharrows are most appropriate, according to the AASHTO Guide for roadways with posted speed limits of 35 mph or less. Signs, both for awareness, safety and wayfinding, are also used in this facility. The combination of signs and pavement markings (including through intersections) designates these roadways as the Village’s “preferred” locations for on-street, with-traffic cycling. They are especially useful in locations where on-street parallel parking is allowed. These facilities are recommended for both Advanced and Basic Cyclists, but not for Children.
- **Improved Shoulders:** While the width of the shoulders on the roadways recommended for this facility are more than adequate, their surface materials are not. This recommendation includes replacing the current oil and chip surface with a standard asphalt surface - an extension of the surface used in the roadway. Pavement markings on the repaved shoulders are recommended, as are wayfinding/route signs. The use of this facility eliminates the need for road-widening and related expenses to accommodate bicycle

lanes. Due to the high speed and volume of traffic on these roadways, Children are not recommended users.

- **Ped Paths:** This “hybrid” facility is a combination of a sidewalk and a trail. Six feet wide and constructed of a continuous smooth pavement surface, such as asphalt, ped paths operate as bi-directional trails on their own right-of-way, with cyclists and pedestrians on both sides of the roadway moving in the same direction as traffic. These facilities are appropriate for all levels of users and serve to extend the Village’s network of facilities both in linear feet and in network connections - often without the need for wide right-of-way acquisition.
- **Multi-Purpose Trail:** Multi-Use Trails are 10-12 feet wide (or greater) with a continuous smooth paved surface such as asphalt or concrete, and accommodate bi-directional flow on their own right-of-way. Recommended for only one side of a roadway, these facilities accommodate all levels of users.
- **Sidewalk:** A minimum five feet wide of hard surface, these facilities are primarily recommended for pedestrian use. Recommended for extensive implementation, properly constructed and well-maintained sidewalks are the main component of a successful alternative transportation network. In areas where certain bicycle facilities are not recommended for Children, sidewalks can and should be used. Keeping the sidewalk clear of low-hanging branches, shrubbery and debris, along with maintaining the pavement surface will encourage novice and advanced children alike to exercise or commute to school.

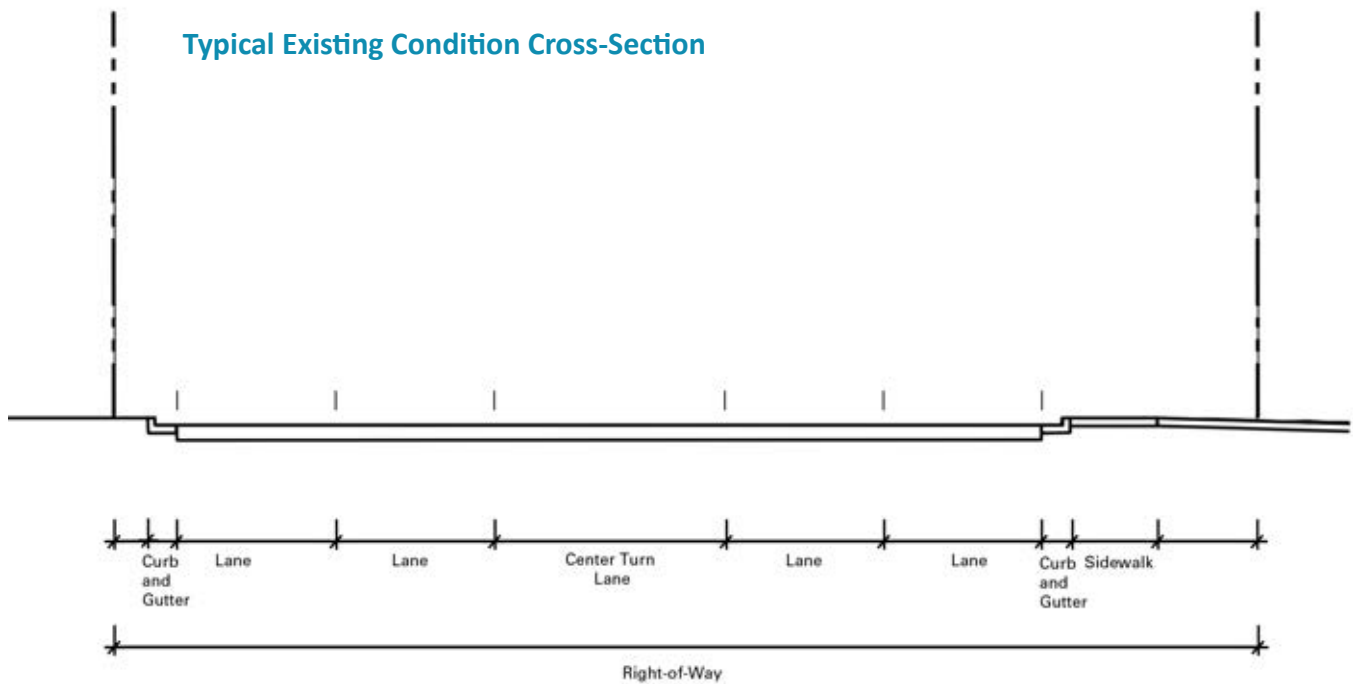
school.

Three examples of types of safety and wayfinding signs for bicycle facilities.

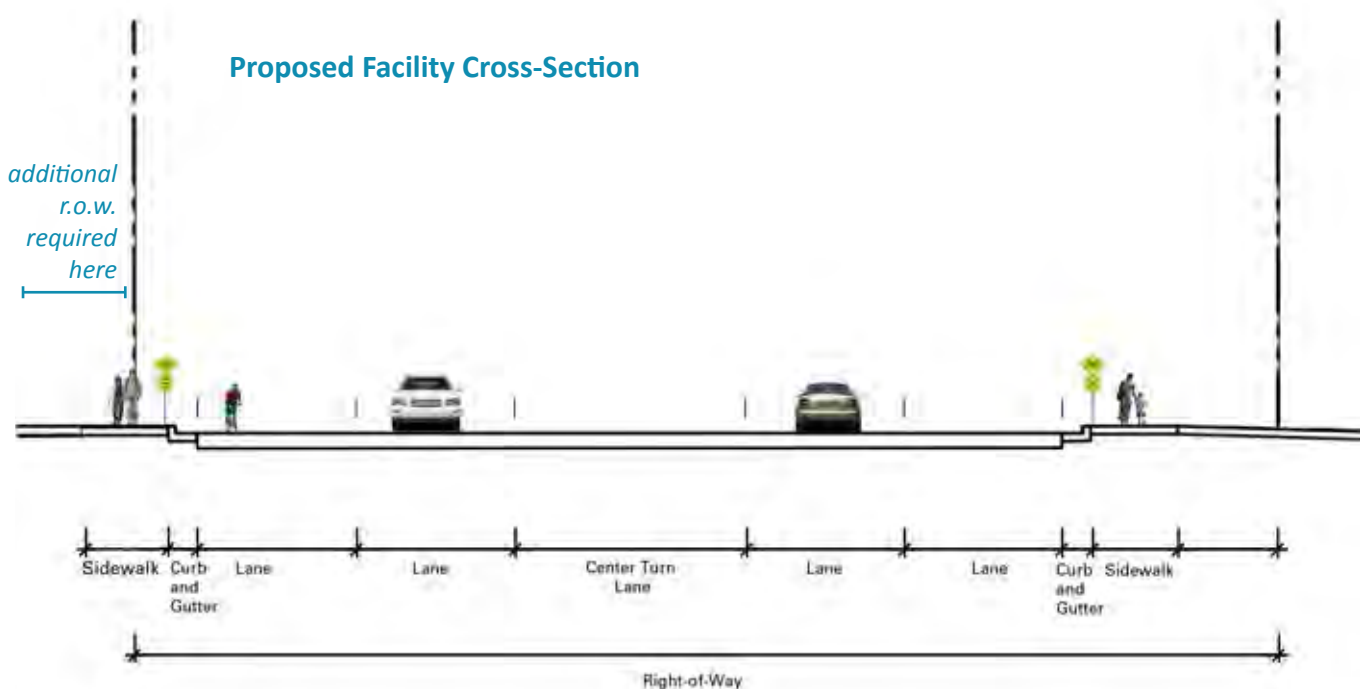


Recommended Facility Types

Share-The-Road Signs & Sidewalks

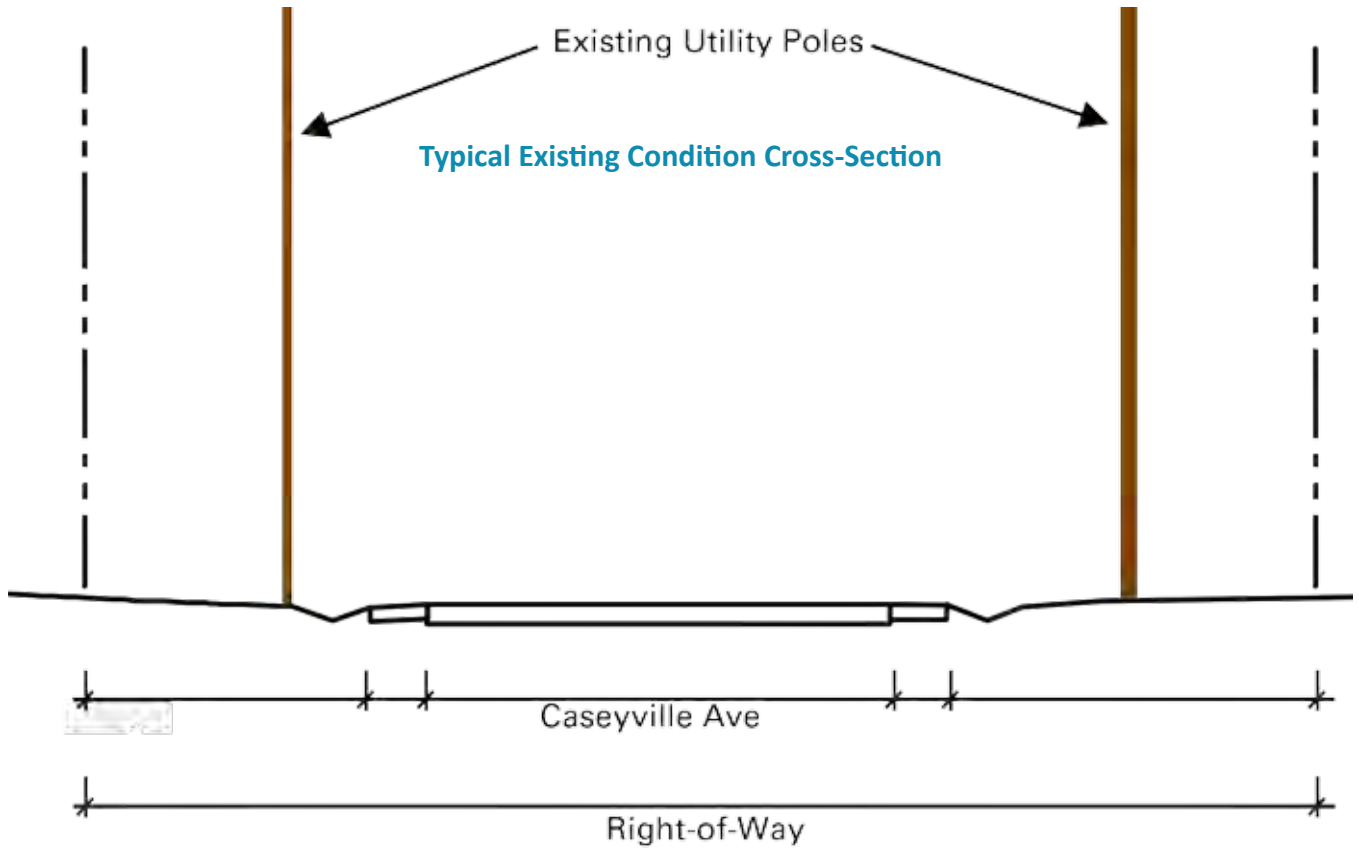


| Street Name/Label | Planned Facility 1 | Feet | Miles | Cost | Planned Facility 2 | Cost | Total Cost |
|---|--------------------|--------|-------|-----------|--------------------|------------|------------|
| Share-The-Road Signs & Sidewalks | | | | | | | |
| Big Bend | STR | 4,294 | 0.8 | \$ 2,834 | Sdwk | \$ 94,477 | \$ 97,311 |
| Boul Ave | STR | 2,992 | 0.6 | \$ 1,974 | Sdwk | \$ 65,816 | \$ 67,791 |
| Bourdelaïs | STR | 1,441 | 0.3 | \$ 951 | Sdwk | \$ 31,699 | \$ 32,650 |
| Goldenrod/Lakeland/Corporate/Jardin/Papillion | STR | 5,226 | 1.0 | \$ 3,449 | Sdwk | \$ 124,802 | \$ 128,251 |
| Illinois Route 161 | STR | 17,512 | 3.3 | \$ 11,558 | Sdwk | \$ 385,262 | \$ 396,820 |
| Kingsbury/Gilbert | STR | 5,704 | 1.1 | \$ 3,765 | Sdwk | \$ 125,494 | \$ 129,259 |
| Illinois Route 159 | STR | 19,213 | 3.6 | \$ 12,681 | Sdwk | \$ 422,691 | \$ 435,372 |

