CITY OF EFFINGHAM
BICYCLE AND PEDESTRIAN PLAN

Adopted February, 2011

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Introduction

The City of Effingham is a thriving, growing community in central Illinois. Situated at the convergence of major highways and railroads, the city takes pride in being the "crossroads of opportunity." Just as those transportation options have contributed to Effingham's success in the past, improving conditions for pedestrians and cyclists will ensure that residents and visitors have even more choices for getting around in the future—from children walking to school, to adults biking for errands, to retirees using the trails to stay active.

People choose to live, work and play in Effingham because of its vibrant mix of housing, education, recreation and employment opportunities. Site Selection Magazine recently ranked it in the top 10 of small US towns for companies striving to provide a better quality of life for their employees. With great schools and parks, including nearby Lake Sara, it is no surprise that Effingham has enjoyed steady population growth in recent decades.

Figure 1 This plan aims to make it easier, safer and more pleasant to walk or bike to local businesses.

Improving the environment for walking and biking will help Effingham meet the transportation and recreation needs of residents and visitors, while making the city even more competitive in terms of attracting new businesses and investments. Sidewalks, bikeways and trails are assets that can spur development and strengthen a sense of community.

Figure 2 Busy intersections, such as the one at Evergreen and Keller, can be intimidating to people using their feet, a wheel chair or a bicycle.

Already, Effingham is on its way to developing an extensive trail system (Trail Recreation Effingham County, or TREC) that will help connect the City to the popular recreation activities in and around Lake Sara. It is also working with IDOT to improve access at two key points across I-57/70, currently a major barrier to people on foot or two wheels. Building on this momentum, the City has partnered with area residents and the League of Illinois Bicyclists to develop this Bicycle and Pedestrian Plan.

The overall goals and guiding principles for this plan are to:

- Provide safer, more pleasant conditions for those who already walk and bike in Effingham by choice or by necessity.
- Encourage more residents to use their feet or bikes for short distance travel through education and the improvement of conditions.
- Ensure new development and transportation projects address walking and cycling amenities from the start, instead of having to be retrofitted.

This plan outlines potential improvements in Effingham to facilitate walking and bicycling for both recreation and transportation, and is comprised of the following sections:

- **Complete Streets:** Provides context and presents policy tools for creating transportation corridors that work for all users.
- **Bikeways:** Explains the range of on and off road bicycle facilities that can be used to complete a "bikeways network" and the methodology used to create a planned network for Effingham.
- **Safe Routes to School:** Pays particular attention to the travel needs of Effingham's youngest residents, and proposes high priority areas of improvement.
- **Recommended Projects:** Provides maps of existing conditions; recommended projects; projects by priority and readiness; and the proposed bikeway network and increased sidewalk coverage for the future. It also includes a table listing recommended on and off road projects by street name.
- **Other Recommendations:** While much of the plan addresses infrastructure and engineering, this section focuses on the "Other E's" – Education, Encouragement, and Enforcement. Bicycle parking is also addressed here.
- **Implementation:** Provides funding, staffing and evaluation strategies to help move the plan from paper to the streets.

Figure 3 The newly built Phase I of the TREC Trail is inviting to people of all ages.

Complete Streets

Introduction

Complete Streets refers to a way of thinking about roadways that emphasizes the needs of all the people who travel along and across them—whether they are in a car, on a bike, on foot, in a wheelchair, or pushing a stroller. For example, a busy street that efficiently moves cars but provides no safe and convenient crossing for school children is "incomplete." Intersection improvements, such as pedestrian countdown signals, center medians and/or curb extensions can help complete the street.

In recent years, jurisdictions and DOTs at all levels of government have developed policy and planning tools to ensure that transportation projects accommodate people of all ages, abilities and modes. In Illinois, a Complete Streets bill passed the legislature in 2007 with resounding support (Public Act 95-0665). It states: "Bicycle and pedestrian ways shall be given full consideration in the planning and development of transportation facilities, including the incorporation of such ways into State plans and programs." The intent of the law, which went into full effect on July 1, 2008, is to help make State-maintained roadways safe and convenient for all modes of travel, including those who walk or bike by choice or necessity.

In March, 2010, the US Department of Transportation also voiced support for Complete Streets with a new bicycle and pedestrian accommodation policy statement, "Every transportation agency, including DOT, has the responsibility to improve conditions and opportunities for walking and bicycling and to integrate walking and bicycling into their transportation systems. Because of the numerous individual and community benefits that walking and bicycling provide — including health, safety, environmental, transportation, and quality of life — transportation agencies are encouraged to go beyond minimum standards to provide safe and convenient facilities for these modes."

Figure 4 Filling in sidewalk gaps and improving intersections helps complete a street for pedestrians.

By developing a Bicycle and Pedestrian Plan, the City of Effingham has established priorities for transportation corridors that need improvement (see later sections). However, to ensure that transportation projects—whether or not they are addressed specifically in this plan—consider the needs of all potential travelers, the plan recommends adopting "Complete Streets" policies.

Plan Recommendations

Local Roads: Pass a Complete Streets Policy to help guide transportation and development projects in Effingham. Suggested language:

> *The City of Effingham establishes a "policy statement" to ensure that all streets shall be designed, built, maintained and operated to enable safe and convenient access for all users, to the extent practical. Pedestrians, bicyclists and motorists of all ages and abilities, including people who require mobility aids, must be able to safely move along and across Effingham's streets.*

Development Ordinances: In addition to passing an overall Complete Streets resolution, create development guidelines to help new developments contribute to Effingham's efforts to become more pedestrian and bicycle friendly. Suggested language:

Developments shall contribute to the City of Effingham's efforts to become more pedestrian and bicycle friendly. This includes:

- *Considering bicycle and pedestrian traffic and facilities during the traffic impact analysis process.*
- *Consulting Effingham's Bicycle and Pedestrian Plan, including referring to AASHTO guidelines for pedestrian and bicycle facilities.*
- *For developments in City limits, installing sidewalks. The minimum preferred width is 5 ft. Consult FHWA New Sidewalk installation guidelines.*
- *Considering pedestrian and bicycle access within the development as well as connections to adjacent properties and existing and planned pedestrian and bicycle facilities.*
- *Considering connectivity between developments for pedestrians and bicyclists to minimize short-distance 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 and accommodate non-motorized access within and through the development while the project is being completed.*

Easements: Effingham already has utility easements along roadways. The easements could be rewritten to include sidewalks, trails, and/or sidepaths.

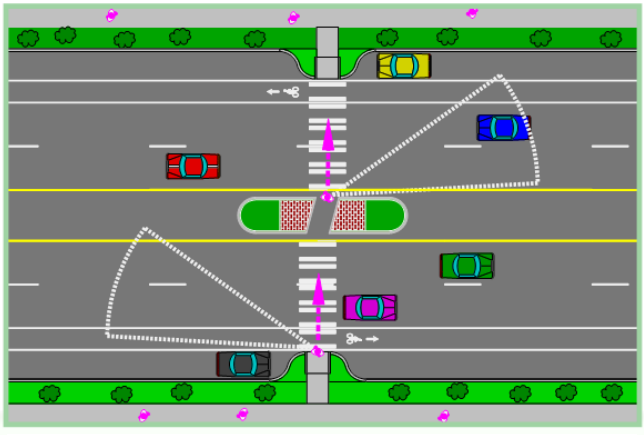


Figure 5 Design treatments that can complete a street include bike lanes, crosswalks, a pedestrian refuge island, and curb extensions. Image courtesy of the Pedestrian and Bicycle Information Center (PBIC).

IDOT and Other Agency Roadways: Work closely with IDOT and other appropriate agencies to identify opportunities to improve roadways as part of new, reconstruction and maintenance projects. Each road occasionally has to be maintained, and sometimes intersection or expansion projects are done. These are the most cost-efficient opportunities to also make improvements (as needed) for those walking and biking. The Complete Streets philosophy is that a roadway's condition should not only be measured by motorist level-of-service and pavement condition, but also by safe accommodation of other users. Suggested policy language:

Resurfacing: *When Effingham works with other agencies (such as IDOT or the county) to do a simple resurfacing (overlay) of an arterial road through Effingham, with no widening of the asphalt, seek opportunities to include bicycle and pedestrian improvements, such as:*

- *For multilane roads, installing 5-ft (with gutter pan) bike lanes. If needed, inside travel lanes can be narrowed. If there is not sufficient width for striping a bike lane, stripe a wide outside curb lane, with no less than 14 usable feet, to at least accommodate more advanced cyclists. These treatments also provide larger turning radii for right-lane trucks.*
- *Filling sidewalk gaps wherever a sidewalk exists but is incomplete. If no sidewalk exists on either side of the road, consider at least one side in the project scope. The preferred minimum width for sidewalks is five feet. Consult the FHWA "New Sidewalk Installation" guidance on the number of sides with sidewalks as a function of various roadway classifications and land uses. (see table below).*
- *Improving crossings: Examples at signalized intersections include ADA retrofits, pedestrian signalization and crosswalks, and (if possible at larger intersections) right-turn corner islands. Priority mid-block crossings may also be improved through raised median islands, pedestrian hybrid beacons, pavement markings and/or other treatments.*

Reconstruction/Expansion: *When Effingham works with another agency (such as IDOT or the county) to do a reconstruction or expansion of an arterial road through Effingham, include bicycle and pedestrian improvements such as:*

- *Fill sidewalk gaps wherever a sidewalk exists but is incomplete.*
- *If sidewalks are lacking on one or both sides, add sidewalks as part of the project consulting the FHWA "New Sidewalk Installation" guidance (as a function of roadway classification and land use). The preferred minimum width for sidewalks is five feet.*
- *Include crossing improvements in scope. Examples at signalized intersections include ADA retrofits, pedestrian signalization and crosswalks, and (if possible at larger intersections) right-turn corner islands. Priority mid-block crossings may also be improved through raised median islands, pedestrian hybrid beacons, and/or other treatments.*
- *Consult IDOT's bikeway selection table and AASHTO bicycle facility guidelines for the appropriate bikeway treatment for the situation. For sidepath trails separate but parallel to the road, design to reduce the inherent conflicts at intersections and entrances. For bike lanes, either reconfigure and narrow travel lanes or widen pavement to allow the 5 or 6-ft (with gutter pan) for bike lanes. If there is not sufficient width for striping a bike lane, stripe a wide outside curb lane, with no less than 14 usable feet, to at least accommodate more advanced cyclists. These treatments also provide larger turning radii for right-lane trucks.*

FHWA Guidelines for New Sidewalk Installation

Roadway Classification and Land Use	Sidewalk Requirements	Future Phasing
Highway (rural)	Min. of 1.525 m (60 in) shoulders required.	Secure/preserve ROW for future sidewalks.
Highway (rural/suburban - less than 2.5 d.u./hectare (1 d.u./acre))	One side preferred. Min. of 1.525 m (60 in) shoulders required.	Secure/preserve ROW for future sidewalks.
Suburban Highway (2.5 to 10 d.u./hectare (1 to 4 d.u./acre))	Both sides preferred. One side required.	Second side required if density becomes greater than 10 d.u./hectare (4 d.u./acre).
Major Arterial (residential)	Both sides required.	
Collector and Minor Arterial (residential)	Both sides required.	1.525 m (60 in)
Local Street (Residential - less than 2.5 d.u./hectare (1 d.u./acre))	One side preferred. Min. of 1.525 m (60 in) shoulders required.	Secure/preserve ROW for future sidewalks.
Local Street (Residential - 2.5 to 10 d.u./hectare (1 to 4 d.u./acre))	Both sides preferred. One side required.	Second side required if density becomes greater than 10 d.u./hectare (4 d.u./acre).
Local Street (Residential - more than 10 d.u./hectare (4 d.u./acre))	Both sides required.	
All Streets (commercial areas)	Both sides required.	
All Streets (industrial areas)	Both sides preferred. One side required.	

Note: *d.u. stands for dwelling unit*

Figure 6 Pedestrian refuge islands break the street crossing into more manageable sections while providing a physical buffer from fast moving traffic. The stop bar is pulled back to help motorists in the inside travel lanes see crosswalk activity. Images courtesy of PBIC.

Bikeways

Introduction

Biking is a popular activity, a moderate form of exercise within the physical capabilities of most people. However, it need not be limited to weekend outings on designated trails. Although cycling is often thought of as just for recreation and exercise, nearly half (43%) of all bike trips are destination-based—and many more would be if better facilities existed. [1]

Biking can be a great form of transportation, especially for short, local trips. National data indicate that 27% of all car trips are one mile or shorter; 40% are less than two miles. When cycling conditions are improved, people are more willing to use bikes instead of cars for these short trips—which benefits their health, pocketbooks and surrounding air quality.

Besides those who bicycle by choice, there are residents – including children, many teenagers, and some low-income workers – who depend on cycling as a transportation necessity.

This section of Effingham's Bicycle and Pedestrian Plan explains the types of bicycle facilities that can help people use two wheels for safe and pleasant transportation and recreation, and the methodology used to propose a network of bikeways for Effingham. The bikeways network (discussed in the Recommended Projects section of the plan) reflects public input and a detailed analysis of existing street conditions, significant barriers and priority destinations. The plan recommends a mixture of on-road bikeways and off-road sidepaths and trails to provide a network of bicycle routes linking the various areas in and around Effingham, including Lake Sara.

It should be noted that while the bikeways network highlights key routes to facilitate travel in and around Effingham, all streets—unless otherwise noted—are open to cyclists.

Figure 7 Image courtesy of PBIC.

[1] 2001 National Household Travel Survey

Bikeway Types

Standards and Guidelines

The 1999 *Guide for the Development of Bicycle Facilities* by the American Association of State Highway and Transportation Officials (AASHTO) forms the technical basis for the plan's recommendations. An updated version is scheduled to be released in late 2011.

The AASHTO 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 Manual of Uniform Traffic Control Devices (MUTCD) when developing bicycle plans.

A general overview of bicycle facility options follows; more engineering details are in the publications.

Trails

Multi-use trails are physically separated from motor vehicle traffic, except at road crossings. Trails accommodate a variety of users, including pedestrians, bicyclists, and others—for both recreation and transportation purposes. Trails away from roads, on easements or in their own rights-of-way tend to be pleasant and popular.

In the Effingham area, the TREC (Trail Recreation of Effingham County) organization is developing a trail system, in partnership with the City of Effingham and other local agencies. Through extensive community fundraising and various state and federal grants, the first segment opened in late 2010 with several other phases being planned. See figure 8. Connections are being developed to the west and northwest parts of the City in addition to Lake Sara subdivisions.

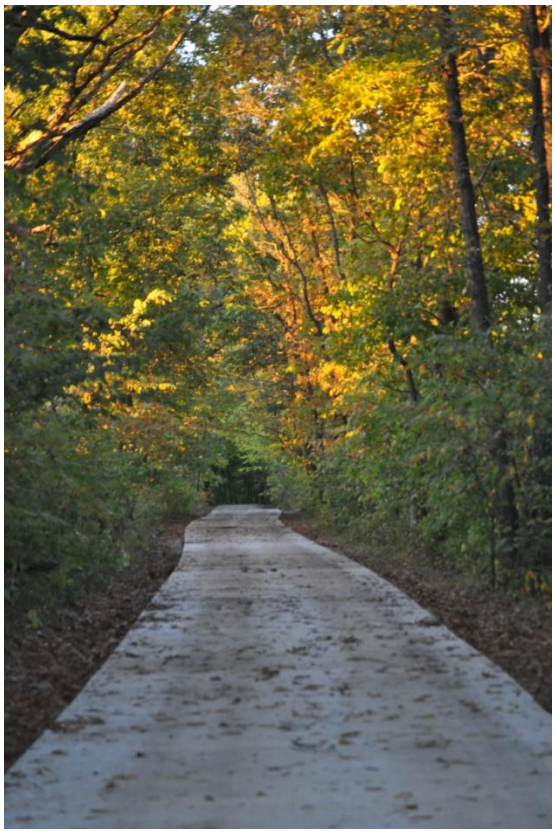


Figure 8 The Calico Trail

Sidepaths

Sidepaths are trails that run immediately parallel to a roadway, like a sidewalk. 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. Turning motorists often do not expect a fast moving cyclist in the space that is usually used by slower pedestrians. That speed difference between walkers and cyclists can also lead to conflicts when sharing the space.

Figures 9 and 10 illustrate the visibility problems leading to intersection conflicts with cyclists using a sidepath. Note that in each case, an on-road cyclist on the right side of the road *would be* within the motorist's viewing area.

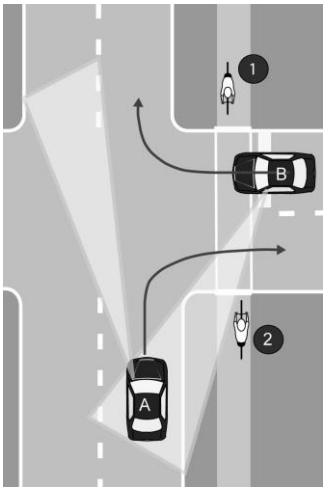


Figure 9 Right turns across sidepaths.

In Figure 9, 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 and will look only to their left. Cyclist 2 might be seen, but 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. Particularly where a large turning radius permits fast turns, many motorists do not yield to cyclists entering or already in the crosswalk.

In Figure 10, 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.

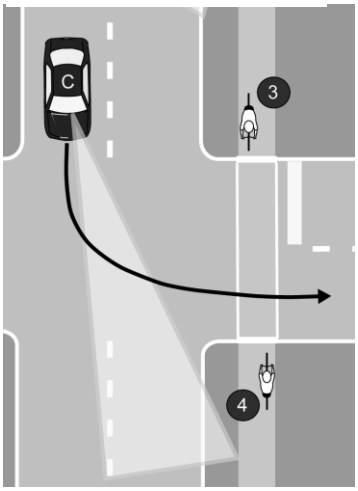


Figure 10 Left-turn across sidepath.

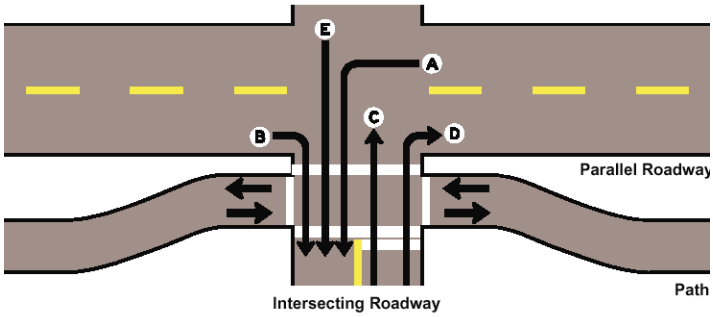
Effingham currently has a sidepath along Keller, which is a high traffic, high volume road that provides key access over Interstates 57 and 70 (Figure 11). Another was just completed along Outer Belt West, just south of Fayette. Being planned now is a sidepath along Fayette Avenue, as part of a road widening project. Although Fayette has many intersections, IDOT proposed a sidepath as the best facility, due to the high truck volumes on the route. IDOT's recently revised facility selection table indicates that a bike lane could also be an option.

