

LORAIN EAST 28TH STREET CORRIDOR TLCI STUDY UPDATE

Safety and Operations Council
November 21, 2025

ACTION REQUESTED

No action is requested. This item is for information and discussion.

PREVIOUS ACTION

Phase 1 – Existing Conditions was presented to the Council in August.

PROJECT GOALS

Improve Traffic Safety



Improve Livability



Encourage Redevelopment of Vacant sites



Economic, Social, and Cultural Growth

COMPLETE STREET



Source: FHWA



LORAIN
Ohio



PROJECT STUDY AREA

2.33-mile Corridor on E. 28th Street from Broadway to Grove Avenue and half-mile buffer




LORAIN
Ohio

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Northeast Ohio Areawide Coordinating Agency

PROJECT PHASES

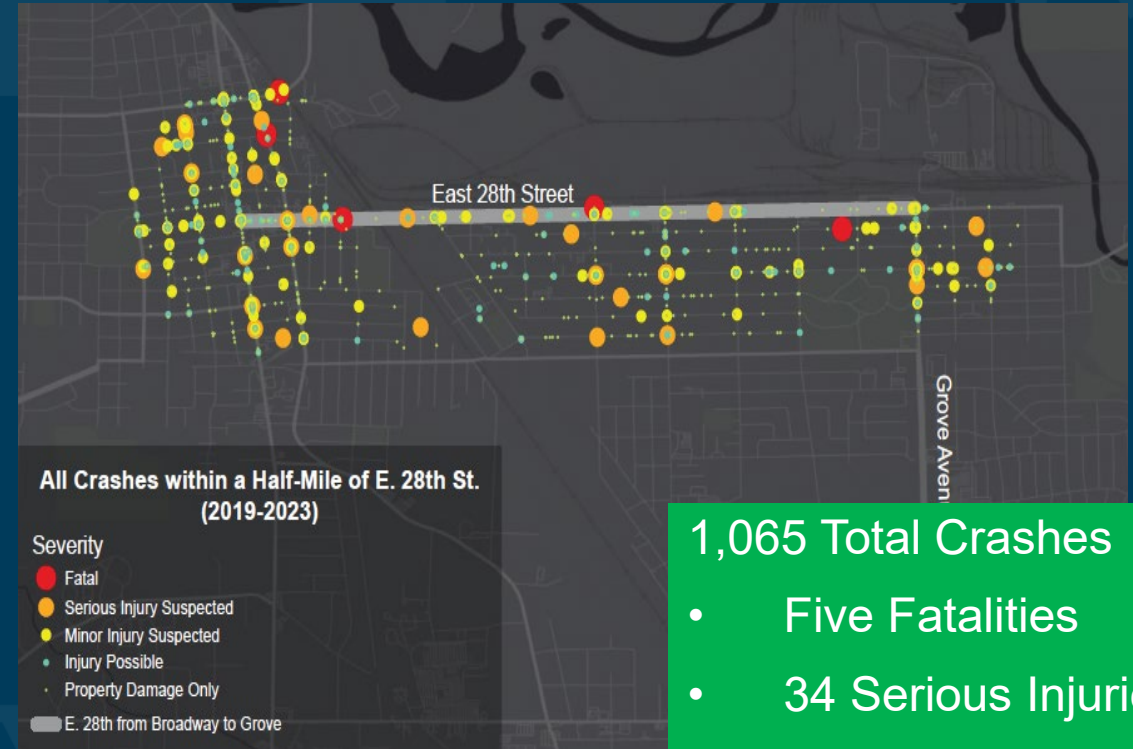
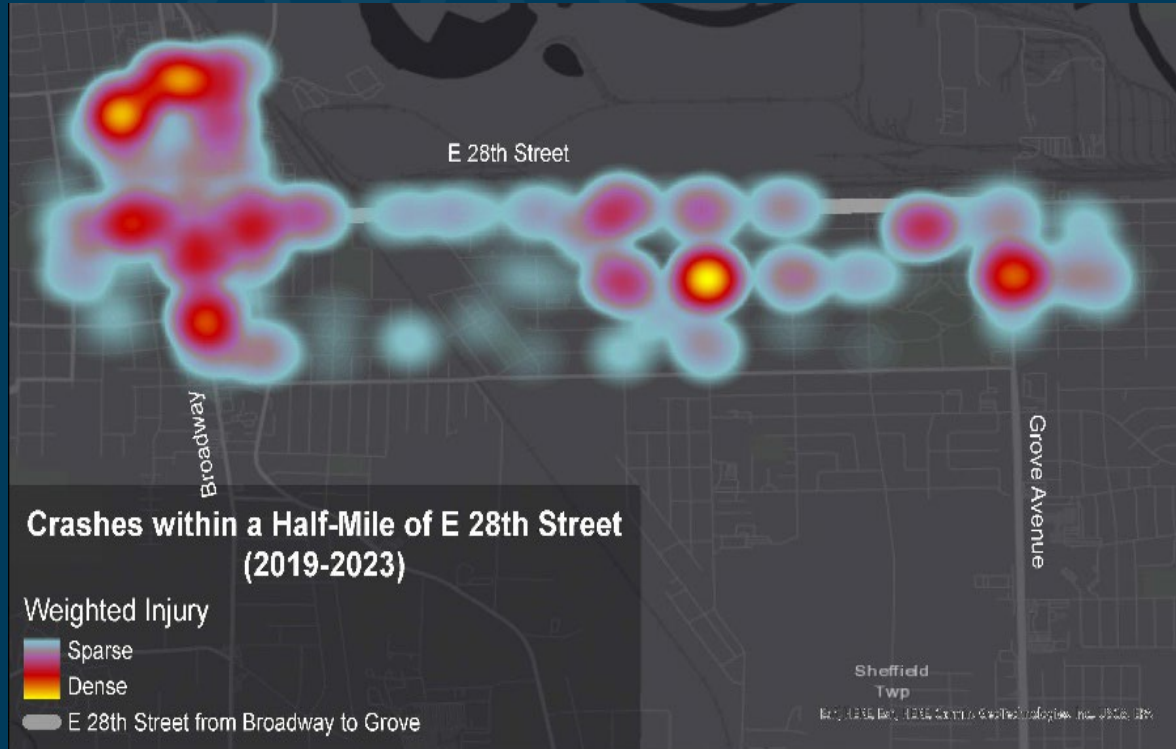
- Phase 1 – Data Collection & Existing Condition Analysis
- Phase 2 – Analysis & Alternatives Development
- Phase 3 – Analysis Refinements & Recommendations
- Phase 4 – Implementation Strategy & Documentation