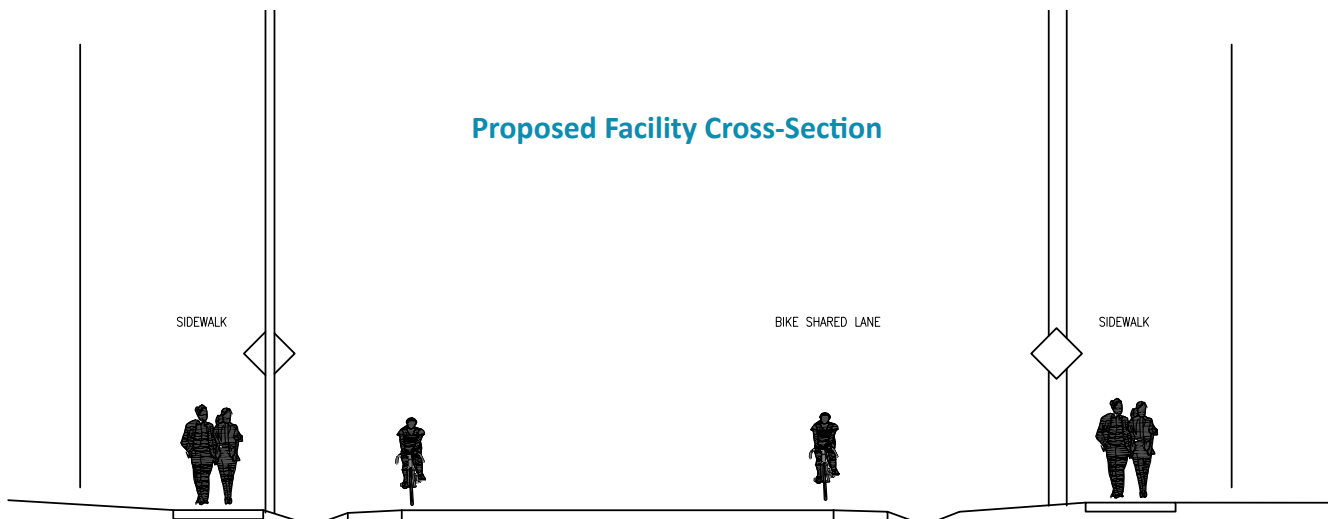


Recommended Facility Types

Shared Lane & Sidewalks



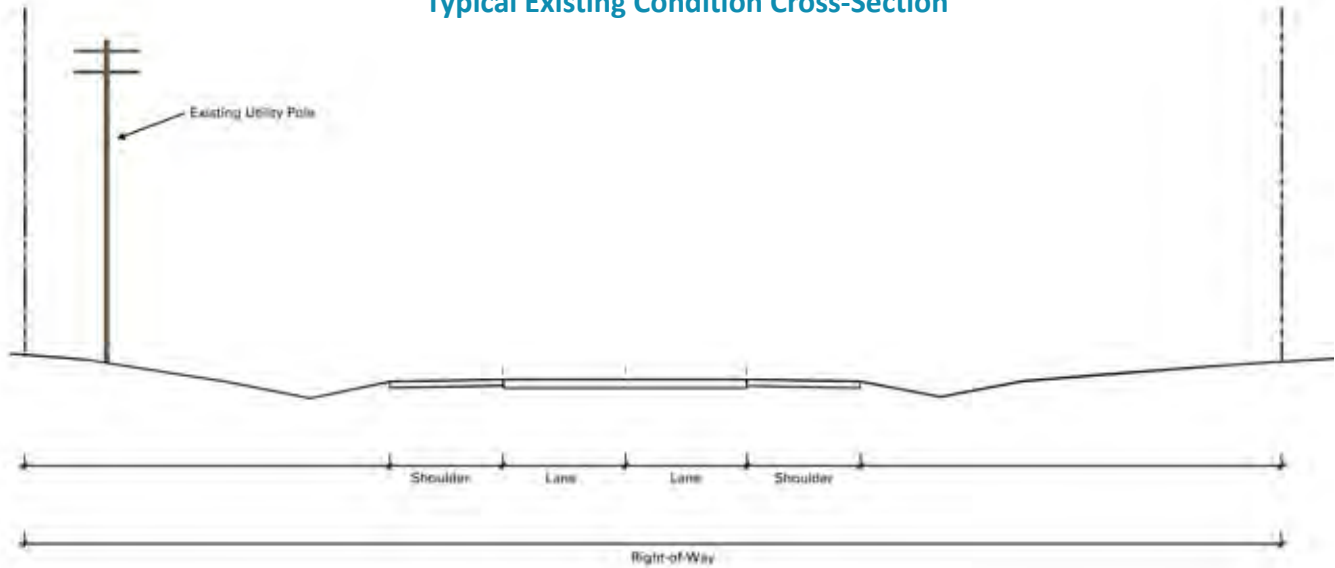
| Street Name/Label | Planned Facility 1 | Sharrow | Sharrow Cost | Feet | Miles | Cost | Planned Facility 2 | Cost | Total Cost |
|-------------------------------------|--------------------|---------|--------------|--------|-------|----------|--------------------|------------|------------|
| Shared Lanes | | | | | | | | | |
| 17th St | Shared Lane | Y | \$ 3,604 | 10,010 | 1.9 | \$ 6,606 | N/A | \$ - | \$ 10,210 |
| Green Haven | Shared Lane | Y | \$ 776 | 2,156 | 0.4 | \$ 1,423 | N/A | \$ - | \$ 2,199 |
| Morgan St | Shared Lane | Y | \$ 1,322 | 3,672 | 0.7 | \$ 2,423 | N/A | \$ - | \$ 3,745 |
| N. Belt West | Shared Lane | Y | \$ 646 | 1,794 | 0.3 | \$ 1,184 | N/A | \$ - | \$ 1,830 |
| Shared Lanes & Sidewalks | | | | | | | | | |
| Caseyville Ave | Shared Lane | Y | \$ 3,167 | 8,796 | 1.7 | \$ 5,805 | Sdwb | \$ 193,513 | \$ 199,318 |
| Fawn Meadows/ Lake Lorraine | Shared Lane | Y | \$ 716 | 1,988 | 0.4 | \$ 1,312 | Sdwb | \$ 43,729 | \$ 45,041 |
| Fullerton | Shared Lane | Y | \$ 1,324 | 3,676 | 0.7 | \$ 2,426 | Sdwb | \$ 80,882 | \$ 83,308 |
| Huntwood | Shared Lane | Y | \$ 3,536 | 9,821 | 1.9 | \$ 6,482 | Sdwb | \$ 216,071 | \$ 222,553 |
| Llewellyn | Shared Lane | Y | \$ 708 | 1,967 | 0.4 | \$ 1,298 | Sdwb | \$ 43,264 | \$ 44,562 |
| Old Caseyville | Shared Lane | Y | \$ 1,113 | 3,092 | 1.0 | \$ 2,041 | Sdwb | \$ 118,509 | \$ 172,550 |



Recommended Facility Types

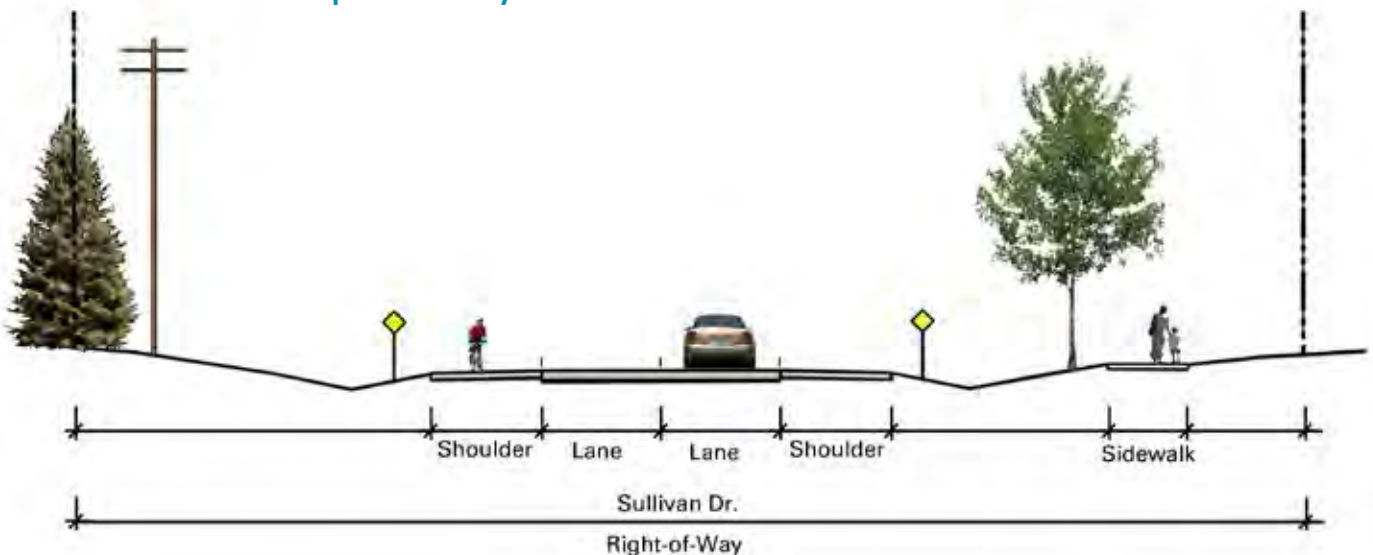
Improved Shoulder & Sidewalks

Typical Existing Condition Cross-Section



| Street Name/Label | Planned Facility 1 | Sharrow | Sharrow Cost | Miles | Cost | Planned Facility 2 | Cost | Total Cost |
|--|--------------------|---------|--------------|-------|--------------|--------------------|------------|--------------|
| Improved Shoulder (with Sharrows) | | | | | | | | |
| Old Caseyville | Imp Shoulder | Y | \$ 2,107 | 1.1 | \$ 807,595 | N/A | \$ - | \$ 809,702 |
| Improved Shoulder (with Sharrows) & Sidewalks | | | | | | | | |
| Frank Scott Parkway | Imp Shoulder | Y | \$ 7,454 | 3.9 | \$ 2,857,425 | Sdwb | \$ 455,532 | \$ 3,312,957 |
| Sullivan | Imp Shoulder | Y | \$ 3,111 | 1.6 | \$ 1,192,572 | Sdwb | \$ 190,120 | \$ 1,382,692 |

