

Frequently Asked Questions

WIS 32 and County Road V – Sheboygan County

1. How many crashes have occurred at the WIS 32 & County V intersection?

For analysis purposes, all WisDOT project use the most recent 5-year crash data. From 2017 to 2023, 15 total crashes occurred at the WIS 32 & County V intersection:

- 7 crashes resulted in injuries and 1 fatal crash occurred
- 12 crashes were right angle crashes, which tend to be the most severe
- 14 crashes were failure to yield to oncoming traffic and 1 crash was failure to stop at the stop sign on County V

For a longer crash history, the team looked at crashes since 2000, in which 36 total crashes occurred at the WIS 32 & County V intersection:

- 16 crashes resulted in injuries and 2 fatal crashes occurred
- 28 crashes were right angle crashes, which tend to be the most severe
- 28 crashes were failure to yield to oncoming traffic and 1 crash was failure to stop at the stop sign on County V

Looking at this data for the last 25 years shows that 1.5 crashes per year averagely occurs at the WIS 32 & County V intersection. In 2022, flashing red lights were added to the stop signs on County V. Since then, 5 crashes have occurred, meaning 1.7 crashes per year averagely occurred in the last 3 years. This indicates that the flashing red lights have not helped to reduce crashes.

2. What is contributing to the crashes at the WIS 32 & County V intersection?

Approximately 80% of crashes over the last 25 years were failure to yield type crashes, meaning traffic on County V stops for the stop signs, but then fails to yield to oncoming WIS 32 traffic. There are two vision issues related to the existing geometry within the intersection that could be causing these types of crashes:

- Vertical curve (dip in the roadway) on WIS 32 north of County V – If an oncoming vehicles is within that vertical curve on WIS 32 north of County V, it is often not seen by vehicles stopped on County V. it is a likely scenario that traffic on County V will stop for the stop sign, look to the north and think there is nobody on WIS 32, look to the south and there is nobody there so they proceed through the intersection and are hit by the southbound WIS 32 vehicle that was within the vertical curve to the north.
- Trees and buildings blocking the view – There are several large trees and a farmhouse in the northeast quadrant of the intersection. These items are within the intersection vision

clearance area that is typically required at intersections. It is likely that drivers on County V stop for the stop sign but cannot properly see oncoming traffic due to the trees and farmhouse. Drivers would need to pull ahead, beyond the stop sign. Similarly, drivers on WIS 32 would not be able to see vehicles on the eastern leg of County V either approaching or stopped at the stop sign, which reduces their opportunity to avoid crashes if County V drivers err in their movements.

3. Were any other alternatives considered besides a roundabout, especially an alternative to create an all-way stop at this intersection?

At the beginning of the project, the design team evaluated installing stop signs on all approaches of the intersection (all-way stop), an offset T intersection, and a roundabout. In the evaluation, the all-way stop and offset T intersection were eliminated from consideration and the roundabout alternative was brought to the public in February 2025.

However, additional alternatives were brought up by the public, including more emphasis on creating an all-way stop, installing rumble strips on the County V approaches, and improving the sight lines at the intersection. The team then analyzed all alternatives in more detail. Additional information and exhibits for each alternative are included on the project website and below.

- Vision Improvements – This alternative would improve the vertical curve on the north leg of WIS 32 and clear the trees and buildings that are within the intersection vision clearance area. While this addresses the likely issues for crashes, it would relocate the family that owns and operates the adjacent farm. There are other alternatives that address the needs of the project without significant impacts to adjacent properties.
- Transverse Rumble Strips – This alternative would install transverse rumble strips on the County V approaches, to indicate to drivers that they will need to stop ahead. However, the crash data shows that crashes are not occurring because drivers miss the stop sign and that the flashing red lights have not helped reduce crashes. Therefore, transverse rumble strips would not solve the safety problems at this intersection.
- All-Way Stop – This alternative would convert the two-way stop intersection to an all-way stop intersection with overhead stop signs, flashing lights, and improved geometry. Stop conditions on rural portions of state highways is not typically permitted unless all other options have been determined to be not feasible. For that reason, it was eliminated from consideration early in the project because there were other feasible alternatives.

However, this was a favored alternative by the public comments received and therefore, the team evaluated this alternative further. Implementing an all-way stop as originally described would cost \$1.5 Million and impact 1.4 acres of adjacent properties. Additionally, in order to even implement an all-way stop on state highways, certain criteria (or warrants) have to be

met related to traffic volumes, crash data, roadway functionality, and geometry. Through this analysis, it was determined that the WIS 32 & County V intersection does not meet warrants for an all-way stop to be implemented.

