

Highway Safety Improvement Program Formal Funding Application

General Project Information	
Project Sponsoring Agency	ODOT
Project Name	WAR US 22 19.24 (Clarksville Rd)
PID	TBD
Applicant Name	Tom Mazza
Contact Phone	513-933-6591
Contact Email	Thomas.Mazza@dot.ohio.gov

Location Information			
ODOT District	8	County	WAR
Route Number	US-22	Road Name	US-22
Begin Logpoint	19.240	End Logpoint	19.240
Begin Latitude	39.417	Begin Longitude	-83.999
End Latitude	39.417	End Longitude	-83.999

Project Description	
Summary of Crash Patterns	
<p>From 2022-2024, there were 22 total crashes at the US 22/Clarksville Rd intersection (WAR US 22 19.24). There were 7 crashes in 2022, 6 crashes in 2023, and 9 crashes in 2024. There were 0 fatal crashes, 2 serious injury crashes, 13 minor injury crashes, 4 possible injury crashes, and 3 property damage only crashes. The fatal and injury crash rate was 86.4%.</p> <p>Every crash at the US 22/Clarksville Rd intersection was an angle crash. Crashes occurred most often in dry (86%) and daylight (77%) conditions. The majority of crashes occurred between 2-7 PM. Running the stop sign is NOT a major contributing factor with only 14% of crashes resulting from running a stop sign. The most common angle crash was WB/NB with 10 occurrences. There were 15 angle crashes involving westbound vehicles on US 22.</p> <p>Historically, there have been 2-3 angle crashes at the US 22/Clarksville Rd intersection each year from 2015-2020. However, the past 4 years have seen a significant increase in the number of angle crashes. There have been at least 5 angle crashes each year from 2021-2024, with a peak of 9 angle crashes in 2024. A long-term solution is needed to eliminate the potential for high severity angle crashes.</p>	
Summary of Recommended Countermeasures	

StreetLight Data was used to create an estimated AADT and turning movement count at the intersection. This data was used to complete a signal warrant analysis utilizing ODOT's Traffic Signal Warrant Spreadsheet. Based on this analysis, a traffic signal is not warranted at the US 22/Clarksville Rd intersection. ODOT District 8 will not pursue a new traffic signal at this location because a traffic signal is not warranted and a new traffic signal is predicted to increase the number of overall crashes.
All-way stop control is not being considered at this intersection. The 85th percentile speeds on US 22 are near 60 mph and the nearest stopped conditions on US 22 are over 8 miles away in either direction (Nelson Ave to the north and SR 123 to the south).
Based on the historical crash data and past countermeasures, the recommended countermeasure at this time is to construct a single lane modern roundabout at US 22/Clarksville Rd. If funding is awarded to this project, a new traffic count will need to be collected. Then, proper traffic analysis would be completed to confirm a traffic signal is unwarranted and a single lane modern roundabout would operate sufficiently in the design year.

Project Priority Information	
Per the 2024 HSIP priority list, the US 22/Clarksville Rd intersection is ranked as rural intersection #105. 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
Existing Conditions: Predicted Crash Frequency	0.0943	0.2288	0.1523	0.8185	1.29
Existing Conditions: Expected Crash Frequency	0.2135	0.5173	0.3445	0.8483	1.92
Potential for Safety Improvement	0.1192	0.2885	0.1922	0.0298	0.63
Proposed Conditions: Expected Crash Frequency	0.0021	0.0184	0.0230	0.5928	0.64
Observed Crashes	0.6667	4.3333	1.3333	1.0000	7.33

Observed People Injury Totals

	Fatal Injury (K)	Serious Injury (A)	Visible Injury (B)	Non-Visible (C)	Total
Observed People Injury Totals	0.0000	1.0000	7.6667	4.6667	13.33

Application Scoring

Category	Scoring Value	Points Awarded	Points Possible
Ratio of Observed Fatal and Serious Injuries to Observed Total Crashes	0.14	28	30
Percentage of the Potential for Safety Improvement to Total Expected Crashes	32.81%	20	20
Relative Severity Index	54,875.84	20	20
Equivalent Property Damage Only Index	8.08	20	20
Location Equity Measure	3.00%	0	10
	Total	88	100

Safety Key Metrics

Functional Class	5 - Major Collector Roadway	Active Transportation Need	1
Major Route AADT	2,200	Active Transportation Demand	1
Maximum Posted Speed Limit	55	Bicycle Level of traffic stress (if available)	
		TOAST Score (if available)	90.80

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)
SWARUS00022**C	19.240	19.240	39.417	-83.9987	US 22 and Clarksville 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 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	\$2,373,862.00	\$3,098,862.00
Sponsor Funding							\$0.00
Total	\$0.00	\$0.00	\$400,000.00	\$125,000.00	\$200,000.00	\$2,373,862.00	\$3,098,862.00

Additional Funding Detail

District requesting funding be combined with the CLI US 22 RAB application (202503D08-02). Design and construction for both roundabouts to be completed as 1 project. Design consultant to be selected through the January 2026 programmatic.

Safety Economic Analysis Results			
Net Present Value of Project	\$2,714,862.00	Net Benefit	-\$1,753,686.75
Net Present Value of Safety Benefits	\$961,175.25	Benefit / Total Project Cost Ratio	0.35
		Benefit / Safety Funding Request Ratio	0.31

Applicant Information			
Name	Title	Phone Number	
Tom Mazza	Traffic Studies Engineer	513-933-6591	
Signature		Date	
		March 31, 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