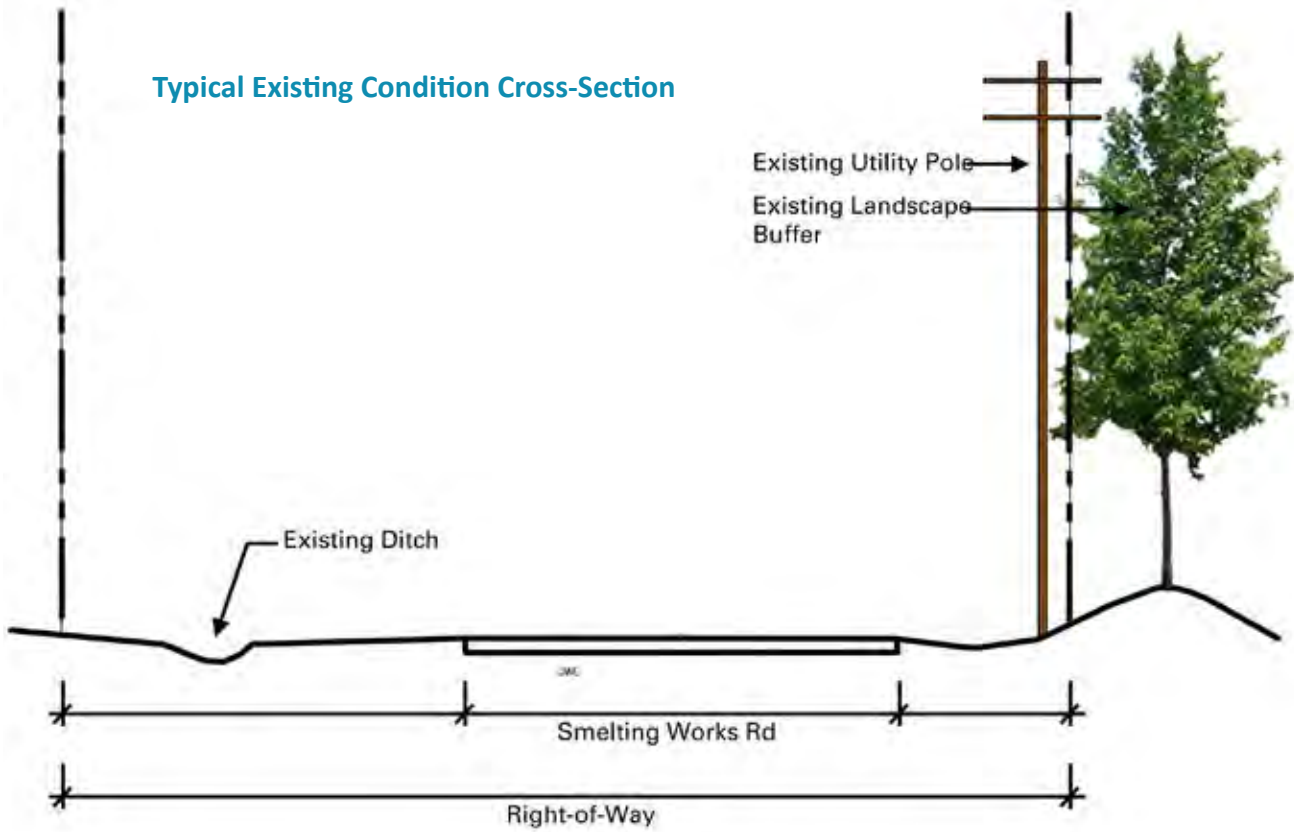
Proposed Facility Cross-Section



Recommended Facility Types

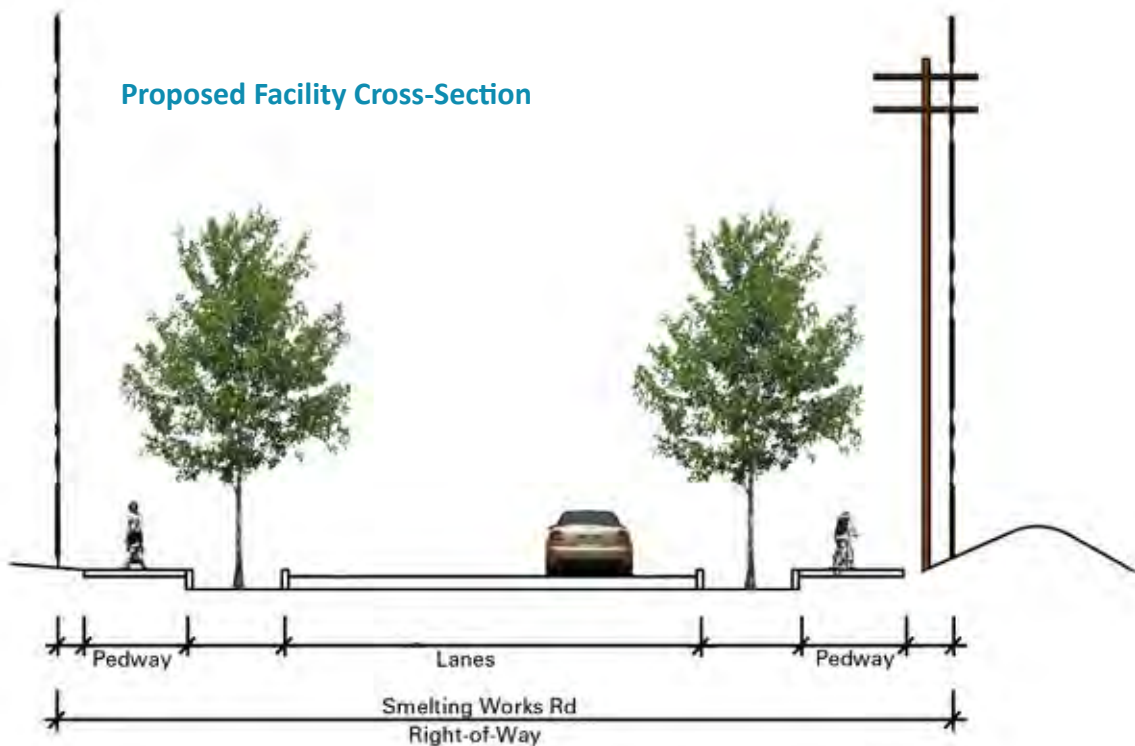
Ped Path (One-Way Trail Pair)

Typical Existing Condition Cross-Section



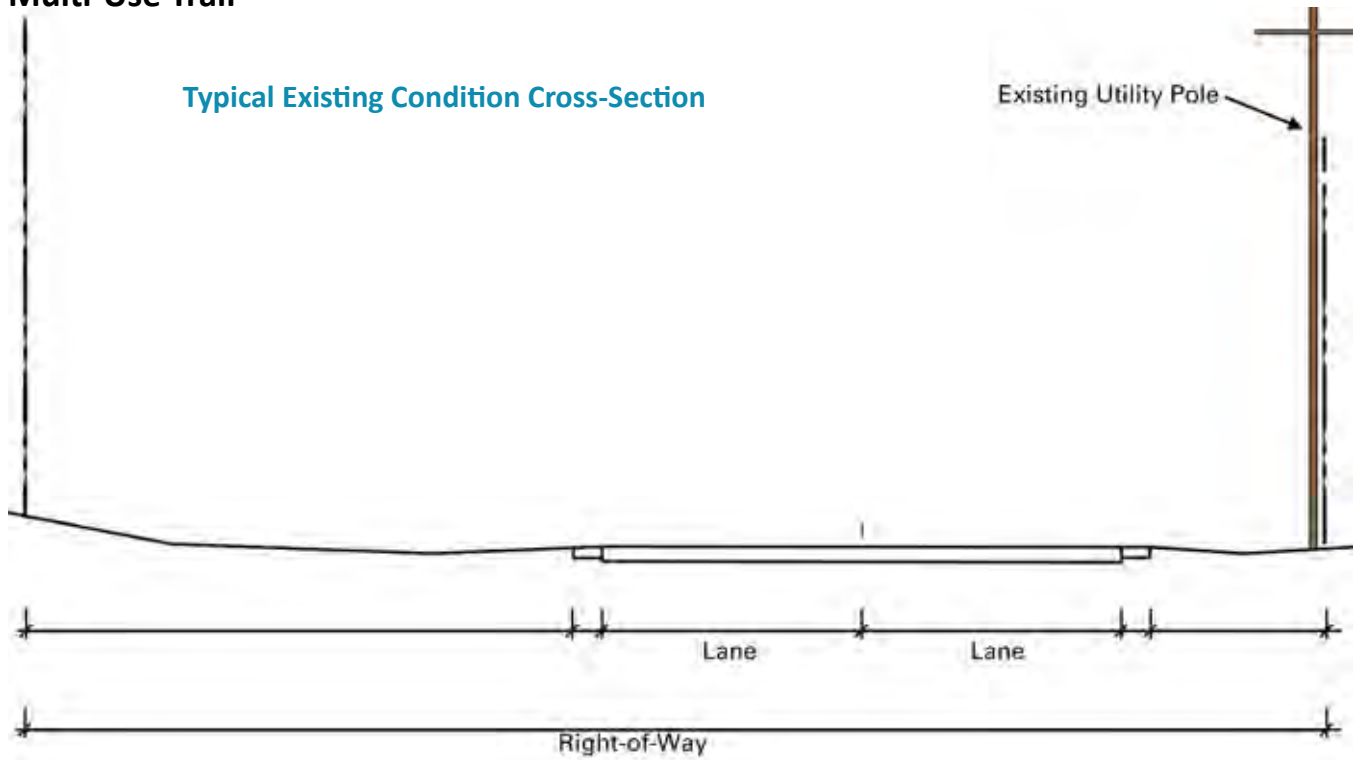
| Street Name/Label | Planned Facility 1 | Sharrow | Sharrow Cost | Miles | Cost | Planned Facility 2 | Cost | Total Cost |
|-----------------------------------|--------------------|---------|--------------|-------|------------|--------------------|------|------------|
| One-Way Trail (Both Sides) | | | | | | | | |
| Smelting Works | OWT | N | \$ - | 2.3 | \$ 860,917 | N/A | \$ - | \$ 860,917 |

Proposed Facility Cross-Section

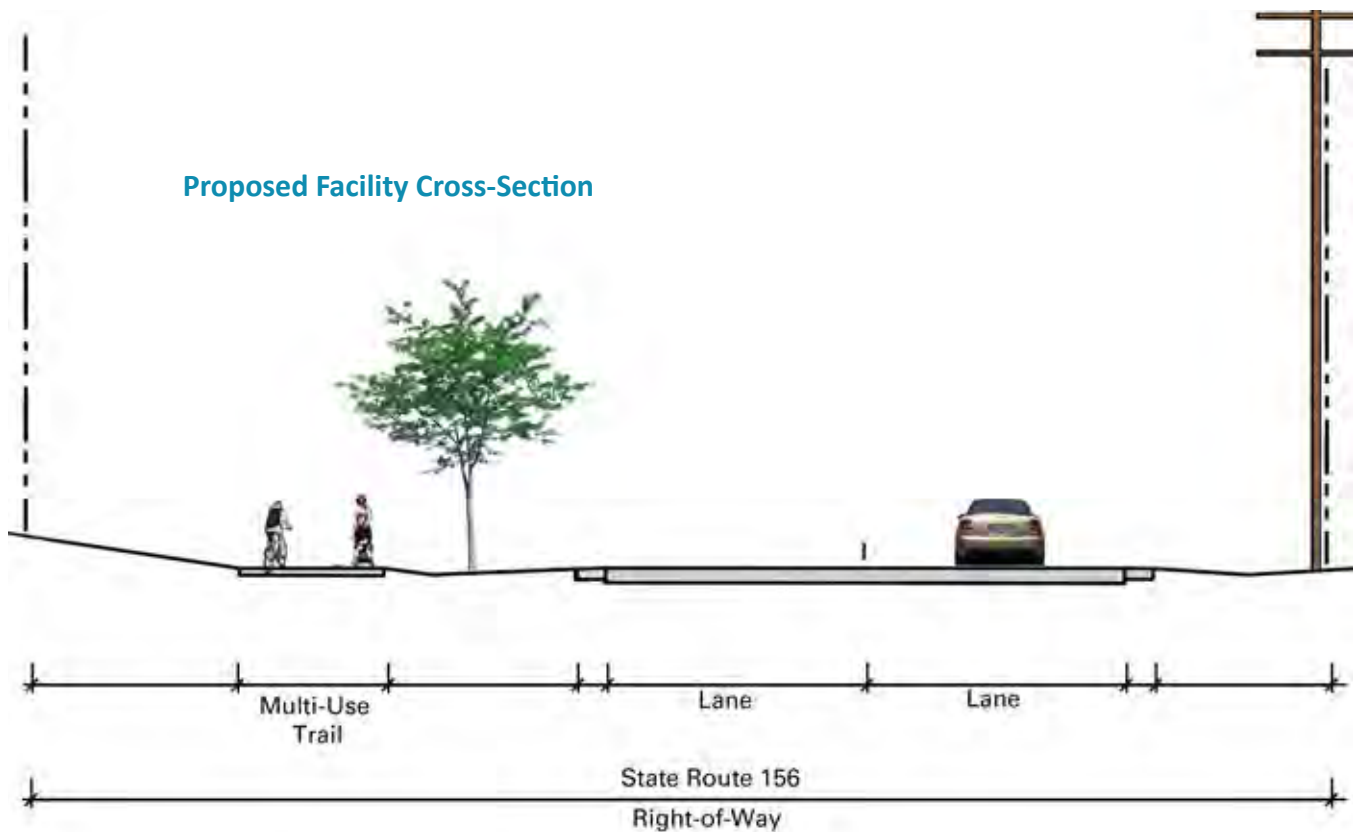


Recommended Facility Types

Multi-Use Trail



| Street Name/Label | Planned Facility 1 | | Sharrow | | Miles | Planned Facility 2 | | Total Cost |
|------------------------------|--------------------|---------|---------|------|------------|--------------------|-----------|------------|
| | Facility 1 | Sharrow | Cost | Cost | | Facility 2 | Cost | |
| Multi-Use Trails | | | | | | | | |
| Munie/Huntwood | Trail | N | \$ - | 1.1 | \$ 317,690 | Sdwk | \$ 63,300 | \$ 380,990 |
| Bourdelaies-FKP Connector | Trail | N | \$ - | 0.03 | \$ 7,671 | N/A | \$ - | \$ 7,671 |
| Mel Price to Metro Bike Link | Trail | N | \$ - | 0.6 | \$ 167,148 | N/A | \$ - | \$ 167,148 |
| Old Collinsville | Trail | N | \$ - | 3.0 | \$ 791,399 | N/A | \$ - | \$ 791,399 |
| Schranz-Metro Connector | Trail | N | \$ - | 0.7 | \$ 208,294 | N/A | \$ - | \$ 208,294 |
| Smelting Works-White Pines | Trail | N | \$ - | 0.4 | \$ 129,627 | N/A | \$ - | \$ 129,627 |



