Ride + Walk US 30 Overpass

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April 15, 2014

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Introduction

Kosciusko County is a great place to work, live and raise a family. This claim is supported by numerous labor force, income, and quality of life statistics. Kosciusko County is ranked high in several key categories:

- Strong Economy
    - Feb 2014 Unemployment Rate 5.4% - 7th in state (6.9% state avg.) [1]
    - 2012 per Capita Income $39,568 – 17th in state ($38,119 state avg.) [1]
- Affordable Cost of Living
    - March 2012 cost of living index 80.8 (below U.S. average of 100) [2]
- Family friendly
    - HS graduation rate 88.8% (Indiana state avg 85.7%) [3]
    - 2008-2012 Mean Commute time 20.1 min – 74th in state (23.0 min state avg.) [4]
    - Ranked 11th of top 15 U.S. "Best Small Cities to Raise a Family" according to Forbes Magazine [5]

This success is made possible by several key resources in the county. Kosciusko County is centrally located in the Midwest, has a strong manufacturing and agricultural base, and contains many lakes and natural resources that offer recreation opportunities. However, the most important resource is the people of the community. The residents possess a high level of talent, innovation, entrepreneurship, and work ethic. They employ these skills to efficiently convert the other available geographic, economic, and natural resources into the results shown above.

In order to maintain this strong position regionally, it is important for our community to attract and retain the people resources that make the county successful. There must be infrastructure in place that enhances the quality of life for the residents in order to encourage them to live and work in this area. A dynamic greenway / recreation trail system is an important element to this infrastructure. A greenway trail system serves multiple functions and provides many benefits towards enhancing the community.

- *Economic*
    - *Enhance property values. Influence corporate location decisions where quality of life is a factor. Attract visitors and supports tourism.*
- *Recreation*
    - *Provide convenient and inexpensive recreation close to home that can be enjoyed by a wide range of people.*
- *Transportation*
    - *Provide access between homes, shopping, schools, parks, recreational and community facilities. Provide safe travel away from traffic. Encourage commuting and reduce motorized vehicle traffic.*
- *Quality of Life*
    - *Increase quality of life through aesthetics of local environment and access to the outdoors.* [6]

The Warsaw and Winona Lake communities have made a significant investment towards planning and implementing a multi-use trail system. The most notable investment is the recently adopted Warsaw and Winona Lake Bicycle and Pedestrian Master Plan. It is a product of the Lake City Greenway Committee and the local Bicycle Advisory Committee. The goals of the master plan are centered on seven components. The top four are as follows:

1. *Economic Benefit - Promote the bicycle and pedestrian system as an exceptional feature of the City of Warsaw and Town of Winona Lake to attract and retain quality residents and commerce.*
2. *Health Benefits and Quality of Life - Market the bicycle and pedestrian system as a tool to address public health concerns and to encourage active lifestyles.*
3. *Connectivity Goal - Establish a network of convenient, safe, and well-designed bicycle and pedestrian facilities that link all local and regional systems and community destinations.*
4. *Safety Goal - Provide for the safe, convenient, and accessible movement of people for all modes of transportation.* [7]

Problem

The Warsaw and Winona Lake Bicycle and Pedestrian Master Plan lays out the future plans to improve and expand the trail system. It identifies several critical intersection improvement projects which need to be addressed in order to extend the function and benefits of the trail system to more areas of the community and region. We propose that the most critical of these projects is the US 30 boundary. US 30 separates the city of Warsaw and hinders multiple components of the master plan goals from being realized by a certain segment of Warsaw's residents and businesses.

1. Economic – the lack of a crossing discourages residents on the south side from taking alternative transportation to the newly constructed YMCA and other businesses (Martin's, Menards, Culver's). It also discourages residents on the north side from taking alternative transportation to the businesses in the downtown neighborhoods.
2. Connectivity – the lack of a crossing discourages residents on the north side of US 30 from using the already established trails system on the south side. It also leaves the current trail system segmented and constrained. An overpass would allow the current system to be connected to

other regional multi use trail systems. This adds a dynamic feature to the trail system and makes it more attractive to potential talent looking to relocate in the area.

3. Safety – no intersection at US 30 is suitable for crossing with a family - especially with young children.

The US 30 crossing is also the most challenging intersection improvement project. There are several factors that add to the complexity. The high safety risk of the crossing due to traffic volume and speed, the high cost of the overpass solution, state highway regulations, strategic crossing site considerations, and extending trail access to crossing site are among the factors that need to be considered.

Purpose

The purpose of this whitepaper is to document the need, detail location options, explore sources of funding, and propose potential next actions for constructing a pedestrian and bicycle overpass over US 30. Also, it will summarize a similar community's experience with implementing a pedestrian/bicycle overpass to show the benefits of the bridge and lessons learned within that community.