PHASE 1
DATA COLLECTION & EXISTING
CONDITION ANALYSIS
(REVIEW)

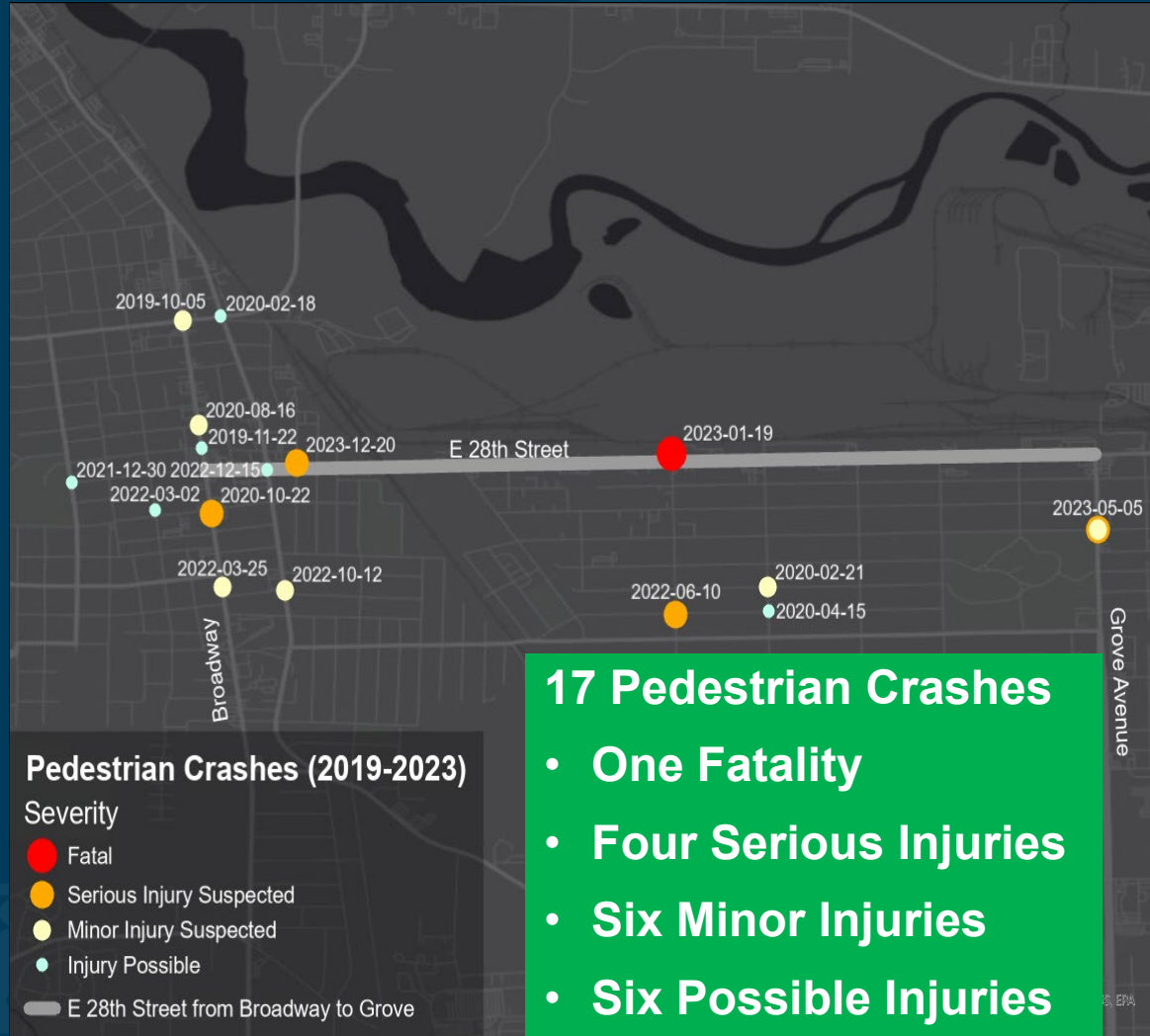
DATA COLLECTION



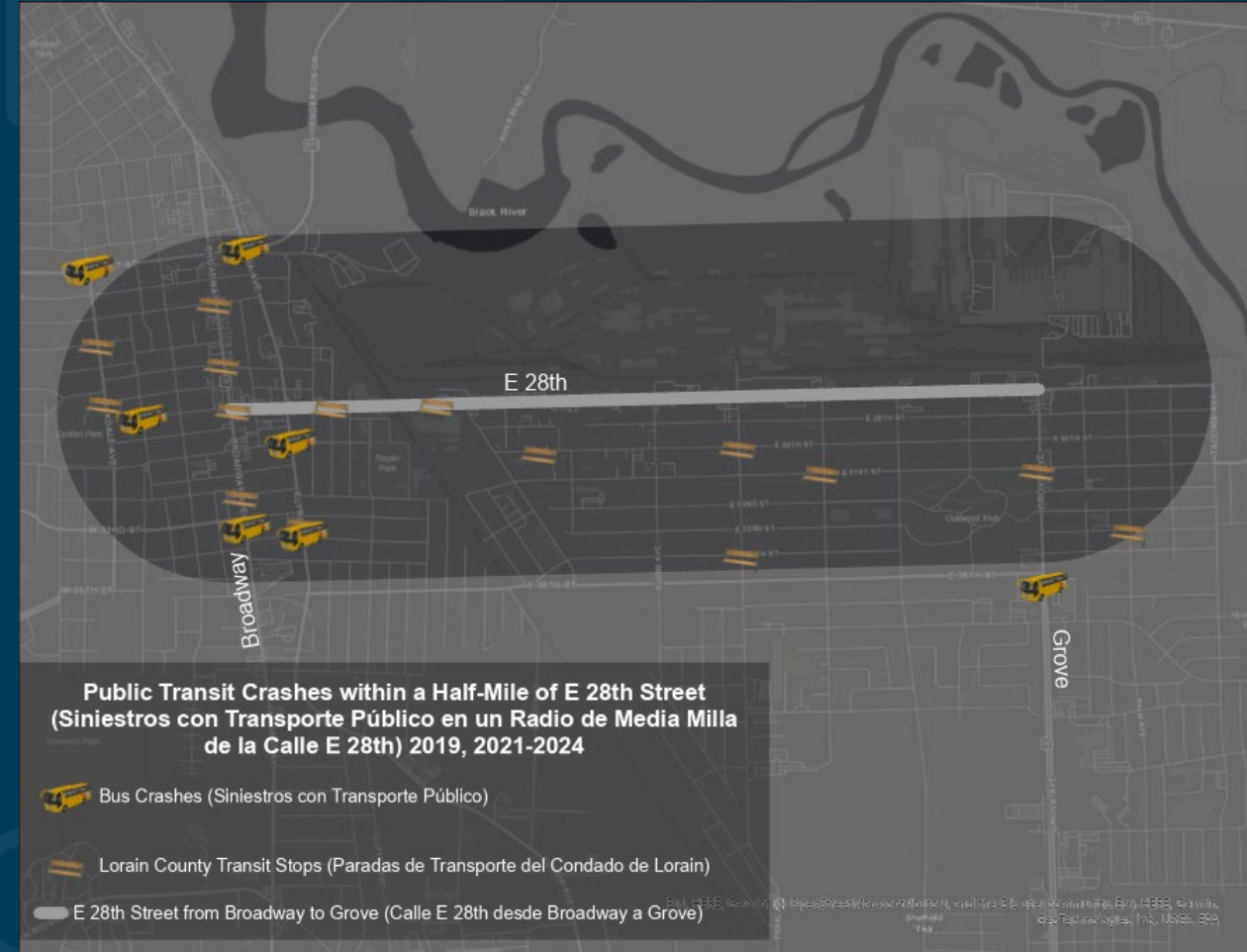