Explore Swansea "Complete Streets" Plan Estimated Preliminary Expenses (20-year implementation timeline)

| Street Name/Label | Planned Facility 1 | Sharrows | Sharrow Cost | Feet | Miles | Cost | Planned Facility 2 | Cost | Total Cost |
|-----------------------|--------------------|----------|--------------|-------|-------|-----------|--------------------|------|------------|
| Just Sidewalks | | | | | | | | | |
| Bettina | Sdwb | N | \$ - | 2,447 | 0.5 | \$ 53,837 | N/A | \$ - | \$ 53,837 |
| Fifth St | Sdwb | N | \$ - | 1,184 | 0.2 | \$ 26,054 | N/A | \$ - | \$ 26,054 |
| H STreet | Sdwb | N | \$ - | 1,844 | 0.3 | \$ 40,577 | N/A | \$ - | \$ 40,577 |
| Kinsella | Sdwb | N | \$ - | 2,705 | 0.5 | \$ 59,501 | N/A | \$ - | \$ 59,501 |
| Old Fullerton | Sdwb | N | \$ - | 828 | 0.2 | \$ 18,227 | N/A | \$ - | \$ 18,227 |
| Schranz Park | Sdwb | N | \$ - | 920 | 0.2 | \$ 20,248 | N/A | \$ - | \$ 20,248 |

Improved Shoulder (with Sharrows)

| | | | | | | | | | |
|----------------|--------------|---|----------|-------|-----|------------|-----|------|------------|
| Old Caseyville | Imp Shoulder | Y | \$ 2,107 | 5,852 | 1.1 | \$ 807,595 | N/A | \$ - | \$ 809,702 |
|----------------|--------------|---|----------|-------|-----|------------|-----|------|------------|

Improved Shoulder (with Sharrows) & Sidewalks

| | | | | | | | | | |
|---------------------|--------------|---|----------|--------|-----|--------------|------|------------|--------------|
| Frank Scott Parkway | Imp Shoulder | Y | \$ 7,454 | 20,706 | 3.9 | \$ 2,857,425 | Sdwb | \$ 455,532 | \$ 3,312,957 |
| Sullivan | Imp Shoulder | Y | \$ 3,111 | 8,642 | 1.6 | \$ 1,192,572 | Sdwb | \$ 190,120 | \$ 1,382,692 |

One-Way Trail (Both Sides)

| | | | | | | | | | |
|----------------|-----|---|------|--------|-----|------------|-----|------|------------|
| Smelting Works | OWT | N | \$ - | 12,130 | 2.3 | \$ 860,917 | N/A | \$ - | \$ 860,917 |
|----------------|-----|---|------|--------|-----|------------|-----|------|------------|

Share-The-Road Signs & Sidewalks

| | | | | | | | | | |
|---|-----|---|------|--------|-----|-----------|------|------------|------------|
| Big Bend | STR | N | \$ - | 4,294 | 0.8 | \$ 2,834 | Sdwb | \$ 94,477 | \$ 97,311 |
| Boul Ave | STR | N | \$ - | 2,992 | 0.6 | \$ 1,974 | Sdwb | \$ 65,816 | \$ 67,791 |
| Bourdelaies | STR | N | \$ - | 1,441 | 0.3 | \$ 951 | Sdwb | \$ 31,699 | \$ 32,650 |
| Goldenrod/Lakeland/Corporate/Jardin/Papillion | STR | N | \$ - | 5,226 | 1.0 | \$ 3,449 | Sdwb | \$ 124,802 | \$ 128,251 |
| Illinois Route 161 | STR | N | \$ - | 17,512 | 3.3 | \$ 11,558 | Sdwb | \$ 385,262 | \$ 396,820 |
| Kingsbury/Gilbert | STR | N | \$ - | 5,704 | 1.1 | \$ 3,765 | Sdwb | \$ 125,494 | \$ 129,259 |
| Illinois Route 159 | STR | N | \$ - | 19,213 | 3.6 | \$ 12,681 | Sdwb | \$ 422,691 | \$ 435,372 |

Shared Lanes

| | | | | | | | | | |
|--------------|-------------|---|----------|--------|-----|----------|-----|------|-----------|
| 17th St | Shared Lane | Y | \$ 3,604 | 10,010 | 1.9 | \$ 6,606 | N/A | \$ - | \$ 10,210 |
| Green Haven | Shared Lane | Y | \$ 776 | 2,156 | 0.4 | \$ 1,423 | N/A | \$ - | \$ 2,199 |
| Morgan St | Shared Lane | Y | \$ 1,322 | 3,672 | 0.7 | \$ 2,423 | N/A | \$ - | \$ 3,745 |
| N. Belt West | Shared Lane | Y | \$ 646 | 1,794 | 0.3 | \$ 1,184 | N/A | \$ - | \$ 1,830 |

Shared Lanes & Sidewalks

| | | | | | | | | | |
|-----------------------------|-------------|---|----------|-------|-----|----------|------|------------|------------|
| Caseyville Ave | Shared Lane | Y | \$ 3,167 | 8,796 | 1.7 | \$ 5,805 | Sdwb | \$ 193,513 | \$ 199,318 |
| Fawn Meadows/ Lake Lorraine | Shared Lane | Y | \$ 716 | 1,988 | 0.4 | \$ 1,312 | Sdwb | \$ 43,729 | \$ 45,041 |
| Fullerton | Shared Lane | Y | \$ 1,324 | 3,676 | 0.7 | \$ 2,426 | Sdwb | \$ 80,882 | \$ 83,308 |
| Huntwood | Shared Lane | Y | \$ 3,536 | 9,821 | 1.9 | \$ 6,482 | Sdwb | \$ 216,071 | \$ 222,553 |
| Llewellyn | Shared Lane | Y | \$ 708 | 1,967 | 0.4 | \$ 1,298 | Sdwb | \$ 43,264 | \$ 44,562 |
| Old Caseyville | Shared Lane | Y | \$ 1,113 | 3,092 | 1.0 | \$ 2,041 | Sdwb | \$ 118,509 | \$ 121,550 |

Multi-Use Trails

| | | | | | | | | | |
|------------------------------|-------|---|------|--------|------|------------|------|-----------|------------|
| Munie/Huntwood | Trail | N | \$ - | 5,776 | 1.1 | \$ 317,690 | Sdwb | \$ 63,300 | \$ 380,990 |
| Bourdelaies-FKP Connector | Trail | N | \$ - | 139 | 0.03 | \$ 7,671 | N/A | \$ - | \$ 7,671 |
| Mel Price to Metro Bike Link | Trail | N | \$ - | 3,039 | 0.6 | \$ 167,148 | N/A | \$ - | \$ 167,148 |
| Old Collinsville | Trail | N | \$ - | 14,389 | 3.0 | \$ 791,399 | N/A | \$ - | \$ 791,399 |
| Schranz-Metro Connector | Trail | N | \$ - | 3,787 | 0.7 | \$ 208,294 | N/A | \$ - | \$ 208,294 |
| Smelting Works-White Pines | Trail | N | \$ - | 2,357 | 0.4 | \$ 129,627 | N/A | \$ - | \$ 129,627 |

Grand Totals: **190,101** **36.7**

\$ 10,342,611

Sidewalks

One of the categories in the table above is "Just Sidewalks". While this facility recommendation did not receive its own page of cross-sections and construction expense summary, it is important to note its presence in the plan recommendations. ***These corridors have been identified as important pedestrian transportation locations.***

Facility Type Construction Estimates* (2012)

Page X shows the grand totals for estimated implementation of the Explore Swansea Plan. Below are general estimates for the construction of each type of facility. These categories were incorporated into the Geographic Information Systems (GIS) map of Swansea's planned facilities. These estimates confirm the long-range nature of the Explore Swansea Plan, providing Village officials and staff with a 20-year implementation timeframe.

*Preliminary construction estimates provided courtesy of Horner & Shifrin, Inc. Engineers

| | |
|----------------------------------|-------------------------------|
| Share-The-Road Sign: \$0.66 / lf | Sharrow: \$0.18 / lf |
| Sidewalk: \$22 / lf | Improved Shoulder: \$138 / lf |
| One-Way Trail: \$81 / lf | Multi-Use Trail: \$55 / lf |

Preliminary Cost Estimate

All costs shown in per foot of roadway

Shared-Use Path

| | Cost/FT |
|---|----------------|
| Separated from Roadway, 10' width, 3" HMA Surface, 6" Aggregate Base | |
| Earth Excavation | \$3.84 |
| Aggregate Base Course | \$8.56 |
| Hot-Mix Asphalt Surface | \$20.52 |
| Misc. Items (Signs, Swales, Culverts, Seeding, Prime Coat, ETC) | \$15.00 |
| Subtotal | \$47.92 |
| +15% Contingency | \$7.19 |
| Total - Per Roadway Centerline | \$55.11 |
| Rounded Total | \$55 |

Pedestrian Path

| | Cost/FT |
|--|--------------------|
| Separated from Roadway, 6' width, 3" HMA Surface, 6" Aggregate Base | |
| Earth Excavation | \$2.50 |
| Aggregate Base Course | \$5.45 |
| Hot-Mix Asphalt Surface | \$12.32 |
| Misc. Items (Signs, Swales, Culverts, Seeding, Prime Coat, ETC) | \$15.00 |
| Subtotal | \$35.27 |
| +15% Contingency | \$5.29 |
| Total - Per Roadway Side | \$40.56 |
| Total - Per Roadway Centerline | \$81.12 x 2 |
| Rounded Total | \$81 |

Sidewalk

| | Cost/FT |
|--|--------------------|
| Separated from Roadway, 5' width, 4" Concrete | |
| Earth Excavation | \$1.00 |
| Concrete Sidewalk | \$3.62 |
| Misc. Items (Swales, Seeding, ETC) | \$5.00 |
| Subtotal | \$9.62 |
| +15% Contingency | \$1.44 |
| Total - Per Roadway Side | \$11.06 |
| Total - Per Roadway Centerline | \$22.13 x 2 |
| Rounded Total | \$22 |

Bike Lane

| | Cost/FT |
|---|---------------------|
| Replace Existing Shoulders, 10' width, 8" HMA full depth Shoulders | |
| Earth Excavation | \$3.17 |
| Hot-Mix Asphalt Shoulders | \$48.69 |
| Rumble Strip 16" | \$1.00 |
| Painting (Sharrows, Buffer Hatching, Bike Symbols) | \$2.26 |
| Misc. Items (Signs, Swales, Seeding, ETC) | \$5.00 |
| Subtotal | \$60.12 |
| +15% Contingency | \$9.02 |
| Total - Per Roadway Side | \$69.14 |
| Total - Per Roadway Centerline | \$138.28 x 2 |
| Rounded Total | \$138 |

Notes: Estimates assume embankment in place to construct accommodations.
 Estimates do not include any ROW or easements costs.
 Estimates are in 2012 dollars