Figure 11 Keller Sidepath over I 57/70

The AASHTO guide cites these and other sidepath issues as reasons to discourage their use in inappropriate locations. This plan considers the feasibility of the sidepath option in specific cases, such as 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.
- Using high visibility crosswalks or color differences – at commercial entrances, too
- Using experimental signs, such as those used in some communities throughout IL (below).
- Occasional police enforcement of stopline adherence at sidepath crossings.



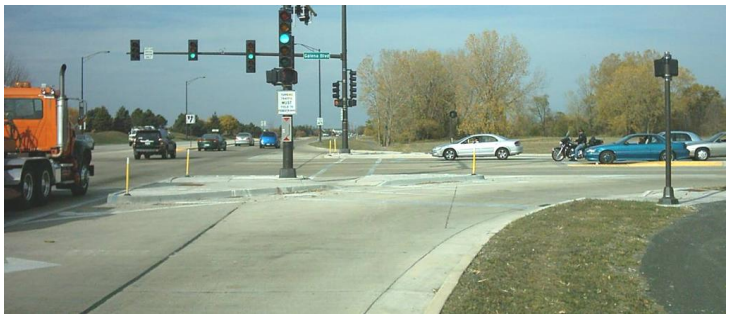


Figure 12 Intersection design methods to reduce sidepath conflicts. Top left: bringing crossing closer. Top right: warning signage. Bottom left: right-turn refuge islands.

Bike Lanes

Bike lanes are portions of the roadway designated for bicyclist use. Bike lanes are at least five feet wide (including gutter pan) on each side of the road with a stripe, signage, and pavement markings. The minimum cross section needed for bike and travel lanes is 30 feet (44 feet if parking lanes are included, which is not the case on most Effingham streets). Consult AASHTO and MUTCD guidelines for details on design, including pavement markings.

Cyclists in each bike lane travel one-way with the flow of traffic. 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 increases in bike usage with lower car-bike crash rates—at a relatively low cost.
- Decreased car-car crashes, too – possibly from a traffic calming effect.
- Easier, safer movements for turning trucks due to increased pavement width between the travel lane and sidewalk.

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.

Many of the roads in Effingham are prime candidates for bike lanes (Figure 13). Vehicle travel lanes will have to be narrowed, but widths will still be up to standards without compromises to safety and capacity. Reallocating roadway width to add a bike lane also facilitates turning movements of large vehicles and can have an overall traffic calming effect.

Figure 13 These digitally enhanced images preview bike lanes in Effingham, minus pavement markings indicating that they are designated for cyclists: Evergreen (above) and Maple (below).

Bike Routes

Some roads may be identified by 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 an unstriped street, or a road with paved shoulders.

Figure 14 MUTCD signs D11-1 and D1-1

There are three permitted signage styles available in the Manual of Uniform Traffic Control Devices (MUTCD). The standard D11-1 "Bike Route" signs (Figure 14) can also provide wayfinding assistance at intersections with supplemental destination plates (MUTCD D1-1) and arrows (MUTCD M7 series) placed beneath them. The 2009 version of the MUTCD manual includes a sign (D11-1c) that combines bike route designation with wayfinding information (Figure 15). Some Illinois towns have put two or three destinations on a single sign, with mileages. See MUTCD D1-C3 (Figure 16).

Figure 15 MUTCD signs D11-1c

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

Figure 16 MUTCD sign D1-C3

Figure 17 Virginia from Willow to Community Park (background of photo above) is recommended as a signed bike route.

Pavement Markings

Pavement markings inform cyclists of optimum lane positioning while 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 18 shows a Shared Lane Marking (or "sharrow"), now approved in the MUTCD. Urbana is one of the Illinois cities using these.

The marking is used only for streets without bike lanes but with occupied on-street parallel parking and speed limits below 40. Often, this treatment is used when there is insufficient width for bike lanes. The center of the marking shall be 11 feet (or more) from the curb, placed right after an intersection and spaced at intervals of 250 feet thereafter. See MUTCD chapter 9 for more installation guidance. The shared lane marking also can be used to indicate correct straight-ahead bicycle position (Figure 19) at intersections with turn lanes.

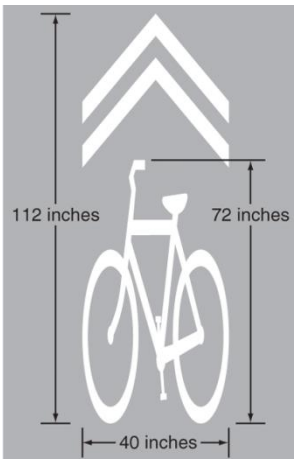


Figure 18 Shared Lane Marking

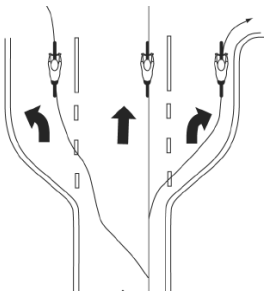


Figure 19 Proper turn lane positioning.

Signal Activation by Bicycles

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 9C-7) in Figure 20, 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. Quadruple loop detectors or camera detection could be used, too, as they are more sensitive to bikes and motorcycles.

Figure 20 ***Signal activation marking and sign***

The detector marking also serves to indicate proper bicycle position at an intersection.

On-road Bikeway Liability

Since 1998, Illinois towns have faced a liability disincentive for on-road bikeways, such as those listed above. When towns designate that a particular route is "intended" for use by bikes, they raise their liability for cyclist injury due to road condition from zero to a negligence standard of care. This has dissuaded many communities from adding on-road bikeways.

In March 2007, two major insurers of Illinois local government agencies (IPARKS and St. Paul-Travelers) were asked how much insurance premiums would rise for hypothetical additions of: a) 10 miles of off-road bike path; b) 10 miles of on-road bike lanes; and c) 10 miles of signed road routes. Both responded that there would be ZERO increase for each case, assuming that proper engineering design standards were met.

At least 30 Illinois towns and jurisdictions have proceeded to install designated bicycle facilities since the 1998 decision, despite the disincentive.[2] Signed bike routes from before 1998 remain in dozens of other towns. The number of known lawsuits resulting from these on-road bikeways has been minimal, demonstrating that the reaction of the more risk-averse towns may be out of proportion with the actual risk exposure.

Local governments regularly weigh risk exposure against policy implications and services provided to residents for all sorts of facilities and programs. Places with a much higher rate of liability exposure (number of cyclists, miles of on-road bikeways) than is proposed for Effingham have years of experience demonstrating this issue to be negligible. The City may proceed with the on-road bikeways listed in this plan, after verifying the risk exposure involved.

[2] "*On-Road* Bicycle Routes and Illinois' Liability Disincentive", League of Illinois Bicyclists, 2008.

Guidelines for Developing the City of Effingham's Bikeway Network

Introduction

A bikeways network is comprised of routes that are particularly important because they serve key destinations and facilitate travel across barriers. Although all city streets, except where prohibited, will be used by cyclists, a designated bikeways network helps direct them to particularly favorable routes, especially for mid and long distance trips. Developing a plan for a bikeways network establishes priorities for improvements, such as restriping for bike lanes, completing trails, adding wayfinding signs and improving crossings.

Effingham's bikeways network was developed with a variety of inputs:

- **Public Involvement:** On February 3, 2010, a "Public Brainstorming Workshop" was attended by over 25 residents. The purposes of the workshop included: a) gather local resident knowledge on biking and walking needs; b) prioritize road corridors and other routes to study for potential improvements; c) build community support for the plan and its implementation. Each attendee marked individual maps with suggestions. A group exercise followed in which top priorities from the South, Northeast, and Northwest regions of the City were discussed and reported. See appendix 2.

- **Consultation with City staff and steering committee**: In addition to the workshop, two meetings were held with a steering committee consisting of City and other agency staff, and residents (See Appendix 1). The steering committee guided the project approach, while City staff provided much valuable input on existing conditions, future transportation projects and other plans, and more.

- **Bicycle Level of Service Analysis:** The Bicycle Level Of Service[3] (BLOS) measure 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 it was recently added to the Highway Capacity Manual. More information and an on-line calculator is at http://www.bikelib.org/bike-planning/bicycle-level-of-service/ BLOS is used in the Effingham Bicycle and Pedestrian Plan to measure existing and future conditions, to set standards for the bikeway network, and to justify recommendations.

- **Review of standards, guidelines and best practices**: The plan draws heavily from AASHTO, MUTCD, FHWA and other nationally recognized resources for bicycle facility design. See Bikeways Types discussion in the previous section.

[3] Landis, Bruce, "Real-Time Human Perceptions: Toward a Bicycle Level of Service," Transportation Research Record 1578 (Washington DC, Transportation Research Board, 1997).

Guiding Principles

The following guiding principles informed the development of Effingham's bikeway network.

- Plan 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 throughout the City with target spacing of ½ to 1 mile. 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 busy roads, and access to destinations.
- Look for spot improvements, short links, and other small projects that make an impact.
- Provide grade separated crossings across major barriers, such as the interstate. All crossings should be bicycle accessible. Also, where appropriate, seek opportunities to improve the at-grade crossings of other barriers, such as US 40, US 45 and IL 33, as well as the rail corridors.
- Be opportunistic, implementing improvements during other projects and development.

Figure 21 Maple Street is recommended as a bikeway since it is a continuous route north/south through Effingham with ample room for bike lanes.

Selecting Bikeway Type

These guidelines were used for specific route segments:

- Where on-road bikeways are recommended, try to achieve a BLOS rating of High C or better for designation in the network. This is an appropriate goal for accommodating the casual adult bicyclist. Depending on the situation, use Bike Lane or Bike Route signage (and wayfinding directional signage) to indicate inclusion in the network.
- For the roads in the network (Bike Routes and Bike Lanes), raise the priority of filling sidewalk or sidepath gaps on at least one side of the road. If these routes are important for cyclists, they are important for pedestrians as well. Also, this recognizes that children – and more traffic-intolerant adults – will ride on the sidewalk. However, do not mark sidewalks as Bike Routes.
- Do not recommend sidepaths 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, stripe roads for dedicated bike lanes – with no parking permitted in these lanes.
- Use shared lane marking and bike signal actuation pavement markings to indicate proper on-road bicycle position, especially where heavy bicycle traffic is expected.

Generating Public Support

To improve public support for plan implementation, these approaches are suggested:

- Achieve early, easy successes ("low-hanging fruit") to gather momentum.
- Do not remove on-road parking if at all possible.
- 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.
- Try to avoid widening sidewalks to 10' sidepath widths where at least some residential front yards would be impacted.
- Do not widen residential roads solely for bikeways.
- Work with local businesses and media outlets to help promote the plan and celebrate progress.

Safe Routes to School

Introduction

Safe Routes to School (SRTS) was a new program included in the 2005 federal transportation bill; the program has two primary goals:

- Increase the number of students in grades K-8 who walk or bicycle to school, and;
- Improve the safety of those students as they travel between school and home.

Implementation of the SRTS concept has several other benefits, including reductions in:

- childhood obesity
- air pollution as a result of fewer parent drop-offs
- school transportation costs as a result of fewer children travelling via school bus
- traffic congestion near schools during arrival/dismissal times

SRTS funding, which is administered by IDOT, can be spent on a wide variety of local activities, as long as those activities occur within a 2-mile radius of a school serving any grade(s) K-8. In addition, the SRTS program emphasizes the five "E's:" Engineering, Education, Encouragement, Enforcement, and Evaluation. Any project using SRTS funds must fulfill at least one of the five E's. SRTS funding is available from the Illinois Department of Transportation at a 100% state/federal share, with periodic grant cycles.

Figure 22 Walking and biking to school fosters health and independence.

Engineering is also known as the Infrastructure category; all construction projects fit into this category, including sidewalks, trails, traffic lighting, signage, etc. The other four E's are collectively referred to as the Non-Infrastructure category, since they do not involve construction. In the case of Infrastructure applications, the State of Illinois highly encourages applicants to simultaneously pursue and implement SRTS activities that fulfill a Non-Infrastructure category. For example, Effingham could apply for SRTS funding to construct a new sidewalk, but should at the same time apply for SRTS funding to educate students on safe walking and bicycling practices, or to implement a "walking-bus" program.

Increasing the number of Effingham students that walk and/or bicycle to school, and making it safer for the children to do so, was determined by the Committee to be a key goal of this plan. In response, trends and issues with safe routes to Effingham schools were researched; that work is detailed in the following sections on Data Collection, Key Findings/Issues, and SRTS Recommendations.

Data Collection

Schools studied for this Safe Routes to School plan included: Southside Elementary, Sacred Heart Elementary (SHES), Effingham Junior High School (EJHS), Effingham High School (EHS), and St. Anthony High School (SAHS). Other schools exist in the District, but they are located in other communities or several miles outside of the City of Effingham.
The first step in developing the Safe Routes to School plan for Effingham was to collect data about students' current transportation habits; student, parent, and school staff concerns; and current community and school-zone infrastructure conditions. This information was gathered via several different methods:

- **Interviews with District Transportation Director**: The Transportation Director was interviewed to learn about where students typically walk or bike; where problem areas exist; typical bus pick-up/drop-off procedures; bus ridership; and concerns the bus drivers have over students' walking and biking habits.
- **Interviews with Principals:** Several school Principals and Assistant Principals were interviewed to learn about their concerns over student safety; key issues in the area immediately surrounding the schools; bus and parent pick-up/drop-off procedures; and ideas for school participation in encouraging student walking/biking and safety improvements.
- **Survey of EJHS Students:** Surveys were administered to all Effingham Junior High School and Effingham High School students near the end of the 2009-10 school year. The survey focused on current travel habits; safety perceptions and concerns; and ideas to encourage student biking/walking.
- **Survey of EJHS Parents:** A survey was mailed to the parents/guardians of all EJHS students, asking questions about their children's travel habits, and the parents' own perceptions of safety and ideas to encourage their children to walk or bike to school safely.
- **On-Site Analysis:** Site visits were made to each public and parochial school in Effingham, as well as the neighborhoods surrounding the schools. Site visits focused on inspecting the walking and bicycling conditions; observing student pedestrian and cyclist behavior; and observing vehicular patterns and behavior.

Key Findings/Issues

Data collection through the methods mentioned above yielded several concerns and impediments to safely walking or bicycling to school in Effingham. Many of these were mentioned by multiple groups of people: students, staff, and parents, including those from different schools. Key Issues include:

- **Highway Crossings**: The City of Effingham is bisected on a North-South axis by U.S. Highway 45 (S. Banker Street/3rd Street), as well as on an East-West axis by U.S. Highway 40 (Henrietta Street/Fayette Avenue). Given that EHS, EJHS, and SHES are all located on the far Southwest corner of the community, students walking or biking to any of these three schools must cross at least one, if not both, of these State routes. These highways are commonly considered the major impediment to student safety in walking or biking to school. See Figure 23. An example is Henrietta and Grove, discussed below.
- **Railroad Crossings:** Effingham is also bisected by railroad tracks. There is an existing pedestrian bridge over Fayette, near downtown Effingham, but there is no pedestrian-only crossing over the railroad tracks to get pedestrians safely from East to West. In addition, some of the railroad tracks run near EJHS, EHS, and SHES.
- **Intersection of Henrietta and Grove:** This is the primary intersection near EJHS, EHS, and SHES. With the amount of bus traffic, parent vehicular traffic, through-truck traffic, and student pedestrian and bicycle traffic, the intersection is extremely busy. This is particularly true in the afternoon when the three schools dismiss.
- **Driver Behavior**: Driver behavior was a common issue found in all data collection methods. This includes speeding, ignoring traffic control devices like stop signs and crosswalks, and disregard or unawareness of pedestrian traffic, particularly at intersections and in crosswalks.
- **Sidewalks:** A lack of sidewalks in some areas, and deteriorating conditions of the infrastructure in other areas, was commonly cited.
- **Pedestrian-Activated Signals:** Although these have been installed at a number of key intersections, many other intersections would benefit from their installation, and some of the units already installed are reported to be in non-working condition.

Figure 23 Intimidating intersections and crumbling sidewalks can discourage walking and biking to school. These images are from Cherry and Fayette.

- **Congestion in School Areas:** Congestion, particularly in drop-off/pick-up areas during arrival and dismissal, was cited frequently as a safety concern, particularly surrounding the schools serving younger grades (SHES and Southside Elementary).
- **Crime/Bullying:** Real or perceived levels of crime, bullying, and child abduction/assault was commonly mentioned in EJHS student and parent surveys. Perception is likely more an issue than real crime occurring, but the issue remains important.
- **Location of Central Grade School:** The grade levels taught at Central are 3-5, prime ages for encouraging students to walk or bike to school. Unfortunately, Central Grade School is located several miles south of the City of Effingham, on U.S. Hwy 45. This distance is a significant barrier to students being able to walk or bike to school. However, some students travel to South Side Elementary to take a bus to Central. An opportunity exists to encourage more of these students to walk or bike to the bus stop.
- **Distance:** Effingham's schools draw students from a wide geographic area, including several other small towns and a large rural area. Far and away the top reason cited by students and parents for not currently walking or bicycling to school was "I live too far away." The vast majority of these respondents self-reported that they live "more than 2 miles away" from school, with some living as far as 20 miles away. To encourage walking and biking, Effingham will need to focus primarily on students that live within the City of Effingham, especially those that live within two miles of school.

SRTS Recommendations

This plan presents a number of Safe Routes to School recommendations. Some are specific to an individual school, but most would serve multiple schools and can be considered community-wide projects. They are categorized below as Infrastructure and Non-Infrastructure Recommendations.

Infrastructure Recommendations

Establish Clear Highway Crossings: Improved crossings of U.S. Highways 40 and 45 would help students navigate these road crossings safely. Improvements can include treatments such as traffic lights and pedestrian-activated signals (if not already present), marked crosswalks, pedestrian refuge islands, curb extensions, and signage for both pedestrians and motorists. Priority intersections include:

- Maple Street at Fayette
- Fourth Street at Fayette
- Cherry Street at Fayette (see below for details)
- Grove Avenue at Henrietta (see below for details)
- Wabash Avenue at Banker
- Temple Avenue at Third
- Clark Street at Banker

Cherry Street at Fayette: This is an existing crossing, with a flashing school crossing light, a striped crosswalk, and crossing guards. However, these traffic controls fall short of an ideal crossing. For this intersection to be considered a good crossing, stoplights are recommended; otherwise, the crossing can be moved east to Maple Street to improve safety. The Fayette Avenue reconstruction project, being scoped now by IDOT, is an opportunity to significantly improve crossing conditions, perhaps with a pedestrian refuge area and a manually-activated Pedestrian Hybrid Beacon. Special consideration should also be given to Maple and Fourth, which are listed above and, like Cherry, proposed as "Safe Routes to School."

