

Public Involvement Meeting Handout

**Dodgeville to Mount Horeb
US 18/151 and County YZ Intersection
Iowa County**

Project ID: 1204-00-06/76



**April 19, 2023
5:30 p.m. to 7:00 p.m.
Dodgeville City Hall**

Purpose of the Meeting

Welcome to the public involvement meeting for the intersection of US 18/151 and County Y/YZ.

The Wisconsin Department of Transportation (WisDOT) is planning improvements to the US 18/151 and County Y/YZ intersection to maintain the operation efficiency of the highway and improve safety for the traveling public.

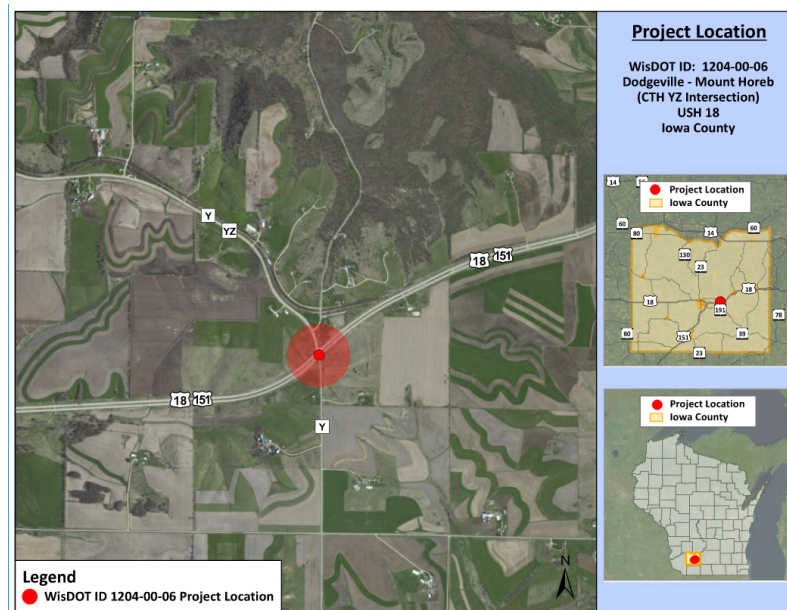
Our objectives for today's meeting are to:

- Provide you with background information about the safety issues with the existing intersection.
- Show several potential alternatives that are being evaluated to improve these safety issues.
- Obtain your input on the potential alternatives to address the safety issues at the existing intersection.

The meeting will run from 5:30 p.m. to 7:00 p.m. A presentation is scheduled to begin at 6:00 p.m. The remainder of the meeting will follow an open-house format with displays of the improvement alternatives available for viewing.

Project Information

The intersection of US 18/151 County Y/YZ is located outside the City of Dodgeville in Iowa County.



General Background

US 18/151 is a rural four-lane expressway with a posted speed limit of 65 mph and an average annual daily traffic (AADT) of 15,800 vehicles. County Y/YZ is a two-lane county highway with a speed limit of 55 mph and an AADT of less than 900 vehicles. County YZ north of US 18/151 provides a northern access to the City of Dodgeville. County Y south of US 18/151 provides access to rural Iowa County. Stop signs are in place on both legs of County Y/YZ at the intersection.

Previous Studies

In 2013, WisDOT completed the US 18/151 Freeway Conversion Study. The Freeway Conversion Study evaluated changes which would be needed to the US 18/151 corridor to convert it from an expressway to a freeway if deemed necessary in the future. Expressways contain at-grade intersections, like County Y/YZ, while freeways require the removal of all direct at-grade access to the highway.

WisDOT understands the value of US 18/151 between Verona and Dodgeville. This corridor is part of the "Backbone" system that consists of the most critical routes statewide for tourism, industry, and other trips. The Department has made significant investments over the past few decades in the construction, enhancement, and preservation of this key corridor connecting Iowa and Wisconsin.

A wholesale conversion of US 18/151 from Verona to Dodgeville to a fully access-controlled freeway is not in WisDOT plans for the foreseeable future because safety and congestion issues on the corridor do not warrant such action. WisDOT expects that needs on the corridor can be appropriately and more cost-effectively resolved with localized improvements to address site specific operational and safety concerns. Such improvements will be evaluated using asset management principles the Department has adopted in alignment with Federal Highway Administration's (FHWA's) performance-based practical design concepts.

