POR US-224 at SR-225 Safety Study

- Ranked #8 on the 2020 ODOT HSIP Rural Intersection list and #1 (locally and overall) on the AMATS High Crash Intersection by Community list (2018-2020).
- Existing Conditions: Two-way stop control with dual stop signs, overhead flashing beacons, and single-lane approaches.
- High volume of northbound right turning trucks and eastbound left turning trucks overlap into oncoming lanes to make their movements.
- The PM peak has LOS E with 2022 volumes, and continues to worsen to LOS F with 2027 and 2047 volumes. Due to truck over-tracking conflicts, it is expected actual operations are likely worse than the capacity analysis results being shown.
- Compared to other countermeasures considered for this intersection, a roundabout is the optimal countermeasure to reduce the failure to yield angle crashes, best improve capacity through the future, and best improve access management.

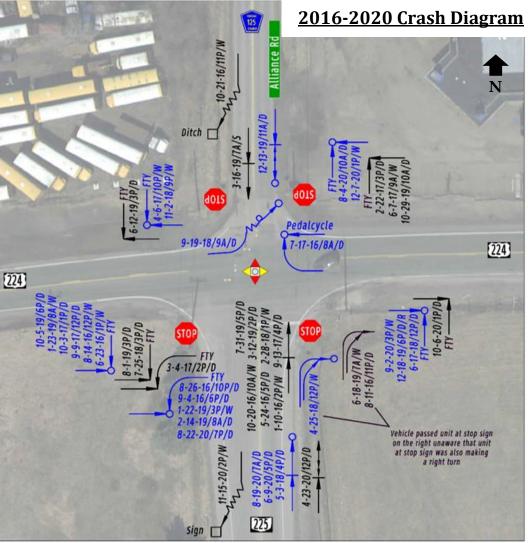
• • • •

Recommended Long- Term Countermeasure: reconfigure intersection to be a roundabout with a CR-1 single circulating lane and single lane approaches. [224] US-224/SR-225 **US-224** JOHN VASI 8186 STATE ROUTE 224 LEGEND FULL-DEPTH PAVEMENT TRUCK APRON SR-225 CONCRETE TRAFFIC MEDIAN DRIVEWAY LANDSCAPI EXISTING

Project Phase	Safety Study	Interchange Mod. Study		PE - Detailed Design	Right of Way /Utilities	Construction		
Fiscal Year	2023		2026	2026	2026	2027	Total	
Project Phase Completed	х					N/A		
Previous Safety	\$29,096.00						\$29,096.00	
New Safety			\$777,200.00	\$137,200.00	\$97,900.00	\$3,666,100.00	\$4,678,400.00	
Sponsor Funding							\$0.00	
Total	\$29,096.00	\$0.00	\$777,200.00	\$137,200.00	\$97,900.00	\$3,666,100.00	\$4,707,496.00	

Application Scoring				Benefit - Cost Calculator	Expected Annual Crash Adju	
Category	Scoring	Points	Points	Net Present Value of Project \$4,256,962.20		
Category		Awarded	Possible	Net Present value of Project \$4,256,962.20	Number of Fatal & Incapacitatin	
Ratio of Observed Fatal and Serious Injuries to Observed Total Crashes	0.09	18	30		Injury Crashe	
% of the Potential for Safety Improvement to Total Expected Crashes	25.29%	20	20	Net Present Value of Safety Benefits \$3,308,631.33		
Relative Severity Index	57,825.04	20	20		Number of Injury Crashe	
Equivalent Property Damage Only Index	6.50	20	20	Net Benefit (\$948,330.87)		
Location Equity Measure	12.00%	2	10			
	Total	80	100	Benefit / Cost Ratio 0.78	Number of Total Crashe	

Project Funding	oject Funding								
Project Phase	Safety Study	Interchange Mod. Study	PE - Environmental	PE - Detailed Design	Right of Way /Utilities	Construction	Total		
Fiscal Year	2023		2026	2026	2026	2027	Total		
Project Phase Completed	х					N/A			
Previous Safety	\$29,096.00						\$29,096.00		
New Safety			\$777,200.00	\$137,200.00	\$97,900.00	\$3,666,100.00	\$4,678,400.00		
Sponsor Funding							\$0.00		
Total	\$29,096.00	\$0.00	\$777,200.00	\$137,200.00	\$97,900.00	\$3,666,100.00	\$4,707,496.00		
Application Scoring	polication Scoring								



ROPOS TEMPOR

PING G RIGHT-OF-WAY SED RIGHT-OF-WAY RARY RIGHT-OF-WAY		Vehicle Direction Backing Pedestrian Out of Control Overturn	Injury Fatal Fixed Object Parked Vebicle TEXT Date/Time/Road/Egress Direc		ehicle	Road: FTC = Failure To Control D = Dry FTS = Failure To Stop W = Wet FTY = Failure To Yield I = Ice LOC = Left of Center S = Snow RRL = Ran Red Light OVI = Operating Vehicle Impaired		TOTAL CRASHES ON PAGE FREQUENCY CRASH SEVERI 10 2016 21 NON - INJUL 7 2018 25 INJURY OR FA 13 2019 46 TOTAL	
	Cra	sh Type	Numb	er	Percent		Crash Year	Number	Percent
	I	Angle	32		42.7%		2011	5	6.7%
	Rear End Left Turn		19		25.3%		2012	4	5.3%
			10		13.3%		2013	2	2.7%
	Fixe	Fixed Object			6.7%		2014	3	4.0%
	Right Turn Backing		3		4.0%		2015	7	9.3%
			3		4.0%		2016	10	13.3%
	Sideswi	pe – Passing	1		1.3%		2017	7	9.3%
	Ped	lalcycles	1		1.3%		2018	7	9.3%
	Ove	rturning	1		1.3%		2019	13	17.3%
n I	_				_		2020	9	12.0%
	Expec	ted Annual Cr	ash Adj	ust	ment		2021	8	10.7%
						1			

