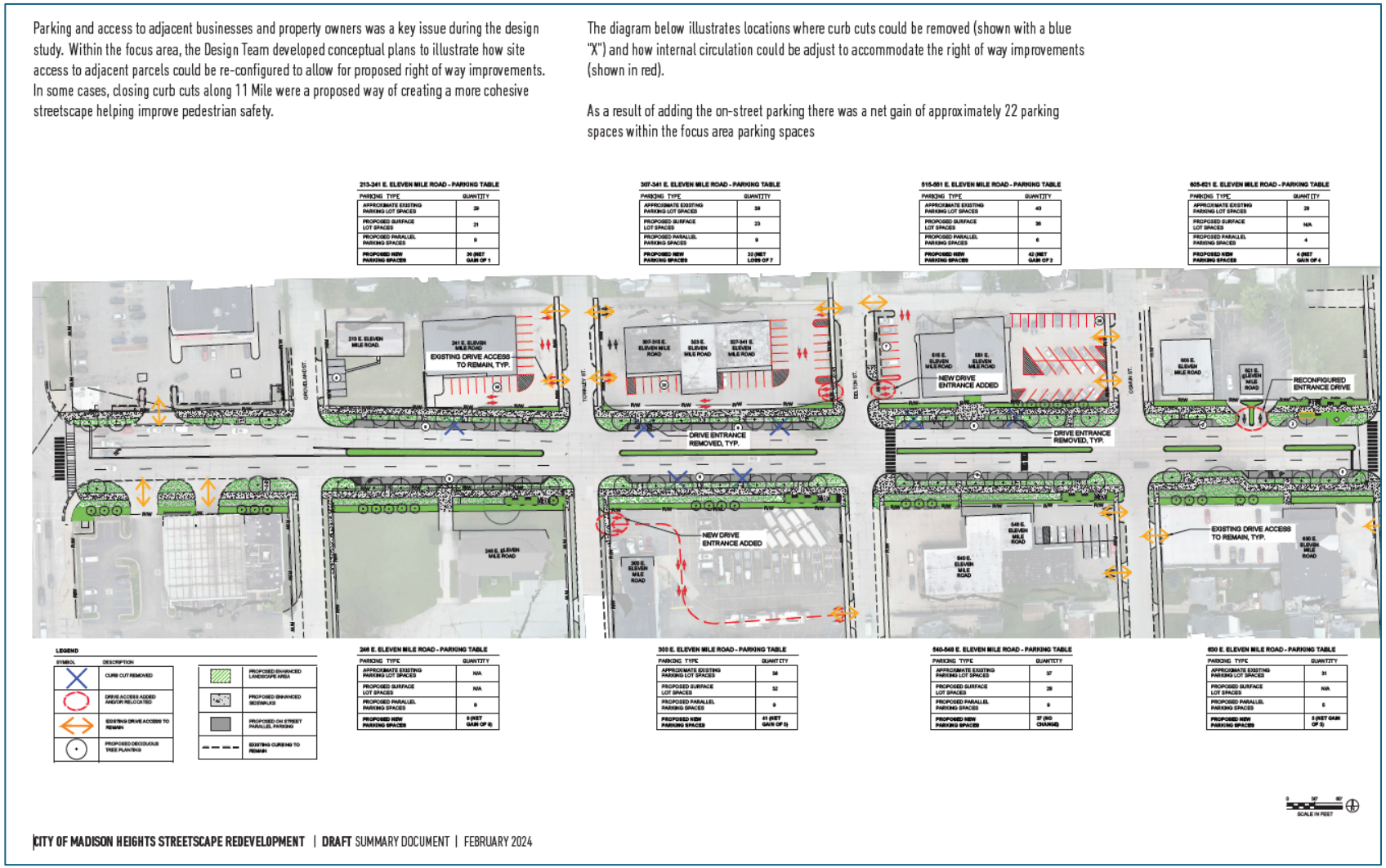
11 Mile Streetscape Plan Summary & Optional 3-Lane Configuration Addition

Summary of Plan & Optional 3-Lane Configuration Pros/Cons

Preferred 4-Lane Configuration

- Plan remains mostly the same since last presented in Winter 2023-2024.
- Plan includes existing bus stops and includes upgraded enclosures at the John R & 11 Miles stops.
- Adding on-street parking creates a net gain of approximately (22) spaces.
- Only block to lose spaces is 307-341 E 11Mile (net loss of 7).