Given the abundance of statewide needs coupled with current financial constraints, an asset management strategy continues to be prudent. The Department typically considers freeway conversion projects when safety and operational issues cannot be adequately addressed by less comprehensive solutions. Please be assured WisDOT will continue to monitor safety and operations issues on this segment, and the Department will adjust its approach if needs dictate.

The project team has evaluated the County Y/YZ intersection to see if an interchange could be funded as a stand-alone project. Currently, the AADT on County Y/YZ is less than 900 vehicles. An interchange is considered appropriate when traffic counts are nearing an AADT of 2,000 vehicles or greater. The needs on this intersection can be appropriately and more cost-effectively resolved with at-grade improvements that are designed to remedy any site-specific safety concerns.

Crash History

The US 18/151 and County YZ intersection has been identified as having a trend of angle crashes due to County YZ vehicles failing to yield to US 18/151 traffic. During a five-year period from 2017 through 2021, 25 total crashes occurred at this intersection. Of those 25, seventeen were angle crashes, or those involving at least one vehicle traveling along the major road and one traveling along the minor road.

Angle crashes accounted for seven out of the eight (88%) injury crashes and one fatal crash that happened at the intersection during the study period.

Funding Source

In 2021 WisDOT applied for, and was granted, improvement funds for the intersection through the Highway Safety Improvement Program (HSIP). HSIP funds highway safety projects at sites that have experienced a high crash history. The overall objective of HSIP is to develop and implement stand-alone safety projects designed to reduce the number and severity of crashes on all streets and highways (State and local).

Intersection Concepts

Alternative 1: No Build Minor Leg Stop Control

The purpose of the No Build alternative is to provide a baseline against which impacts of the proposed alternatives are evaluated. In many cases, the No Build alternative does not meet the purpose and need of the proposed action; therefore, it is not considered a feasible or prudent alternative. This alternative includes 42 total conflict points.

The No Build alternative represents the roadway and associated structures in their present condition at the time of analysis. If no action is taken, the existing roadway and facilities will continue to deteriorate; safety concerns as a function of substandard design will not be corrected; and the long-term operational needs of the corridor will not be met.

Alternative 2: Minor Leg Stop Control with Offset Turn Lanes

This alternative allows full access to all movements to and from US 18/151 at the intersection without using U-turns. This alternative includes the construction of offset right-turn and left-turn lanes which would improve the sight distance at the intersection. This alternative includes 42 total conflict points.

Alternative 3: Right-In/Right-Out/Left-In

This alternative allows left-turns from US 18/151 at the intersection but restricts side road movements to right-turns only. This alternative also includes the construction of offset right-turn lanes on US 18/151. This alternative includes 12 total conflict points.

Alternative 4: Right-In/Right-Out

This alternative is the most restrictive and only allows right-turn movements to and from US 18/151. This alternative includes the construction of offset right-turn lanes on US 18/151. This alternative includes 6 total conflict points.

Alternative 5: Restricted Crossing U-Turn (RCUT) – No Left Turns

A Restricted Crossing U-turn (RCUT) intersection is a type of reduced conflict intersection used primarily on four-lane divided highways. RCUT intersections differ from conventional intersections by re-routing left-turn and through vehicles from the side road. Motorists approaching the divided highway from the side road are required to turn right and then make a U-turn at a designated median opening. This alternative also includes the construction of offset right-turn lanes on US 18/151. This alternative includes 18 total conflict points.

Alternative 6: Restricted Crossing U-Turn (RCUT)

This alternative is like Alternative 5 except for left-turns from US 18/151 are allowed to make turns directly at the intersection. This alternative includes the construction of offset right-turn lanes which would improve the sight distance at the intersection. This alternative includes 24 total conflict points.