- Offset T – This alternative would realign the western leg of County V further to the south to create two closely spaced, but offset T intersections. The concept of an offset T intersection is that conflict points, or potential conflicting movements where a crash could occur, are reduced but through traffic is maintained on WIS 32. An offset T intersection would cost \$2.4 Million and impact 4.6 acres of adjacent properties.
- Single-Lane Roundabout – This alternative would reconstruct the intersection as a single-lane roundabout. The concept of a roundabout is that conflict points, or potential conflicting movements where a crash could occur, are reduced and the flow of traffic is maintained for all directions. A single-lane roundabout would cost \$2.8 Million and impact 1.1 acres of land.

4. Why can't a cheaper alternative be considered to improve the WIS 32 & County V intersection?

A summary of impacts and costs for each alternative that was analyzed for the WIS 32 & County V intersection is provided in the table below.

Alternative	Relocation	Right of Way Impacts	Construction Cost
Vision Improvements	1 farmhouse	0.2 acres	N/A ¹
Rumble Strips	None	None	\$15,000
All-Way Stop	None	1.4 acres	\$1.5 Million
Offset T	None	4.6 acres	\$2.4 Million
Roundabout	None	1.1 acres	\$2.8 Million

¹ Construction costs cannot be provided since the cost of the relocation is unknown at this time.

As noted by the table, the other alternatives explored are not less costly in the grand scheme of everything. While the rumble strips are the cheapest alternative, they will not improve safety at the intersection since crash data is already showing that people stop for the stop signs on County V. The all-way stop is the next cheapest alternative, but it would still impact more land than the roundabout alternative and is not an implementable alternative since all-way stop warrants are not met. The offset T intersection is the next cheapest alternative and is a feasible option, but it impacts more than four times the amount of land than the roundabout alternative, only saves 14% cost, and is not likely to reduce crashes or improve safety as much as the roundabout alternative.

Roundabouts are shown to reduce fatal and life-changing injury crashes by 84% and all other injury crashes by 39%, which significantly outweighs the slightly higher cost and similar impacts the roundabout alternative has compared to other alternatives.

5. Can the speed limit be reduced on WIS 32 in this area?

Lower speed limits are often viewed as a quick fix to traffic safety, but this is not always the case. Crashes are most often the result of other factors. In many cases, posting a lower speed limit creates a greater speed variance between the slowest and fastest vehicles. This speed variance, also called “speed differential”, can contribute to increased and more severe crashes, making roadways less safe. Additional information about how speed limits are determined for various highways can be found here: <https://wisconsindot.gov/Pages/doing-bus/local-gov/traffic-ops/speed-management/default.aspx>

Roundabouts are designed in such a way that requires all traffic (even through movements) to reduce their speed as they approach and circulate the roundabout. This would in effect, lower the speeds naturally within the intersection.

6. Has WisDOT implemented roundabouts in other rural, farming communities?

There are hundreds of roundabouts throughout Wisconsin, many at rural intersections and near farming operations. For more than 20 years, roundabouts have become a popular intersection treatment in Wisconsin because of their safety benefits while maintaining mobility.

WisDOT has an interactive map through the roundabout information website where you can view all roundabouts within the state of Wisconsin on all roadway systems (local and state owned). The map can provide information on the location, roundabout type, and year it opened. Visit this website to learn more about roundabouts and view the interactive map:

<https://wisconsindot.gov/Pages/safety/safety-eng/roundabouts/default.aspx>

7. How will heavy, slow moving farm equipment navigate the roundabout and access adjacent properties?

Roundabouts are designed to accommodate larger farm equipment and semi-trucks for all movements. Designers use software that models what turning movements for different vehicles would be and adjusts the design to meet the needs. The roundabout itself and the approaches are wide enough to handle farm tractors, combines, semi's, and other large equipment that would normally travel on a state or county highway. All access to and from driveways adjacent to the roundabout are designed to handle the turning movements for these larger vehicles. The openings in the raised medians are wide enough to accommodate the large turning needs of farm equipment.

Additionally, the roundabout will promote slower speeds in and around the intersection vicinity, providing safer opportunities for slow moving equipment to enter or cross the highway.