

Project Purpose

The purpose of this project is to address crash frequency, severity, and improve traffic flow at the intersection of ND 13 and ND 32, 1 mile east of Gwinner.

Transportation

Background Information

Be Legendary

This intersection of two state highways experiences relatively high traffic volumes and is in proximity to Doosan Bobcat in Gwinner, CHS, a regional garbage dump, and other generators of truck traffic. The intersection is stopcontrolled on the north and south legs while the east and west legs are free flowing with a speed limit of 65 mph. The east and west legs of the intersection have left and right turn lanes and are marked as no passing zones with 'Trucks Entering Ahead' and intersection warning signs. The south leg of the intersection has a 'Stop Ahead' warning sign, rumble strips, and a flashing LED Stop sign. There is also destination lighting in the SE corner of the intersection.

This intersection was ranked as the 3rd highest crash location in rural ND from 2016-2020 based on severity. Below is a table of the crash history here from 2007-2024. Northbound traffic often fails to yield, resulting in a high number of angle crashes.

| | | | Crash Type | | | Severity | | |
|------|---------------|-------------|------------------------|------------------------|-------------|----------|---|---|
| | | | NB+EB | WB | /eh. | | | |
| Year | Start Date | End Date | $\rightarrow \uparrow$ | $\downarrow\downarrow$ | Single Veh. | к | A | В |
| 1 | 1/1/07 | 12/31/07 | 1 | | | 1 | | |
| 10 | 1/1/16 | 12/31/16 | | 1 | | | 1 | |
| 11 | 1/1/17 | 12/31/17 | 1 | | | | 1 | |
| 12 | 1/1/18 | 12/31/18 | | | | | | |
| 13 | 1/1/19 | 12/31/19 | | | | | | |
| 14 | 1/1/20 | 12/31/20 | 2 | | 1 | 1 | 1 | 1 |
| 15 | 1/1/21 | 12/31/21 | | | | | | |
| 16 | 1/1/22 | 12/31/22 | | | | | | |
| 17 | 1/1/23 | 12/31/23 | | | 1 | | 1 | |
| 18 | 1/1/24 | 8/31/24 | | | | | | |
| | | | 4 | 1 | 2 | 2 | 4 | 1 |

K Fatalities

A Incapacitating Injuries

B Non-incapacitating Injuries



Project Information

The NDDOT and representatives from the county and city collaborated to review current safety countermeasures and determine various alternatives to reduce crashes at this location. Through this process, it was determined to explore the installation of a roundabout. Two alternatives being carried forward are described below.

Alternative A: No Build

Estimated Cost - \$0

Under this alternative, no changes will be made to the existing intersection.

Alternative B: Roundabout & Lighting

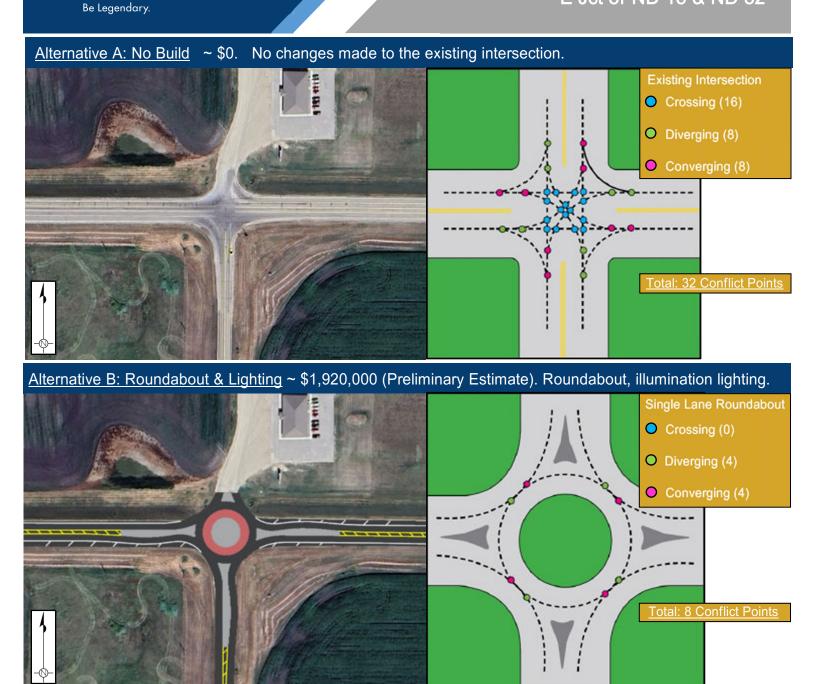
Estimated Cost - \$1.92 million

This alternative proposes a roundabout and illumination lighting to address safety and operations at the intersection of ND 13 and ND 32, 1 mile east of Gwinner. The roundabout would be retrofitted into existing conditions to keep the intersection open to traffic during construction, reduce total cost of the project, and reduce construction duration. Lighting would be installed at each leg of the intersection and along the highway west of the intersection to Gwinner city limits to provide more visibility for drivers approaching the roundabout.

Roundabout Considerations:

- Safety reduce fatalities and serious injury crashes
- Design can accommodate large trucks and other large vehicles
- Keeps traffic moving
- Maintenance snowplow operations will be different to clear intersection properly





Project Cost & Funding

NORTH

Dakota

Transportation

Federal 90%

& State 10%

Anticipated Project Timeline

- Public Involvement Fall 2024
- Plans Complete Fall 2025
- Construction Pending Available Funding (Anticipated 2026)

Public Input Opportunity

Comments can be submitted by mail or email by November 12th, 2024 to: Email: rfrolek@nd.gov

Mail: Ryan Frolek, P.E. NDDOT - Design Division Upson Hall I Room 218 243 Centennial Dr, Stop 8115 Grand Forks, ND 58202-8115

> HEN-8-032(051)020, PCN 24189 Safety Improvements

Public Input Meeting