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ALT.	TRAFFIC CONTROL	PROS	CONS	OTHER CONSIDERATIONS
1	NO BUILD MINOR LEG STOP CONTROL	<ul style="list-style-type: none"> Costs nothing No impacts Maintains access to all movements at the intersection 	<ul style="list-style-type: none"> Does not address the known safety issues Will not improve intersection skew, vehicle speeds, and mis-judging of gaps 	
2	MINOR LEG STOP CONTROL WITH OFFSET TURN LANES	<ul style="list-style-type: none"> Maintains access to all movements at the intersection Reduces crash potential, by eliminating poor intersection angle No added delay to sideroad movements 	<ul style="list-style-type: none"> Highest crash potential alternative (except no build) No reduction in intersection conflict points Driver discomfort from minor street approaches trying to enter USH 18/151 Real estate impacts 	<ul style="list-style-type: none"> Street light may be needed Oversized Ag equipment may have width restrictions if using turn lanes
3	RIGHT-IN/RIGHT-OUT/ LEFT-IN	<ul style="list-style-type: none"> Reduces crash potential, specifically right-angle crashes Reduces intersection conflict points by 71%. (12 vs 42) Simplifies driver decision-making task 	<ul style="list-style-type: none"> Increased delay for all intersection left-turn and sideroad thru movements Increases delay & travel time for sideroad traffic that are required to find alternate routes to USH 18/151 May increase risk of illegal U-turns Real estate impacts 	<ul style="list-style-type: none"> Street light may be needed Oversized Ag equipment may have width restrictions if using turn lanes
4	RIGHT-IN/RIGHT-OUT	<ul style="list-style-type: none"> Lowest-cost alternative Safest alternative, eliminating all angle crashes Reduces intersection conflict points by 86%. (6 vs 42) Offset alignments could be used to reduce R/W impacts and cost Simplifies driver decision-making tasks 	<ul style="list-style-type: none"> Increased delay for all intersection left-turn and sideroad thru movements Limits access, by eliminating sideroad left turn and thru movements Increased delays and travel time for restricted movements that are required to find alternate routes May increase risk of illegal U-turns Real estate impacts 	
5	RESTRICTED CROSSING U-TURN (RCUT) - NO LEFT TURNS	<ul style="list-style-type: none"> Maintains access to all movements at the intersection Reduces crash potential, specifically right-angle crashes Reduces intersection conflict points by 57%. (18 vs 42) Offset alignments could be used to reduce R/W impacts and cost Simplifies driver decision-making task 	<ul style="list-style-type: none"> Second-highest cost alternative Increased delay for all intersection left-turn and sideroad thru movements Real estate impacts 	<ul style="list-style-type: none"> Requires street lighting
6	RESTRICTED CROSSING U-TURN (RCUT)	<ul style="list-style-type: none"> Maintains access to all movements at the intersection Reduces crash potential, specifically right-angle crashes Reduces intersection conflict points by 43%. (24 vs 42) Simplifies driver decision-making tasks 	<ul style="list-style-type: none"> Highest-cost alternative Increased delay for sideroad left-turn and thru movements Real estate impacts 	<ul style="list-style-type: none"> Requires street lighting Oversize Ag equipment may have width restrictions if using turn lanes

APRIL 2023



PROJECT ID 1204-00-06/76
 DODGEVILLE - MOUNT HOREB
 (CTH YZ INTERSECTION)
 USH 18/151, IOWA COUNTY

DESIGN ALTERNATIVES
 SUMMARY

Prior RCUT installations

RCUT intersections can dramatically improve safety compared to traditional intersections. Studies in Wisconsin and throughout the US have shown decreases in crashes that involve injuries and fatalities from 30% up to 90% reduction compared to conditions before the RCUT's were constructed. Locations in Wisconsin have shown reductions in total crashes up to 80%. In addition to significant crash reductions, driver delay can be reduced by nearly half with RCUT intersections.

Proposed traffic impacts

Construction is currently scheduled for 2027. During construction, US 18/151 is expected to remain open and be reduced to one lane of traffic in each direction with staged construction. County Y/YZ is expected to be closed to traffic.

Real estate

Additional right-of-way will be required for this project. Property acquisition will be needed to re-align County Y/YZ for each of the alternatives under evaluation, aside from the No Build option. County Y/YZ re-alignment impacts are shown on the exhibits.

Project update/next steps

- Public Information Meeting #1 -- April 19, 2023
- Phase II Intersection Control Evaluation -- June 2023
- Alternative selected and project moved to design phase -- Summer 2023

Project Website

Please reference [WisconsinDOT.gov](https://wisconsinDOT.gov) for additional information and updates regarding the project:

<https://wisconsinDOT.gov/Pages/projects/by-region/sw/us18-countyyz/default.aspx>

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 **May 19, 2023** or leave them in the comment box tonight. You can also e-mail 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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Public Involvement Meeting Comment Form

Project ID 1204-00-06/76
Dodgeville to Mount Horeb
US 18/151, County YZ Intersection
Iowa County

April 19, 2023

Please place this form in the comment box or mail by **May 19, 2023** to the address on the back of this sheet. Comments can also be e-mailed to derek.potter@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)

The information in this document including names, addresses, phone numbers, e-mail 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.

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Wisconsin Department of Transportation – Southwest Region

2101 Wright Street

Madison, WI 53704

Attn: Derek Potter

Fold here and staple to mail