Preferred 4-Lane Configuration

- Curb cuts, on-street parking, 8ft walkway not TAP eligible activities as presented.
- TAP Grant anticipated to cover HAWK crosswalk signal, and pedestrian amenities.
- A 10ft wide path that meets meet AASHTO standards on North 11 Mile is TAP Grant Eligible (Option 2).

PREFERRED OPTION - SHARED USE PATH

A shared use path is typically wider than a traditional sidewalk and is designed to accommodate pedestrians and cyclists.

Lane markings and changes in material can be used to define various uses.

Providing thoughtful solutions for transit riders, pedestrians, scooters, and bicyclists can improve the mobility, access, and safety.

PREFERRED OPTION - WITH SHARED USE PATH

Preferred Option - With Shared Use Path

An alternate consideration of the perferred option included the addition of a 10' wide Shared Use Path along the north side of the study corridor.

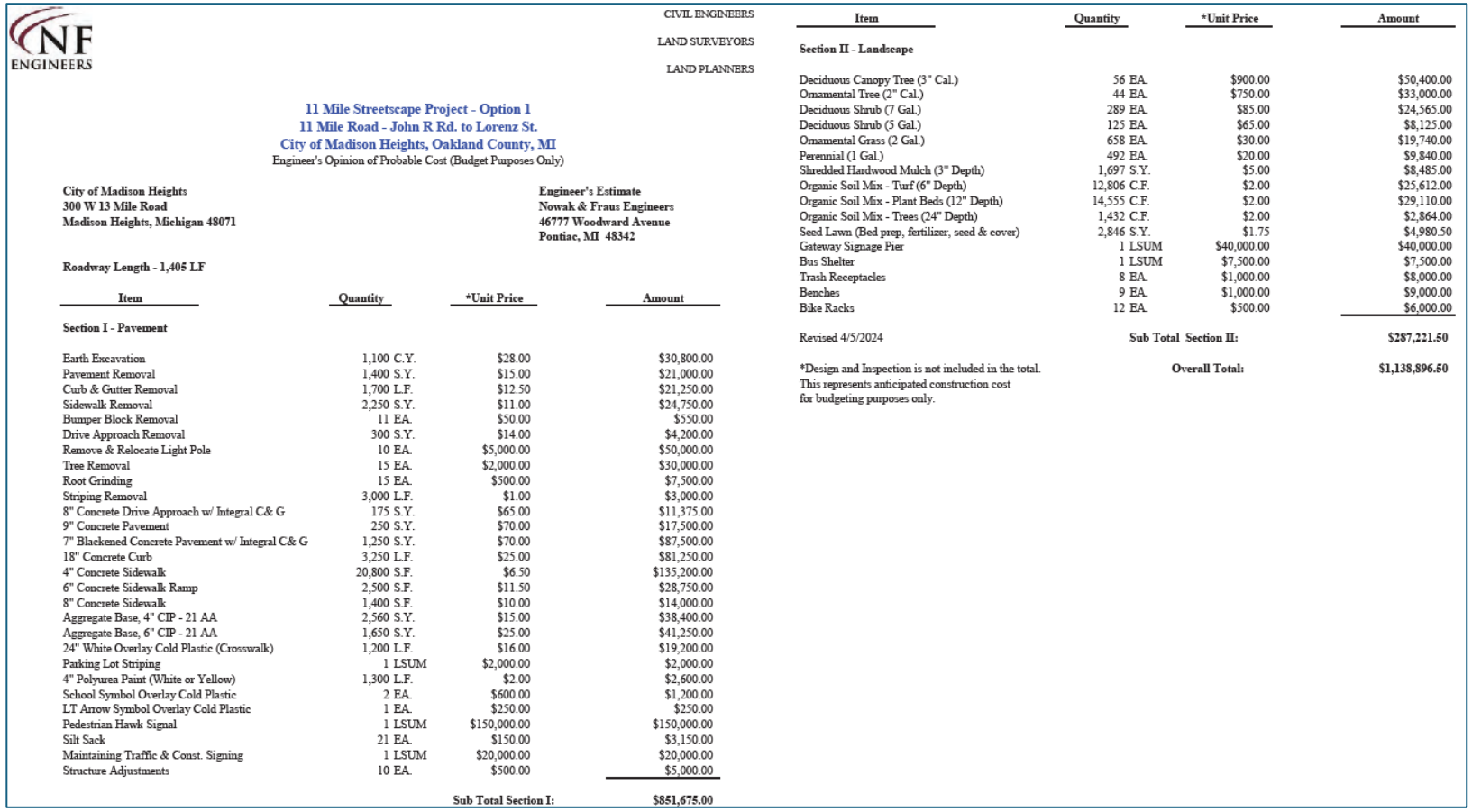
A shared use path provides a travel area separate from motorized traffic for bicyclists, scooter users, pedestrians, skaters, wheelchair users, joggers, and other users.