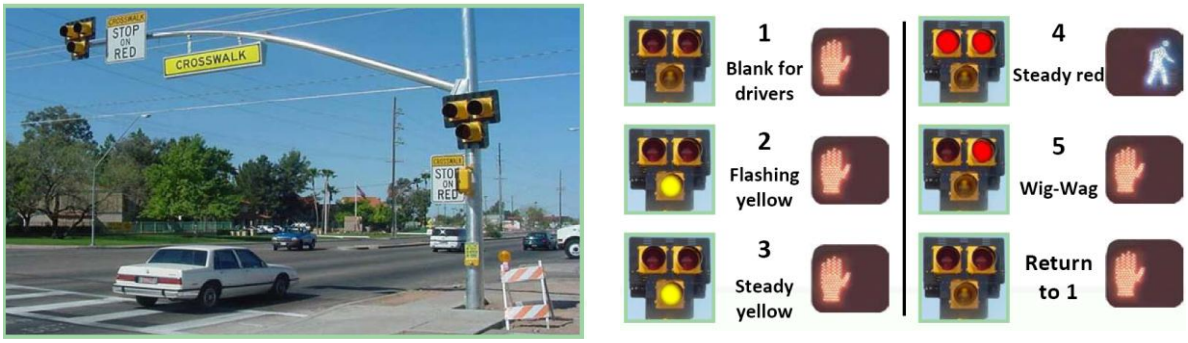


Figure 24 A Pedestrian Hybrid Beacon (or HAWK), included in the MUTCD, helps pedestrians cross busy roads with minimum disruption to vehicular traffic. Images courtesy of PBIC.

Grove Avenue at Henrietta: The intersection of Grove and Henrietta, the primary intersection near SHES, EJHS, and EHS, is extremely busy with vehicular and pedestrian traffic during afternoon dismissal. The intersection was frequently cited as dangerous for pedestrians and a significant obstacle to non-motorized school travel. See Figure 25. While the intersection does witness significant volumes of pedestrian, parent, and school bus traffic, on-site analysis found that the intersection design and infrastructure is largely sufficient; it has relatively narrow traffic lanes, stoplights, pedestrian-activated signals, sidewalks, and crosswalks. The issues at this intersection appear to be primarily behavioral, rather than infrastructure. As such, several recommendations were identified:

- **Lengthen the pedestrian "walk" signal and increase its frequency – or use an all-red pedestrian phase**. Groups of students were commonly seen waiting for several minutes for a walk signal, and when it came, they did not have time to cross before the "Don't Walk" signal flashed. As a result, many EHS students skipped the lights and crosswalks altogether; instead walking half-a-block north, and crossing Henrietta mid-block to EJHS while dodging heavy vehicular traffic on the U.S. Route. This created serious safety issues for pedestrians and vehicles alike. Another signalization option, for school day arrival and dismissal times only, is a manually-activated all-red vehicular signal phase with Walk signals for pedestrians and bicyclists to cross the intersection. This has worked well in locations with many pedestrians and turning vehicles, such as Wright and Green Streets at the University of Illinois in Champaign.

- **Police Enforcement**. Drivers in the area were commonly seen speeding, running yellow or red lights, pulling through crosswalks, and not giving right-of-way to pedestrians. Additionally, pedestrians were jaywalking. Police enforcement of laws for both drivers and pedestrians during arrival and dismissal periods could help reduce dangerous behavior.

- **Mid-Block Pedestrian Controls.** This recommendation should be taken as a second alternative to the above recommendations, and could go one of two directions. 1) Add a mid-block pedestrian crossing from the EHS/SHES side of Henrietta to EJHS. 2) Install barriers to impede pedestrians from crossing Henrietta mid-block between EHS and EJHS. Either option would require close participation from Illinois Department of Transportation.

Figure 25 Henrietta and Grove was frequently cited as an intersection of concern, due to heavy pedestrian and vehicle traffic after school.

Establish Primary Bicycle/Pedestrian School Routes: Clearly designated North-South and East-West routes (in conjunction with the improved Highway crossings), would help encourage and accommodate non-motorized travel to school. These routes should be upgraded to include sidepaths, bicycle lanes, or bike route signage, as specified elsewhere in this plan. Signage should be used to inform pedestrian, bicycle and vehicular traffic that the corridor is a school route.

- Maple Street
- Fourth Street
- Cherry Street
- Wabash Avenue
- Temple Avenue
- Grove Avenue

Establish Clear Railroad Crossings: Clearly marked crossings over railroad tracks, including improved safety controls, will help attract students to safe crossings, and reduce the number of students crossing or walking along tracks in dangerous places. Crossings of particular concern include:

- South Maple Street
- Wabash Avenue

Grade-Separated Tunnel (or Bridge) near the Amtrak Station: This high-cost, long-term solution would help connect the school areas with downtown and most of the rest of the community and entice children away from at-grade crossings and/or walking along the railroad tracks. Further study is needed to determine ideal structure placement—especially since pedestrians are very detour averse, but near the Amtrak Station between Fayette and Grove Avenues would seem to be the best fit from a SRTS perspective.

Sidewalk Construction/Reconstruction: Lack of sidewalks, or condition of sidewalks, was one of the most commonly-cited ways to increase safety, as identified by EJHS students who do not currently walk or bike to school. In many areas of the City sidewalks exist, but are commonly described by students as "bumpy," "dangerous," or "bad." In some areas, sidewalks simply don't exist; one area that was frequently mentioned is along Fayette Ave. Constructing and/or repairing sidewalks in these areas, especially along the proposed "School Routes" above, will help encourage walking and biking to school. Sidewalk construction should be prioritized to address the most dangerous areas, serve the largest number of students, or some other rational criteria. The project recommendation section of this plan includes new and reconstructed sidewalks and sidepaths at key locations throughout Effingham.

School Zone Traffic Calming: With the high levels of vehicular and bus traffic in and around pick-up/drop-off areas, pedestrians and bicyclists need additional levels of protection. Raised pedestrian crosswalks, corner bump-outs, signage, and flashing lighting are all examples of infrastructure that can be used. Educational materials and messages targeted at parents can also be of value.

Improve Bicycle Parking Facilities: Bicycle parking facilities could be improved in three primary ways: additional storage, increased security, and, over time, upgrades to higher quality racks. (See Figure 26 and discussion of bicycle parking in the "Three E's" section, later in the plan.) Bike racks were found at most schools, and all had bicycles parked in them on the day of the on-site visit. Parking appeared to be sufficient for current levels of ridership (up to 20 cyclists per day in nice weather), but as the number of cyclists grows, more bike parking will be needed. In addition, security should be considered: several student-surveys reported concern over damage to or theft of their bicycles. As part of an Encouragement program, perhaps bike locks and other deterrents could be prizes or rewards.

Figure 26 Bike parking at St. Anthony High School. This style of rack should eventually be replaced by one that provides more support and security. See also Figure 31.

Non-Infrastructure Recommendations

Increase People Presence: Among EJHS students who walk or bike to school at least occasionally, *the most commonly cited reason why they feel safe is because they are with friends, a parent or adult, or other people*. The presence of friends, family and acquaintances not only makes the student feel safer, but likely makes the activity more enjoyable for the student. Specific ideas to pair students with other people include:

- **Walking School Bus**: Coordinated groups of students walk or riding together from a common neighborhood area, led by a parent or adult volunteer to increase safety, lead the route, and ensure safe biking and walking practices.
- **International Walk/Bike to School Day:** Coordinating school encouragement efforts around this day can help give a single-day boost to participation levels; some of these "first-timers" or sporadic student-pedestrians may choose to walk or bike more often once they participate and have fun with classmates and friends.

City-Wide Crossing Guard Program: Among EJHS students who do not ever walk or bike to school, *the most commonly cited activity identified to increase safety is more crossing guards*. The City of Effingham already has a crossing guard program, with guards located at Fifth & Fayette, Cherry & Fayette, Wabash & Fifth, Fourth & Kreke, and Third and St. Louis. Moving guards from these intersections should be considered carefully, but crossing guards should be added and/or moved to correspond with the primary Highway crossings, or in other areas where high levels of student pedestrian traffic is observed.

Target EJHS and SHES students: Students in grades 3-8 are the "sweet spot" for SRTS activities; they are old enough to be able to walk or bicycle to school, but young enough that they are not settled into transportation habits or prone to serious peer pressure. Therefore, targeting SRTS activities at students in EJHS and SHES is likely most effective. Ideally, students in grades 3-5 at Central Middle School would also be targeted, but the school's proximity makes it

unlikely for these students to walk or bike to their school. However, since approximately 100 Central students are picked-up and/or dropped-off by bus at South Side Elementary and many then walk or bike home from that location. Non-Infrastructure activities should also be targeted at Central students.

Safety Education: Safety education programs or materials for students are needed. In addition to general safety information and "rules of the road" for cyclists, students need to be educated on how and where to properly travel and cross streets. Educating students on safe walking and riding techniques, safe routes, and proper behavior will help to greatly improve student safety. Specific recommendations include:

- **Mentorship Programs:** Administrators at EHS suggested that their existing mentorship programs pairing high school athletes with Central Grade School students could be utilized to encourage and educate the younger students about bicycling and walking. This program offers great potential, and could be expanded to include EHS-EJHS, or SAHS-SHES mentorships.
- **Physical Education**: Bike trails and bike routes (both existing and new) can be utilized in Physical Education programs to promote the health benefits of walking and biking while delivering safety information.
- **Educational Materials:** The League of Illinois Bicyclists, the Illinois Secretary of State, and the Illinois State Police are resources for bicycle safety education. See the Additional Recommendations section of this plan for more details.
- **Route-Finding**: A common suggestion in EJHS student and parent surveys was to publicize and sign "Safe Route to School" Routes on the City's roads and sidewalks. In combination with this signage, maps, directions, or other way-finding materials can be distributed showing the best way to find and navigate the Effingham SRTS Routes.

Increase Police Enforcement: Partnering with the Effingham Police Department to increase police patrols in and around school zones during arrival and dismissal times will help reduce actual crime, traffic violations, and bullying, and also help diminish the perceived problems of crime felt by both students and parents.

School Travel Plan: IDOT requires a school travel plan (www.dot.state.il.us/saferoutes) to be completed and approved before a school district or City can receive SRTS funding. Regardless of whether or not an application for a specific project is actually submitted or approved, completion of the School Travel Plan can aid school and City officials in making travel conditions safer for students on foot or bike.

School Zone Traffic Enforcement: State motor vehicle law allows for increased fines for traffic violations in school zones, with those funds going directly to the school district in which the violation occurred. Those funds can then be used to pay for safety programs and improvements to increase the safety of children walking or biking to school. Effingham's Police Department and School District should partner to more strictly enforce traffic violations within school zones, and then use the revenue generated to implement SRTS recommendations within that school or school zone.

Recommended Projects

Introduction

Figure 27 Completing the "Missing Mile" to Teutopolis is a long term project.

The Effingham Bicycle and Pedestrian Plan proposes a network of bicycle and walking routes to facilitate travel to all sections of the city and beyond. The network builds on existing strengths, and so includes routes that already work reasonably well for pedestrians and/or cyclists. The recommended projects in this section will help fill gaps, tackle barriers and improve conditions to complete the network. Some projects are relatively easy, such as striping bike lanes on Maple. Others will require a longer term vision, such as building the "Missing Mile" from Evergreen to Teutopolis (Figure 27). See the earlier Bikeways Guidelines section for more information on how routes and projects were selected.

Opportunities to improve conditions for walking and cycling in Effingham are not limited to the projects discussed below or even the network as a whole. See the Complete Streets section for strategies to ensure that all future transportation projects meet the needs of pedestrians and cyclists, whether or not they are specifically included in this plan.

Understanding the Maps

The plan's maps provide a snapshot of needs and recommendations. "Mapping 4th Street" (next page) shows how the maps can work together.

- **Existing Conditions--Sidewalks/Trails and On-Road Comfort (BLOS – Bicycle Level of Service):** Shows *existing* on-road conditions for bicyclists on key roads throughout Effingham, including, but not limited to, all routes in the proposed network. It also provides information on sidewalk gaps, sidepaths and trails.
- **Recommended Projects:** Includes on and off road bike facilities, new sidewalks and sidepaths, intersection improvements and long range improvements beyond the scope of this plan. The TREC trails map is also included.
- **Priority and Implementation:** Differentiates projects by priority and readiness to be implemented. Ready projects have no significant barriers to implementation. Conditional ones are linked to the progress of other road projects or developments.
- **Future Conditions: Sidewalks/Trails and On-Road Comfort (BLOS):** Portrays how level of service for cyclists will change if the recommended projects are implemented, as well as the increased sidewalk coverage. Future BLOS scores are not shown for "longer term improvement" projects, because of their uncertain status.

Mapping 4th Street

The existing conditions map shows that 4th Street south of Temple is currently a mix of low and high C in terms of Bicycle Level of Service. Sidewalks are continuous on both sides of the street, except south of Eiche.

The recommended projects map calls for bike lanes. 4th is shown as high priority and ready to go in the implementation map. With bike lanes, 4th street moves up a grade to a low B south of Fayette and a high B downtown, both meeting the target level for the bikeway network.

North of Evergreen, the plan calls for shared lane markings to improve motorist awareness of on-road cyclists using 4th. In addition, the east sidewalk gap north of the interstate is categorized as high priority, but conditional on development at the location.

Using Merchant to bridge the gap between Temple and Evergreen is treated as a long range project, with Maple being the nearest bikeway network segment until then.

Travel across 4th should be considered as well, as discussed in the Complete Streets and Safe Routes to School sections. Higher visibility crosswalks and other intersection features will help "complete" 4th Street.

Figure 28 4th Street is a great candidate for bike lanes.

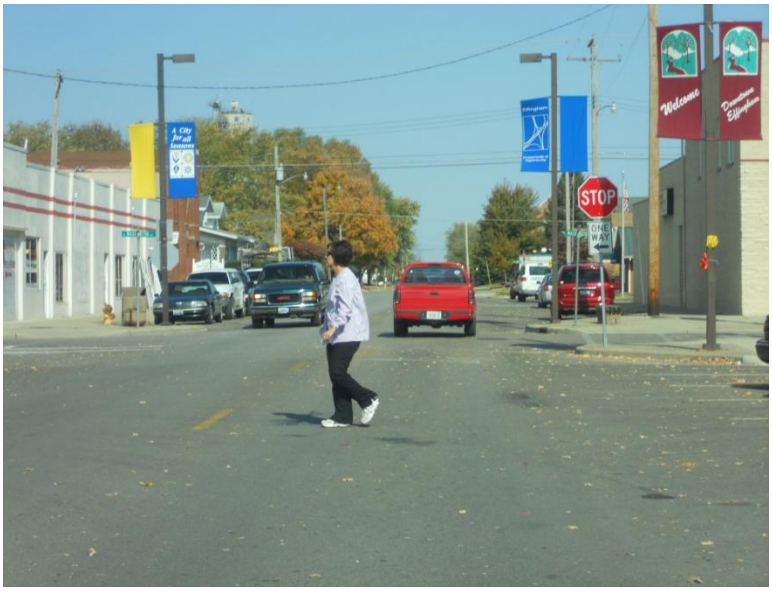
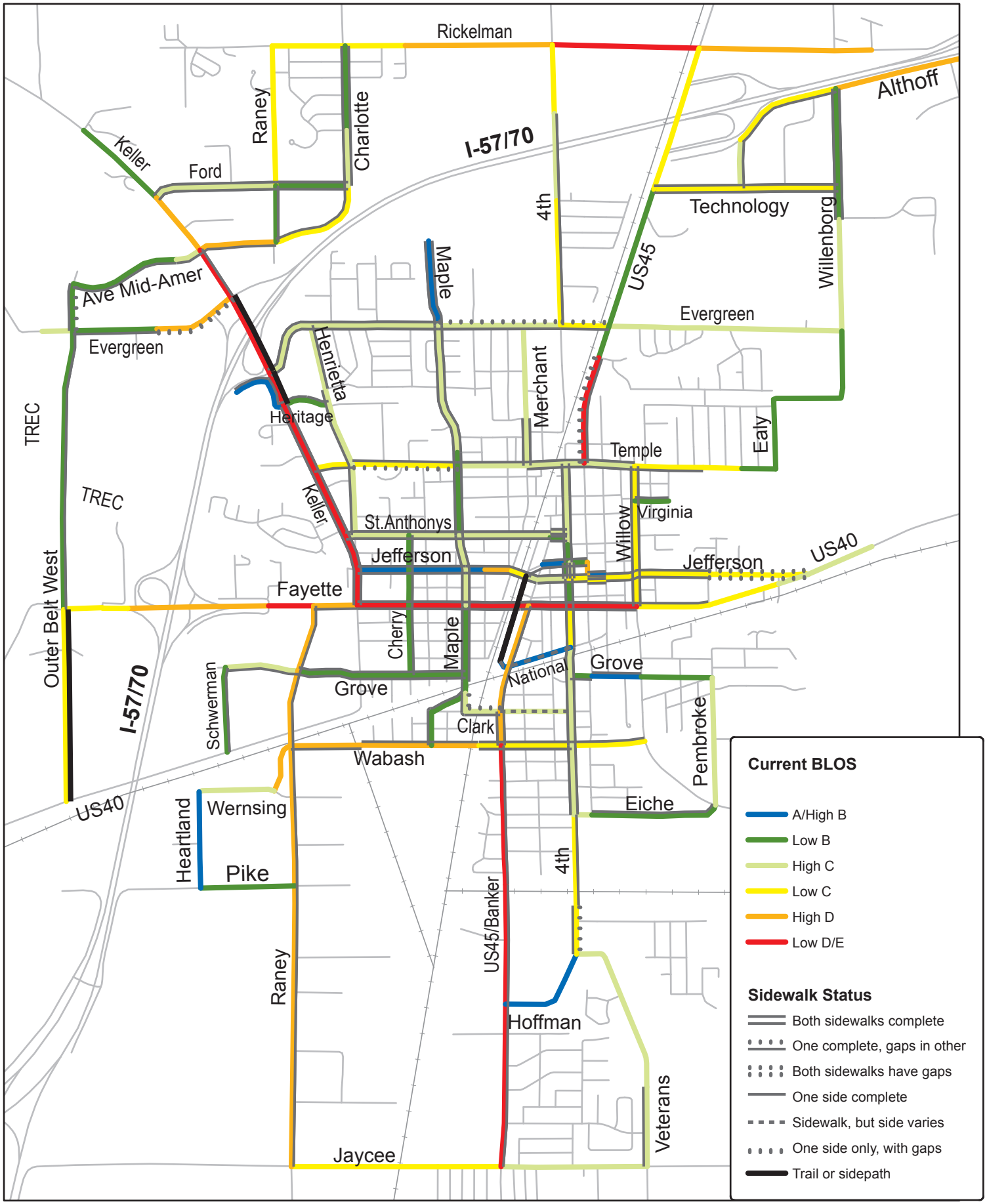
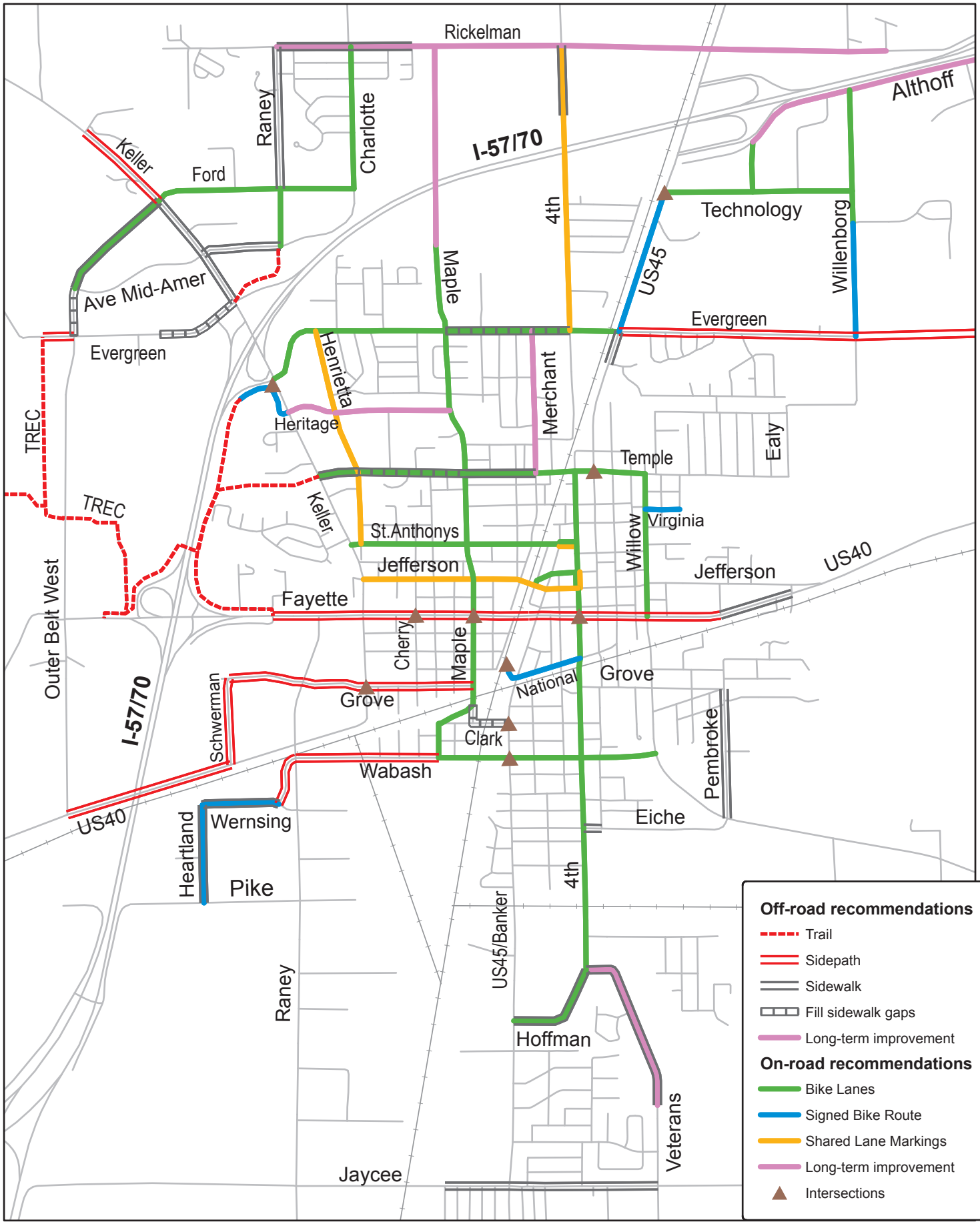