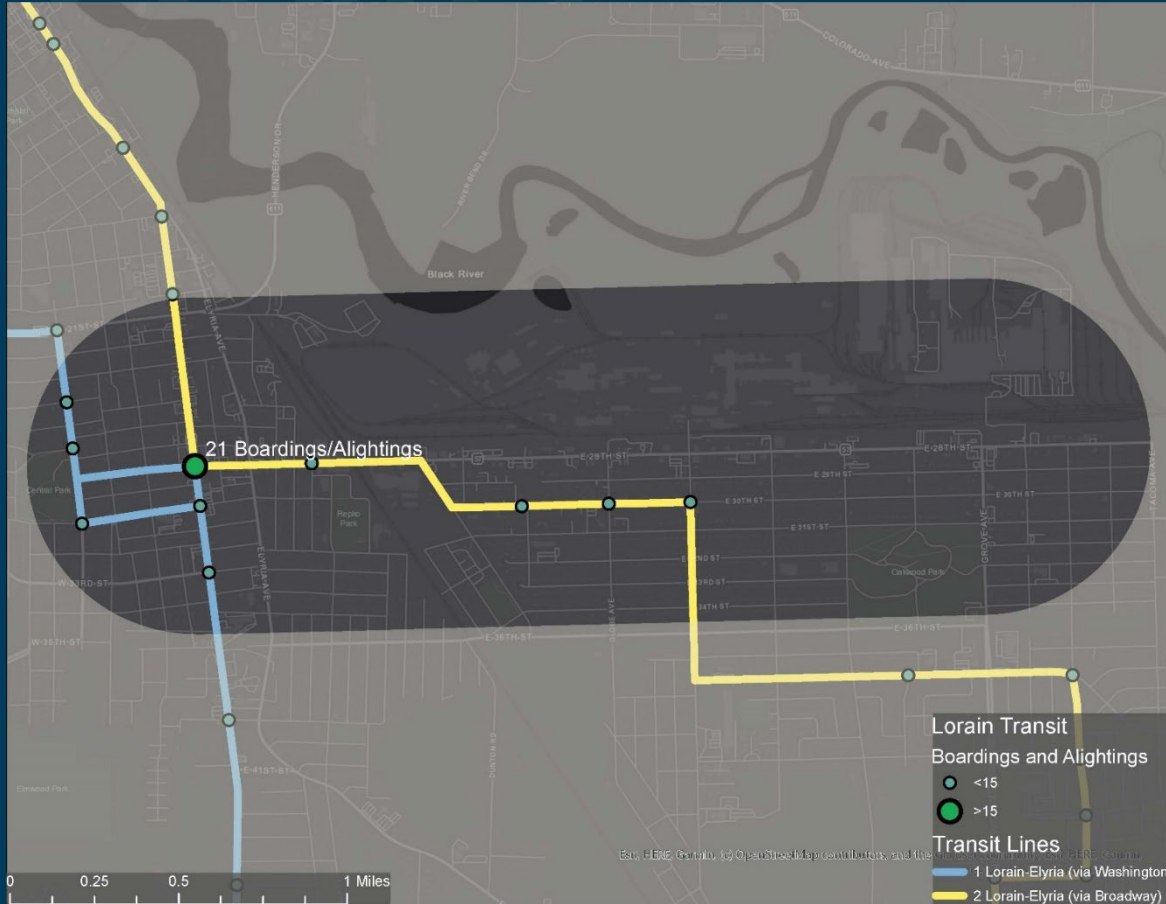
- 1,065 Total Crashes
- Five Fatalities
- 34 Serious Injuries
- 153 Minor Injuries