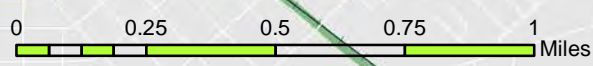
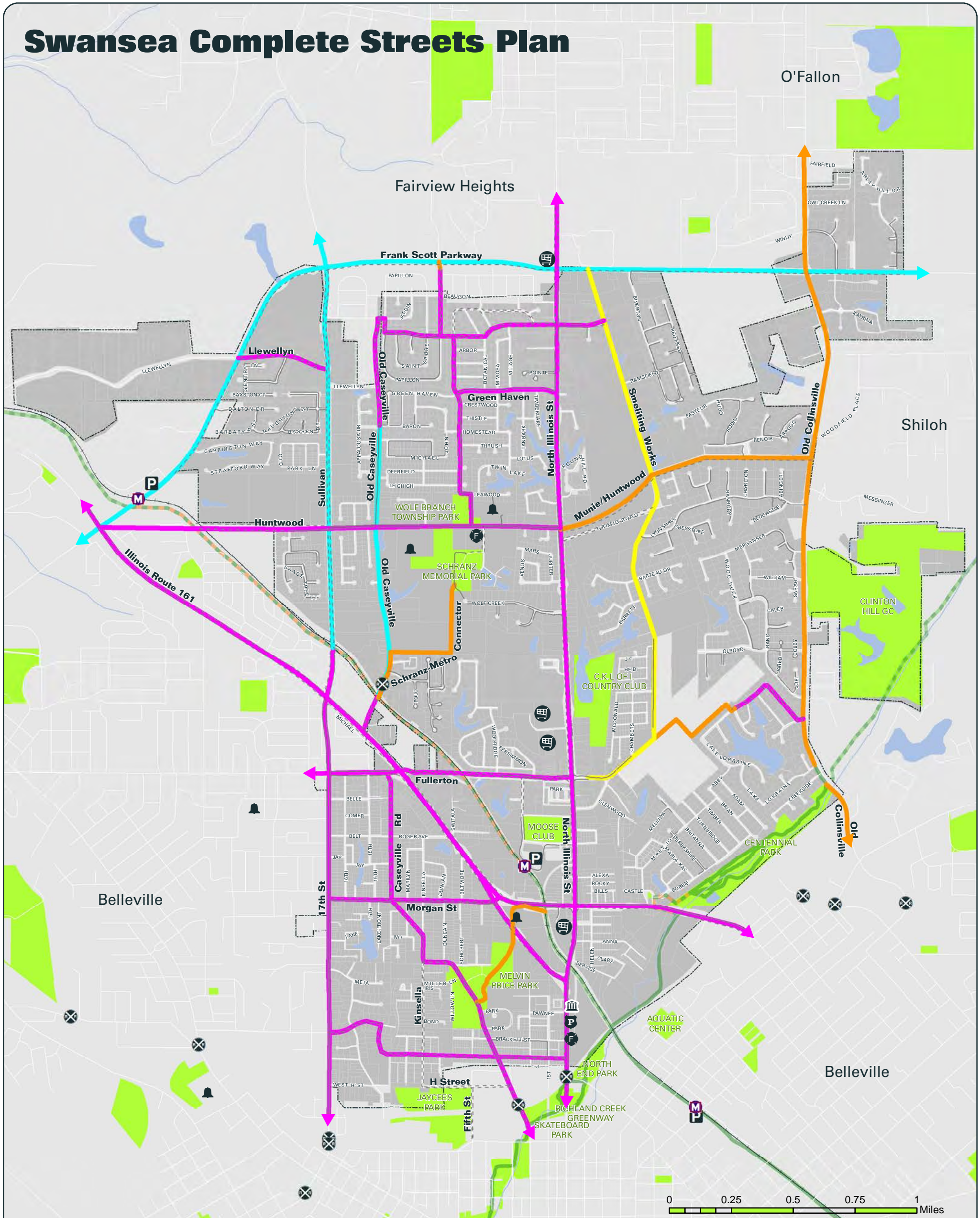


Potential Funding Sources

The Village of Swansea has secured many opportunities for construction funding for sidewalks and bicycle facilities. They have received funding assistance from the Illinois Department of Transportation, the Metro East Parks & Recreation District, and the St. Clair County Greenspace Committee. They have worked in partnership with the St. Clair County Transit Agency and have applied for funding through the state's Safe Routes to Schools Program. Below is a listing of these and other funding sources recommended to aid the Village in the implementation of these recommended facilities.

| Grant Program | Type | Match | \$ Amount | Website: |
|--|-------------|----------|--------------|---|
| Illinois Transportation Enhancements Program (ITEP) | Constr. | 20% | \$15-25M Avg | www.dot.state.il.us/ |
| Congestion Mitigation & Air Quality (CMAQ) | Constr. | 20% | \$5-7M Avg | www.dot.state.il.us/ |
| Illinois State Bike Paths Grant | Constr. | 50% | \$200K-\$1M | www.dot.state.il.us/ |
| Highway Safety Improvement Program (HSIP) | Constr. | | | www.dot.state.il.us/ |
| Safe Routes to School | Constr./Ed | None | \$5-7M Avg | www.dot.state.il.us/ |
| Pedestrian & Bicycle Safety Program (PBS) | Ed & Enfor. | | | www.dot.state.il.us/ |
| Injury Prevention Program | Ed Only | | | www.dot.state.il.us/ |
| Surface Transportation Program (STP) | Constr. | 20% | | www.dot.state.il.us/ |
| Open Space Lands Acquisition & Development (OSLAD) | Constr. | min. 51% | up to \$400K | dnr.state.il.us/ |
| Recreational Trails Program | Constr. | 20% | \$1 M Avg | dnr.state.il.us/ |
| Tourism Attraction Development Grant (TAP) | Constr. | min. 51% | up to \$1M | www.commerce.state.il.us/ |
| Community Development Assistance Program | Constr. | | | www.commerce.state.il.us/ |
| MEPRD Park & Trail Grant Matching Program | Constr./Ed | | | www.meprd.org/ |
| National Scenic Byways Grant-- must be along byway | Constr. | 20% | | bywaysonline.org/grants |
| Land & Water Conservation Fund (LWCF) | Constr. | min. 51% | | www.nps.gov/ |
| Preserve America Grant | Constr. | | | www.nps.gov/ |
| Transportation, Community, & System Preservation Program | Plan/Imp | | | http://www.fhwa.dot.gov/discretionary/tcsp2012info.htm |
| Kodak American Greeways | Constr. | | | http://www.conservationfund.org/kodak_awards |
| Bikes Belong Coalition Grant | Constr./Ed | min. 51% | up to \$10K | http://www.bikesbelong.org/ |

Swansea Complete Streets Plan



Legend

- | | | | |
|-------------------|--------------------------|--------------------------|-----------------------------|
| Village Limit | Metro Stations | Existing Sidewalks | Plan Recommendations |
| Fire Station | Metro Park and Ride Lots | Existing Trail | Planned Improved Shoulder |
| Government Center | Railroad Crossings | Under Construction Trail | Planned One-Way Trail |
| Police Department | Metro Rail Lines | Trail Planned By Others | Planned Share-The-Road |
| School | Streams | Parks & Open Space | Planned Multi-Use Trail |
| Shopping | Bodies of Water | | Planned Sidewalks |



Implementation



Prioritization

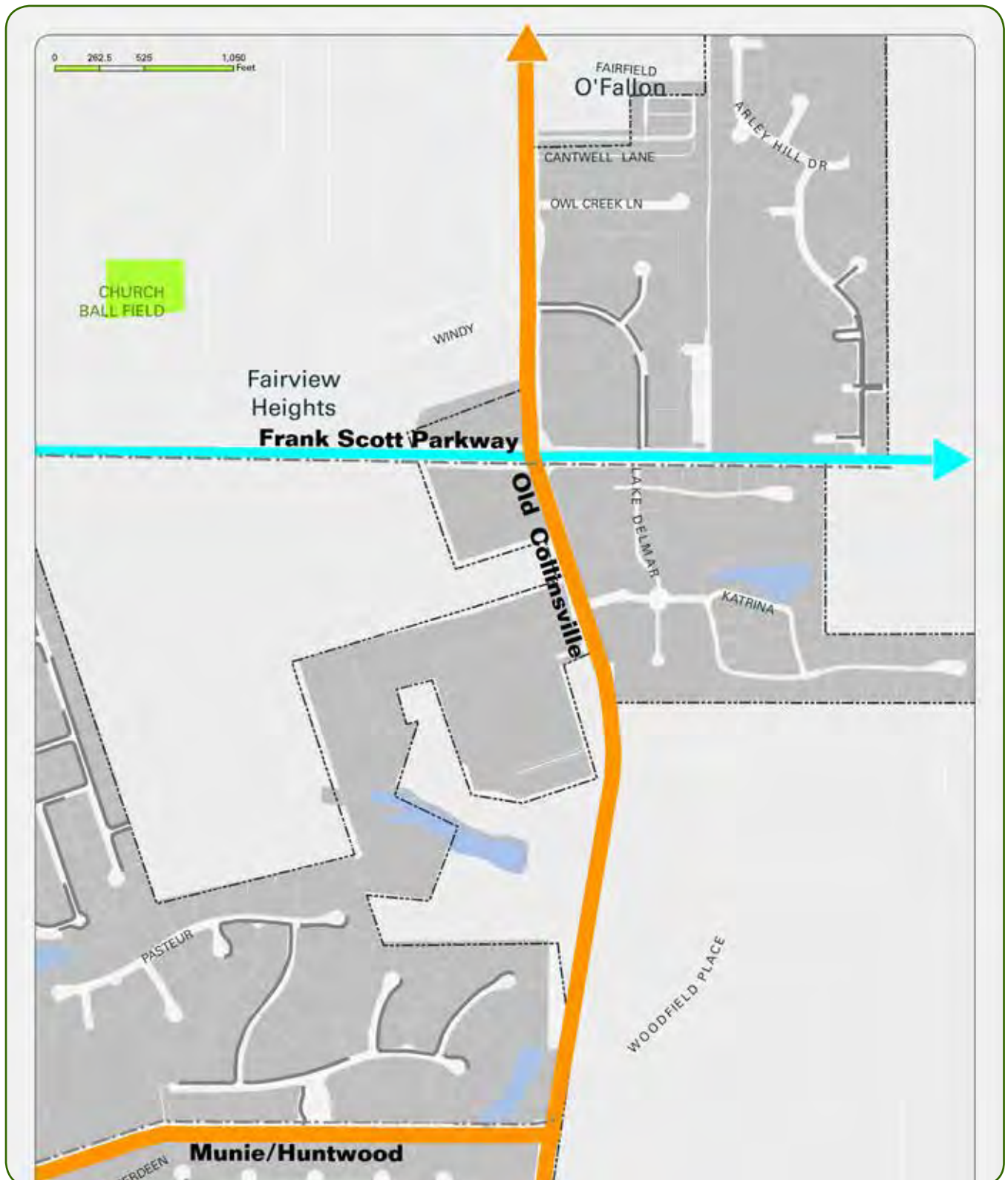
There are 35 recommended facilities in the Explore Swansea plan. A combination of sources was utilized to create a “prioritization matrix” including the on-line and paper survey responses, comments provided at the second open house, and proximity to important destinations such as schools and parks. The completed matrix was then analyzed for construction efficiency, and below is a summary of the results. This is the “order” recommended for implementation.

| Priority | Street Name/Label | Facility Type | Total Cost |
|--------------|---|-----------------------|-------------|
| 1 | Illinois Route 159 | STR* Signs | \$12,681 |
| | Illinois Route 161 | STR Signs | \$11,558 |
| 2 | Illinois Route 159 | Sidewalks | \$422,691 |
| 3 | Illinois Route 161 | Sidewalks | \$385,262 |
| 4 | N. Belt West | Sharrows/Signs | \$1,830 |
| | Fullerton | Sharrows & Sidewalks | \$83,308 |
| | Old Fullerton | Sidewalks | \$18,227 |
| 5 | Old Caseyville | Improved Shoulder | \$809,702 |
| 6 | Old Caseyville | Sharrows & Sidewalks | \$172,550 |
| 7 | Schranz-Metro Connector | Trail | \$208,294 |
| 8 | Old Collinsville | Trail | \$791,399 |
| 9 | Smelting Works | One-Way-Trail Pairs | \$860,917 |
| 10 | Frank Scott Parkway | Improved Shoulder | \$2,857,425 |
| | Sullivan | Improved Shoulder | \$1,192,572 |
| 11 | Frank Scott Parkway | Sidewalks | \$455,532 |
| | Sullivan | Sidewalks | \$190,120 |
| 12 | Caseyville Ave | Sharrows & Sidewalks | \$199,318 |
| | Kinsella | Sidewalks | \$59,501 |
| 13 | Huntwood | Sharrows & Sidewalks | \$222,553 |
| | Munie/Huntwood | Trail | \$380,990 |
| 14 | Mel Price to Metro Bike Link | Trail | \$167,148 |
| | Boul Ave | STR Signs & Sidewalks | \$67,791 |
| 15 | 17th St | Sharrows/Signs | \$10,210 |
| | Morgan St | Sharrows/Signs | \$3,745 |
| | Kingsbury/Gilbert | STR Signs & Sidewalks | \$129,259 |
| 16 | Big Bend | STR Signs & Sidewalks | \$97,311 |
| | Green Haven | Sharrows/Signs | \$2,199 |
| | Llewellyn | Sharrows & Sidewalks | \$44,562 |
| | Goldenrod/Lakeland/Corporate/Jardin/Papillion | STR Signs & Sidewalks | \$118,432 |
| | Bettina | Sidewalks | \$53,837 |
| | Bourdelaais | STR Signs & Sidewalks | \$32,650 |
| | Bourdelaais-FKP Connector | Trail | \$7,671 |
| Schranz Park | Sidewalks | \$20,248 | |
| 17 | H Street | Sidewalks | \$40,577 |
| | Fifth St | Sidewalks | \$26,054 |
| 18 | Fawn Meadows/ Lake Lorraine | Sharrows & Sidewalks | \$45,041 |
| | Smelting Works-White Pines | Trail | \$129,627 |