Figure 29 Bike lanes and sidewalks provide for cycling and walking along 4th Street. Intersection improvements, such as more visible crosswalks, will help travel across.

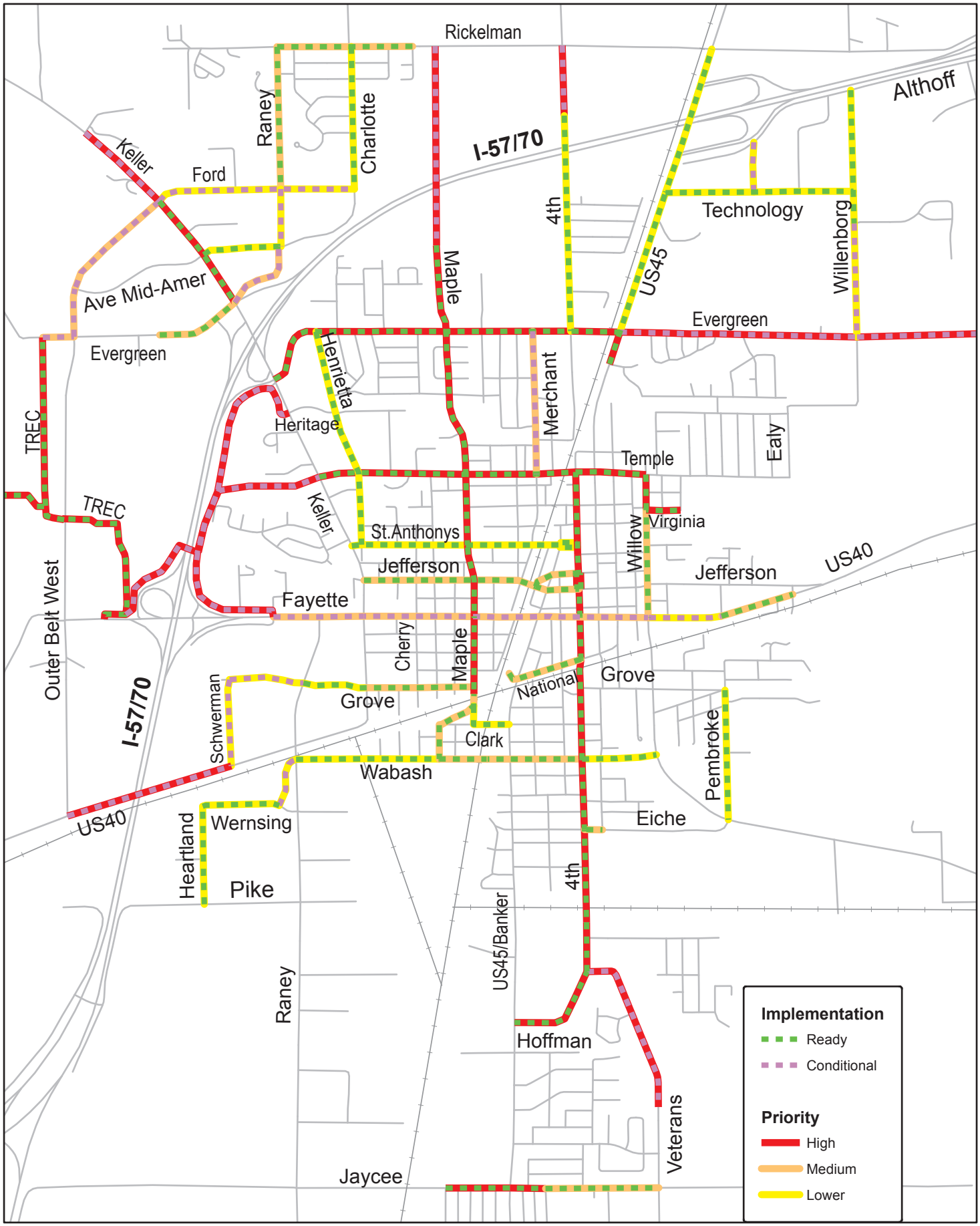
Existing conditions: sidewalks/trails and on-road comfort (BLOS)



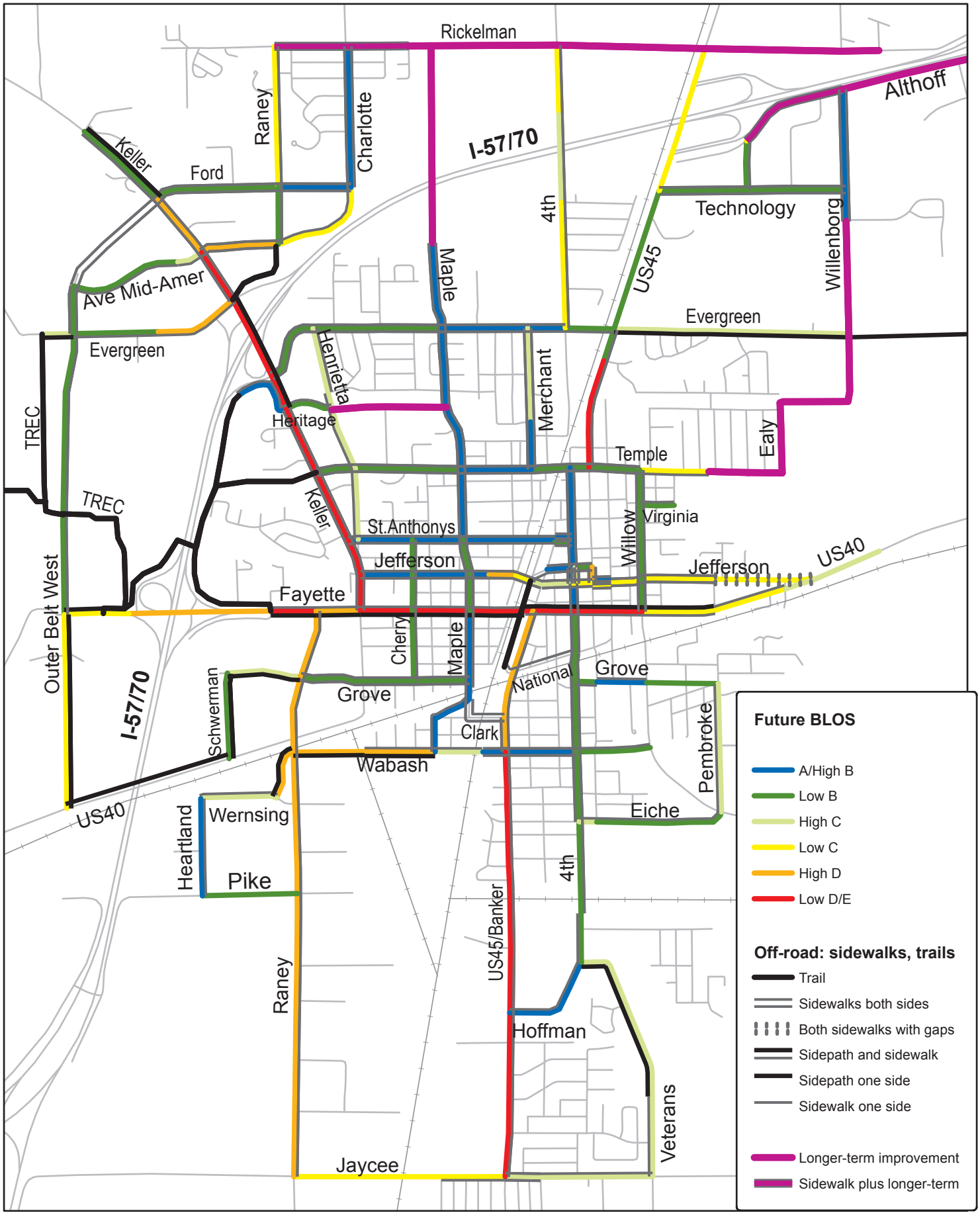
Effingham Ped/Bike Plan - Recommended Projects



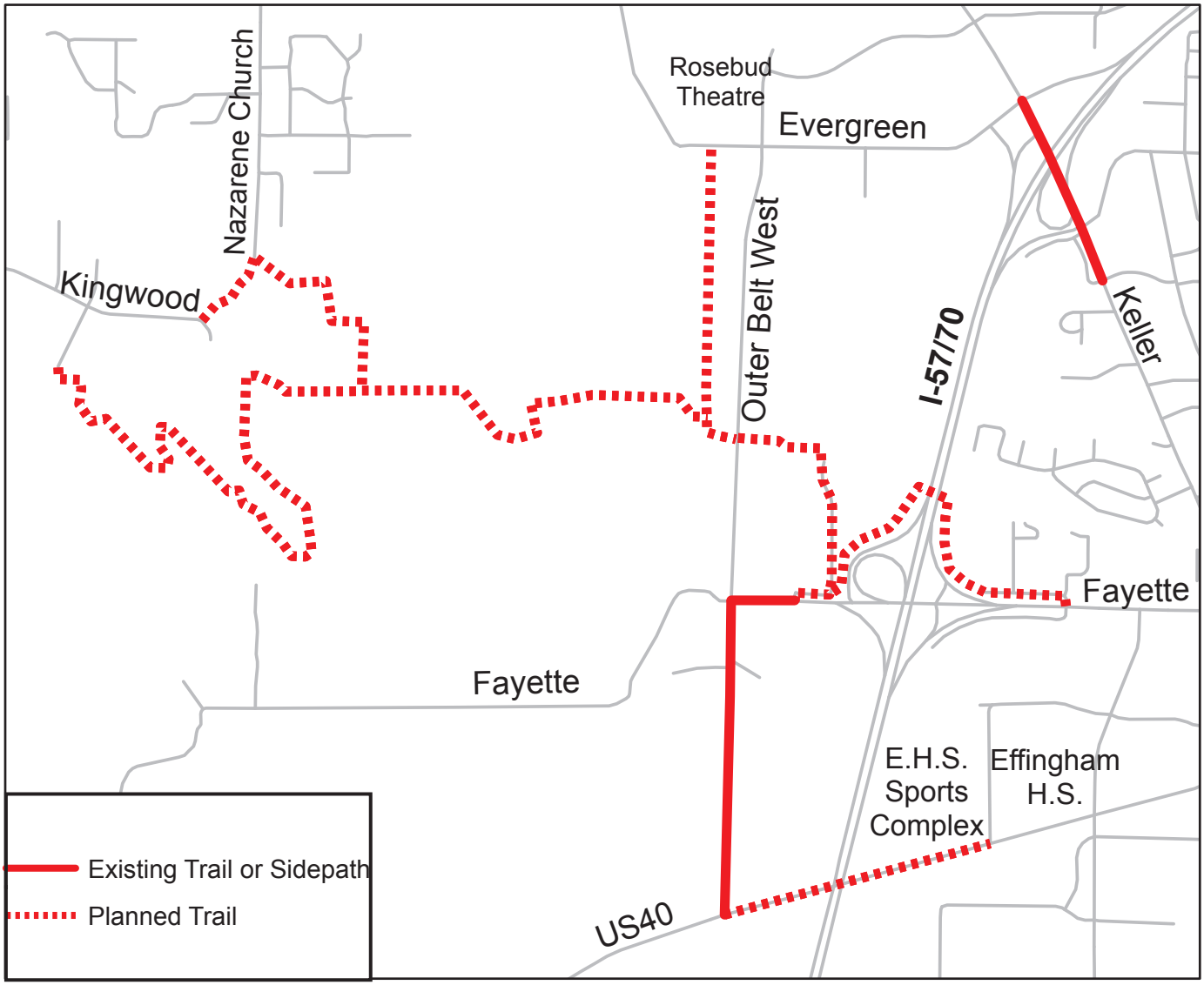
Effingham Ped/Bike Plan - Priority and Implementation



Future conditions: sidewalks/trails and on-road comfort (BLOS)



TREC Trail Network



Understanding the Project List

Extensive data collection on existing walking and cycling conditions informed the development of this plan. Most of this information, such as Bicycle Level of Service scores, sidewalk coverage, project readiness and implementation notes, is housed in a spreadsheet that helps generate the maps. Examples of high priority and "Ready to Go" projects include:

- **Bike Lanes** for Hoffman, Willow, Temple, Evergreen, Maple, 4th.
- **Sidewalks** along sections of Hoffman, Keller, Temple, Evergreen, Jaycee and US 45.

The table that follows lists recommended projects by road name. Please note the exceptions below. See Appendix 3 for the entire dataset by road segment:

- **Safe Routes to School:** All of the routes proposed as safe routes are included in the networks, but are not specifically labeled in the map and spreadsheet as Safe Routes improvements. They are: *Maple, Fourth, Cherry, Wabash, Temple and Grove.*
- **Intersections:** The spreadsheet stores information on road segments, but not information about key intersections that need improvements. However, they are reflected on the recommended projects map. Most are also part of the Safe Routes to Schools proposal*: Fayette at Maple, Fourth and Cherry (figure 25); Banker at Wabash and Clark; Grove at Henrietta; Temple at Third; Keller at Evergreen/Hampton (south of I-57/70); and US 45 at Technology*.
- **Long Term Projects:** Projects identified as long range are on the maps and spreadsheet, but not in the table below. They are included in the maps to reflect awareness of missing gaps that either can not be addressed in the near future or need further study, such as extending Maple over I -57/70.

Figure 30 Improved pedestrian crossings of Fayette are part of the Safe Routes to School proposals in this plan. They would also help make Fayette a "Complete Street."

Recommended Bicycle and Pedestrian Projects for Effingham, IL

(Does not include intersections and long range projects. Projects along a proposed Safe Route to School are starred.)

Segment	From (W/N)	To (E/S)	On Road Recommendation	Off Road Recommendation
*4th	Temple	Veterans	Bike Lanes (Shared Lane Marking between Jefferson and Washington, northbound)	
*4th	Rickelman	Evergreen	Shared Lane Markings	Sidewalk (Rickelman to N of I-57 bridge)
Althoff	Technology	Fitzpatrick	Bike Lanes	
Avenue of Mid-America	Keller	Raney		Sidewalk
Charlotte	Rickelman	Ford	Bike Lanes	
Clark	Old Maple	Banker		Fill sidewalk gaps
Eiche	4th	3rd		Sidewalk
Evergreen	1/3 mi W of Keller	Keller		Fill sidewalk gaps
Evergreen	US 45	1600th		Sidepath
Evergreen	Calico Trail	Outer Belt West		Sidepath
Evergreen	Keller	US 45	Bike Lanes	Fill sidewalk gaps between Maple and 4th
Fayette	Illinois (E frontage)	Long		Sidepath
Fayette	Long	Oak Ridge		Sidewalk
Ford	Keller	Charlotte	Bike Lanes	
*Grove	Schwerman	Maple		Sidepath
Hampton	W-end	Keller	Signed Bike Route	
Heartland	Wernsing	Pike	Signed Bike Route	Sidewalk
Henrietta	Evergreen	St. Anthonys	Shared Lane Markings	
Hoffman	Veterans	Banker	Bike Lanes	Sidewalk
Jaycee	4 Seasons West	Veterans		Sidewalk
Jefferson	Keller	4th	Shared Lane Markings	
Keller	N city limits	Ford		Sidepath
Keller	Ford	N interstate ramp		Sidewalk
Keller ramp trail	Keller E-SP	Raney		Trail
*Maple	N-end	Wabash	Bike Lanes	
National	Amtrak station	4th	Signed Bike Route	
Outer Belt West	Avenue of Mid-America	Evergreen		Fill sidewalk gaps
Outer Belt West	Ford	Avenue of Mid-America	Bike Lanes	Sidewalk
Pembroke	Grove	Eiche		Sidewalk
Raney	Rickelman	Ford		Sidewalk
Raney	Ford	Avenue of Mid-America	Bike Lanes	
Schwerman	Grove	National		Sidepath
St. Anthonys	Keller	4th	Bike Lanes With shared lane markings for small segment	

Segment	From (W/N)	To (E/S)	On Road Recommendation	Off Road Recommendation
Technology	US 45	Willenborg	Bike Lanes	
*Temple	Keller	Willow	Bike Lanes	Fill sidewalk gaps
TREC: I-57 Bridge connector	I-57 Bridge	Hampton		Trail
TREC: I-57 Bridge connector	I-57 Bridge	Temple		Trail
TREC: I-57 Bridge	Calico	Fayette E-ramp/ Illinois		Trail
TREC: Calico S. bridge connection	Outer Belt West	Fayette		bridge connection over creek
TREC	Kingwood Estates and Nazarene Church	Little Wabash River		Trail, including bridge over river
TREC: US40 Project	Outer Belt West	Schwerman		Sidepath
US 45	Evergreen	Surs Woods		Sidewalk
US 45	Technology	Evergreen	Signed Bike Route	
Veterans	4th	1/3 mi N of Jaycee	Bike Lanes (long range)	Sidewalk
Virginia	Willow	Park	Signed Bike Route	
*Wabash	Wernsing	Maple		Sidepath
*Wabash	Maple	Willow	Bike Lanes	
Washington (W-bd)	Front	4th	Bike Lanes	
Wernsing	Heartland	Mansfield	Signed Bike Route	Sidewalk
Willenborg	Althoff	City limit	Bike Lanes	
Willenborg	City limit	Evergreen	Signed Bike Route	
Willow	Temple	Fayette	Bike Lanes	

Additional Recommendations:
Bike Parking and the Other "E's"

Introduction

Engineering improvements to the physical environment for walking and cycling should be accompanied by work in the "other E's": Education, Encouragement and Enforcement. The recommendations below will raise awareness of new facilities and motivate more people to safely and comfortably walk and bike in Effingham. Bicycle Parking is treated as a separate category, given the breadth of the topic and its relationship to both engineering and encouragement.