Shared use paths can provide a low-stress experience for people using the network for transportation or recreation and are fully separated from vehicular traffic. Shared use paths differ from cycle tracks in that they are can include pedestrians even if the primary anticipated users are cyclists and scooters.

This option is shown as "Option 2" in Appendix A8- A11.

4-Lane Configuration Estimated Costs

- Estimated Total Cost **$1,135,721.50**
- If awarded, staff estimates about **$272,937.50** of these costs are TAP eligible costs, **$150,000** of which would be for a HAWK crosswalk signal.



NF ENGINEERS

CIVIL ENGINEERS
LAND SURVEYORS
LAND PLANNERS

11 Mile Streetscape Project - Option 1
11 Mile Road - John R Rd. to Lorenz St.
City of Madison Heights, Oakland County, MI
Engineer's Opinion of Probable Cost (Budget Purposes Only)

City of Madison Heights
300 W 13 Mile Road
Madison Heights, Michigan 48071

Engineer's Estimate
Nowak & Fraus Engineers
46777 Woodward Avenue
Pontiac, MI 48342

Roadway Length - 1,405 LF

Item	Quantity	*Unit Price	Amount
Section I - Pavement			
Earth Excavation	1,100 C.Y.	$28.00	$30,800.00
Pavement Removal	1,400 S.Y.	$15.00	$21,000.00
Curb & Gutter Removal	1,700 L.F.	$12.50	$21,250.00
Sidewalk Removal	2,250 S.Y.	$11.00	$24,750.00
Bumper Block Removal	11 EA.	$50.00	$550.00
Drive Approach Removal	300 S.Y.	$14.00	$4,200.00
Remove & Relocate Light Pole	10 EA.	$5,000.00	$50,000.00
Tree Removal	15 EA.	$2,000.00	$30,000.00
Root Grinding	15 EA.	$500.00	$7,500.00
Striping Removal	3,000 L.F.	$1.00	$3,000.00
8" Concrete Drive Approach w/ Integral C& G	175 S.Y.	$65.00	$11,375.00
9" Concrete Pavement	250 S.Y.	$70.00	$17,500.00
7" Blackened Concrete Pavement w/ Integral C& G	1,250 S.Y.	$70.00	$87,500.00
18" Concrete Curb	3,250 L.F.	$25.00	$81,250.00
4" Concrete Sidewalk	20,800 S.F.	$6.50	$135,200.00
6" Concrete Sidewalk Ramp	2,500 S.F.	$11.50	$28,750.00
8" Concrete Sidewalk	1,400 S.F.	$10.00	$14,000.00
Aggregate Base, 4" CIP - 21 AA	2,560 S.Y.	$15.00	$38,400.00
Aggregate Base, 6" CIP - 21 AA	1,650 S.Y.	$25.00	$41,250.00
24" White Overlay Cold Plastic (Crosswalk)	1,200 L.F.	$16.00	$19,200.00
Parking Lot Striping	1 LSUM	$2,000.00	$2,000.00
4" Polyurea Paint (White or Yellow)	1,300 L.F.	$2.00	$2,600.00
School Symbol Overlay Cold Plastic	2 EA.	$600.00	$1,200.00
LT Arrow Symbol Overlay Cold Plastic	1 EA.	$250.00	$250.00
Pedestrian Hawk Signal	1 LSUM	$150,000.00	$150,000.00
Silt Sack	21 EA.	$150.00	$3,150.00
Maintaining Traffic & Const. Signing	1 LSUM	$20,000.00	$20,000.00
Structure Adjustments	10 EA.	$500.00	$5,000.00
		Sub Total Section I:	**$851,675.00**