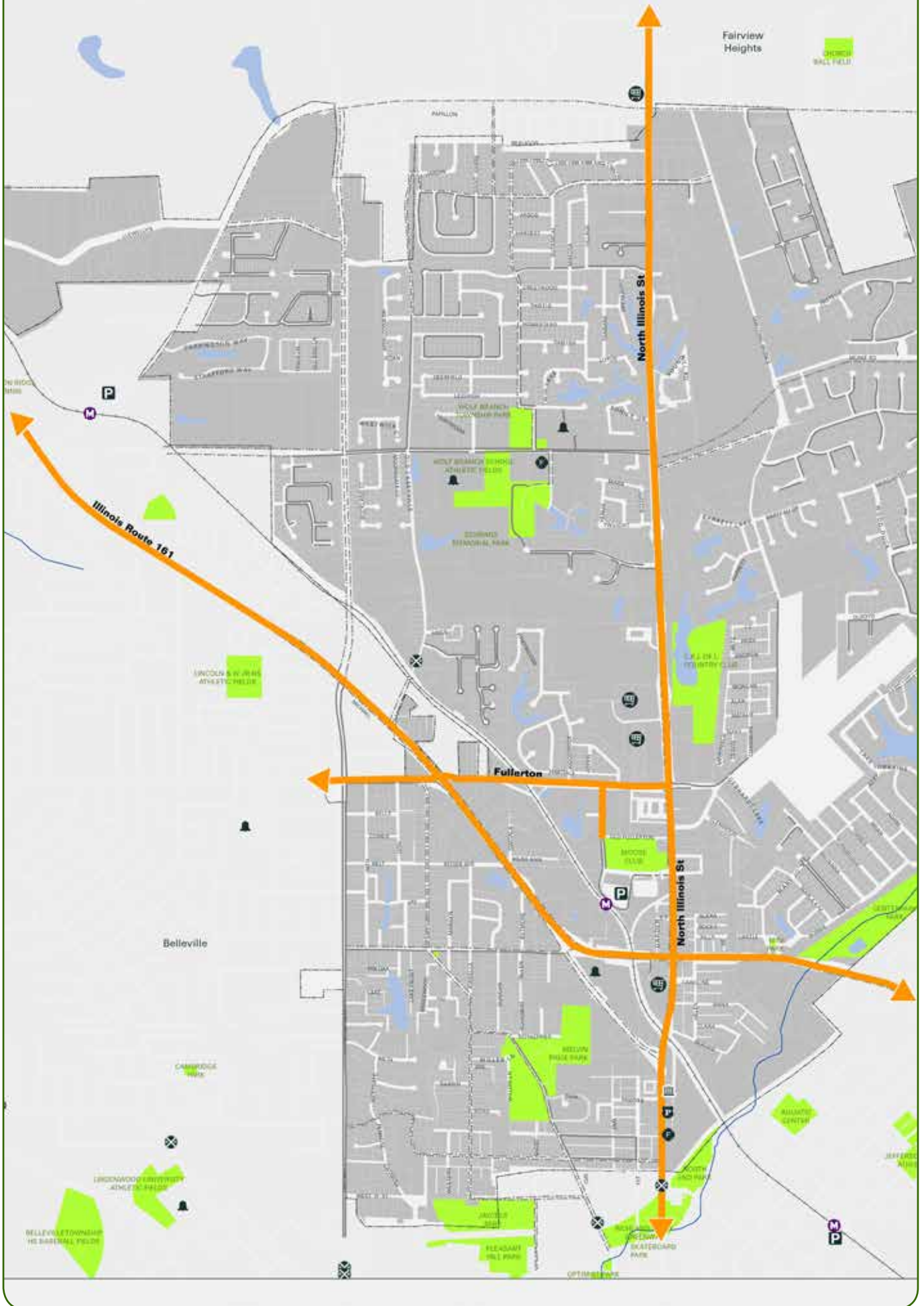
*STR=Share-The-Road

The table is also further categorized into “phases”. There are 18 phases based on project expense and geographic efficiency for construction. We expect one phase to be reviewed for possible implementation and/or application of funds each fiscal year. Doing so will achieve the 20-year implementation timeline. The phases are shown on three maps on the following pages.

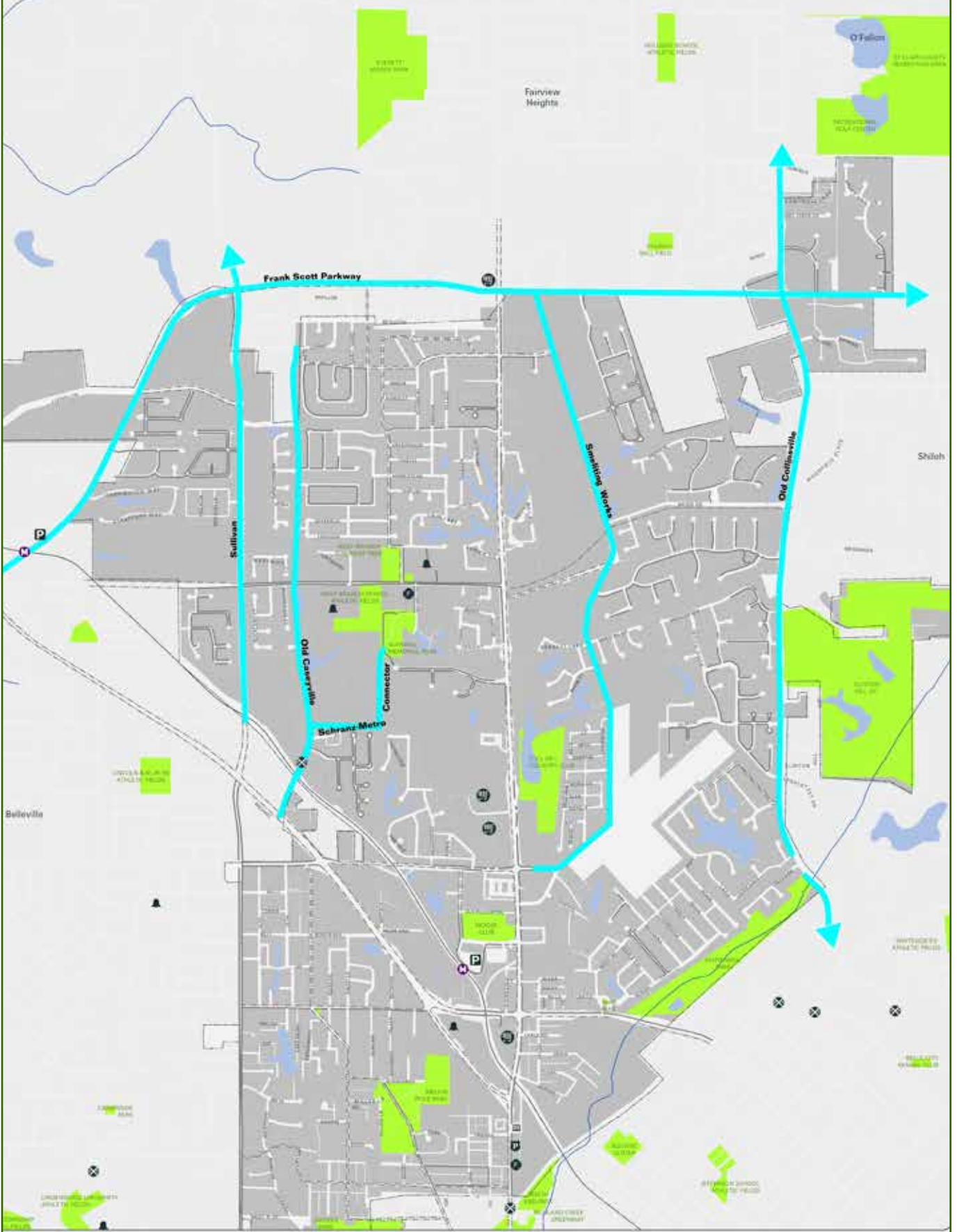
Some of the recommended facilities are excellent candidates for utilizing existing funding structures and regional partnerships. For example, we recommend Swansea appeal the alignment in the Metro East Park & Recreation District’s Long Range Plan (see page 8 of this plan). Instead of constructing a trail along Huntwood Road (existing sidewalks are more than adequate), the trail along Old Collinsville should be extended north of Munie Road, connecting to Fairview Heights and O’Fallon (see plan map snapshot below).



Phases 1-4

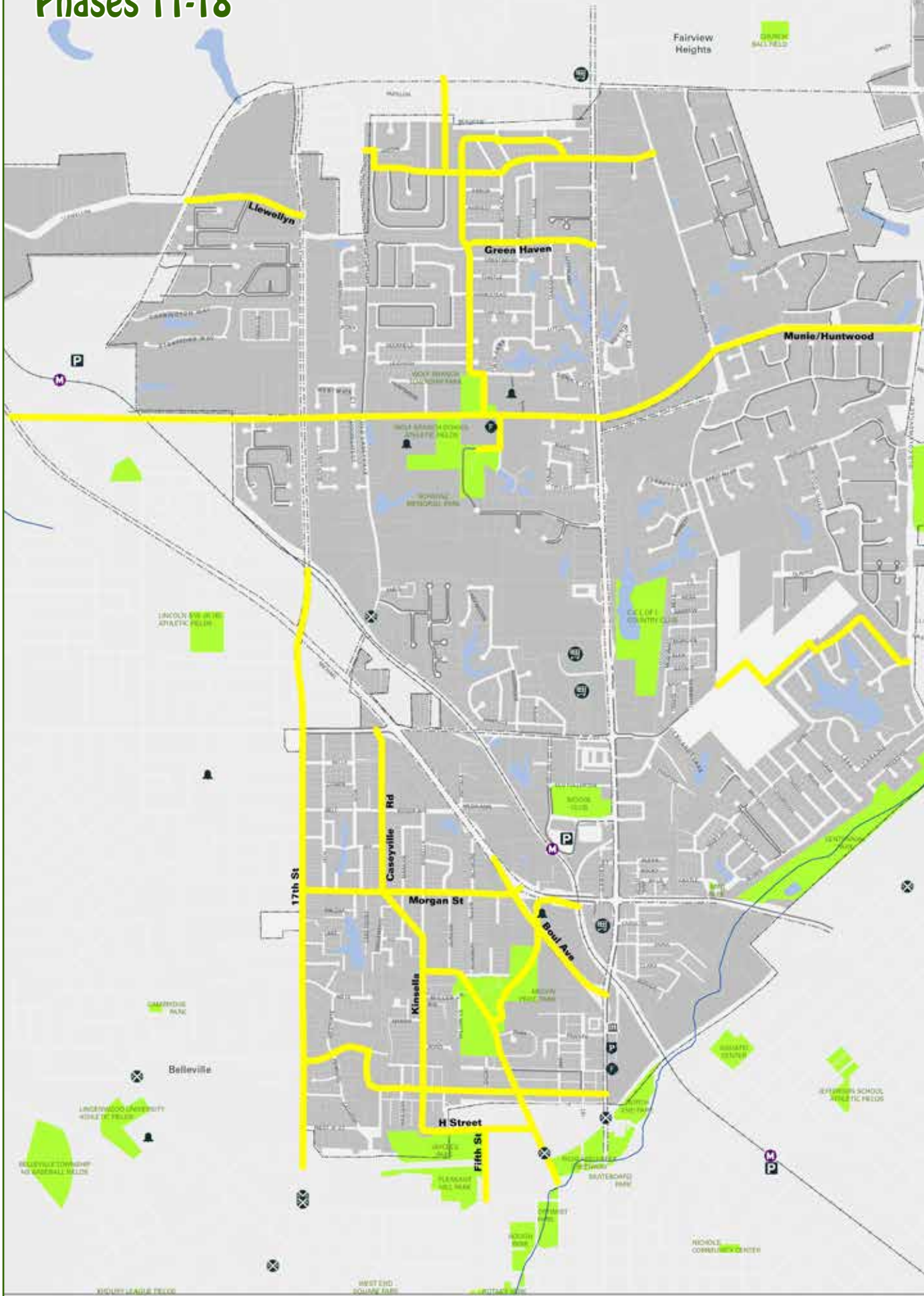


Phases 5-10



Implementation

Phases 11-18



Intersections & Design Guidelines

The planned bicycle and pedestrian facilities recommended in this plan will need to be given special design considerations where they intersect roadways and even other bicycle and pedestrian facilities. In addition to design and construction, there are safety issues to consider when encouraging cycling and walking across lanes of traffic.

Four major intersections and potential costs associated are covered in the following pages:

1. Huntwood & Highway 159
2. Sullivan and Highway 161
3. Old Collinsville & Frank Scott Parkway
4. Highway 159 & Frank Scott Parkway

Each illustration contains design guidelines, sign recommendations and safety precautions. The implementation of both bicycle and pedestrian facilities is shown, as well as how those facilities should interact with each other and with automobile traffic. One “best practice” example is to adjust the timing of pedestrian signals as it relates to traffic signals. Giving pedestrians a few seconds of advanced time (white walking light) before the traffic light turns green can improve safety conditions. Additionally, providing “countdown” signals assists all parties: pedestrians/sidewalk users, cyclists in the roadway, and drivers and increases informed decisions.

Innovations in signaling, signs and safety precautions are ever-changing, therefore it is recommended that resources be sought at the time of facility implementation to ensure the most recent practices are utilized, as well as their compliance with local and state regulations and guidelines.