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 prime location. It is recommended that the City address bike parking by adopting a development ordinance requirement and by retrofitting racks at strategic locations in town.

Figure 31 Inverted U, single (top) and in a series (bottom)

General bicycle parking considerations are covered below. For more details, consult *Bicycle Parking Guidelines, 2nd Edition: A Set of Recommendations from the Association of Pedestrian and Bicycle Professionals***,** 2010, available at www.apbp.org.

Style: A good bicycle rack provides support for the bike frame and allows both the frame and wheels to be secured with one lock. The most common styles include the inverted "U" (two bikes, around $150-300) and the wave or continuous curve style (more than two). The preferred option for multiple spaces is a series of inverted "U" racks, situated parallel to one another. These can be installed as individual racks, or as a series of racks connected at the base, which is less expensive and easier to install and move, if needed. See Figure 31.

Figure 32 This style of rack is not recommended.

Old-fashioned "school racks," which secure only one wheel, are a poor choice for today's bicycles (Figure 32). Securing both the wheel and frame is difficult, and bicycles are not well supported, sometimes resulting in bent rims.

Locations: The best locations for bike parking are near main building entrances, conveniently located, highly visible, lit at night, and—when possible—protected from the weather. 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, avoiding the curb and area adjacent to crosswalks. Racks should be installed a minimum of 6 feet from other street furniture and placed at least 15 feet away from other features, such as fire hydrants or bus stop shelters.

The installation recommendations below come from the Kane County Bicycle and Pedestrian Plan:

- 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.

Ordinances: Ideally, all multi-family and non-residential buildings should provide bike parking. A simple ordinance may call for one bike parking space for every 10 or 20 required car spaces, with a minimum of two spaces. The City of Naperville has a very good ordinance (Section 6-9-7) specifying bike rack standards and a detailed list of required spaces per land use. Most uses call for 5% of car spaces, with higher amounts for multi-family dwellings, schools, recreation facilities, etc. For suggestions on bike parking requirements according to land use type, consult the APBP bicycle parking guide referenced above.

Existing Conditions: Bike racks currently exist at locations throughout the City, including most schools. Locations that need new or upgraded bike parking include, but are not limited to:

- Post Office
- County Building
- Government Building
- City Hall
- Library (replace existing)
- Mall, both the east and west side
- Hendelmeyer Park
- Bliss Park
- Community Park
- Wal Mart
- K Mart

Figure 31 Over time, the school yard style of rack, such as this one in Community Park, should be replaced by more secure racks, as discussed above.

Education

Education of bicyclists, pedestrians and motorists is crucial to improving real and perceived bicycling and walking safety in Effingham. Many adults and children are afraid to bike, or bike only on off-road trails, because of their concern about safety. Many parents fear letting their children walk along or across busy streets. Improving education can lessen these concerns and instill the skills and confidence to bike and walk around town more safely. Some possibilities include:

Bicyclists and Pedestrians: Distribute safety materials through schools and PTAs; at public places such as City Hall, the library, and the Park District; and on the City's and park districts' 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 http://www.bikelib.org/safety-education/kids/bike-safety-sheet/ .
- *Safe Bicycling in Illinois* (www.dot.state.il.us/bikemap/safekids/cover.pdf), a free booklet directed to teens and adults, from IDOT Traffic Safety.
- *Teaching Children to Walk Safely as They Grow and Develop: A Guide for Parents and Caregivers*, a free guide from the National Center for Safe Routes to School: http://www.saferoutesinfo.org/resources/education_teachingchildren.cfm .

Other resources for kids and adults are listed at http://www.bikelib.org/safety-education , ranging from bike safety classes to videos to a bike rodeo guide. Also, grant funding for grades K-8 education programs is available from the Illinois Safe Routes to School program.

Motorists: Educate motorists on sharing the road with bicyclists and avoiding common mistakes that lead to crashes. Include a link to the League of Illinois Bicyclists' "Share the Road: Same Road, Same Rights, Same Rules" video (http://www.bikelib.org/safety-education/motorists/driver-education and available as a DVD) on the City and park district websites. Show the video on the local cable channel, 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 plans, which include a road rage case study for classroom discussion.

Motorists also need to be vigilant about pedestrians, especially at intersections and other crossing points. Recently enacted state law requires motorists to STOP for pedestrians in crosswalks. In the coming years, look for more education resources to help drivers (and bicyclists) understand their responsibilities towards pedestrians.

Articles meant to educate the public on the above are available on the League of Illinois Bicyclists website. These are suitable for newspapers, local newsletters, and the City website.

Encouragement

Suggestions for encouraging visitors or residents to explore Effingham by feet or two wheels include:

- Create a city map of Effingham's bikeways network, including TREC, as more facilities are developed. The map can show existing and proposed bikeways. Partner with local businesses to produce—and be listed—on the map.
- Work with schools and PTA's to develop Safe Routes to School maps and Walking School Buses.
- Proclaim the City's observance of National Bike Month in May (or June, when weather is more dependable).
- Declare a Bike to Work day to encourage bicycling to work, errands, or other destinations. Offer token incentives, such as refreshments at City Hall or coupons for ice cream, for example.
- Work with the school district to observe International Walk and Bike to School Day, the first Wednesday of each October.
- Work with the park districts, public health officials and other partners, such as local bike shops and TREC volunteers, to organize bike tours, running events and walks.
- Promote Effingham as a bicycle-friendly community in the City's advertising.

Figure 32 Local stakeholders can help promote walking and biking in Effingham.

Enforcement

A vital component of a safe bicycling and walking environment is enforcement with education to reduce common collision types.

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 bikes, 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 educate, issue warning citations, or issue tickets. Changing their behavior could save their lives. Resources include Illinois bike law cards and warning citations from the League of Illinois Bicyclists. See www.bikelib.org/safety-education/enforcement-resources

In a car-bike crash, the motor vehicle does the most damage. Some aggressive motorists intentionally harass cyclists, while others simply don't know how to avoid common crash types. Police are encouraged to learn the common crash types and enforcement techniques to 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" (http://www.bikelib.org/safety-education/motorists/driver-education and available as a DVD).

Some communities also conduct "stings" to educate all road users about various issues, such as stopping for pedestrians in crosswalks. These stings sometimes start off as education, where during the first week drivers are given warnings and information. During a subsequent week, violators are ticketed. These efforts should be publicized via local media outlets; the goal is to inform as many people as possible about state law and safe usage of the roadway.

Plan Implementation

Introduction

The key recommendation of this plan is to develop a way to ensure its implementation. Continued progress will require a commitment of time and financial resources over many years. Little by little, project by project, the City of Effingham will become a more walkable and bikeable community.

Committee or Staff Time

Perhaps the most important implementation tool is time. The plan recommends dedicating some fraction of a staff member's time as the City's 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 City staff and relevant agencies to ensure their work conforms to the goals of the plan. Routine review of development plans and road project designs is a prime example.

In addition, consider establishing an on-going Effingham Bicycle and Pedestrian Advisory Committee, perhaps from the plan steering committee membership. Other communities, such as Naperville and Urbana, have found that volunteer involvement by a few energetic, knowledgeable, and dedicated residents can greatly leverage their staff time investment.

Organizing regular, such as quarterly, meetings with this 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 below to the city planner's library, seek out opportunities to participate in webinars and workshops on best practices. Not only do these events provide useful information, they are an opportunity to interact with other planners and engineers grappling with similar issues.

Manuals and Guidelines:

- *AASHTO Guide for the Development of Bicycle Facilities*, 3rd Edition, 1999 (new edition expected in 2011) available at www.transportation.org
- *AASHTO Guide for the Planning, Design, and Operation of Pedestrian Facilities*, 1st Edition, 2004 available at www.transportation.org
- *Bicycle Parking Guidelines, 2nd Edition: A Set of Recommendations from the Association of Pedestrian and Bicycle Professionals***,** 2010, available at www.apbp.org.

Websites and Professional Organizations:

- 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: www.bikelib.org
- The Pedestrian and Bicycle Information Center: Offers a wealth of information on engineering, encouragement, education and enforcement, including archived webinars and quarterly newsletters: www.pedbikeinfo.org
- The Association of Pedestrian and Bicycle Professionals: provides continuing education, technical resources and an online forum for exchanging questions and ideas. http://www.apbp.org/
- National Center for Safe Routes to School: A clearing-house of resources to improve walking and cycling conditions around schools, educate children and caregivers, and organize events. http://www.saferoutesinfo.org/
- National Complete Streets Coalition: Policy and advocacy tools to help communities across the country develop streets that work for all users. http://www.completestreets.org/

Multi Year Work Plan

This plan recommends a variety of strategies, 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 should be to go through the listed recommendations (See Complete Streets, Safe Routes to School, Recommended Projects, and the Three E's) and draft a five year work plan. Projects that don't get completed on 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.

Implementation Funding

Recommendations in this plan range from low-cost or no-cost improvements to major capital investments. Project costs depend on myriad factors. It is usually most cost effective to address pedestrian and cycling improvements as part of larger projects, instead of retrofitting. Estimates for projects are below.[4]

- **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.
- **Bike Lanes:** The cost of installing a bike lane is approximately $3,100 to $31,000 per kilometer ($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.

[4] Explanations and figures from http://www.walkinginfo.org/engineering/roadway.cfm

- **Sidewalks**: The cost for concrete curbs and sidewalks is approximately $49/linear meter ($15/linear foot) for curbing and $118/square meter ($11/square foot) for walkways. Asphalt curbs and walkways are less costly, but require more maintenance, and are somewhat more difficult to walk and roll on for pedestrians with mobility impairments.

These may be funded in a number of ways. First, the City of Effingham may dedicate an annual budget for a bicycle and pedestrian implementation program. If needed, one strategy may entail a smaller first year budget for the highest priority projects, as a way to build momentum for following years. Additional funding may come from the Effingham Park District, Effingham County, Illinois Department of Transportation, and other relevant agencies.

Treatment	Cost	Effectiveness
Signing	$500 – 1,000	*
High visibility markings	$2,000 – 15,000	**
Advance stop bars	$1,000 – 2,000	****
Illumination	$5,000 – 15,000	****
Median Islands	$10,000 – 30,000	****
Signals	$35,000 – 150,000	***
Over/undercrossings	$500,000 – 2,000,000	*
Proper location	"Priceless"	*****

Figure 33 Comparison of cost and effectiveness of various crossing treatments, from PBIC.

Another major builder of bikeways and sidewalks is developers. Plan recommendations may be implemented opportunistically when a new subdivision or commercial development is added, as described in the Complete Streets section.

Other opportunities include road projects by the City, County, or State. Addressing intersection improvements, bikeways and sidewalks as part of a larger road project is substantially cheaper and easier than retrofitting. Even resurfacing work can be used to add on-road bikeway striping, sometimes at no additional cost.

Finally, outside government funding sources can be used for bikeway and sidewalk retrofit projects. A number of state and federal grant programs are available and summarized in Appendix 4.

Annual Evaluation and Celebration

Another way to keep up momentum and public support is to plan for a yearly evaluation (often called the fifth "E") and celebration of plan progress. For example, work with the Advisory Committee to publish a yearly plan update in conjunction with a ribbon cutting ceremony or community event, such as Walk and Bike to School Day, a community bike ride, or something related to TREC, such as a trail clean-up day. This keeps local stakeholders focused on the progress that has been made and energizes everyone to keep moving forward. Also consider updating this plan every 5-10 years to reflect progress and reevaluate priorities.

Appendix 1:
Effingham Bicycle and Pedestrian Plan
Steering Committee

MEMBERS
Frank Brummer, TREC*
Dean Keller, Effingham Community Unit Schools Dist. 40
Larry Micenheimer, Effingham City Council
Greg Palmer, IDOT District 7
Mike Seay, resident
Angela Woods, resident
Dan Woods, resident

CITY STAFF
Steve Miller, City of Effingham
Hank Stephens, City of Effingham

CONSULTANTS
Ed Barsotti, League of Illinois Bicyclists
John Chambers, League of Illinois Bicyclists
Gin Kilgore, League of Illinois Bicyclists

**Special thanks to Tara Flaig for providing many of the photographs in this plan.*

Appendix 2:
Public Brainstorming Workshop Results

On February 3, 2010, a "Public Brainstorming Workshop" was attended by over 25 residents. The purposes of the workshop included: a) gather local resident knowledge on biking and walking needs; b) prioritize road corridors and other routes to study for potential improvements; c) build community support for the plan and its implementation.

Each attendee marked individual maps with suggested "routes to study" for improvements. The map on the following page shows the results of this input, with each recommended segment color-coded by the number of participants suggesting that it be considered. A group exercise followed in which top priorities from the South, Northeast, and Northwest regions of the City were discussed and reported. These include:

South

1) Effingham Junior High and High School – find alternative to walking along railroad tracks. (Map shows Grove to Clinton to north side of National.) Perhaps a Safe Routes to School grant.
2) Loop: 4th from Jefferson to Hendelmeyer Park, then Veterans, Jaycee, Raney (signage on Pike "spur" to cross), Wabash back to 4th.
3) Jefferson from US40 from east.

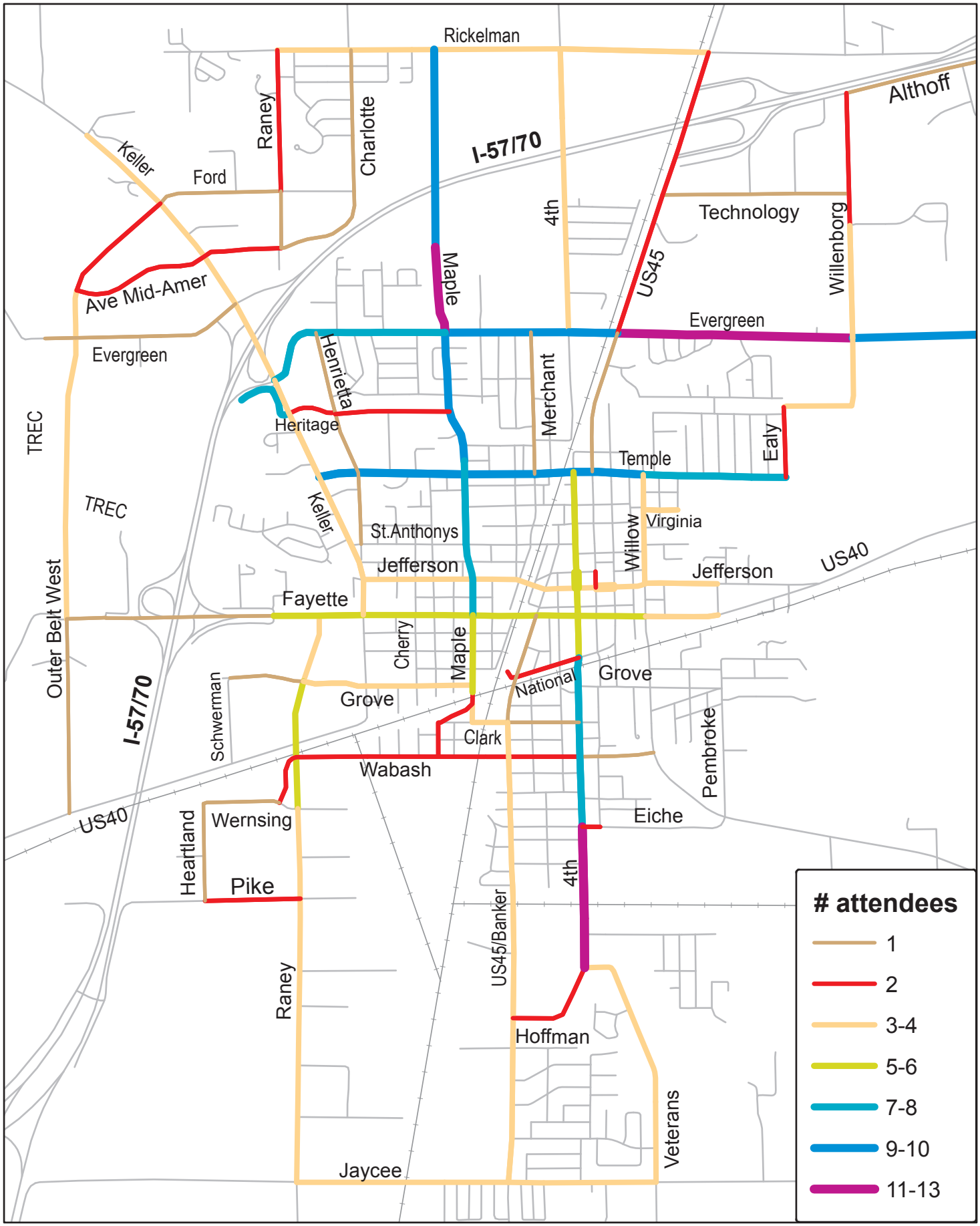
Northeast

1) Evergreen: Build the Missing Mile to Teutopolis, then continue west all the way to the interstate.
2) 4th Street from north of the interstate (Rickelman Ave.), across interstate, all the way to the south end of town.
3) Maple: From Rinkelman, over the planned overpass of the interstate, to Grove, then west along Grove to the schools and beyond.
4) Improve Willow's crossing of Fayette.
5) Bike racks at Joe Sipper's and Homewood Grill.
6) Intersection of Technology Drive and US45.
7) Temple Ave, Maple to east end.

Northwest

1) Maple St: Grove to swimming pool to future overpass to Rinkelman *[same as Northeast #3]*
2) Proposed bike/pedestrian overpass north of Fayette from Calico to east side of interstate, then north along interstate, then east to connect with either Temple or Heritage.
3) Evergreen, from west end to Missing Mile to Teutopolis *[same as Northeast #1]*.
4) Outer Belt West.

