

Highway Safety Improvement Program Formal Funding Application

General Project Information

| | |
|---------------------------|--|
| Project Sponsoring Agency | ODOT D8 |
| Project Name | CLI US 22 @ SR-380/Creek Rd |
| PID | TBD |
| Applicant Name | Bree Hetzel |
| Contact Phone | 513-933-6624 |
| Contact Email | brianne.hetzel@dot.ohio.gov |

Location Information

| | | | |
|----------------|--------|-----------------|---------|
| ODOT District | 8 | County | CLI |
| Route Number | US-22R | Road Name | US-22 |
| Begin Logpoint | 2.570 | End Logpoint | 2.670 |
| Begin Latitude | 39.436 | Begin Longitude | -83.946 |
| End Latitude | 39.436 | End Longitude | -83.944 |

Project Description

Summary of Crash Patterns

Crash data from 2022-2024 at the intersection of CLI US-22 and SR-380/Creek Rd shows 20 total crashes with an average of 6.67 crashes per year and a 60% injury rate. There were 15 angle crashes, of which 1 was serious injury, 7 minor injury, 1 injury possible and 6 PDO. There were also 2 rear end crashes (1 minor injury, 1 PDO), 1 PDO sideswipe passing crash, 1 minor injury fixed object crash and 1 minor injury head on crash. The majority of the angle crashes involved SB SR-380 vehicles pulling out in front of NB/EB US-22 vehicles (7 crashes with 4 injury). There were also 5 angle crashes involving NB Creek Rd vehicles pulling out in front of SB/WB US-22 vehicles, with 2 resulting in injury.

Summary of Recommended Countermeasures

Based on the history of angle crashes, a single lane modern roundabout is being recommended.

Project Priority Information

This intersection is ranked #123 on the 2024 HSIP Rural intersection ranking list. This intersection does not appear on the current SIP map.

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Crash Data

| Crash Totals (average per year) | Fatal & Serious Injury (KA) | Visible Injury (B) | Non-Visible (C) | Property Damage Only (O) | Total |
|--|-----------------------------------|-----------------------|-----------------------|--------------------------------|-------|
| | Fatal Injury (K) | Serious Injury (A) | Visible Injury (B) | Non-Visible (C) | Total |
| Existing Conditions: Predicted Crash Frequency | 0.2930 | 0.7104 | 0.4731 | 2.5422 | 4.02 |
| Existing Conditions: Expected Crash Frequency | 0.4242 | 1.0278 | 0.6847 | 2.5896 | 4.73 |
| Potential for Safety Improvement | 0.1312 | 0.3174 | 0.2116 | 0.0474 | 0.71 |
| Proposed Conditions: Expected Crash Frequency | 0.0050 | 0.0415 | 0.0514 | 1.0942 | 1.19 |
| Observed Crashes | 0.3333 | 3.3333 | 0.3333 | 2.6667 | 6.67 |

Observed People Injury Totals

| Fatal Injury (K) | Serious Injury (A) | Visible Injury (B) | Non-Visible (C) | Total |
|---------------------|-----------------------|-----------------------|--------------------|-------|
| 0.0000 | 0.6667 | 4.6667 | 1.0000 | 6.33 |

Application Scoring

| Category | Scoring Value | Points Awarded | Points Possible |
|--|---------------|-------------------|--------------------|
| Ratio of Observed Fatal and Serious Injuries to Observed Total Crashes | 0.10 | 20 | 30 |
| Percentage of the Potential for Safety Improvement to Total Expected Crashes | 15.01% | 12 | 20 |
| Relative Severity Index | 53,781.94 | 20 | 20 |
| Equivalent Property Damage Only Index | 6.71 | 20 | 20 |
| Location Equity Measure | 10.34% | 2 | 10 |
| | Total | 74 | 100 |

Safety Key Metrics

| | | | |
|----------------------------|-----------------------------|--|------|
| Functional Class | 5 - Major Collector Roadway | Active Transportation Need | 1 |
| Major Route AADT | 5,030 | Active Transportation Demand | 1 |
| Maximum Posted Speed Limit | 55 | Bicycle Level of traffic stress (if available) | |
| | | TOAST Score (if available) | 0.88 |

Strategic Highway Safety Plan

| | |
|--------------------------------|---|
| Ohio Emphasis Area | Serious Crash Types |
| Ohio Emphasis Area Subcategory | Intersection |
| FHWA Emphasis Area | Improving the design and operation of highway intersections |
| FHWA Improvement Category | Intersection traffic control |
| FHWA Improvement Subcategory | Modify control - two-way stop to roundabout |

Work Locations

| NLFID | Begin Logpoint | End Logpoint | Begin Latitude | Begin Longitude | Location Termini (i.e. from Street 1 to Street 2) |
|----------------|-------------------|-----------------|-------------------|--------------------|--|
| SCLIUS00022**C | 2.570 | 2.670 | 39.436 | -83.9460 | US-22 @ SR-380/Creek Rd |

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| Project Funding | | | | | | | |
|-------------------------|-------------------------------------|---------------------------|--------------------------|--------------------------|----------------------------|-----------------------|-----------------------|
| Project Phase | Safety Study | Interchange Mod. Study | PE - Environmental | PE - Detailed Design | Right of Way /Utilities | Construction | Total |
| Fiscal Year | | | 2026 | 2028 | 2028 | 2029 | |
| Project Phase Completed | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | N/A | |
| Previous Safety | | | | | | | \$0.00 |
| New Safety | | | \$400,000.00 | \$125,000.00 | \$200,000.00 | \$2,750,000.00 | \$3,475,000.00 |
| Sponsor Funding | | | | | | | \$0.00 |
| Total | \$0.00 | \$0.00 | \$400,000.00 | \$125,000.00 | \$200,000.00 | \$2,750,000.00 | \$3,475,000.00 |

Additional Funding Detail
District requesting funding to be combined with the WAR-22 RAB application to be designed and constructed together on the January 2026 programmatic

| Safety Economic Analysis Results | | | |
|---|----------------|---|---------------|
| Net Present Value of Project | \$3,475,000.00 | Net Benefit | -\$288,210.87 |
| Net Present Value of Safety Benefits | \$3,186,789.13 | Benefit / Total Project Cost Ratio | 0.92 |
| | | Benefit / Safety Funding Request Ratio | 0.92 |

| Project Development | | |
|----------------------------|--------------|-----------------|
| Project Phase | Completed by | Completion Date |
| Safety Study | ODOT D8 | 3/12/2025 |

| Applicant Information | | |
|------------------------------|-----------------------------|----------------|
| Name | Title | Phone Number |
| Brianne Hetzel | D8 Traffic Studies Engineer | 513-933-6624 |
| Signature | | Date |
| | | March 21, 2025 |

Version: 20230523

The following information should be included in submission of the safety project application:

1. An electronic copy of the Safety Engineering Study
2. All Excel Analysis Files
May include Crash Analysis Module (CAM) Tool, Economic Crash Analysis Tool (ECAT), HSIP Application and Scoring Tool.
3. Benefit-Cost Results (Economic Analysis)
4. DSRT approval signatures