Public Involvement Meeting Handout

WIS 29
Shawano County U Intersection
Shawano County

Project ID: 1058-02-03

March 18, 2020*
5:30 p.m. to 7:00 p.m.
Herman Town Hall

*This in-person meeting was canceled on March 17, 2020 as a precautionary measure against the continued spread of COVID-19, based on public health guidance to limit public gatherings.

This handout and other meeting items are available on the design website at: https://wisconsindot.gov/Pages/projects/by-region/nc/wis29shawano/default.aspx
Welcome

The Wisconsin Department of Transportation (WisDOT) is conducting a public involvement meeting to discuss proposed improvements to the WIS 29 and County U intersection in Shawano County. WisDOT will discuss the selected improvements that meet the project’s purpose and need. A formal presentation is scheduled to begin at 5:30 p.m. The remainder of the meeting will follow an open house format.

Project information

The intersection of WIS 29 at County U is located in the Town of Herman in central Shawano County. WIS 29 is a principal arterial roadway connecting Green Bay to Wausau. WIS 29 consists of a 4-lane divided roadway with two 12-foot eastbound and two 12-foot westbound travel lanes. WIS 29 is classified as a 65-mile per hour (mph) rural expressway and has an average daily traffic (ADT) of 9,100 vehicles per day (2015).

County U is a 2-lane asphalt rural county trunk highway with 6-foot gravel shoulders. The County U intersection is at-grade with stop control provided on County U. County U north of WIS 29 provides access to the Village of Gresham and the North Star Mohican Casino and has an ADT of 1,500 vehicles per day (2009). County U south of WIS 29 connects to County M and has an ADT of 380 vehicles per day.

WIS 29 – County U Project Location
Purpose and Need

The purpose of the project is to reduce and/or eliminate severe crashes and improve intersection operations.

The need to improve safety and operations was identified by WISDOT and local officials monitoring crash history at the intersection.

The intersection of WIS 29 at County U has been identified as having a right-angle crash trend and has been the site of multiple severe injury and fatal crashes.

Sight distance at the intersection is limited due to a hill crest located east of County U on WIS 29. Vehicles stopped on County U have limited intersection sight distance available to identify on-coming traffic in the westbound direction of WIS 29 when deciding to cross. Vehicles traveling on WIS 29 in the westbound direction, approaching the intersection, have limited decision sight and stopping sight distance available to identify and react to a vehicle crossing WIS 29 on County U.

Operational concerns have been observed at the intersection. Some traffic crosses WIS 29 in a single stage movement crossing all lanes of WIS 29 in one action. Some traffic crosses WIS 29 in a two-stage movement stopping in the median. That stopped traffic, at times, creates conflict with WIS 29 to County U left turning traffic in the median.

Intersection Conflict Points
Alternatives Considered

1. No Build
2. Westbound Hill Cut with Offset Right Turn Lanes
3. Hybrid J-Turn with Offset Right Turn Lanes
4. Median Widening North with Offset Right Turn Lanes
5. Median Widening South with Offset Right Turn Lanes

Note: Median U-Turn alternative not carried forward to maintain County U mobility.

Based on engineering judgement and public involvement comments, the Westbound STH 29 Hill Cut was included in all alternatives moving forward. Adequate sight distance is needed for all alternatives to function safely. Therefore, more detailed engineering work was done on alternatives 3, 4, and 5 with alternative 2 included in them.
Westbound Hill Cut with Offset Right Turn Lanes
This alternative would reconstruct the westbound lanes of WIS 29 by lowering the hill crest east of the intersection to improve sight distance. Offset right turn lanes are included to provide improved sight lines.

Hybrid J-Turn intersection with WIS 29 Westbound Hill Cut
This alternative will improve intersection operations by allowing drivers to focus on one direction of traffic at a time to make their decision and provide improved sight lines. It maintains full access at the County U intersection by use of dedicated median turn lanes and U-turn locations. Left turns from WIS 29 onto County U are allowed. Offset right turn lanes are included to provide improved sight lines. Westbound lanes will be reconstructed, lowering the hill crest east of the intersection to improve sight distance.