Crossing Options

The team evaluated three types of crossings. Below is a brief summary of each type and some of the risks, pros, and cons of each option.

1. **At Grade Crossing**. This crossing type is an intersection where the road and multi-use trail is at the same level. These typically include the installation of traffic signs, signals, and road striping.
    a. Relatively inexpensive
    b. Still puts pedestrian and bicycle traffic in harm's way. Safety is heavily dependent on vehicle traffic responding to the traffic signs.

   c. Pedestrians may not be able to cross both traffic directions in a single signal cycle

2. **Overpass**
   a. Clearly the safest option
   b. Easily the most expensive
3. **Underpass**
   a. An opportunity to create an underpass was missed with the recent bridgework beyond Spring Hill Road.
   b. Drainage could be an issue. Concerned with relatively high water table causing flooding within a tunnel crossing.
   c. Safety concerns. A tunnel creates a blind spot for safety patrols. It makes patrolling and maintaining security along the trail more difficult.

Safety is the first priority for the crossing and aligns with the fourth component of the Master Plan. Based on this, the team proposes that an overpass is the best solution to crossing US 30. Despite the relatively high cost, an overpass clearly provides the safest crossing for pedestrians and bicyclists. Below is a list of some of the benefits that the overpass can provide:

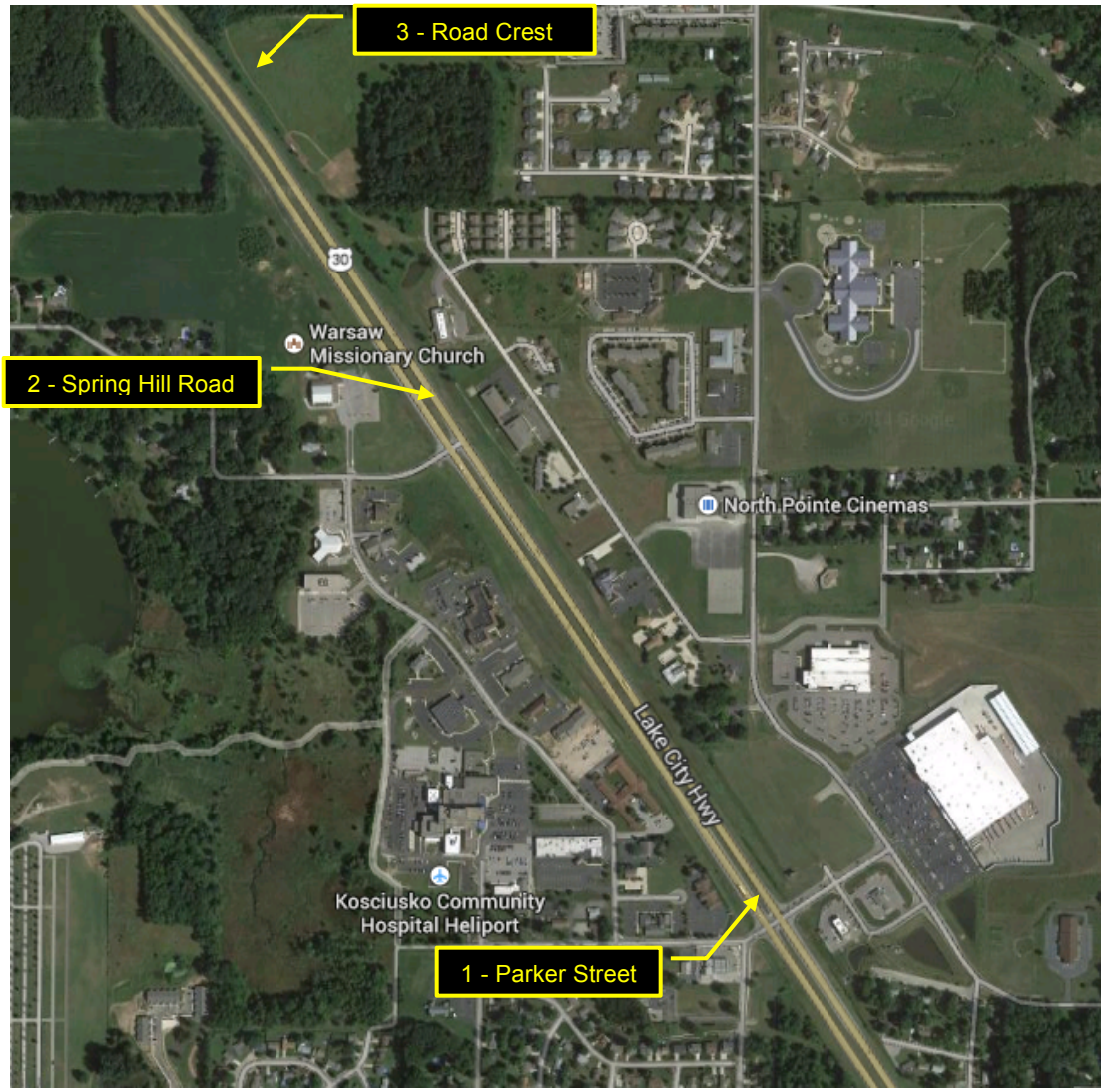
1. Safe and easy commute from the Greenway
2. Keeps pedestrians away from busy intersections
3. Will become a connection between the communities located on either side of US 30
4. Promotes health and fitness
5. Brings in people from other areas to enjoy the benefits of our community
6. Can be used for advertisements of community events