Item	Quantity	*Unit Price	Amount
Section II - Landscape			
Deciduous Canopy Tree (3" Cal.)	56 EA.	$900.00	$50,400.00
Ornamental Tree (2" Cal.)	44 EA.	$750.00	$33,000.00
Deciduous Shrub (7 Gal.)	289 EA.	$85.00	$24,565.00
Deciduous Shrub (5 Gal.)	125 EA.	$65.00	$8,125.00
Ornamental Grass (2 Gal.)	658 EA.	$30.00	$19,740.00
Perennial (1 Gal.)	492 EA.	$20.00	$9,840.00
Shredded Hardwood Mulch (3" Depth)	1,697 S.Y.	$5.00	$8,485.00
Organic Soil Mix - Turf (6" Depth)	12,806 C.F.	$2.00	$25,612.00
Organic Soil Mix - Plant Beds (12" Depth)	14,555 C.F.	$2.00	$29,110.00
Organic Soil Mix - Trees (24" Depth)	1,432 C.F.	$2.00	$2,864.00
Seed Lawn (Bed prep, fertilizer, seed & cover)	2,846 S.Y.	$1.75	$4,980.50
Gateway Signage Pier	1 LSUM	$40,000.00	$40,000.00
Bus Shelter	1 LSUM	$7,500.00	$7,500.00
Trash Receptacles	8 EA.	$1,000.00	$8,000.00
Benches	9 EA.	$1,000.00	$9,000.00
Bike Racks	12 EA.	$500.00	$6,000.00
Revised 4/5/2024		**Sub Total Section II:**	**$287,221.50**
*Design and Inspection is not included in the total. This represents anticipated construction cost for budgeting purposes only.		**Overall Total:**	**$1,138,896.50**

Why Should We Consider Including a 3-Lane Option to the Streetscape Plan?