2/3/10 Public Brainstorming Workshop Results



Appendix 3: Road Segment Data

Segment Definition	
Segment	Street name of road segment
From (W/N)	West or North segment end
To (E/S)	East or South segment end
Existing Conditions	
Lanes	Number of through lanes (excludes center/other turn lanes)
Traffic ADT	Traffic count in vehicles/day. Gray or blue indicate estimates.
Speed Limit	Posted speed limit
Lane Width	Width from lane edge (often the gutter seam/pavement edge) to next lane, in feet
Extra Width	Pavement width from outer lane edge to gutter seam/pavement edge. May include paved shoulders, parking areas, bike lanes.
Gutter Pan	Width of cement gutter pan in feet
Parking Occupancy	Estimated % occupancy rate of on-street parking - excludes driveway areas. Averaged over 2-sides unless noted.
% Truck Traffic	Estimated % of heavy truck traffic
Pavement condition	FHWA's scale (5=best, 1=worst)
BLOS score	Bicycle Level of Service score of road segment - measure of on-road comfort level for a range of adult cyclists, as a function of geometry and traffic conditions
BLOS grade	BLOS converted to a grade range. B (or better) might be considered "comfortable" for casual adult cyclists, C (or better) for experienced cyclists
Comments	Further details
Sidewalk Status	Are there sidewalks (SW) or sidepaths (SP) on each side (N-north, S-south, E-east, W-west)
Recommendations	
Feasible on-road facility type	Comments and some details on a feasible on-road bikeway treatment for that segment
Sidepath Feasibility	Suitability of a 10' sidepath. Reasons for "No": many existing residences (resid.), many and/or busy crossings (driveways, entrances, side streets)
Recommendation	Projects recommended for the segment.
New BLOS score	BLOS score, if the above on-road bikeway is implemented. Again, only different if re-striping is involved (in **bold**).
New BLOS grade	Conversion of BLOS to a grade.
Implementation	
Public priority pts	Segment's prioritization points during public workshop
Priority	Recommended implementation priority of segment
Impl. Condition	Segment's "readiness" for implementation: ready now; conditional (needs something else first); future (usu. development); or temporary (until something else is done)
Implement Notes	Further details on implementation, especially for the "conditional" implementation segments

Segment	From (W/N)	To (E/S)	Lanes	Traffic ADT	Speed Limit	Lane Width	Extra Width	Gutter Pan	Park Occ%	% Truck	PavemtCond	BLOS score	BLOS grade	Comments	SidewalkStatus
Rickelman	Raney	Charlotte	2	2000	30	11.5	0	no curbs	0	1	4.0	3.01	C		none
Rickelman	Charlotte	Cumberland	2	4250	30	11.5	0	no curbs	0	1	4.0	3.39	C		none
Rickelman	Cumberland	4th	2	4400	55	11.5	0	no curbs	0	1	4.0	3.75	D	Undeveloped N. CLTL near US45	none
Rickelman	4th	US 45	2	3250	55	12	0	no curbs	0	3	4.0	4.01	D	Undeveloped N. CLTL near US45	none
Rickelman	US 45	east end	2	550	55	8	0	no curbs	0	4	4.0	3.64	D	Much busier @45	none
Althoff	Technology	Fitzpatrick	2	2300	30	15	0	(2 incl)	0	3	4.0	2.95	C		S-SW
Althoff	Fitzpatrick	Willenborg	2	1800	30	11	0	no curbs	0	3	4.0	3.35	C	frontage road	S-SW
Althoff	Willenborg	E to T-town	2	2450	30	11	0	no curbs	0	3	4.0	3.50	D	frontage road	none
Ford	Keller	Raney	2	3100	30	16	0	0	0	3	4.0	2.95	C		Both SWs
Ford	Raney	Charlotte	2	1450	30	16	0	0	0	2	4.0	2.39	B	Long turn lanes	Both SWs
Technology	US 45	Willenborg	2	2850	30	15	0	(2 incl)	0	3	4.0	3.06	C	On-road bike actuation of US45 light needed? Corner island@Althoff	Both SWs
Avenue of Mid-America	Outer Belt West	1 blk W of Keller	2	400	30	12	0	no curbs	0	1	4.0	2.13	B		S-SW
Avenue of Mid-America	1 blk W of Keller	Keller	2	2100	30	13.5	0	2	0	2	4.0	2.94	C		S-SW
Avenue of Mid-America	Keller	Raney	2	10000	30	13	0	0	0	1	4.0	3.64	D	CLTL. W-end busiest	S-SW
Avenue of Mid-America	Raney	Ford	2	3000	30	13	0	0	0	1	4.0	3.03	C	CLTL.	N-SW
Evergreen	Calico Trail	Outer Belt West	2	500	*40*	10	0	no curbs	0	1	4.0	2.65	C		none
Evergreen	Outer Belt West	1/3 mi W of Keller	2	1000	30	15.5	0	0	0	1	4.0	2.12	B		S-SW
Evergreen	1/3 mi W of Keller	Keller	2	6000	30	15.5	0	0	0	7	4.0	3.75	D	No SW east end, or logical Xing to Keller E-SP. SW delineation needed @entrances!	S-SW with gap
Evergreen	Keller	Maple	2	6100	30	16	0	0	0	1	4.0	2.95	C	SW connection to Hampton possible, at Keller intersection	Both SWs
Evergreen	Maple	4th	2	5400	30	16	0	0	0	1	4.0	2.89	C		Both SWs except N gap by 4th
Evergreen	4th	US 45	2	5500	30	16	0	(2 incl)	0	3	4.0	3.24	C	Light @ US45. Trucks betw US45, Builders Supply	S-SW all, N-SW except by Keller
Evergreen	US 45	Willenborg	2	1000	30	11.3	0	no curbs	0	1	4.0	2.68	C	big hill; improve w/ missing mile	none

Segment	From (W/N)	To (E/S)	Feasible on-road facility type	Sidepath Feasibility	Recommendation	New BLOS score	Public priority points	Priority	ImplCondition	Implementation Notes
Rickelman	Raney	Charlotte	None now. If road ever widened, design for Bike Lanes with 10'-5'	Low S (homes); N depends on development type	Add S sidewalk. Future N sidewalk and possibly bike lanes.		3	Medium	Ready	No future road upgrade/widening plans now
Rickelman	Charlotte	Cumberland	None now. If road ever widened, design for Bike Lanes with 10'-5'	Low S (homes); N depends on development type	Add S sidewalk. Future N sidewalk and possibly bike lanes.		4	Medium	Ready	No future road upgrade/widening plans now
Rickelman	Cumberland	4th	None now. If road ever widened, design for Bike Lanes with 10'-5'	Depends on development type	Future sidewalks or sidepath and possibly bike lanes.		4			No future road upgrade/widening plans now
Rickelman	4th	US 45	Use off-road due to trucks by US45	Depends on development type	Future S sidepath and N sidewalk		3			4th to US45 in long-term plans, but no ROW or funding
Rickelman	US 45	east end	Use off-road due to trucks by US45	Depends on development type	Future S sidepath and N sidewalk		0			
Althoff	Technology	Fitzpatrick	Bike Lanes: 5-10-10-5	High	Stripe 5' Bike Lanes	2.07	0	Lower	Conditional	After segments east widened
Althoff	Fitzpatrick	Willenborg	None now. If road ever widened, design for Bike Lanes with 10'-5'	High	Future Bike Lanes		0			No future road upgrade/widening plans now
Althoff	Willenborg	E to T-town	Paved shoulders, 4 ft w/o rumble strips, or 3 ft of rumble-free space	High	Future Paved Shoulders		1			No future widening plans. Lower priority if "Missing Mile" has sidepath
Ford	Keller	Raney	Bike Lanes: 5-11-11-5	Medium	Stripe 5' Bike Lanes	2.02	1	Lower	Conditional	After Outer Belt West link connected
Ford	Raney	Charlotte	Bike Lanes: 5-11-11-5	Medium	Stripe 5' Bike Lanes	1.46	0	Lower	Conditional	After Outer Belt West link connected
Technology	US 45	Willenborg	Bike Lanes: 5-10-10-5. Also, on-road bike actuation @US45.	Medium	Stripe 5' Bike Lanes and add on-road bike actuation at US45	2.18	1	Lower	Ready	Network connection via US45 signage to Evergreen desirable but not necessary condition
Avenue of Mid-America	Outer Belt West	1 blk W of Keller	Bike Route signs (or SLMs) possible, but poor connectivity.	High	None		2			
Avenue of Mid-America	1 blk W of Keller	Keller	Bike Route signs, SLMs, or Bike Lanes, possible, but poor connectivity	Low	None		2			
Avenue of Mid-America	Keller	Raney		Low	Add N sidewalk		2	Lower	Ready	
Avenue of Mid-America	Raney	Ford		Medium	None		1			
Evergreen	Calico Trail	Outer Belt West		High	Add S sidepath		1	Medium	Conditional	Already planned, awaiting Calico Trail
Evergreen	Outer Belt West	1/3 mi W of Keller	Bike Lanes possible, but lots of trucks by Keller.	High	None		1			
Evergreen	1/3 mi W of Keller	Keller	Use off-road due to trucks by Keller	Medium	Fill sidewalk gap and Keller signalization		1	Medium	Ready	Better Keller crossing to its E-sidepath may need other signalization
Evergreen	Keller	Maple	Bike Lanes: 5-11-11-5	Low S, Medium N	Stripe 5' Bike Lanes	2.03	8	High	Ready	
Evergreen	Maple	4th	Bike Lanes: 5-11-11-5	Low S, Medium N	Stripe 5' Bike Lanes and fill N sidewalk gap	1.97	10	High	Ready	
Evergreen	4th	US 45	Bike Lanes: 5-11-11-5	Medium S	Stripe 5' Bike Lanes	2.31	9	High	Ready	
Evergreen	US 45	Willenborg	Missing Mile may bring widening to enable 10-5' Bike Lanes, but hills & Missing Mile sidepath may mean off-road	Medium N	Add N sidepath during Missing Mile project		12	High	Conditional	As part of Missing Mile project to T-town

Segment	From (W/N)	To (E/S)	Lanes	Traffic ADT	Speed Limit	Lane Width	Extra Width	Gutter Pan	Park Occ%	% Truck	PavemtCond	BLOS score	BLOS grade	Comments	SidewalkStatus
Evergreen	Willenborg	1600th												"Missing Mile" to T-town: early planning	
Hampton	W-end	Keller	2	450	30	15.5	0	0	0	1	4.0	1.71	B	SW connects to Keller/Evergreen light. Tourism center.	N/E-SW
Heritage	Keller	Dollar General	2	1700	30	15.5	0	0	0	1	4.0	2.39	B	Turn lanes @ Kellar, Dollar General	N-SW
Heritage	Dollar General	Henrietta	2	900	30	15.5	0	0	0	1	4.0	2.06	B		N-SW
Heritage	Henrietta	Maple												Or only to Medical Park Dr.	
Temple	Keller	Henrietta	2	8100	30	15.3	0	0	0	1	4.0	3.21	C	Keller turn lanes; future I-70 ped bridge connection, but house on W-side	S-SW
Temple	Henrietta	Maple	2	8100	30	15.3	0	0	0	1	4.0	3.21	C		N-SW, some S-SW
Temple	Maple	Merchant	2	6500	30	16.3	0	0	0	1	4.0	2.94	C		N-SW
Temple	Merchant	Willow	2	6600	30	16.3	0	0	0	1	4.0	2.95	C	ADT 4.5-7.7K; 3rd St light, turn lanes	Both SWs
Temple	Willow	park entrance	2	4200	30	11	0	no curbs	0	1	4.0	3.44	C	5' SW residential, 5'10" by park	S-SW
Temple	park entrance	Osceola	2	2100	30	11	0	no curbs	0	1	4.0	3.09	C		none
Temple	Osceola	Ealy	2	300	30	11	0	no curbs	0	1	4.0	2.10	B		none
Virginia	Willow	park	2	500	30	*9*	0	0	0	0.5	4.0	2.49	B		N-SW
St. Anthonys	Keller	Banker	2	2650	30	15	0	0	0	1	4.0	2.69	C	No Keller signal, Maple only stop	Both SWs
St. Anthonys (E-bd)	Banker	4th	2	2650	30	12	8	0	50	1	4.0	2.10	B	Parking for one-block by apts	Both SWs
St. Anthonys (W-bd)	Banker	4th	2	2650	30	16	0	0	0	1	4.0	2.53	C		Both SWs
Market															
Washington (W-bd)	Front	Banker	1	1600	30	23	7.5	1	40	1	4.0	0.00	A	Not incl. diag. parking other side	S-SW
Washington (W-bd)	Banker	4th	2	2350	30	12.5	8.3	1.3	50	1	4.0	1.92	B	L-lane: 13.5'. Bulbouts @ 4th	Both SWs
Washington (W-bd)	4th	3rd	2	2400	30	12.5	8.6	1.3	75	1	4.0	2.50	B	L-lane: 13' + diag parking.	Both SWs
Jefferson	Keller	Maple	2	5000	30	14	7	1	10	1	4.0	1.06	A	businesses have internal parking	Both SWs
Jefferson	Maple	Walnut	2	5600	30	14	7	1	40	1	4.0	1.94	B		Both SWs
Jefferson	Walnut	Merchant	2	6100	30	12	0	1	0	1	4.0	3.51	D	avg of tapering X-section (14'-10'); some parking	Both SWs
Jefferson	Merchant	Front	2	6100	30	12.5	0	1	0	1	4.0	3.45	C	railroad crossing	Both SWs

Segment	From (W/N)	To (E/S)	Feasible on-road facility type	Sidepath Feasibility	Recommendation	New BLOS score	Public priority points	Priority	ImplCondition	Implementation Notes
Evergreen	Willenborg	1600th	Missing Mile width may enable 10-5' Bike Lanes, but off-road expected	High	Add N sidepath as part of Missing Mile project		*10*	High	Conditional	Missing Mile project to T-town
Hampton	W-end	Keller	Bike Route signs (or SLMs) sufficient, Bike Lanes possible	High N/E, Medium S/W	Sign as Bike Route		7	High	Conditional	Only if trail built from west end to I-57/70 overpass near Fayette
Heritage	Keller	Dollar General	Bike Route signs or SLMs. Bike Lanes possible if turn lanes by Dollar General removed.	Medium	Future Bike Lanes		*2*			Only if trail from I-57/70 bridge to Hampton AND Henrietta widened or Heritage extended east
Heritage	Dollar General	Henrietta	Bike Route signage sufficient, Bike Lanes possible	Medium	Future Bike Lanes		*2*			Only if trail from I-57/70 bridge to Hampton AND Henrietta widened or Heritage extended east
Heritage	Henrietta	Maple	Design for Bike Lanes with 10'-5'	Depends on development type	Future Bike Lanes		*2*			Only if trail built from I-57/70 bridge to Hampton
Temple	Keller	Henrietta	Bike Lanes: 5-10.2-10.2-5	Low	Stripe 5' Bike Lanes and add N sidewalk	2.34	9	High	Ready	Even higher priority if Temple chosen to connect to I-57/70 bridge
Temple	Henrietta	Maple	Bike Lanes: 5-11.3-11.3-5	Low	Stripe 5' Bike Lanes, fill S sidewalk gaps	2.34	9	High	Ready	Even higher priority if Temple chosen to connect to I-57/70 bridge
Temple	Maple	Merchant	Bike Lanes: 5-11.3-11.3-5	Low	Stripe 5' Bike Lanes and add S sidewalk	2.00	10	High	Ready	
Temple	Merchant	Willow	Bike Lanes: 5-11.3-11.3-5	Low	Stripe 5' Bike Lanes	2.01	9	High	Ready	
Temple	Willow	park entrance	Shared Lane Markings, but a poor BLOS.	Low	None		8			A Cleveland-North Bike Route would miss the park but could connect to Missing Mile in future
Temple	park entrance	Osceola	Shared Lane Markings, but a poor BLOS.	High	None		8			
Temple	Osceola	Ealy	Signed Bike Route (or Shared Lane Markings)	High	None now. If Temple/ Ealy/Willenborg rebuilt in future, add sidewalks and bike lanes(?)		8			
Virginia	Willow	park	Signed Bike Route, possibly Shared Lane Markings, too	Low	Sign as Bike Route		3	High	Ready	
St. Anthonys	Keller	Banker	Bike Lanes: 5-10-10-5	Low	Stripe 5' Bike Lanes	1.81	0	Lower	Ready	
St. Anthonys (E-bd)	Banker	4th	Shared Lane Markings on E-bound lane to avoid parked cars	Low	Add Shared Lane Markings, E-bound		0	Lower	Ready	
St. Anthonys (W-bd)	Banker	4th	W-bound Bike Lane: 5-11	Low	Stripe 5' W-bound Bike Lane	1.61	0	Lower	Ready	
Market										
Washington (W-bd)	Front	Banker	SLMs. Or, Bike Lane: 7.5(park)-5.5(BL)-17.5	Low	Stripe 5.5' W-bound Bike Lane		0	Medium	Ready	
Washington (W-bd)	Banker	4th	Bike Lane: 8.3(park)-5(BL)-10.5-10.5	Low	Stripe 5' W-bound Bike Lane	1.65	0	Medium	Ready	Not continued E due to W-bd Jefferson-3rd-Washington difficulty
Washington (W-bd)	4th	3rd	Bike Lane: 8.4(park)-5(BL)-10-12.5	Low	None		0			
Jefferson	Keller	Maple	SLM; or Bike Lanes: 7 (park)-5-10-10-5-7	Low	Add Shared Lane Markings		4	Medium	Ready	
Jefferson	Maple	Walnut	SLM; or Bike Lanes: 7 (park)-5-10-10-5-7	Low	Add Shared Lane Markings		4	Medium	Ready	
Jefferson	Walnut	Merchant	Shared Lane Markings, although poor BLOS	Low	Add Shared Lane Markings		4	Medium	Ready	
Jefferson	Merchant	Front	Shared Lane Markings, although poor BLOS	Low	Add Shared Lane Markings		4	Medium	Ready	