While the benefits are numerous, there will be several risks that need to be mitigated:

1. Cost of construction. There is state money available for alternative transportation projects of this nature. It is critical to explore the available options to minimize the impact on the local community.
2. Security issues.
3. Safety issues.
4. Ongoing maintenance. An overpass will create new risks that need to be identified and evaluated within the existing trail management plan.
5. Proposed location can greatly impact overall cost. A strategic crossing site selection is important to minimize the required land grading, ramp construction, and connecting trail construction. These components can make up a significant portion of the project cost.

Crossing Locations

As stated above, the crossing location is a critical aspect of the project. There are many factors that need to be identified and evaluated in order to make the best decision. The crossing location has a large influence on the project cost for the overpass construction. However, this cannot be the only consideration in the selection process. Accessibility to nearby residents/businesses, proximity to existing trails, future development of US 30 in regional transportation plan, right of way requirements of adjacent property owners are a few other factors that need to be considered. The team identified and evaluated three potential overpass sites along US 30. They are shown in the following aerial view of the US 30 corridor. Below is a brief summary of the benefits and challenges of each site:



Site 1 – Parker Street

Benefits

1. Central location
2. Safely connect sites of side paths proposed in Ride+Walk Master Plan
3. Reduce complexity of traffic at highest capacity intersection in Kosciusko County by removing cyclists and pedestrians from the at grade crossing
4. Access to multiple businesses and facilities - KCH, Pill Box, Culver's, Menards, Martin's

5. Good location to encourage commuters

Challenges

1. Limited options for cyclists and pedestrians at exit points. Safety will still be a concern as current paths in the Ride+Walk Master Plan are not dedicated for pedestrian or bicycle use only.
2. Less convenient access to YMCA, school, North Pointe cinema, apartment complexes.

Site 2 – Spring Hill Road

Benefits

1. Safe Connection from the Greenway
2. Safely connect sites of side paths proposed in Ride+Walk Master Plan
3. Location could provide camera security from stop lights
4. Pathway from overpass can provide multiple accesses to local businesses, homes, family recreational facilities (YMCA, movie theater etc...) and Harrison Elementary School
5. Local businesses will be recognized for supporting health and fitness
6. Less traffic at exit points, allowing more continuous flow for cyclists and pedestrians
7. Warsaw Missionary Church may be willing to provide access

Challenges

1. Cost of additional accesses from Ride+Walk Overpass to Mariner Drive
2. Gaining support from local businesses to add accesses
3. Gaining support from the community
4. Traffic patterns make an at grade crossing option more viable here than at Parker

Site 3 – Natural crest close to YMCA site

Benefits

1. Safe Connection from the Greenway
2. Scenic location at crest of US 30, no visibility concerns
3. Direct commute to the YMCA
4. Minimal land development with natural elevation on both sides of the road

Challenges

1. Not cost effective
2. Remote location may limit utilization of crossing
3. Additional side path construction required
4. Security concerns due to location
5. May not gain local business or community support

To summarize the thoughts outlined above, below is what the team identified as the main argument in favor of each site.

Site 1 – Parker Street

Improve safety at a very complex and highly trafficked intersection and connecting at a location central to many businesses and facilities.

Site 2 – Spring Hill Road

Provides the best flow for traffic continuing onto greenway paths while connecting many destinations including: recreational facilities, shopping centers, and homes.

Site 3 – Natural crest close to YMCA site

Scenic location and direct access to YMCA

The team recommends Site 2 – Spring Hill Road. The continuous flow offered to users is better suited to recreational traffic. While the higher traffic volumes at Parker Street seem to justify placement of an overpass, the stop and go nature of navigating the surrounding areas are a more natural fit with an at grade crossing.

Funding

One of the most common challenges for communities to complete a project like a Bike-Walk Overpass is the funding for the project. We are fortunate in the state of Indiana that there is an avenue with the INDOT grant program titled TAP (Transportation Alternative Program). Trail, Safe Routes to Schools and Enhancement projects that meet the eligibility requirement will be funded under this program. INDOT is committed to funding these types of projects, which promote a safe and healthy lifestyle. Between the years 2015 to 2017, INDOT will award over $13,000,000 to projects that are selected under this program. [8]

One of the essential requirements to this grant is that 20% of the project has to be covered by either local government or businesses and has to be guaranteed before the grant can be considered. We are estimating that this project will cost around $4,000,000 so our local commitment would be approximately $800,000. In the past, K21 has worked with specific projects to provide that guarantee, while local funding was secured they would consider that role for this project if needed.