SAFETY

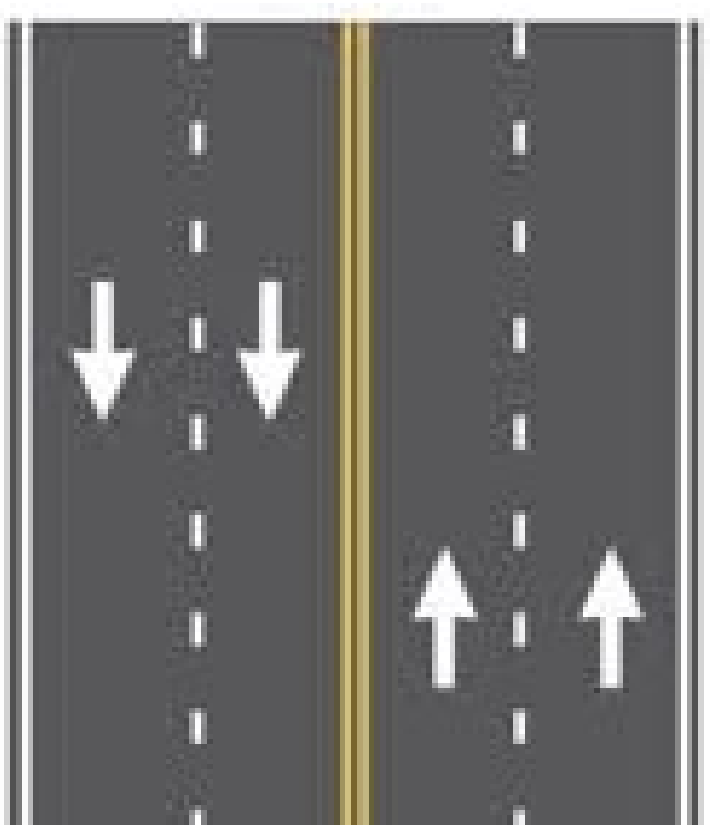
CONSTRUCTION COST SAVINGS

BETTER ALIGNED WITH TAP GRANT FUNDING

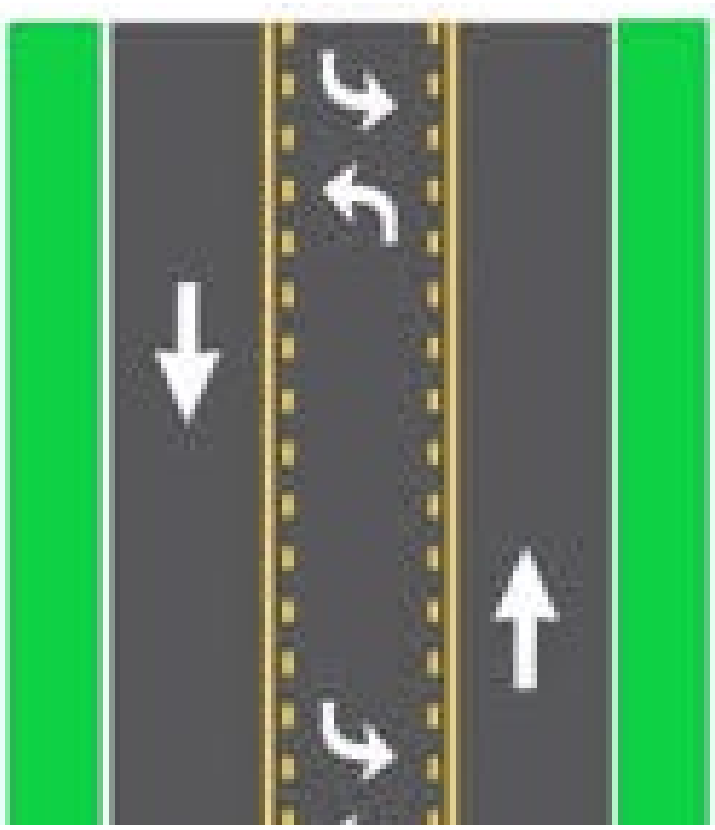
4-Lane v. 3-Lane Configuration Safety Benefits

- https://www.tiktok.com/@streetcraft/video/7351076999500287278?_r=1&_t=8lAgWroVz2s