DATA COLLECTION

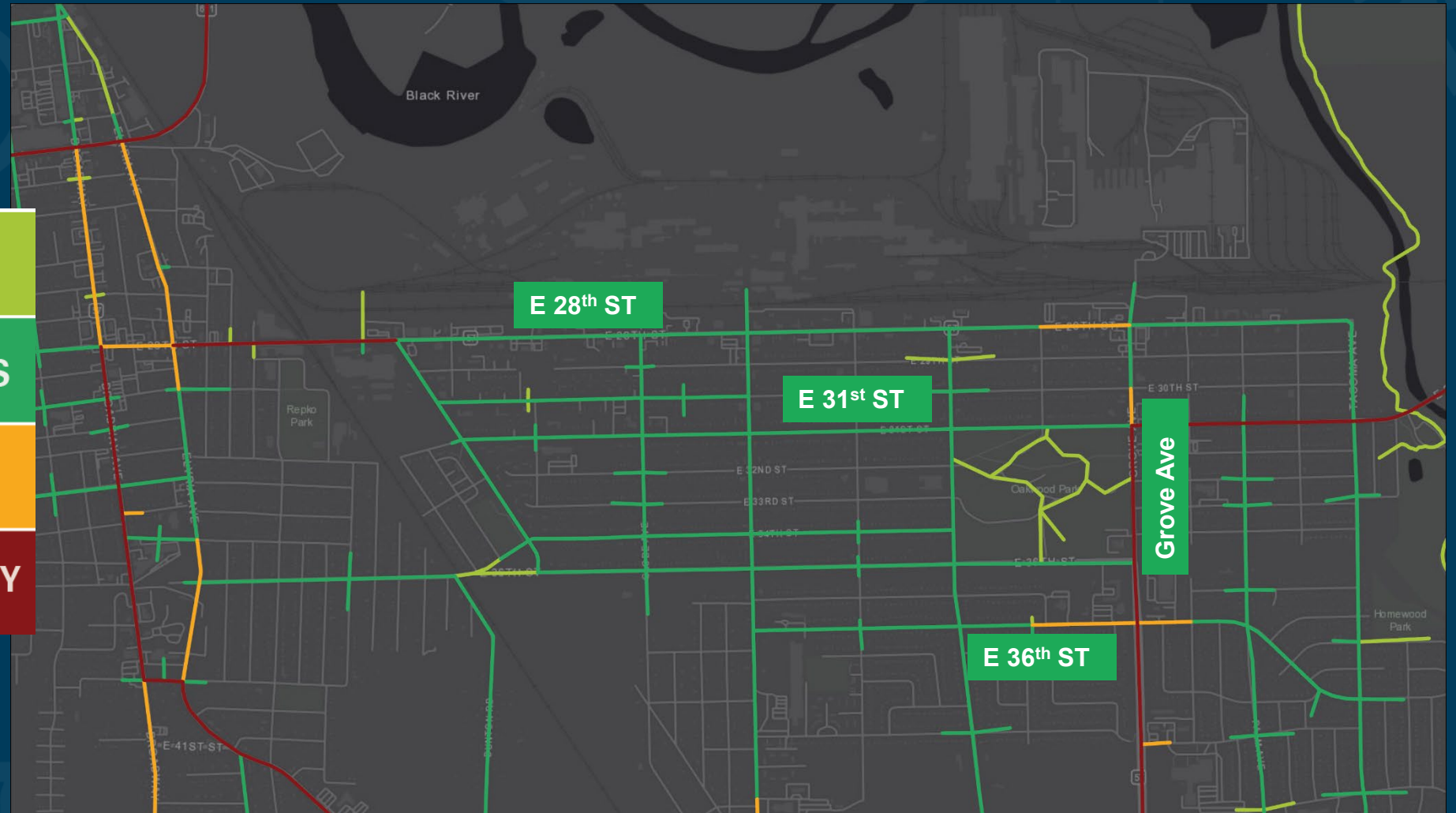


TRANSIT NETWORK & CRASHES



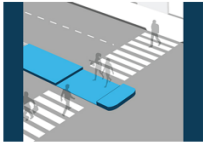
BICYCLE LEVEL OF TRAFFIC STRESS

LTS 1	CHILDREN & BEGINNERS
LTS 2	MOST ADULTS
LTS 3	CONFIDENT CYCLISTS
LTS 4	EXPERTS ONLY



PUBLIC MEETING #1

Pedestrian Facility Improvements (Mejoras en las Instalaciones Peatonales)



Pedestrian Refuge Island – Provides a safe place mid-crossing for pedestrians to wait
Isla de Refugio para Peatonales – Proporciona un lugar seguro a mitad de cruce para que los peatones esperen



Raised Crosswalk – Forces vehicles to slow down at pedestrian crossings
Paso elevado – Obliga a los vehículos a reducir la velocidad en los cruces peatonales

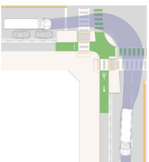


Raised Crosswalks & Rapid Flashing Beacon – Vehicles to slow down from both flashing beacon and jolt from raised crosswalk
Paso elevado y baliza intermitente rápida – Los vehículos tienen que reducir la velocidad tanto por la baliza intermitente como por el golpe del paso elevado.

Traffic Calming (Pacificación del tráfico)



Intersection Improvements (Mejoras en las Intersecciones)



Protected Intersection – Physically separates pedestrians and cyclists from vehicle traffic, including at turns

Intersección Protegida – Separa físicamente a los peatones y ciclistas del tráfico vehicular, incluyendo en las curvas.



Intersection Daylighting – Removes barriers, like parked cars, around intersections to improve the view and sight of drivers

Intersección Iluminación Diurna – Elimina barreras, como los coches estacionados, alrededor de las intersecciones para mejorar la visibilidad y la vista de los conductores.



Curb Extensions – Shortens crossing distance for pedestrians and narrows travel lanes to reduce speeding
Extensiones de Bordillo – Acorta la distancia de cruce para los peatones y estrecha los carriles de circulación para reducir la velocidad

vehicles to slow

vehicles to reduce the



gaps wide enough

velocity with spaces
 > los vehículos de
 ma

Curb Extensions – Shortens crossing distance for pedestrians and narrows travel lanes to reduce speeding

Extensiones de Acera – Acortan la distancia de cruce para los peatones y estrechan los carriles de circulación para reducir la velocidad

Speed Table – Ramped speed hump with flat top, allows cars to pass over at reasonable speeds

Meseta de Velocidad – Resalto con rampas y parte superior plana, permite que los vehículos pasen a velocidades razonables



Chicanes – Forces vehicles to slow down to maneuver curve

Chicanes – Obliga a los vehículos a reducir la velocidad para maniobrar en la curva



Roundabout – Reduces conflict and collisions through circular design that increases traffic flow

Rotonda – Reduce los conflictos y las colisiones mediante un diseño circular que aumenta el flujo de tráfico



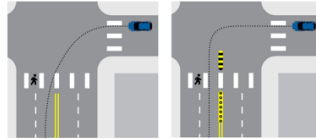
Roundabout – Reduces conflict and collisions through circular design that increases traffic flow