We believe that we are also fortunate in this community to have local industry that invests in community projects such as this. Recently, in our community, a new YMCA is being built and much of the funding came from our local industry. After meeting with the President of K21, we believe that a similar financial funding model can be used to gain all the necessary resources to complete this project. The model is a 3-tier model and begins with large companies, but offers the opportunity for smaller

companies or organizations to be a part of the project. We can gain the necessary $800,000 with the help of 11 companies or organization as showcased below.

INDOT Grant	$3,200,000.00	
(3) Tier 1 Businesses	$600,000.00	$200,000 each
(3) Tier 2 Businesses	$150,000.00	$50,000 each
(5) Tier 3 Businesses	$50,000.00	$10,000 each
Total Project Cost	$4,000,000.00	

Case Study

Weston, WI is a village in Marathon County, with a strong manufacturing base, surrounded by a strong agricultural economy (mainly dairy farms). Weston has experienced significant growth recently, having grown from 12,079 in 2000 to 15,052 in 2013 (estimated). The village is physically divided by a four lane highway (State Highway 29). In 2006 the village administrator was able to capitalize on his relationship with a state representative and obtained $576,000 in the form of a Transportation Enhancement Award [(9)] from the Wisconsin Department of Transportation towards a bike/pedestrian bridge. The village administrator was instrumental in working on support and advertised the concept in the town newsletter [(10)]. The primary purpose of the pedestrian bridge was to provide a safe route for village residents to walk or bike over STH 29 [(11)]. The bridge links the neighborhoods on the north and south sides of the highway connecting commercial and residential districts on each side of the highway. Although there was no accident history that was used to justify the bridge, there was no other crossing of STH 29 in Weston where there was separation of vehicle traffic and pedestrians. The village was pro-active in identifying the potential hazard and finding a safe route for non-motorized residents to cross

the highway. The bridge also serves as a connection for bicycles and pedestrians travelling throughout the area, although that was not the impetus for the bridge.

At the time the initial $576,000 was obtained, the cost of the project was estimated at $720,000[(11)]. This estimate was for a pre-fab steel bridge and did not include right-of-way needs and the cost of bridge approaches. As more investigation was done about the project and its costs, there was some consideration to eliminating the project [(11)]. However it was thought that returning the money would negatively impact the Village's credibility in seeking grant funds for future projects. In 2007 Central Wisconsin Engineers, Inc reviewed five possible locations for the bridge. The advantages for the location ultimately selected were: Proximity to a large medical complex, low traffic counts on the adjacent streets, closeness to connect to other existing sidewalks and multi-use paths and length of span for the structure which relates to costs.

The total cost of the bridge was $2.48 million [(11)]. This included all expenses incurred from primary design through the completion of construction (2007 through the end of 2012). The Village applied a total of $1.32 million of grant funds to the project. This included the TE award of $576,000 and $744,080 left over from a different project. The net cost to the Village was $1.16 million (please see appendix A for a breakdown of the costs) [(11)]. The balance was paid off by taking out a loan (4). The cost of the debt service was absorbed in the general tax roll [(10)]. Local industry was not able to offset the costs, but some were able to donate services [(12)]. Some cost savings were obtained with the lighting system which uses modern LED technology coupled with motion detectors [(11)].

Since the bridge is in place there appears to be a fair amount of pedestrian use in summer months [(12)]. In 2012 the first ever Wausau Marathon was held and the bridge was used as part of the course. Other bike rides and "fun runs" were held including the "Freeze Your Buns Run".

In summary, pedestrian use was the main driving force behind the bridge construction in Weston, rather than recreational bicycle use. Unfortunately, costs could not be offset by local industry and it was absorbed into the tax roll.

Next steps

If our project is awarded the 2014 Project Proud seed money, we plan to use the capital towards building community awareness of the Ride + Walk US 30 overpass idea. We propose two communication events. The goal of the events would be to raise awareness of the current problem, location options and crossing types, benefits, and to build excitement. We propose one event aimed at the general community held at Center Lake Pavilion. This would be an open session to provide information about the project and also gather survey data from the general community about user characteristics, crossing site selection, trail management issues that impact them, and opinion and attitude of the overpass idea. We propose a second event aimed at potential crossing users. This would be held in conjunction with one of the local 5k run/walk, biking, or triathlon events. This would be a targeted session to provide information about the project to potential users and collect survey data about user characteristics, type of use, and potential crossing style and locations.

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