



City of Lorain ODOT District 3

LOR-58-25.50

North Leavitt Road at Tower Boulevard
Intersection Improvements

Overview

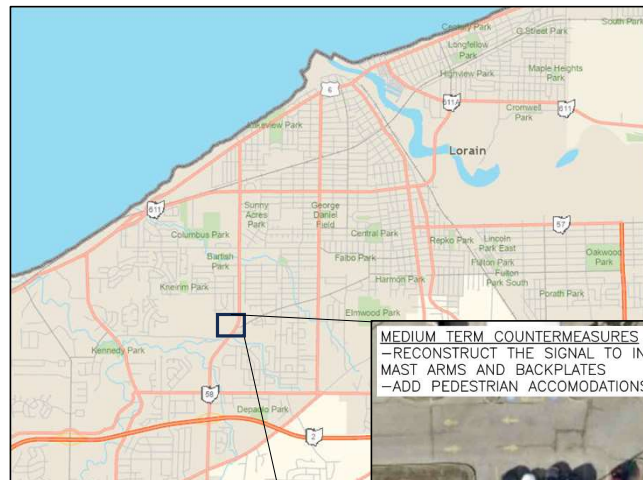
The City of Lorain has identified this intersection as a safety priority location due to crash frequency, severity, and patterns. The existing signal is a span wire installation with poor signal visibility. The proposed improvement is a new signal with backplates, supplemental signal heads, and upgraded detection and pedestrian accommodations.

Funding Request

Project Funding							
Project Phase	Safety Study	Interchange Mod. Study	PE - Environmental	PE - Detailed Design	Right of Way /Utilities	Construction	Total
Fiscal Year	2023		2025	2025	2025	2026	
Project Phase Completed	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A	
Previous Safety							\$0.00
New Safety			\$67,500.00	\$13,500.00	\$50,000.00	\$306,000.00	\$437,000.00
Sponsor Funding			\$7,500.00	\$1,500.00	\$5,000.00	\$43,700.00	\$57,700.00
Total	\$0.00	\$0.00	\$75,000.00	\$15,000.00	\$55,000.00	\$349,700.00	\$494,700.00
Additional Funding Detail							

Safety Funding Score

Ratio of Observed KA to Observed Total Crashes	0.05	10
% PSI to Total Expected Crashes	16.26%	12
Relative Severity Index	32,246	10
Equivalent PDO Index	3.02	10
Location Equity Measure	13%	2
Total		44



MEDIUM TERM COUNTERMEASURES
-RECONSTRUCT THE SIGNAL TO INCLUDE MAST ARMS AND BACKPLATES
-ADD PEDESTRIAN ACCOMMODATIONS



Calculated
Benefit/Cost
Ratio = 1.60

#2 City of Lorain's Signalized Priority Intersection
#18 NOACA's Regional Safety Priority Intersection
#634 ODOT HSIP Urban Intersection Listing

2017-2022 Crash Summary

66 Total Crashes
32% Total Injury Crashes
41% Total Rear End Crashes

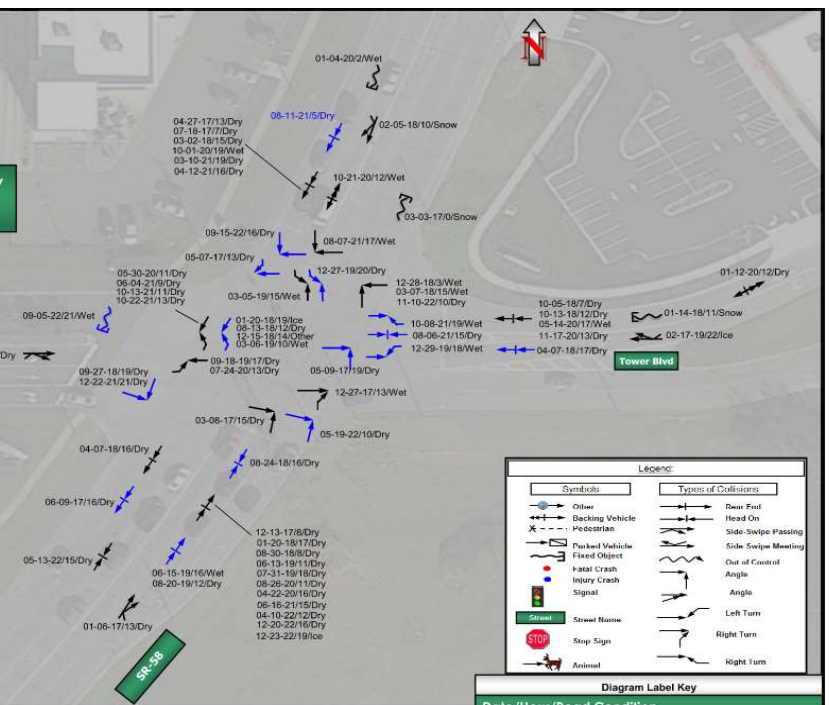
CRASH DIAGRAM

LOR-57-25.5
SR-57 & Tower Blvd.
Dates: 1/1/2017 - 12/31/2022

Crashes By Year
2017: 10 (15%)
2018: 16 (24%)
2019: 10 (15%)
2020: 10 (15%)
2021: 11 (18%)
2022: 9 (14%)
Total: 66 crashes

Crashes By Severity
Injury: 21 (32%)
PDO: 45 (68%)

Crashes By Type
Rear End: 27 (41%)
Left Turn: 13 (20%)
Angle: 10 (15%)
Fixed Object: 4 (6%)
Sideswipe-Passing: 4 (6%)
Right Turn: 3 (4.5%)
Head On: 3 (4.5%)
Backing: 2 (3%)



August 2023