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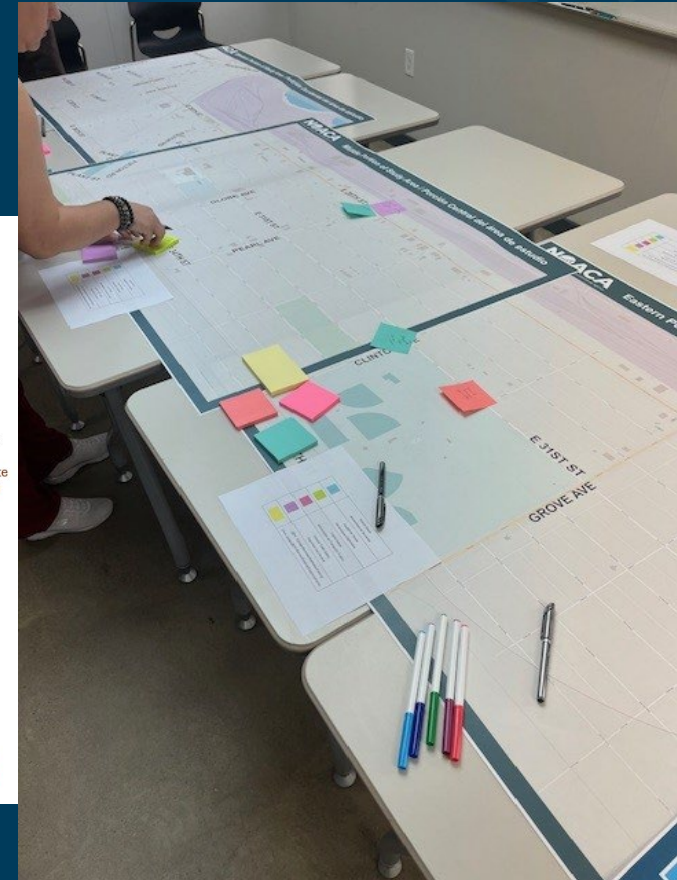
Bike Box – Allows bikes to maneuver and wait in front of vehicles at red lights to make drivers more aware

Caja para bicicletas – Permite a las bicicletas maniobrar y esperar frente a los vehículos en los semáforos en rojo para hacer que los conductores sean más conscientes.



Centerline Hardening – Eliminates the diagonal path for vehicles turning at an intersection

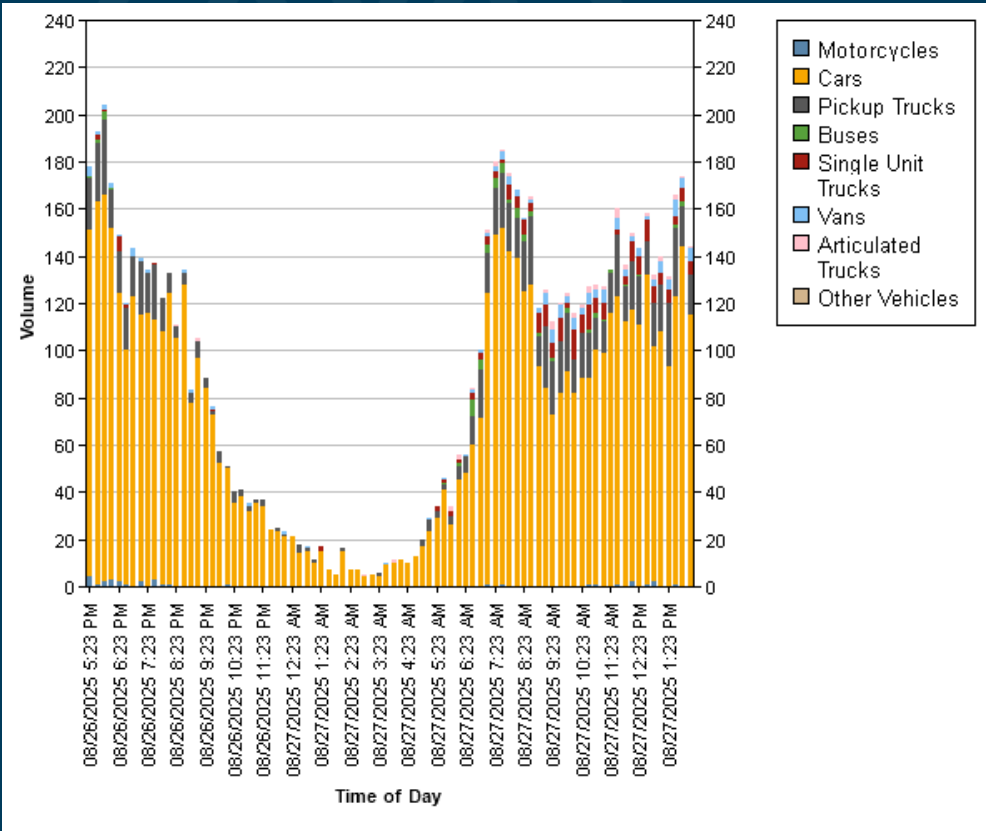
Endurecimiento de la línea central – Elimina el camino diagonal para los vehículos que giran en una intersección



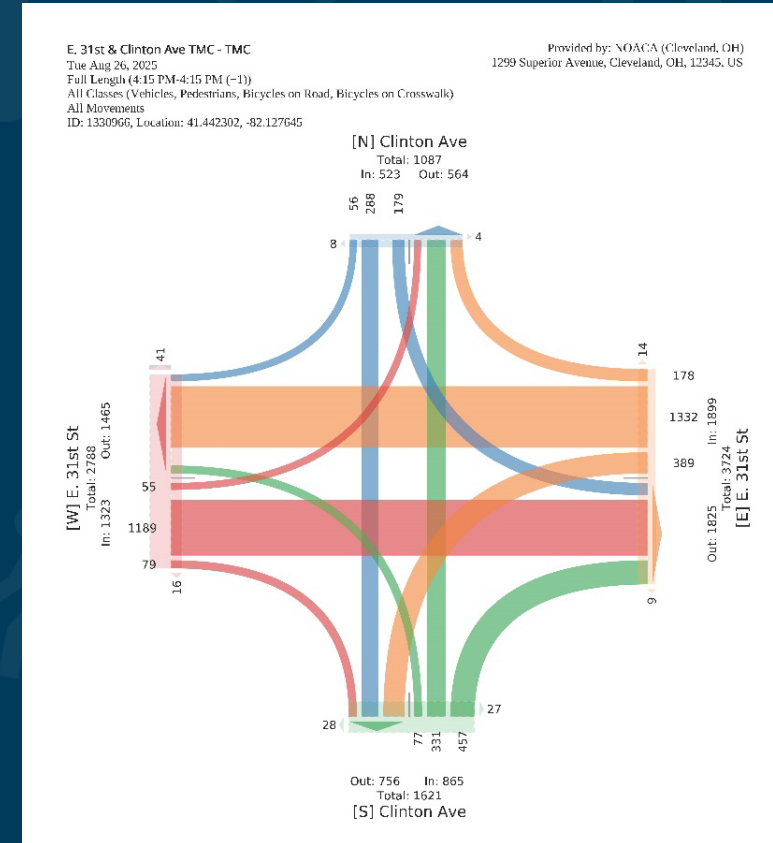
The background is a dark blue gradient with faint, light blue icons of a bicycle, a car, a bus, and a pedestrian scattered across it.