Segment	From (W/N)	To (E/S)	Lanes	Traffic ADT	Speed Limit	Lane Width	Extra Width	Gutter Pan	Park Occ%	% Truck	PavemtCond	BLOS score	BLOS grade	Comments	SidewalkStatus
Jefferson	Front	Banker	2	5100	30	13.2	6.4	1.7	60	1	4.0	2.57	C	2-way, despite W-bd only Washington one block north	Both SWs
Jefferson (E-bd)	Banker	4th	2	3350	30	11.3	8.2	1.5	80	1	4.0	2.96	C	One-way E. Bulbouts each corner.	Both SWs
Jefferson (E-bd)	4th	3rd	2	3900	30	11.3	8.2	1.5	80	1	4.0	3.04	C	One-way E. Bulbouts each corner.	Both SWs
Jefferson (E-bd)	3rd	2nd	2	2800	30	10.2	0	2	0	1	4.0	3.32	C		Both SWs
Jefferson (W-bd)	3rd	2nd	2	2800	30	12.8	7.3	0.9	0	1	4.0	0.69	A		Both SWs
Jefferson	2nd	Willow	2	2800	30	11.2	0	0.9	0	1	4.0	3.15	C		Both SWs
Jefferson	Willow	Long	2	2750	30	12	0	0	0	1	4.0	3.11	C		Both SWs
Jefferson	Long	US 40	2	2150	30	10.5	0	no curbs	0	1	4.0	3.15	C		Both-SWs W of cemetery only
Fayette	Outer Belt West	Calico	2	1050	*35*	12	0	0	0	5	4.0	3.33	C	N-SP	N-SP
Fayette	Calico	I-57/70 W-ramp	2	1050	*35*	12	0	0	0	5	4.0	3.33	C		none
Fayette	I-57/70 W-ramp	Illinois (E frontage)	4	7000	*35*	12	0	0	0	4	4.0	3.83	D	Light @ Illinois (E-frontage).	none
Fayette	Illinois (E frontage)	Raney	4	12700	*35*	12	0	0	0	4	4.0	4.13	D	Light @ Raney	none
Fayette	Raney	Henrietta	4	11000	*35*	12	0	0	0	2	4.0	3.75	D	Light @ Henrietta	S-SW
Fayette	Henrietta	RR underpass	4	15000	35	9	0	1	0	2	4.0	4.23	D	Light @ Maple	Both SWs
Fayette	RR underpass	Willow	4	15000	35	9	0	1	0	2	4.0	4.23	D	Lights @ 4th, 3rd, Willow	Both SWs
Fayette	Willow	Long	2	8500	35	16	0	0	0	2	4.0	3.41	C		N-SW
Fayette	Long	Oak Ridge	2	8500	35	16	0	0	0	2	4.0	3.41	C		none
Fayette	Oak Ridge	Jefferson	2	8500	40	12	4	0	0	2	4.0	2.79	C		none
Fayette	Jefferson	T-town	2	9300	50	12	5	0	0	2	4.0	2.54	C		none
Grove	Schwerman	Raney	2	1800	30	15.5	0	0	0	3	4.0	2.75	C		S-SW
Grove	Raney	Henrietta	2	1000	30	13.5	0	0	0	1	4.0	2.41	B	CLTL; high school S	Both SWs (carriage)
Grove	Henrietta	Maple	2	900	30	15	0	0	0	1	4.0	2.14	B	turn lanes @Henrietta; Jr High N; speeding and concern about on-road. SW too narrow for peds & bikes	Both SWs
National	Amtrak station	4th	2	150	30	8	0	no curbs	0	1	4.0	1.89	B	Adjacent to railroad tracks. Railroad ped crossing N of Amtrak station.	N-SW except W-end S-SW
Grove	4th	3rd	2	950	30	13	0	2	0	1	4.0	2.45	B		S-SW
Grove	3rd	Willow	2	750	30	15.5	0	0	0	1	4.0	1.97	B		N-SW
Grove	Willow	Pembroke	2	650	30	11	0	0	0	1	4.0	2.49	B		none
Clark	Old Maple	Banker	2	1250	30	11	0	no curbs	0	1	4.0	2.83	C	unsignalized crossing at Banker. RR Xing.	S-SW, some N-SW by 45

Segment	From (W/N)	To (E/S)	Feasible on-road facility type	Sidepath Feasibility	Recommendation	New BLOS score	Public priority points	Priority	ImplCondition	Implementation Notes
Jefferson	Front	Banker	SLMs. E-bound only Bike Lane possible but tight: 8.1(park)-5-10.6-10.6-8.1, incl gutter	Low	Add E-bound only Shared Lane Markings		4	Medium	Ready	
Jefferson (E-bd)	Banker	4th	Shared Lane Markings right lane only	Low	Add E-bound only Shared Lane Markings		4	Medium	Ready	
Jefferson (E-bd)	4th	3rd	Shared Lane Markings right lane only	Low	None		4			Not continued E due to W-bd Jefferson-3rd-Washington difficulty
Jefferson (E-bd)	3rd	2nd	SLMs; or Bike Lane 5-11.5-11.5-5 if W-parking removed	Low	None		4			
Jefferson (W-bd)	3rd	2nd	SLMs; or Bike Lane 5-11.5-11.5-5 if W-parking removed	Low	None		4			
Jefferson	2nd	Willow		Low	None		4			
Jefferson	Willow	Long		Medium	None		3			
Jefferson	Long	US 40		Low, especially west end	None		0			
Fayette	Outer Belt West	Calico		Medium	None		1			
Fayette	Calico	I-57/70 W-ramp	Rely on planned I-57/70 ped bridge (#3008)	Medium	(Rely on planned ped bridge #3008)		1			
Fayette	I-57/70 W-ramp	Illinois (E frontage)	Rely on planned I-57/70 ped bridge (#3008)	Low (ramp merges)	(Rely on planned ped bridge #3008)		1			
Fayette	Illinois (E frontage)	Raney	None now. Widening could include Bike Lanes if adjacent to 12' lanes (truck traffic).	Low N, Medium S	If not Bike Lanes, then IDOT's plan of S sidepath in widening, Also add N sidewalk.		5	Medium	Conditional	During Fayette widening project, being scoped now, but not funded.
Fayette	Raney	Henrietta	None now. Widening could include Bike Lanes if adjacent to 12' lanes (truck traffic).	Medium	If not Bike Lanes, then IDOT's plan of S sidepath in widening, Also add N sidewalk.		5	Medium	Conditional	During Fayette widening project, being scoped now, but not funded.
Fayette	Henrietta	RR underpass	None now. Widening could include Bike Lanes if adjacent to 12' lanes (truck traffic).	Low	If not Bike Lanes, then IDOT's plan of S sidepath in upcoming widening		6	Medium	Conditional	During Fayette widening project, being scoped now, but not funded.
Fayette	RR underpass	Willow	None now. Widening could include Bike Lanes if adjacent to 12' lanes (truck traffic).	Low	If not Bike Lanes, then sidepath (N side??) in upcoming IDOT widening		6	Medium	Conditional	During Fayette widening project, being scoped now, but not funded.
Fayette	Willow	Long		Low	If not Bike Lanes, then sidepath (N side??) in IDOT widening. Also add S sidewalk.		3	Lower	Conditional	During Fayette widening project, being scoped now, but not funded.
Fayette	Long	Oak Ridge		Low	Add sidewalk on at least one side		0	Medium	Ready	
Fayette	Oak Ridge	Jefferson		Low	None		0			
Fayette	Jefferson	T-town		High	None		0			
Grove	Schwerman	Raney	Bike Lanes: 5-10.5-10.5-5, but near High School	High	Widen S sidewalk to sidepath width		1	Lower	Conditional	After US40 sidepath (#3007) built
Grove	Raney	Henrietta	Bike Lanes 5-10-10-10-5; or no CLTL: 6-14-14-6 - but at high school	High N, Low S	Widen S sidewalk to sidepath width		3	Lower	Ready	Lower priority because of existing sidewalk
Grove	Henrietta	Maple	Bike Lanes: 5-10-10-5, but concern about school traffic	Medium	Widen N sidewalk to sidepath width. Improve Henrietta Xing		4	Medium	Ready	Existing sidewalk unable to handle bike and ped capacity for school
National	Amtrak station	4th	Signed Bike Route	Low	Sign as Bike Route		2	Medium	Ready	
Grove	4th	3rd	Bike Lanes: 5-10-10-5	Low	None		0			
Grove	3rd	Willow	Bike Lanes: 5-10.5-10.5-5	Medium	None		0			
Grove	Willow	Pembroke	Signed Bike Route	Low	None		0			
Clark	Old Maple	Banker	No, because of unsignalized crossing	Medium	Complete N sidewalk		4	Lower	Ready	Higher priority if Clark ped beacon or traffic signal added at Banker

Segment	From (W/N)	To (E/S)	Lanes	Traffic ADT	Speed Limit	Lane Width	Extra Width	Gutter Pan	Park Occ%	% Truck	PavemtCond	BLOS score	BLOS grade	Comments	SidewalkStatus
Clark	Banker	4th	2	750	30	10	0	varies	0	1	4.0	2.53	C	curbs, gravel adjacent parking varies	1-side SW, varies
Wabash	Wernsing	Raney underpass	2	2800	35	15	0	0	0	6	4.0	3.53	D		none
Wabash	Raney underpass	Henrietta	2	2800	35	15	0	0	0	6	4.0	3.53	D	SW turns S, stays ground level, meets Raney SW	S-SW
Wabash	Henrietta	Maple	2	6800	35	15	0	0	0	3	4.0	3.65	D		N-SW
Wabash	Maple	railroad	2	6800	35	15	0	0	0	3	4.0	3.65	D	turn lanes @ 4th	N-SW
Wabash	railroad	4th	4	7250	35	12	0	2	0	1	4.0	3.36	C	3.3' arched rumble median. Long, excessive turn lanes @ US45	Both SWs
Wabash	4th	Willow	2	6300	30	15	0	0	0	1	4.0	3.13	C	turn lanes @ 4th	N-SW
Wernsing	Heartland	Mansfield	2	1000	*30*	12	0	0	0	1	4.0	2.60	C	To cross	none
Eiche	4th	3rd	2	1500	30	12	0	0	0	1	4.0	2.80	C		none
Eiche	3rd	Pembroke	2	1350	30	15.5	0	0	0	1	4.0	2.27	B	Hills	N-SW
Pike	Heartland	Raney	2	800	*30*	12	0	0	0	1	4.0	2.48	B	Second option for Cross access	none
Hoffman	Veterans	Banker	2	2750	30	19.5	0	0	0	1	4.0	1.93	B	car dealership	none
Jaycee	Raney	4 Seasons West	2	4000	35	15	0	0	0	3	4.0	3.38	C	railroad overpass	None
Jaycee	4 Seasons West	Banker	2	4000	35	15	0	0	0	3	4.0	3.38	C	trailer park S	None
Jaycee	Banker	Easy Breeze East	2	1250	30	10	0	no curbs	0	1	4.0	2.93	C	trailer park S	None
Jaycee	Easy Breeze East	Veterans	2	1250	30	10	0	no curbs	0	1	4.0	2.93	C		sparse N
Outer Belt West	Ford	Avenue of Mid-America												Could be let for construction this fall.	(Both-SWs to be built)
Outer Belt West	Avenue of Mid-America	Evergreen	2	800	40	15.5	0	(2 incl)	0	1	4.0	2.19	B	No SW Rosebud access (gulley). Rosebud W-SW stops short of Evergreen.	E-SW, some W-SW
Outer Belt West	Evergreen	Fayette	2	800	40	15.5	0	(2 incl)	0	1	4.0	2.19	B		E-SW
Outer Belt West	Fayette	National	2	*800*	*40*	16	0	(2 incl)	0	7	4.0	3.27	C	CLTL. Under construction on S-end	E-SP
Schwerman	Grove	National	2	1300	30	15.5	0	0	0	2	4.0	2.41	B	Connect to future US 40 SP under I-57/70	E-SW
Heartland	Wernsing	Pike	2	200	*30*	12	0	1	0	1	4.0	1.78	B	To cross	none
Keller	N city limits	Ford	4	12400	40	12	5	0	0	2	4.0	2.21	B		none

Segment	From (W/N)	To (E/S)	Feasible on-road facility type	Sidepath Feasibility	Recommendation	New BLOS score	Public priority points	Priority	ImplCondition	Implementation Notes
Clark	Banker	4th	No, because of unsignalized crossing	Low	None		1			
Wabash	Wernsing	Raney underpass	5' Bike Lanes precluded by would-be 10' lanes and trucks. SLMs for wayfinding?	High E	Add sidepath on the E side		2	Lower	Conditional	If route to Cross is desired
Wabash	Raney underpass	Henrietta	5' Bike Lanes precluded by would-be 10' lanes and trucks. SLMs for wayfinding?	Medium S	Widen S sidewalk to sidepath width		2	Lower	Ready	Lower priority because of existing sidewalk
Wabash	Henrietta	Maple	5' Bike Lanes precluded by would-be 10' lanes and trucks. SLMs for wayfinding?	Medium	Add S sidepath. Transition to Bike Lanes east of Maple.		2	Lower	Ready	Lower priority because of existing N sidewalk
Wabash	Maple	railroad	Bike Lanes: 5-10-10-5	Low	Stripe 5' Bike Lanes	2.78	2	Medium	Ready	
Wabash	railroad	4th	Now: Bike Lanes, each side 5-11-10. Future: CLTL road diet w/ Bike Lanes 6-13-17.3-13-6	Low	Stripe 5' Bike Lanes, shorten excessively long turn lanes	1.88	2	Medium	Ready	
Wabash	4th	Willow	Bike Lanes: 5-10-10-5	High	Stripe 5' Bike Lanes	2.25	1	Lower	Ready	
Wernsing	Heartland	Mansfield	Signed Bike Route, possibly SLMs, too	Low	Sign as Bike Route, and add sidewalk on at least one side		1	Lower	Ready	
Eiche	4th	3rd	Shared Lane Markings	Low	Add N sidewalk		2	Medium	Ready	School access?? Fill gap W of 4th, too.
Eiche	3rd	Pembroke	Bike Lanes: 5-10.5-10.5-5	W end: Low N, Med S. Other: High	None		0			
Pike	Heartland	Raney		High	None		2			
Hoffman	Veterans	Banker	Bike Lanes: 5.5-14-14-5.5	Low N/W, Med S/E	Stripe 5' Bike Lanes, add W/N sidewalk	0.83	2	High	Ready	Access for B&B subdivision
Jaycee	Raney	4 Seasons West	5' Bike Lanes precluded by would-be 10' lanes and trucks. SLMs for wayfinding?	None (bridge deck limit)	None		4			
Jaycee	4 Seasons West	Banker	5' Bike Lanes precluded by would-be 10' lanes and trucks. SLMs for wayfinding?	Medium	Add S sidewalk		4	High	Ready	
Jaycee	Banker	Easy Breeze East	SLMs, especially if repaving overlay widens lanes some	Medium	Add sidewalks, both sides		4	High	Ready	
Jaycee	Easy Breeze East	Veterans	SLMs, especially if repaving overlay widens lanes some	Medium	Add N sidewalk (some exists now)		4	Medium	Ready	
Outer Belt West	Ford	Avenue of Mid-America	Bike Lanes 5-10-10-5, especially if speed limit less than 40	Medium (but no extra ROW)	Stripe 5' Bike Lanes and add sidewalks		2	Medium	Conditional	As part of new road construction
Outer Belt West	Avenue of Mid-America	Evergreen	5-10.5-10.5-5 Bike Lanes possible, but 40 mph speed, Calico Trail precludes	High	Fill sidewalk gaps (listed in comments)		4	High	Ready	W-SW gap may solve Calico Trail parking issue
Outer Belt West	Evergreen	Fayette	5-10.5-10.5-5 Bike Lanes possible, but 40 mph speed, Calico Trail precludes	High	None		4			
Outer Belt West	Fayette	National	Bike Lanes possible, but E sidepath already	High W, Medium E	None		1			
Schwerman	Grove	National	Bike Lanes: 5-10.5-10.5-5, but near High School	High	Widen W sidewalk to sidepath width		0	Lower	Conditional	After US40 sidepath (#3007) built
Heartland	Wernsing	Pike	Signed Bike Route	Medium W, High E	Sign as Bike Route, and add sidewalk on at least one side		1	Lower	Ready	
Keller	N city limits	Ford		Medium	Add E sidepath and W sidewalk when developed		4	High	Conditional	As development occurs

Segment	From (W/N)	To (E/S)	Lanes	Traffic ADT	Speed Limit	Lane Width	Extra Width	Gutter Pan	Park Occ%	% Truck	PavemtCond	BLOS score	BLOS grade	Comments	SidewalkStatus
Keller	Ford	Avenue of Mid-America	4	13800	40	12	0	1	0	2	4.0	3.96	D		none
Keller	Avenue of Mid-America	N interstate ramp	4	26200	40	12	0	1	0	3	4.0	4.50	E	Corner islands exist. Need SW delineation at entrances	E-SW
Keller	N interstate ramp	S interstate ramp	4	26200	40	13	0	0	0	3	4.0	4.38	D	Great corner isl, S ramp signal @ E-SP	E-SP
Keller	S interstate ramp	Heritage	4	21900	40	13	0	0	0	2	4.0	4.07	D	Light @ Heritage. CLTL.	E-SP
Keller/ Henrietta	Heritage	Fayette	4	19600	40	13	0	0	0	2	4.0	4.01	D	Lights @ Temple, Jefferson, Fayette. CLTL.	Both SWs
Raney	Rickelman	Ford	2	2800	*30*	11	0	no curbs	0	1	4.0	3.23	C	hills	none
Raney	Ford	Avenue of Mid-America	2	850	30	15	0	0	0	1	4.0	2.11	B		E-SW
Raney	Fayette	Grove	4	5800	40	12	0	1	0	3	4.0	3.74	D	3' painted median	E-SW (carriage)
Raney	Grove	Wernsing	4	5800	40	12	0	1	0	3	4.0	3.74	D	3' painted median; railroad overpass	E-SW (carriage)
Raney	Wernsing	Jaycee	2	4650	45	15	0	0	0	3	4.0	3.66	D	Industrial. Low ped use reduces need to widen SW to SP width	E-SW
Charlotte	Rickelman	Ashwood	2	2450	30	12.5	2.5	0	0	1	4.0	2.24	B	Faded striping	Both SWs
Charlotte	Ashwood	Ford	2	3000	30	15	0	0	0	1	4.0	2.75	C		Both SWs
Henrietta	Evergreen	Holiday	2	800	30	11	0	no curbs	0	1	4.0	2.60	C		E-SW
Henrietta	Holiday	St. Anthonys	2	1100	30	11	0	no curbs	0	1	4.0	2.76	C	uncontrolled @ Temple, St Anthonys	W-SW
Cherry	St. Anthonys	Grove	2	500	30	10	0	no curbs	0	1	4.0	2.47	B	uncontrolled @ Jefferson, Fayette (school Xing guard). SW poor condition, sometimes carriage	W-SW
Maple	Rickelman	Existing N-end												I-57/70 bridge planned in the long term	
Maple	N-end	Evergreen	2	400	30	16	0	(2 incl)	0	1	4.0	1.57	B	Kluthe Pool	Both SWs
Maple	Evergreen	Indiana	2	4500	30	16	0	(2 incl)	0	1	4.0	2.80	C		Both SWs
Maple	Indiana	St. Anthonys	2	5200	30	20	0	0	0	1	4.0	2.15	B		Both SWs
Maple	St. Anthonys	Fayette	2	4700	30	15	0	0	0	1	4.0	2.98	C	Turn lanes @Fayette	Both SWs
Maple	Fayette	RR tracks	2	1800	30	15	0	0	0	1	4.0	2.49	B		Both SWs
Maple	RR tracks	Wabash	2	800	30	15	0	0	0	1	4.0	2.08	B		SW-W
Merchant	Evergreen	Eden	2	1400	30	10	0	no curbs	0	1	4.0	2.99	C		None
Merchant	Eden	Temple	2	2900	30	15.3	0	0	0	1	4.0	2.69	C		Both SWs
US45/ Banker	Fayette	Clark	4	17500	35	12	0	2	0	2	4.0	3.99	D	Overpass. 4' painted median	E-SW
US45/ Banker	Clark	Wabash	4	17500	35	12	0	2	0	2	4.0	3.99	D	5' painted median	Both SWs
US45/ Banker	Wabash	IC RR tracks	4	20400	35	12	0	2	0	2	4.0	4.07	D	CLTL	E-SW
US45/ Banker	IC RR tracks	Jaycee	4	17000	45	12	0	2	0	2	4.0	4.14	D	CLTL	E-SW