WIS 29 Median Widening Shifted South
This alternative will improve intersection operations by allowing drivers to focus on one direction of traffic at a time to make their decision. The WIS 29 median is widened to provide adequate width for vehicles to cross the intersection in two stages. Eastbound WIS 29 is shifted off existing alignment to provide additional width for the 120’ wide median. It maintains full access at the County U intersection. Westbound lanes will be reconstructed, lowering the hill crest east of the intersection to improve sight distance.

WIS 29 Median Widening Shifted North
This alternative will improve intersection operations by allowing drivers to focus on one direction of traffic at a time to make their decision. The WIS 29 median is widened to provide adequate width for vehicles to cross the intersection in two stages. Westbound WIS 29 is shifted off existing alignment to provide additional width for the 120’ wide median. It maintains full access at the County U intersection.
### Evaluation of Alternatives:

<table>
<thead>
<tr>
<th>Factors of Evaluation</th>
<th>Alternative 1: No Build</th>
<th>Alternative 2: WB Hill Cut and Addition of Offset Right Turn Lanes</th>
<th>Alternative 3: Hybrid J-Turn with WB Hill Cut and Offset Right Turn Lanes</th>
<th>Alternative 4: Median Widening Shifted North (120-FT) with WB Hill Cut and Offset Right Turn Lanes</th>
<th>Alternative 5: Median Widening Shifted South (120-FT) with WB Hill Cut and Offset Right Turn Lanes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Probability of Reducing Angle Crashes (High is Most Favorable)</td>
<td>Low</td>
<td>Moderate</td>
<td>High</td>
<td>Moderate</td>
<td>Moderate</td>
</tr>
<tr>
<td>Probability of Reducing Confusion for Motorists Using the Median (High is Most Favorable)</td>
<td>Low</td>
<td>Low</td>
<td>High</td>
<td>Moderate</td>
<td>Moderate</td>
</tr>
<tr>
<td>Expected to Increase Ease of Making a Turning Movement (Yes is Most Favorable)</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Level of Direct Construction Impacts to the Environment (Minimal is Most Favorable)</td>
<td>None</td>
<td>Minimal</td>
<td>Minimal</td>
<td>Large (Wetland Impact: 0.4 acre)</td>
<td>Moderate</td>
</tr>
<tr>
<td>Utility Impact (Minimal is Most Favorable)</td>
<td>None</td>
<td>Minimal</td>
<td>Minimal</td>
<td>Large</td>
<td>Large</td>
</tr>
<tr>
<td>Real Estate Impact (Minimal is Most Favorable)</td>
<td>None</td>
<td>Minimal (TLE - 0.2 acre)</td>
<td>Minimal (TLE - 0.3 acre)</td>
<td>Large* (FEE - 3.4 acre)</td>
<td>Large** (FEE - 2.9 acre)</td>
</tr>
<tr>
<td>Approximate Anticipated Cost Range</td>
<td>$0</td>
<td>$2,500,000 - $3,000,000</td>
<td>$3,000,000 - $3,500,000</td>
<td>$5,000,000 - $5,500,000</td>
<td>$6,000,000 - $6,500,000</td>
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* FURTHER ROADSIDE DESIGN ANALYSIS REQUIRED TO MINIMIZE RESIDENTIAL IMPACTS.
** POTENTIAL IMPACT TO CEMETERY PARCEL

### Preferred Alternative: Alternative 3

**Hybrid J-Turn intersection with WIS 29 Westbound Hill Cut and Offset Right Turn Lanes**

This alternative will improve intersection operations by allowing drivers to focus on one direction of traffic at a time to make their decision and provide improved sight lines and dedicated median turn lanes which provide drivers their own lane for acceleration and decision making. It maintains full access at the County U intersection by use of median turn lanes and U-turn locations. Left turns from WIS 29 onto County U are allowed. Offset right turn lanes are included to provide improved sight lines. Westbound lanes will be reconstructed, lowering the hill crest east of the intersection to improve sight distance. Additional signage and lighting will be installed.

