

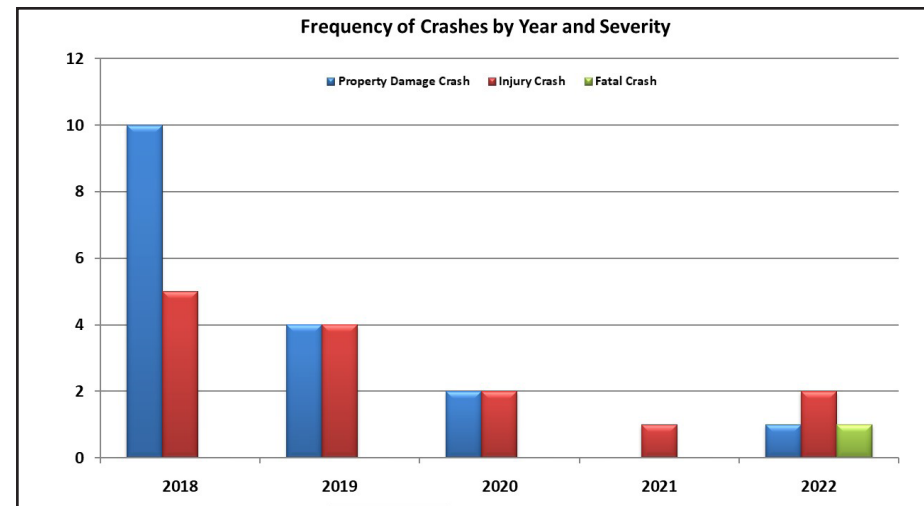
EXISTING CONDITIONS

1. Ranked #69 statewide on the 2021 Safety Analyst Rural Intersection Priority Listing
2. Previous countermeasures include backplates and signal ahead warning signs on US 42
3. High approach speeds, high truck percentages, and a red-light running pattern contribute to crash severity
4. A three-vehicle fatal crash occurred in 2022. Injury rate of 43.8% (14 crashes over 5 years between 2018-2022)
5. Meets Ohio Emphasis Areas: High Risk Drivers - 28.1% of crashes involved young drivers and Serious Crash Types - RSI Value of 52,394

APPLICATION SCORING

Category	Scoring Value	Points Awarded	Points Possible
Ratio of Observed Fatal and Serious Injuries to Observed Total Crashes	0.13	26	30
Percentage of the Potential for Safety Improvement to Total Expected Crashes	0.00%	0	20
Relative Severity Index	52,393.93	20	20
Equivalent Property Damage Only Index	3.66	12	20
Location Equity Measure	1.00%	0	10
Total		58	100

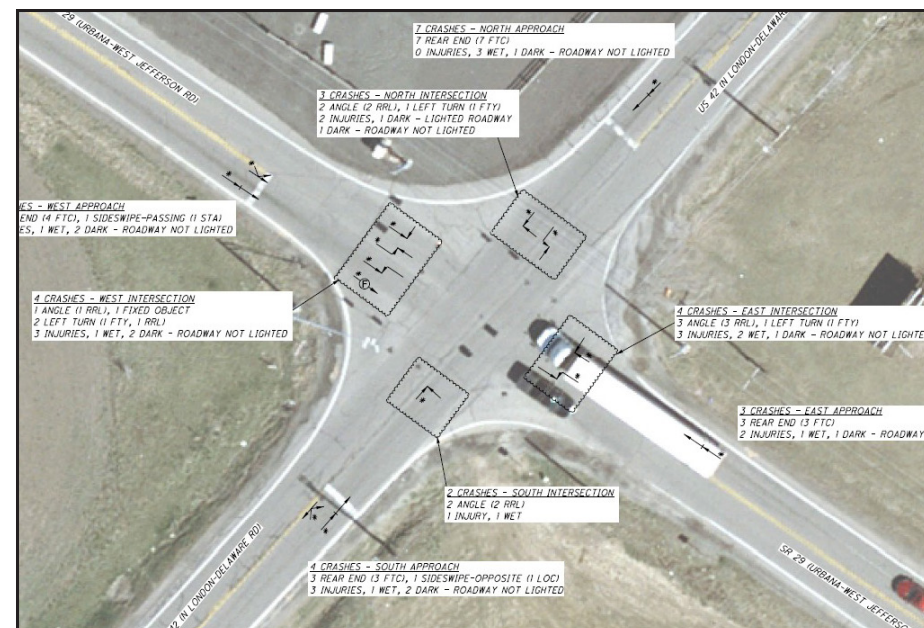
SAFETY ANALYSIS



COUNTERMEASURES

1. Convert signalized intersection to single lane roundabout
2. Roundabout design to accommodate heavy vehicles and agricultural equipment
3. Reprofile SR 29 east of the intersection to improve visibility to the roundabout

CRASH DIAGRAM



PROJECT FUNDING

Project Phase	Safety Study	Interchange Mod. Study	PE - Environmental	PE - Detailed Design	Right of Way /Utilities	Construction	Total
Fiscal Year	2024		2025	2026	2027	2028	
Project Phase Completed	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A	
Previous Safety	\$51,906.00						\$51,906.00
New Safety			\$440,000.00	\$250,000.00	\$512,000.00	\$3,648,158.00	\$4,850,158.00
Sponsor Funding							\$0.00
Total	\$51,906.00	\$0.00	\$440,000.00	\$250,000.00	\$512,000.00	\$3,648,158.00	\$4,902,064.00

PROPOSED COUNTERMEASURE



1.24 B/C Ratio

NPV OF SAFETY BENEFITS: \$5,213,592

MAD-US42-14.00

US Route 42 (N. London-Delaware Road) and State Route 29 (Urbana-West Jefferson Road) Intersection