Resources:

- American Association of State & Highway Transportation Officials’s Guide for the Development of Bicycle Facilities
- Manual on Uniform Traffic Control Devices
- Illinois Department of Transportation’s Bureau of Design and Engineering Manual Ch. 17
- Pedestrian and Bicycle Information Center (bicyclinginfo.org & walkinginfo.org)
- Accommodating Bicycle and Pedestrian Travel: A Recommended Approach (FHWA)
- Best Practices for Complete Streets (completestreets.org)
- Institute of Transportation Engineers (ite.org)
- NACTO Urban Bikeway Design Guide (National Association of City Transportation Officials)
- Bicycle Friendly America - The Blueprint (http://issuu.com/bikeleague/docs/bfa_blueprint)



| | | | |
|----------|---|--------|----------|
| Subject: | Swansea Complete Streets Preliminary Construction Cost Estimate Provided to HeartLands Conservancy | | |
| By: | BER | Date: | 03/26/12 |
| H&S No. | C120018 | Sheet: | 2 of 2 |

| |
|--|
|  <p>HORNER & SHIFRIN, INC. ENGINEERS</p> <p>640 Pierce Blvd., Suite 200 O'FALLON, IL 62269 (618) 622-3040 Fax: (618) 622-3070</p> |
|--|

| |
|--|
| Preliminary Cost Estimate Signals |
|--|

| |
|--|
| Illinois Route 159 - Frankscott Parkway |
|--|

| Cross Walks All legs | Cost |
|---------------------------------|-----------------|
| Pedestrian Push Buttons | \$7,200 |
| Reflective Back plates | \$3,200 |
| Pedestrian Crossing Signal Head | \$8,000 |
| Misc. Items (Paint, Signs, ETC) | \$2,000 |
| Subtotal | \$20,400 |
| +15% Contingency | \$3,060 |
| Total | \$23,460 |

| |
|--|
| Illinois Route 159 - Huntwood/Grimmig Rd. |
|--|

| Cross Walks All legs | Cost |
|---------------------------------|-----------------|
| Pedestrian Push Buttons | \$7,200 |
| Reflective Back plates | \$3,200 |
| Pedestrian Crossing Signal Head | \$8,000 |
| Misc. Items (Paint, Signs, ETC) | \$2,000 |
| Subtotal | \$20,400 |
| +15% Contingency | \$3,060 |
| Total | \$23,460 |

| |
|--|
| Frankscott Parkway - Old Collinsville Rd. |
|--|

| Shared-Use Path Crossing West Leg | Cost |
|-----------------------------------|----------------|
| Pedestrian Push Buttons | \$1,800 |
| Reflective Back plates | \$400 |
| Pedestrian Crossing Signal Head | \$2,000 |
| Misc. Items (Paint, Signs, ETC) | \$500 |
| Subtotal | \$4,700 |
| +15% Contingency | \$705 |
| Total | \$5,405 |

| |
|--|
| Frankscott Parkway - Mid-Block Crossing |
|--|

| Pedestrian Hybrid Beacon 900 Feet West of intersection with Old Collinsville Rd | Cost |
|---|-----------------|
| Pedestrian Push Buttons | \$1,800 |
| Traffic Signal Equipment | \$40,000 |
| Pedestrian Crossing Signal Head | \$1,000 |
| Misc. Items (Paint, Signs, ETC) | \$700 |
| Subtotal | \$43,500 |
| +15% Contingency | \$6,525 |
| Total | \$50,025 |

Notes: Estimates assume existing intersections will accommodate sidewalks with minor adjustments.
Estimates assumes Grimmig Rd relocation to align with Huntwood Dr.
Estimates do not include any ROW or easements costs.
Estimates are in 2012 dollars



Source: Trina Chew

'Take it to make it' flags and buckets at each pedestrian crossing



Source: Talk Up ARS

Crossing Guard on duty before and after school



NORTH ILLINOIS ST

HUNTWOOD

Recommended Facilities
 North Illinois St.: Warning accommodation signs to alert drivers cyclists may be present. Sidewalks on both sides of street.
 Huntwood: West of N. Illinois St., sharrow; East of N. Illinois St., multi-use trail. Sidewalk opposite trail and on both sides of Huntwood.

Reflective border around all stoplights for better visibility



Source: ci.redmond.wa.us

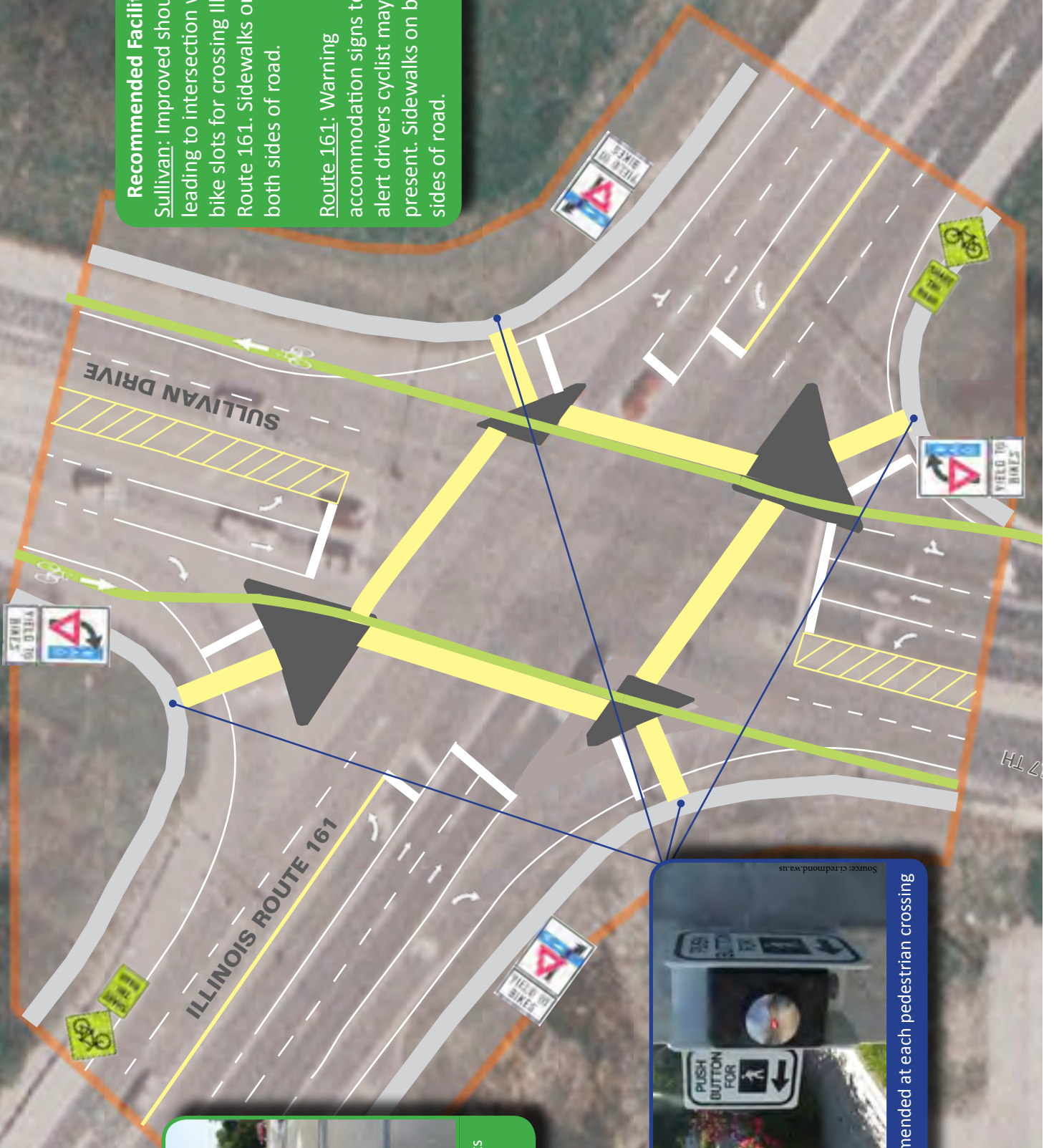
Recommended at each pedestrian crossing



Recommended Facilities

Sullivan: Improved shoulders leading to intersection with bike slots for crossing Illinois Route 161. Sidewalks on both sides of road.

Route 161: Warning accommodation signs to alert drivers cyclist may be present. Sidewalks on both sides of road.



Street view of bike slots on Sullivan through intersection



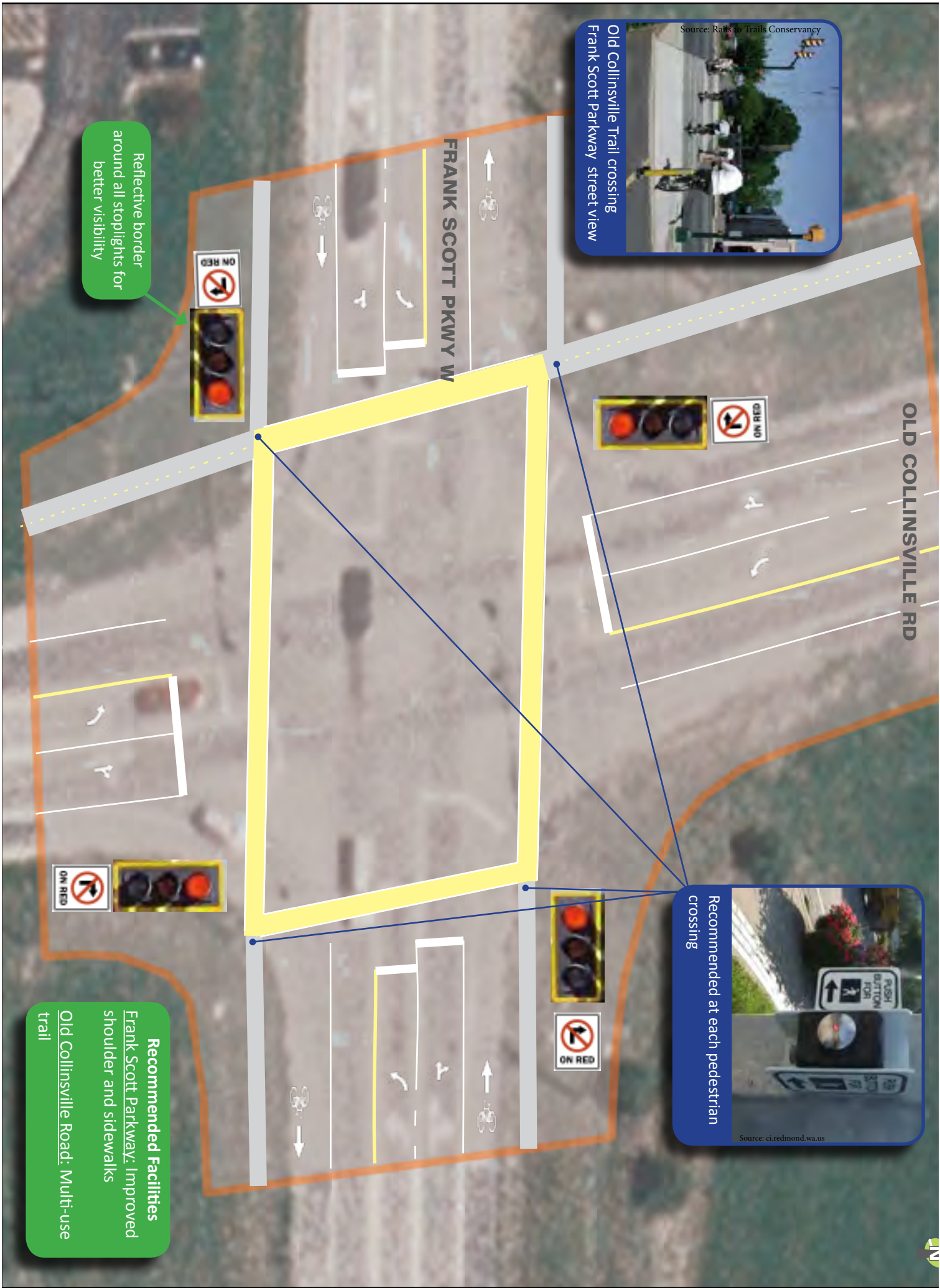
Recommended at each pedestrian crossing

Source: cl.redmond.wa.us



Source: Rails to Trails Conservancy

Old Collinsville Trail crossing
Frank Scott Parkway street view



Reflective border
around all stoplights for
better visibility



Source: ci.redmond.wa.us

Recommended at each pedestrian
crossing

Recommended Facilities
Frank Scott Parkway: Improved
shoulder and sidewalks
Old Collinsville Road: Multi-use
trail

Recommended Facilities

North Illinois St.: Warning accommodation signs to alert drivers cyclists may be present, sidewalks on both sides of road.

Frank Scott Parkway: Improved, marked shoulders transitioning to sharrow through the intersection, sidewalks on both sides of road.