### Benefits of J-Turn Intersections:

- Reduces crash potential – 42 conflict points with a standard intersection, 24 conflict points with a J-Turn
- Simplifies driving task – drivers only required to look at one direction of traffic at a time
- Provides additional space for longer vehicles to store in median
Driving a Hybrid J-Turn

These four steps will allow you to turn left or cross WIS 29 from County U

**Left Turn:**

1. From the stop line at County U, select a safe gap in traffic then turn right, across the WIS 29 through lanes, into the J-turn crossover lane of WIS 29

2. When you reach the J-turn crossover, yield as indicated. Look ahead and select a safe gap in oncoming traffic, then perform a U-turn entering the left lane of WIS 29, increasing your speed after you turn.

3. For traffic continuing on WIS 29, look for a safe gap in the right (outside lane of WIS 29, signal right and change lanes.

**Cross WIS 29:**

1. From the stop line at County U, select a safe gap in traffic then turn right, across the WIS 29 through lanes, into the J-turn crossover lane of WIS 29

3. When you reach the J-turn crossover, yield as indicated. Look ahead and select a safe gap in oncoming traffic, then cross WIS 29 and enter the right-turn lane of WIS 29. Continue to County U and turn right.
J-Turn Crash Reduction Results:

Wisconsin:

- 7 J-Turn Intersections throughout the State of Wisconsin
  - 21% reduction in number of crashes
  - 89% reduction in injury/fatal crashes

- WIS 29/32 and County VV
  - 66% reduction in injury/fatal crashes

- WIS 54
  - 2006 – 2015
    - 11 KABC's (Severe Crashes)
    - 9 Property Damage Crashes
  - 2016 – Construct Hybrid J-Turn
  - 2017 – 2018
    - 0 KABC’s (Severe Crashes)
    - 2 Property Damage Crashes

Other States:

- Maryland (9 locations) – 42% decrease in injury crashes
- Missouri (5 locations) – 54% decrease in injury crashes
- North Carolina (13 locations) – 51% decrease in injury crashes

Construction/Staging Considerations:

- Approximately 4 months to construct (May/June through September 2021)
- WIS 29: Counter directional traffic with median crossovers. Also, one lane each direction through work zone at times
- County U: full closure during reconstruction (approximately 4 – 6 weeks)

Project Schedule/Next Steps

- Local Official Meeting 1.................November 19, 2019
- Public Involvement Meeting 1 .........December 11, 2019
- Local Official Meeting 2.....................March 18, 2020
- Public Involvement Meeting 2.............March 18, 2020
- Environmental Document Signed............May 2020
- Final Plans.....................................November 2020
- Construction .....................................2021
Project Website

Please reference WisconsinDOT.gov for additional information and updates regarding the project. WisconsinDOT.gov

North Central Region Projects and Studies

Projects Under Construction
North Central Region 2019 construction projects in progress (511wi.gov)

Projects in Design (not all design projects have a website)
- I-39
- US 10
- WIS 21
- WIS 29

Public Input/Comments

We encourage you to talk to the project representatives and ask them questions. Attached to this handout is a sheet for your written comments and input regarding the proposed project. Please mail any written comments about the project before April 15, 2020 or leave them in the comment box tonight. You can also email your comments to the contacts listed below.

Your comments assist us in developing a project that will serve the needs of the traveling public as well as the needs of the local community. Your input is welcome and appreciated throughout the design process.

For more information, please contact:

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715-421-8050
timothy.hanley@dot.wi.gov
Public Involvement Meeting Comment Form

Project ID: 1058-02-03
Wittenberg – Shawano
CTH U Intersection
WIS 29
Shawano County
March 18, 2020

Please place this form in the comment box or mail by April 15, 2020 to the address on the back of this sheet. Comments can also be emailed to timothy.hanley@dot.wi.gov. Your comments assist us in developing a project that will serve the needs of the traveling public as well as the needs of the local community. Your input is welcome and appreciated throughout the design process.

Name: _____________________________________________________________

Address: ___________________________________________________________

Daytime Phone Number (optional): _______________________________________

Email Address (optional): _____________________________________________

Please Print Comments (attach additional sheets if necessary)
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The information in this document including names, addresses, phone numbers, email addresses, and signatures is not confidential, and may be subject to disclosure upon request, pursuant to the requirements of the Wisconsin open records law, sections 19.31 - 19.39 of the Wisconsin Statutes.