PHASE 2 ANALYSIS & ALTERNATIVES DEVELOPMENT

COLLECTING TRAFFIC DATA



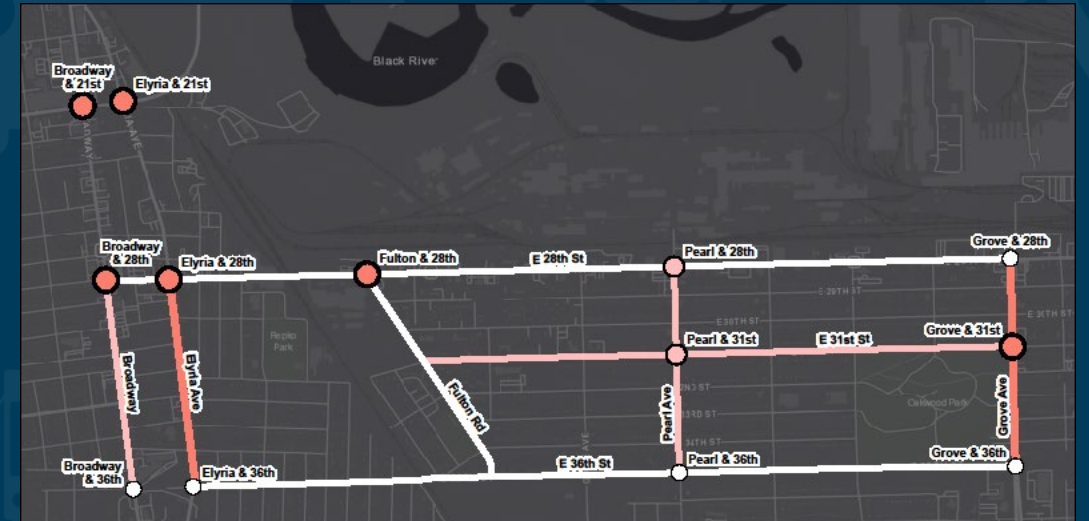
Speed Summary (mph)	
15th Percentile Speed	35
50th Percentile Speed	40
85th Percentile Speed	44
95th Percentile Speed	48
Mean Speed	40
Min Speed	5
Max Speed	72



CRASH ANALYSIS CONCLUSIONS

- Observed Crashes
- Predicted Crashes
 - Methodology via AASHTO's Highway Safety Manual
 - Parameters include: Configuration (lanes, signal/stop sign, etc.), width, AADT, lighting, driveway density, speed limit, pedestrian activity, right-turn-on-red, bus stops, schools, etc.

Intersection	Type	Important For:			Total
		Peds	Bikes	FSI	
Elyria and E 36th	Unsignalized			X	
Broadway and W 36th	Unsignalized				
E 31st and Pearl	Unsignalized	X		X	X
E 31st and Grove	Signalized	X	X	X	X
E 21st and Elyria Ave	Signalized	X	X	X	X
Pearl and E 36th	Unsignalized		X		
Grove and E 36th	Unsignalized			X	
E 28th and Grove	Unsignalized				
E 28th and Pearl	Unsignalized		X	X	X
E 28th and Fulton	Signalized	X	X	X	X
E 28th and Elyria	Signalized	X	X	X	X
E 28th and Broadway	Signalized	X	X	X	X
W 21st and Broadway	Signalized	X	X	X	X



Intersections
Number of Safety Priorities

- Four, Signalized
- Three, Unsignalized
- ≤ Two, Unsignalized

Segments
Number of Safety Priorities

- Four
- Three
- ≤ Two

Segment	Important For:			
	Peds	Bikes	FSI	Total
Broadway from W 28th to W 36th	X		X	X
E 28th from Broadway to Fulton			X	X
E 28th from Fulton to Grove		X	X	
E 31st from Broadway to Elyria	X	X		
E 31st from Fulton to Grove	X	X	X	
E 36th from Elyria to Grove	X		X	
Elyria from W 28th to E 36th	X	X	X	X
Fulton from E 28th to E 36th				
Grove from E 28th to E 36th	X	X	X	X
Pearl from E 28th to E 36th	X		X	X



TRAFFIC OPERATIONS ANALYSIS

- Traffic Operations Assessment Systems Tool (TOAST)
- Score out of 100% for road function
- Safety is key to improvement

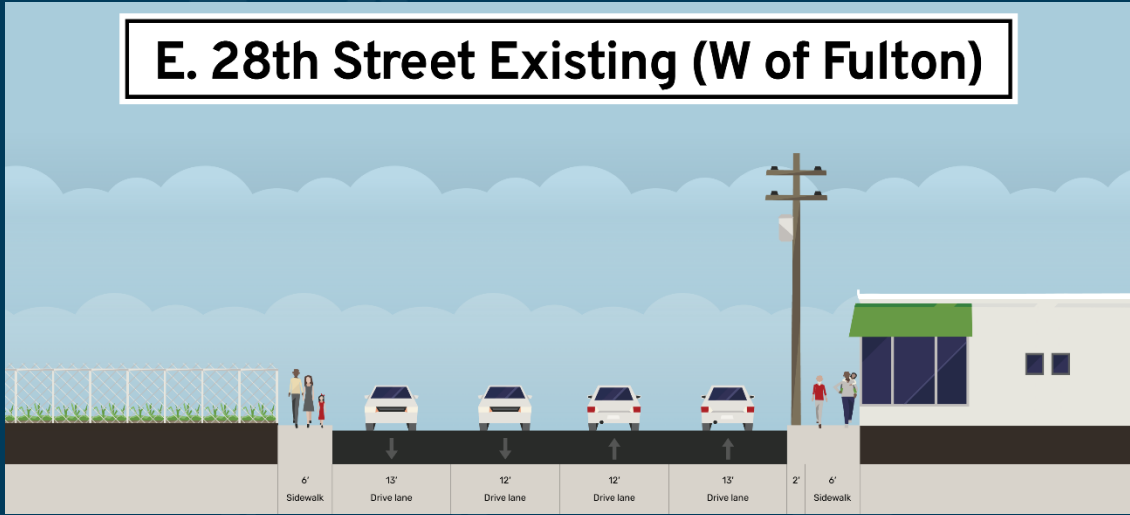


Roadway	Direction	From	To	Overall TOAST Score	Bottlenecks		Travel Time		Safety		Traffic Incident Management		Traffic Volume	
					Pass-through	Origination	Travel Time Performance	Travel Time Reliability	Rear End Crash Percent	Crash Severity Impact	Incident Clearance	Secondary Crashes	Volume Per Lane	Freight Corridors
SR-57	NB / WB	E 36th St	Elyria Ave	72.0%	10	10	3	9	6	3	0	10	8	10
SR-57	SB / EB	Elyria Ave	E 36th St	73.5%	10	10	3	10	6	3	0	10	8	10