Offset pedestrian crossings with flashing light beacons to signal when pedestrian is in the crosswalk complete with push button to activate signals. Pedestrian crossing islands in median allow crossing of one direction of traffic at a time.

Reflective border around all stoplights for better visibility



Push buttons with indicator light, crossing countdown signal, and audible signal to indicate the WALK interval for those with vision impairments at each pedestrian crossing. A leading pedestrian interval (LPI) will allow pedestrians several seconds to start in the crosswalk where there is a concurrent signal, making them more visible to motorist.



Education

Education is a major component of successful integration of pedestrians and cyclists into daily traffic. There are a number of resources that can aid the Village in creating a welcome environment for walkers and bikers:

- League of American Bicyclists (bikeleague.org)
- League of Illinois Bicyclists (bikelib.org)
- CyclingSavvy (cyclingsavvy.org)
- Trailnet (trailnet.org)
- National Center for Bicycling & Walking (bikewalk.org)
- National Center for Safe Routes to Schools (saferoutesinfo.org)
- International Walk to School Day (iwalktoschool.org)
- National Bike to School Day (walkbiketoschool.org)
- Yield to Life Driver's Education Program (yieldtolife.org)
- Commute By Bike: Commuting 101 (<http://www.commutebybike.com/cats/commuting-101/>)



Utilize education campaigns like the League of American Bicyclists' National Bike Month

CyclingSavvy

Listed above in the tools for education, CyclingSavvy is a tailored program to YOUR community offering a three-part class for residents and visitors teaching and demonstrating "best practices" for on-road cycling. Graduates of the class become predictable and cooperative users of the roadway, encouraging both rider and drivers to truly share the road.









1st Course: "Truth & Techniques of Traffic Cycling" Classroom Session

2nd Course: "Train Your Bike" Drills & Skills

3rd Course: "Tour Of [Insert Your City Here]" Put Your Skills To The Test!

Implementation

Be sure to educate and inform area cyclists about proper communication techniques for riding in the roadway, such as these universal hand signals.

| Front View | Hand Signal | Back View |
|--|---|--|
|  | Left Turn Extend your left arm out sideways. |  |
|  | Right Turn Extend your left arm out sideways bent at a ninety - degree angle at the elbow joint, hand pointing upwards and the palm of hand facing forward. |  |
|  | Alternative Right Turn Extend your right arm out straight. |  |
|  | Stopping or Slowing Extend your left arm sideways and have a ninety degree angle at the elbow joint and hand pointing downwards and the palm of your hand facing backwards. |  |

McGruff and Scruff's

Bike Safety Tips

Always use the correct hand signals while riding your bike.

Obey the rules of the road just like Scruff!



Hand Signals



Before turning left.



Before turning right.



Before slowing down or stopping.

McGruff and Scruff are registered trademarks of NCPC. For more information visit NCPC.org



Route Signs & Wayfinding

Branding the facilities implemented within Swansea will produce multiple benefits: recognition, awareness, wayfinding, and community identity are just a few. When signing the routes, personalized “Explore Swansea” signs should be used both on the roadside signs and on the pavement markings. Pocket-sized maps should be produced showing the recommended routes along with popular destinations or stops along the way to increase ridership and time spent in the Village. Both Madison County Transit and Bike St. Louis utilize these techniques to great success. Pictured here are examples of their wayfinding strategies and their map products.



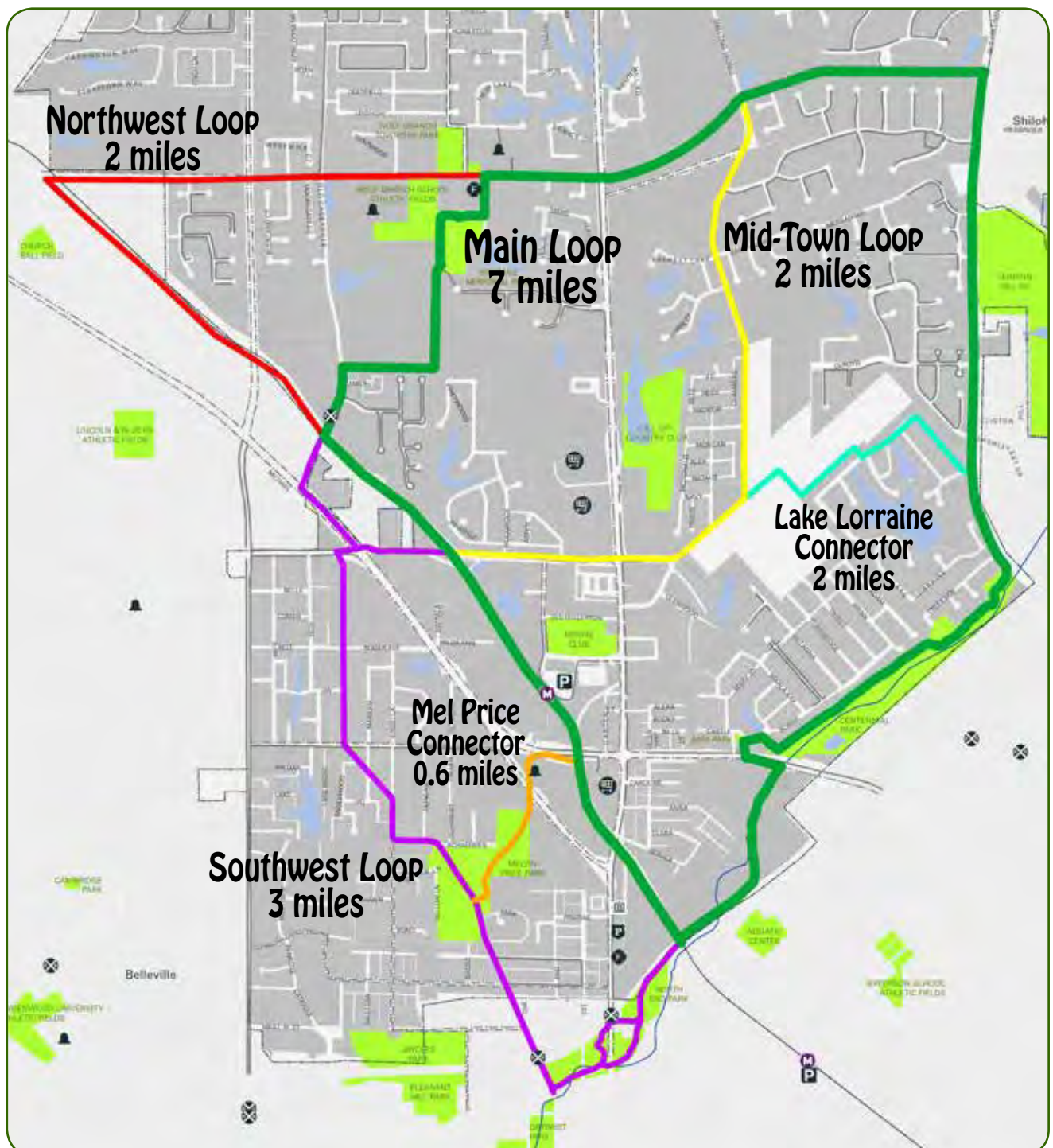
Implementation

Potential Loops for Route Map(s)

Based on existing ridership and popular Village destinations, potential loops, main loop additions and connectors have been identified in the map below. The identification, publication and encouragement of these loops will accomplish two major goals:

1. The controlled location of the majority of riders/walkers: to reduce any potential negative interactions between cars and cyclists/walkers, etc., the Village should make an effort to encourage those using the facilities for recreation/exercise to do so in predictable appropriate locations.
2. Provide residents and visitors with identified locations and associated distances of “sanctioned” loops: if routes are outlined, signed and well-maintained, residents and visitors will be much less likely to travel outside the Village for their recreation/exercise needs. The economic benefits of this eco-industry will stay in the Village!

The saying “If you build it, they will come” is most certainly true in the case of bicycle and pedestrian facilities - route loops enable your citizens to get the most out of these investments!



Marketing & Recognition

Once implementation is underway, recognition should be sought from regional and national organizations to raise awareness of Swansea's efforts to become more bicycle and pedestrian friendly. Specifically, the League of American Bicyclists has a recognition program with levels: platinum, gold, silver and bronze, that once awarded will offer Swansea with an excellent opportunity for recognition and a structure for future efforts.



What is a Bicycle Friendly Community?

A Bicycle Friendly Community welcomes cyclists by providing well-engineered bicycle facilities, creating new places to ride, educating motorists and cyclists on the rules of the road, and encouraging people to bike for transportation and recreation.

Why should my community apply?

Bicycle Friendly Communities have a high quality of life that translates into sustainable development, tourism, business growth and even increased property values. Encouraging bicycling is an effective way to increase physical activity, improve air quality, reduce traffic congestion and foreign oil dependence, and tackle climate change and obesity. Benefits for the 360 communities that have applied for BFC status include:

- Inspiration to do more
- Technical assistance and training
- Grants and funding notification
- Recognition and promotion

What are the requirements?

The Bicycle Friendly Community application is an audit of a community's efforts to create a bicycling culture. The audit reviews engineering, education, encouragement, enforcement, and evaluation and planning efforts for bicycling.

Who reviews applications?

Each application is reviewed by national experts and local cyclists to determine whether the community should get a BFC designation. Feedback from the reviewers creates a valuable roadmap for action.

How will my community be recognized?

The League will recognize deserving communities at one of four award levels: bronze, silver, gold, or platinum. The League will issue a press release, and will present an award and two highway-quality road signs at a local ceremony or celebration.

What if my community isn't designated bicycle friendly?

Get involved with your local bike club or advocacy organization, join your community's bicycle advisory committee and work with your city staff. Use the BFC application and feedback as a task list to improve the state of cycling in your community — then apply again! Every applicant gets in-depth feedback, so applying is well worth your time.

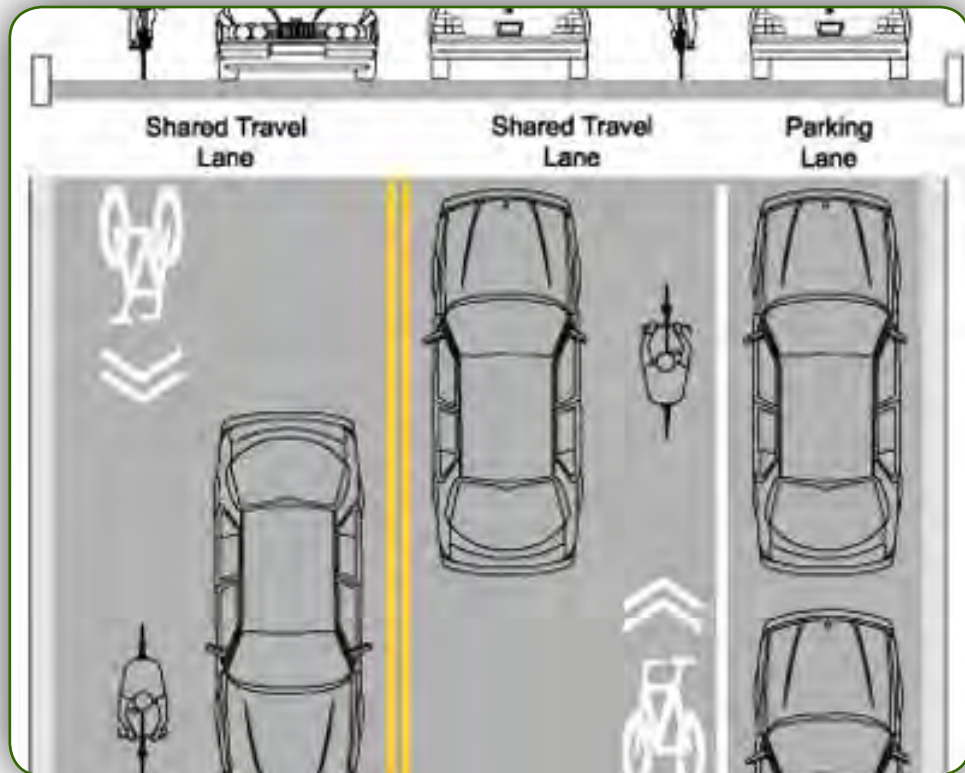
Where can I get an application?

The BFC application is available at www.bicyclefriendlycommunity.org. The site also provides resources and technical assistance to help you with the on-line application. Contact the League of American Bicyclists at 202-822-1333 or info@bicyclefriendlycommunity.org to receive more information.

for more info, visit www.bicyclefriendlycommunity.org or call 202-822-1333

Appendix

All related documents are included on the attached CD along with electronic copies of this plan, plan map images and plan map data. Please reference this material for all future planning and implementation efforts.



HEARTLANDS

C O N S E R V A N C Y

Investing In The Nature Of Southwestern Illinois

406 East Main Street
Mascoutah, Illinois 62258
www.HeartLandsConservancy.org