Segment	From (W/N)	To (E/S)	Feasible on-road facility type	Sidepath Feasibility	Recommendation	New BLOS score	Public priority points	Priority	ImplCondition	Implementation Notes
Keller	Ford	Avenue of Mid-America		Low	Add sidewalks on both sides		4	High	Ready	Add SW delineation at entrances. E-SW, if only one side possible
Keller	Avenue of Mid-America	N interstate ramp		Low	Add W sidewalk; and N crosswalk at Keller		4	High	Ready	Add SW delineation at entrances when add E, retrofit W
Keller	N interstate ramp	S interstate ramp		Medium	None		4			
Keller	S interstate ramp	Heritage		Medium	None		3			
Keller/ Henrietta	Heritage	Fayette		Low	None		3			
Raney	Rickelman	Ford		Medium N-end, high S-end	Add sidewalk on at least one side		2	Medium	Ready	
Raney	Ford	Avenue of Mid-America	Bike Lanes: 5-10-10-5	High	Stripe 5' Bike Lanes	2.14	1	Lower	Conditional	If: Ford BLs (to Outer Belt) or I-57 ramp trail from Keller-Raney
Raney	Fayette	Grove		High	None		4			
Raney	Grove	Wernsing		Low (bridge deck limit)	None		6			
Raney	Wernsing	Jaycee	5' Bike Lanes precluded by would-be 10' lanes, trucks, 45mph speed.	High	None		4			
Charlotte	Rickelman	Ashwood	Bike Lanes: 5-10-10-5	Low	Stripe 5' Bike Lanes	1.77	1	Lower	Ready	
Charlotte	Ashwood	Ford	Bike Lanes: 5-10-10-5	High	Stripe 5' Bike Lanes	1.87	1	Lower	Ready	
Henrietta	Evergreen	Holiday	SLM and Bike Route signs	Medium	Add Shared Lane Markings		1	Lower	Ready	No plans to change the current rural cross-section
Henrietta	Holiday	St. Anthonys	SLM and Bike Route signs	Low W, Medium E	Add Shared Lane Markings		1	Lower	Ready	No plans to change the current rural cross-section
Cherry	St. Anthonys	Grove		Low	Sidewalk maintenance	2.36	0			
Maple	Rickelman	Existing N-end	Design for Bike Lanes with 11'-5'	High	Design Bike Lanes and sidewalks, with sidepath width on bridge, approaches		*10*	High	Conditional	If project is funded in the future
Maple	N-end	Evergreen	Bike Lanes: 5-11-11-5	High W, Low E	Stripe 5' Bike Lanes	0.65	13	High	Ready	
Maple	Evergreen	Indiana	Bike Lanes: 5-11-11-5	Low	Stripe 5' Bike Lanes	1.88	10	High	Ready	
Maple	Indiana	St. Anthonys	Bike Lanes: 6-14-14-6	Low	Stripe 6' Bike Lanes	1.03	8	High	Ready	
Maple	St. Anthonys	Fayette	Bike Lanes: 5-10-10-5	Low	Stripe 5' Bike Lanes	2.10	7	High	Ready	
Maple	Fayette	RR tracks	Bike Lanes: 5-10-10-5	Low	Stripe 5' Bike Lanes	1.62	5	High	Ready	
Maple	RR tracks	Wabash	Bike Lanes: 5-10-10-5	Low	Stripe 5' Bike Lanes	1.20	2	Medium	Ready	
Merchant	Evergreen	Eden		Low	Future Bike Lanes and sidewalks		1	Medium	Conditional	If conversion to urban cross section funded
Merchant	Eden	Temple	Bike Lanes: 5-10.2-10.2-5	Low	Future Bike Lanes	1.82	1	Medium	Conditional	If N of Eden converted to urban cross-section
US45/ Banker	Fayette	Clark		None (bridge deck limit)	None		1			
US45/ Banker	Clark	Wabash		Medium	None		3			
US45/ Banker	Wabash	IC RR tracks	Poor SW condition, lots of curb cuts	Low	None		3			
US45/ Banker	IC RR tracks	Jaycee		Low	None		3			

Segment	From (W/N)	To (E/S)	Lanes	Traffic ADT	Speed Limit	Lane Width	Extra Width	Gutter Pan	Park Occ%	% Truck	PavemtCond	BLOS score	BLOS grade	Comments	SidewalkStatus
4th	Rickelman	N of I-57 bridge	2	2100	45	11	0	no curbs	0	1	4.0	3.34	C		none
4th	N of I-57 bridge	Santa Monica	2	2100	30	12	0	2	0	1	4.0	2.97	C	interstate bridge; elevated E-SW	E-SW
4th	Santa Monica	Evergreen	2	3900	30	11	0	no curbs	0	1	4.0	3.40	C		E-SW
4th	Temple	Virginia	2	1800	30	11.9	1.9	1.4	0	1	3.5	2.52	C	Faint stripes	Both SWs
4th	Virginia	Market	2	2250	30	13.5	0	1.5	0	1	4.0	2.82	C	no parking signs N of Market	Both SWs
4th	Market	Washington	2	2800	30	15.2	8.5	1.4	75	1	4.0	2.11	B	Library @ Market. Pkg 25% but 75% worst case?	Both SWs
4th (S-bd)	Washington	Jefferson	2	2900	30	13.5	8.5	1.4	70	1	4.0	2.32	B		Both SWs
4th (N-bd)	Washington	Jefferson	2	2900	30	16	16.8	1.4	100	1	4.0	2.58	C	courthouse, diag. parking E-side	Both SWs
4th	Jefferson	Fayette	2	3350	30	13.2	8.5	1.4	70	1	4.0	2.44	B	Schoolyard rack SW corner @ Jefferson. 14' bulbout clearances	Both SWs
4th	Fayette	National	2	4650	30	13	0	2	0	1	4.0	3.25	C		Both SWs
4th	National	Wabash	2	4300	30	15	0	0	0	1	4.0	2.93	C	Light @ Wabash; Xing behind stopbar	Both SWs
4th	Wabash	Eiche	2	6500	30	16.1	0	0	0	1	4.0	2.97	C	Bulb-out by school possible?	Both SWs
4th	Eiche	Hendelmeyer Park	2	7200	30	16.1	0	0	0	1	4.0	3.02	C	Hendelmeyer Park, lots of cycling	E-SW
4th	Hendelmeyer Park	Veterans	2	7200	30	16.1	0	0	0	1	4.0	3.02	C	unmarked crosswalk at park	W-SW, some E-SW
US 45	Rickelman	Technology	2	9200	45	12	4.5	1	0	5	4.0	3.17	C	Median or CLTL	None
US 45	Technology	Evergreen	2	9200	45	11.8	8.5	no curbs	0	5	4.0	2.17	B		None
US 45	Evergreen	Surs Woods	2	9900	45	11.8	8.5	no curbs	0	5	4.0	2.21	B	Wide! CLTL lane	None
US 45	Surs Woods	Temple	2	9900	45	12	0	1	0	5	4.0	4.69	E	Wide! CLTL lane	E-SW all, W-SW south
3rd	Washington	Jefferson	2	12500	30	12	0	1	0	1	4.0	3.88	D		
Veterans	4th	1/3 mi N of Jaycee	2	1050	30	10.5	0	no curbs	0	1	4.0	2.79	C	Big hill, turn. Utilitarian cycling. Shortcut trail link from Veterans to Hawthorne, Poplar, or Pine would help.	None
Veterans	1/3 mi N of Jaycee	Jaycee	2	600	30	10.5	0	no curbs	0	1	4.0	2.51	C		W-SW
Willow	Temple	Virginia	2	5600	30	15	0	0	0	1	4.0	3.07	C		Both SWs
Willow	Virginia	Fayette	2	5600	30	15	0	0	0	1	4.0	3.07	C		Both SWs

Segment	From (W/N)	To (E/S)	Feasible on-road facility type	Sidepath Feasibility	Recommendation	New BLOS score	Public priority points	Priority	ImplCondition	Implementation Notes
4th	Rickelman	N of I-57 bridge	SLM and Bike Route signs. If road ever widened, design for Bike Lanes with 11'-5'	High	Add E sidewalk (high priority) and Shared Lane Markings (lower priority)		3	High	Conditional	Senior center to construct sidewalk; gap must be closed. SLM ready but lower priority.
4th	N of I-57 bridge	Santa Monica	SLM and Bike Route signs	None (bridge deck limit)	Add Shared Lane Markings		4	Lower	Ready	
4th	Santa Monica	Evergreen	SLM and Bike Route signs. If road ever widened, design for Bike Lanes with 11'-5'	High	Add Shared Lane Markings		4	Lower	Ready	
4th	Temple	Virginia	Bike Lanes: 5-10.2-10.2-5	Low	Stripe 5' Bike Lanes	1.71	5	High	Ready	
4th	Virginia	Market	Bike Lanes: 5-10-10-5	Low	Stripe 5' Bike Lanes	1.77	5	High	Ready	
4th	Market	Washington	Bike Lanes: 9.1 (w/gutter)-5-11-11-5-9.1	Low	Stripe 5' Bike Lanes	1.63	5	High	Ready	
4th (S-bd)	Washington	Jefferson	Bike Lane: 8.4-5-10 (use SLM if can't clear bulbout)	Low	Stripe 5' Bike Lane	1.86	5	High	Ready	
4th (N-bd)	Washington	Jefferson	SLM in middle of N-bd lane, to avoid diagonal parking	Low	Add Shared Lane Markings in the middle of the lane		5	High	Ready	
4th	Jefferson	Fayette	Bike Lanes: 7.7 (incl. gutter)-5-10-10-5-7.7; or SLMs only if wider parking desired	Low	Stripe 5' Bike Lane	1.93	5	High	Ready	
4th	Fayette	National	Bike Lanes: 5-10-10-5	Low	Stripe 5' Bike Lanes	2.10	5	High	Ready	
4th	National	Wabash	Bike Lanes: 5-10-10-5	Low	Stripe 5' Bike Lanes	2.12	8	High	Ready	
4th	Wabash	Eiche	Bike Lanes: 5-11.1-11.1-5	Low	Stripe 5' Bike Lanes	2.06	8	High	Ready	
4th	Eiche	Hendelmeyer Park	Bike Lanes: 5-11.1-11.1-5	High	Stripe 5' Bike Lanes	2.11	11	High	Ready	
4th	Hendelmeyer Park	Veterans	Bike Lanes: 5-11.1-11.1-5	High	Stripe 5' Bike Lanes	2.11	11	High	Ready	
US 45	Rickelman	Technology	Paved shoulders	Low (underpass)	When reconstructed, narrow underpass median for a sidewalk and/or wider shoulders		2	Lower	Ready	Future: if NE area develops more, consider W-SP w/links
US 45	Technology	Evergreen	Wide paved shoulders exist, Bike Routes signs for wayfinding	High	Add Bike Route wayfinding sigange		2	Lower	Ready	Future: if NE area develops more, consider W-SP w/links
US 45	Evergreen	Surs Woods		High	Add E sidewalk		1	High	Ready	
US 45	Surs Woods	Temple		High north end, Low otherwise	None		1			
3rd	Washington	Jefferson	N-bd SLM or Bike Route, but poor BLOS. Would be needed for W-bd Jefferson/Washington	Low	None		2			
Veterans	4th	1/3 mi N of Jaycee	SLM and/or signed Bike Route, but poor BLOS and hill. If widened, design for Bike Lanes	Medium, but bridge narrow	Add W sidewalk or sidepath.		4	High	Conditional	Separate structure over creek? No funding for widening. Seek private easements for shortcut trail link (see comments)
Veterans	1/3 mi N of Jaycee	Jaycee	SLM or signed Bike Route	Low W, High E	None		4			
Willow	Temple	Virginia	Bike Lanes: 5-10-10-5	Low	Stripe 5' Bike Lanes	2.19	3	High	Ready	Assumes Virginia E of Willow signed, too
Willow	Virginia	Fayette	Bike Lanes: 5-10-10-5	Low	Stripe 5' Bike Lanes. Shared Lane Markings by Fayette turn lane (narrower lanes)	2.19	3	Medium	Ready	Section from Jefferson to Fayette lower priority until Fayette project done

Segment	From (W/N)	To (E/S)	Lanes	Traffic ADT	Speed Limit	Lane Width	Extra Width	Gutter Pan	Park Occ%	% Truck	PavemtCond	BLOS score	BLOS grade	Comments	SidewalkStatus
Ealy	Willenborg	Temple	2	325	30	10	0	no curbs	0	1	4.0	2.25	B	blind curve	None
Willenborg	Althoff	City limit	2	650	30	15	0	(2 incl)	0	3	4.0	2.31	B		Both SWs
Willenborg	City limit	Evergreen	2	850	30	10	0	no curbs	0	1	4.0	2.74	C	unincorporated area	None
Willenborg	Evergreen	North/Ealy	2	325	30	10	0	no curbs	0	1	4.0	2.25	B	blind curves	None
Pembroke	Grove	Eiche	2	600	30	9.5	0	0	0	1	4.0	2.61	C		none
TREC Trail: Calico S	Outer Belt West	Fayette													Planned Trail
TREC Trail: Calico N	Evergreen	Outer Belt West												Provide access to Rosebud Theatre	Planned Trail
TREC Trail: Phase 1	Nazarene Church	Calico													Planned Trail
TREC Trail: Phase 3	Kepley	Phase 1													Planned Trail
TREC Trail: Phase 4	Hilltop	Nazarene Church													Planned Trail
TREC Trail: Outer Belt West S	Fayette	US 40													Existing Trail
TREC Trail: US40 Project	Outer Belt West	Schwerman													Planned Trail
TREC Trail: I-57 Bridge	Calico	Fayette E-ramp/ Illinois													Planned Trail
I-57 Bridge connector	I-57 Bridge	Hampton												Hampton, Heritage, or Temple?	Proposed Trail
I-57 Bridge connector	I-57 Bridge	Temple												Hampton, Heritage, or Temple?	Proposed Trail
Keller ramp trail	Keller E-SP	Raney													Proposed Trail
Fayette bridge trail	Jefferson	Amtrak station													Existing Trail

Segment	From (W/N)	To (E/S)	Feasible on-road facility type	Sidepath Feasibility	Recommendation	New BLOS score	Public priority points	Priority	ImplCondition	Implementation Notes
Ealy	Willenborg	Temple	None now. If road ever widened, design for Bike Lanes with 10'-5'	Low W, High E	None now. If Temple/ Ealy/Willenborg rebuilt in future, add sidewalks and bike lanes(?)		2			
Willenborg	Althoff	City limit	Bike Lanes: 5-10-10-5	High	Stripe 5' Bike Lanes	1.43	2	Lower	Ready	
Willenborg	City limit	Evergreen	Signed Bike Route. If widened, design for Bike Lanes with 10'-5'	High	Sign as Bike Route. Future Bike Lanes and Sidewalks.		3	Lower	Conditional	When Missing Mile project done
Willenborg	Evergreen	North/Ealy	None now. If road ever widened, design for Bike Lanes with 10'-5'	High	None now. If Temple/ Ealy/Willenborg rebuilt in future, add sidewalks and bike lanes(?)		4			
Pembroke	Grove	Eiche	Signed Bike Routes	Low	Add sidewalk on one side		0	Lower	Ready	
TREC Trail: Calico S	Outer Belt West	Fayette			Complete trail and bridge work			High	Ready	
TREC Trail: Calico N	Evergreen	Outer Belt West			Done			High	Ready	Finishing in Fall 2010
TREC Trail: Phase 1	Nazarene Church	Calico			Complete trail and add bridge			High	Ready	Funding secured. Bridge needed.
TREC Trail: Phase 3	Kepley	Phase 1			Build trail			High	Conditional	TREC fundraising
TREC Trail: Phase 4	Hilltop	Nazarene Church			Build trail			High	Conditional	TREC fundraising
TREC Trail: Outer Belt West S	Fayette	US 40			Done					
TREC Trail: US40 Project	Outer Belt West	Schwerman			Build sidepath trail			High	Conditional	TREC fundraising
TREC Trail: I-57 Bridge	Calico	Fayette E-ramp/ Illinois			Build new bike/ped bridge over I-57/70			High	Conditional	Planned as a part of upcoming Fayette bridge project
I-57 Bridge connector	I-57 Bridge	Hampton			Build trail			High	Conditional	Bridge first. Would require easement along creek, water line.
I-57 Bridge connector	I-57 Bridge	Temple			Build trail			High	Conditional	Bridge first. City owns some ROW, other easement possible.
Keller ramp trail	Keller E-SP	Raney			Build trail			Medium	Conditional	Right-of-way, funding needed
Fayette bridge trail	Jefferson	Amtrak station			Done					

Appendix 4:
Summary of Major Funding Sources

Some of the most commonly used funding sources for bicycle and pedestrian projects are listed below. The funding landscape is always evolving. Check http://www.bikelib.org/bike-planning/bikeway-funding-tips/ for updates.

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 $12M/year in Illinois for bikeway projects, but widely varying including $49M in October, 2010.
- Very high demand to supply ratio (averaging 8:1), but geographic diversity in grant selections would generally favor Effingham area projects.
- In October, 2010, Effingham County and TREC were awarded $1,171,560 for the third phase of the TREC trail.

With more stringent federal engineering standards and review processes, this source is better suited for larger ($500K 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 $2.5M per year, with a $200K limit (except for land acquisition projects). However, the program was cancelled 2008-2010 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. Some agencies prefer these over ITEP.

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.
- $1-2M per year. About half is dedicated for non-motorized, off-road trails emphasizing underserved user groups. $200K 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.
- TREC received $410,000 in RTP funds to help construct the Calico Trail.

This has been an underutilized source. Trails serving other user groups (equestrian, hiking, cross-country ski, snowmobile) get priority, so partnering with these uses will increase chances for funding. A good target range is $100-300K.

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 $7M per year; reimbursement grants.
- 70-90% for infrastructure projects within 2 miles of schools serving any K-8 grades, with an application maximum of $250K for up to 3 projects.
- 10-30% for education and encouragement programs for the same grades, with an application maximum of $100K for up to 3 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, 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.

All of the Safe Routes to School recommendations, plus many others in this plan, are eligible for this funding source. Again, geographic diversity in grant selections gives Effingham an advantage.

Non-Government Sources

Private foundations, local businesses and individual donors can be another resource, especially for high profile projects. TREC has already raised over $500,000 in private contributions from these sources, demonstrating a widespread level of community support rarely seen around the state. The national focus on public health is also creating more opportunities for active transportation. Many high profile organizations, such the Robert Wood Johnson Foundation, are committing resources to projects that promote public health.