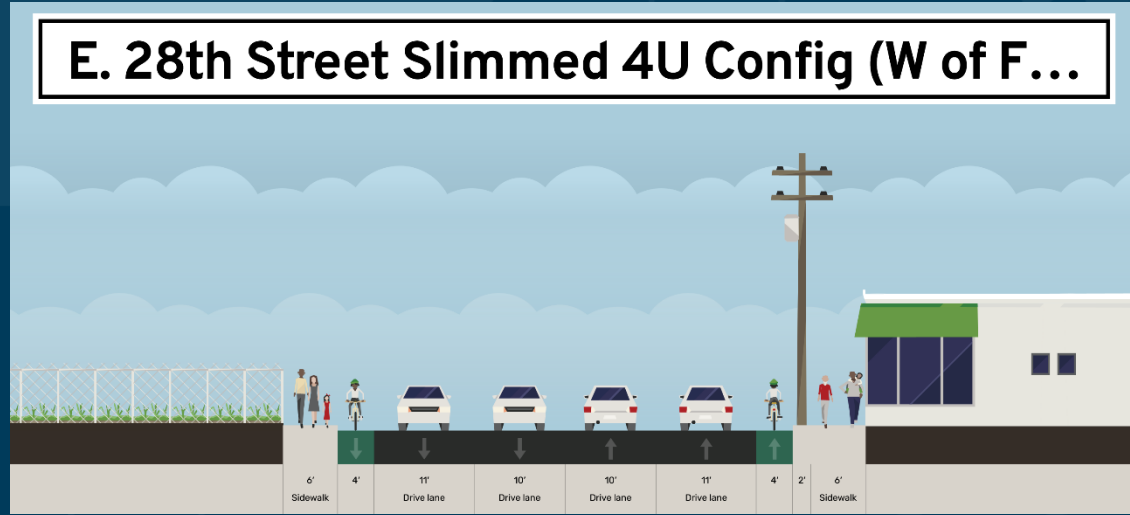


DESIGN ALTERNATIVES

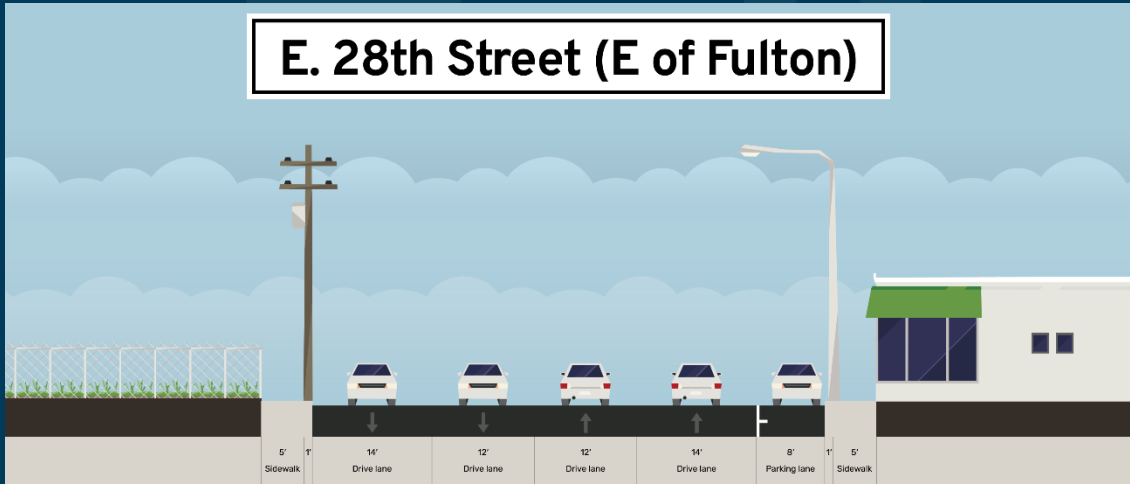
E. 28th Street Existing (W of Fulton)



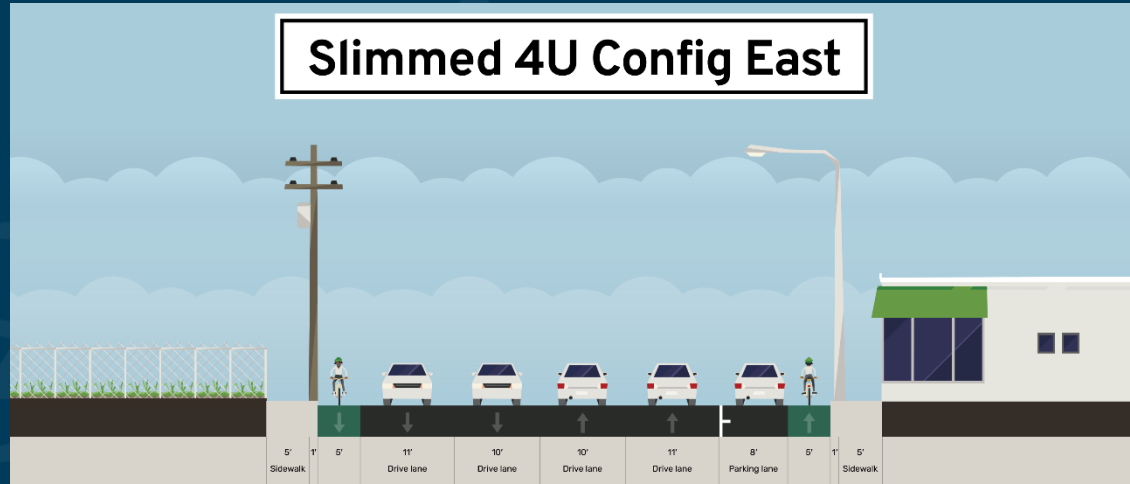
E. 28th Street Slimmed 4U Config (W of F...)



E. 28th Street (E of Fulton)

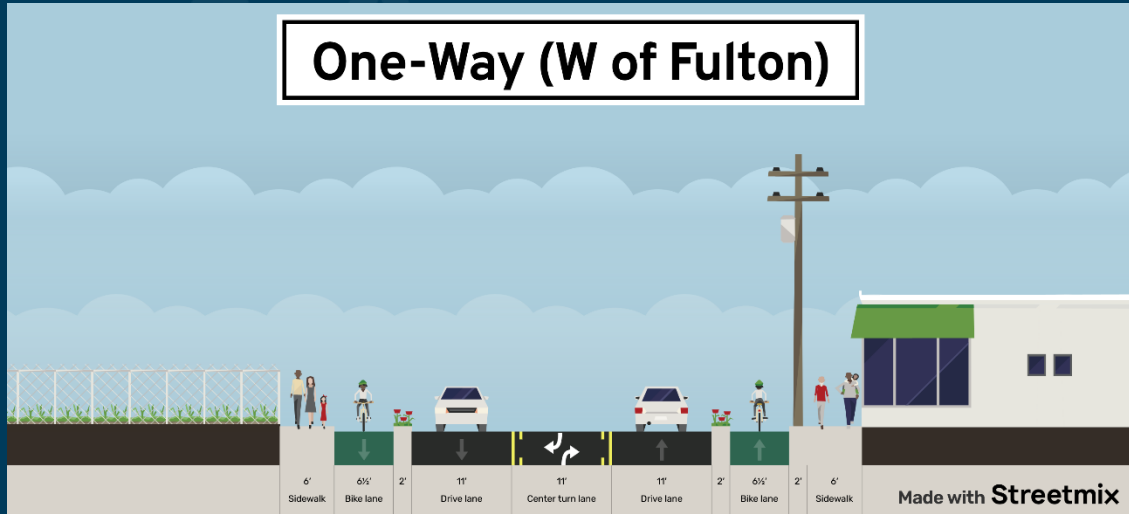


Slimmed 4U Config East

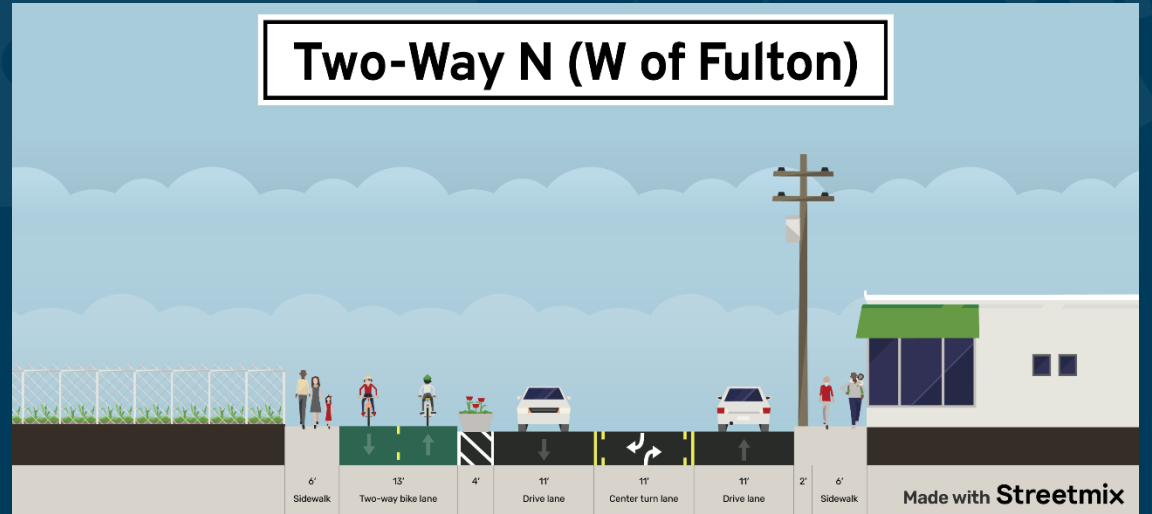


DESIGN ALTERNATIVES

One-Way (W of Fulton)



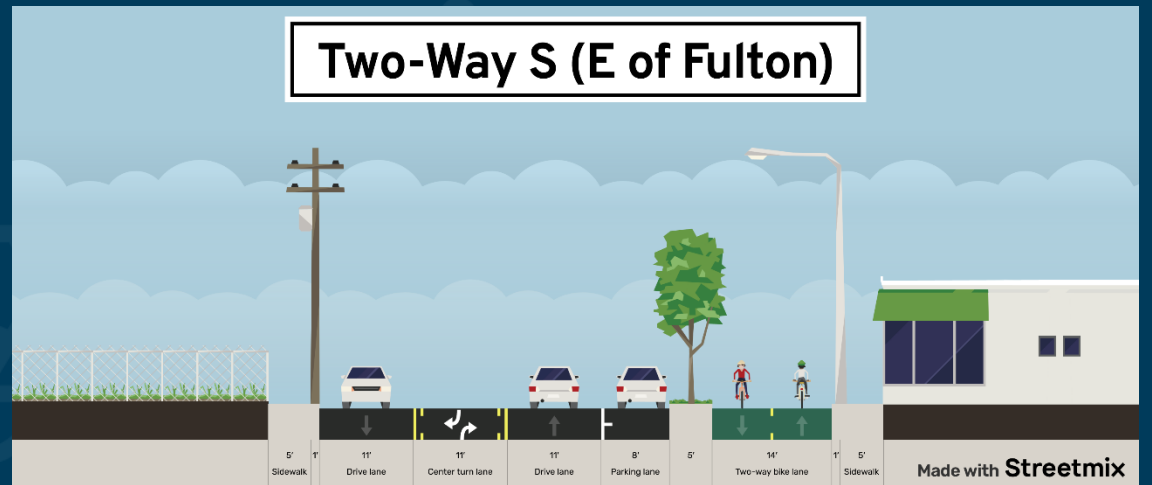
Two-Way N (W of Fulton)



One-Way East



Two-Way S (E of Fulton)



DESIGN ALTERNATIVES – RAIL BRIDGE



LORAIN Ohio



DESIGN ALTERNATIVES – E 28TH & PEARL

Existing



One-Way
Bike Lanes



Two-Way
Cycle Track



Two-Way
Raised Cycle Track



NEXT STEPS

Project alternatives will be presented at a public meeting in early 2026, then recommendations will be selected in Phase 3. Staff will continue updating the Council as the project progresses.



NOACA

Northeast Ohio Areawide Coordinating Agency

NOACA will **strengthen** regional cohesion, **preserve** existing infrastructure, and **build** a sustainable multimodal transportation system to **support** economic development and **enhance** quality of life in Northeast Ohio.