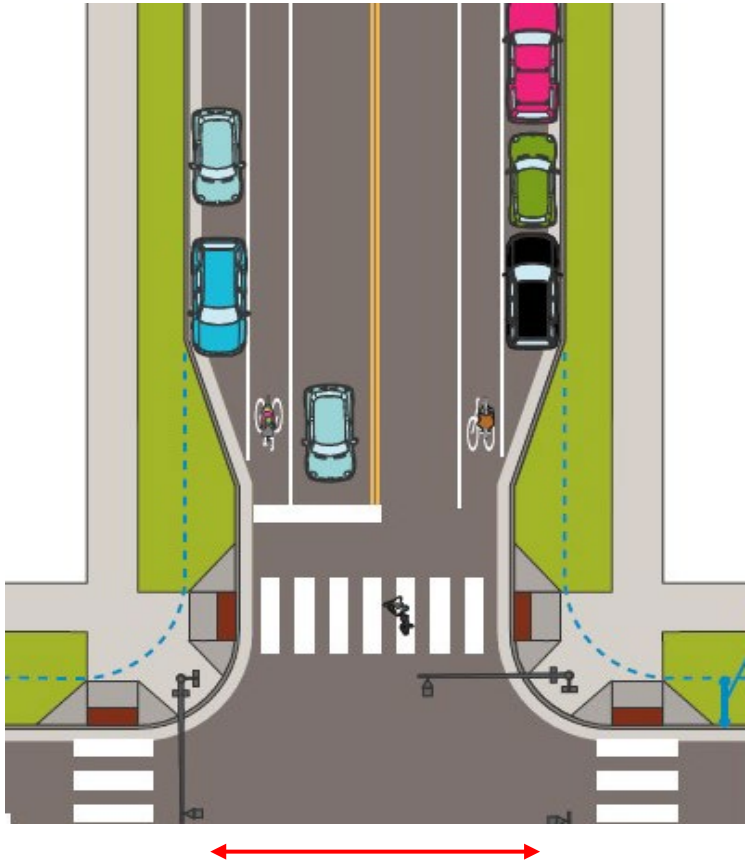
Shorter Distances = Pedestrian Safety



4 lanes of traffic to cross; longer distance

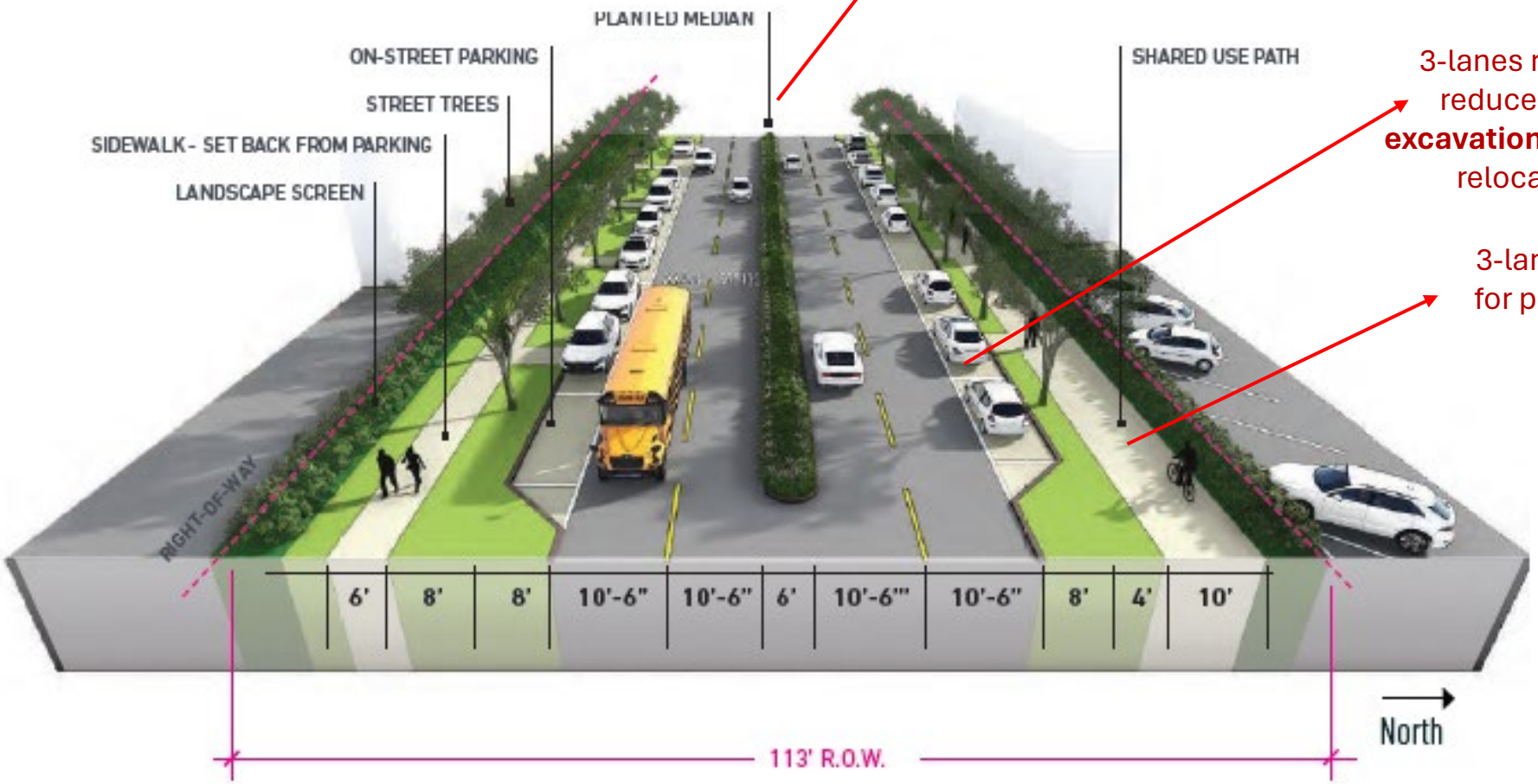


3 lanes to cross; shorter distance



With bump out curb extension the distances are even shorter, and curbing to do so is TAP eligible.

3-Lane Areas for Potential Cost Savings

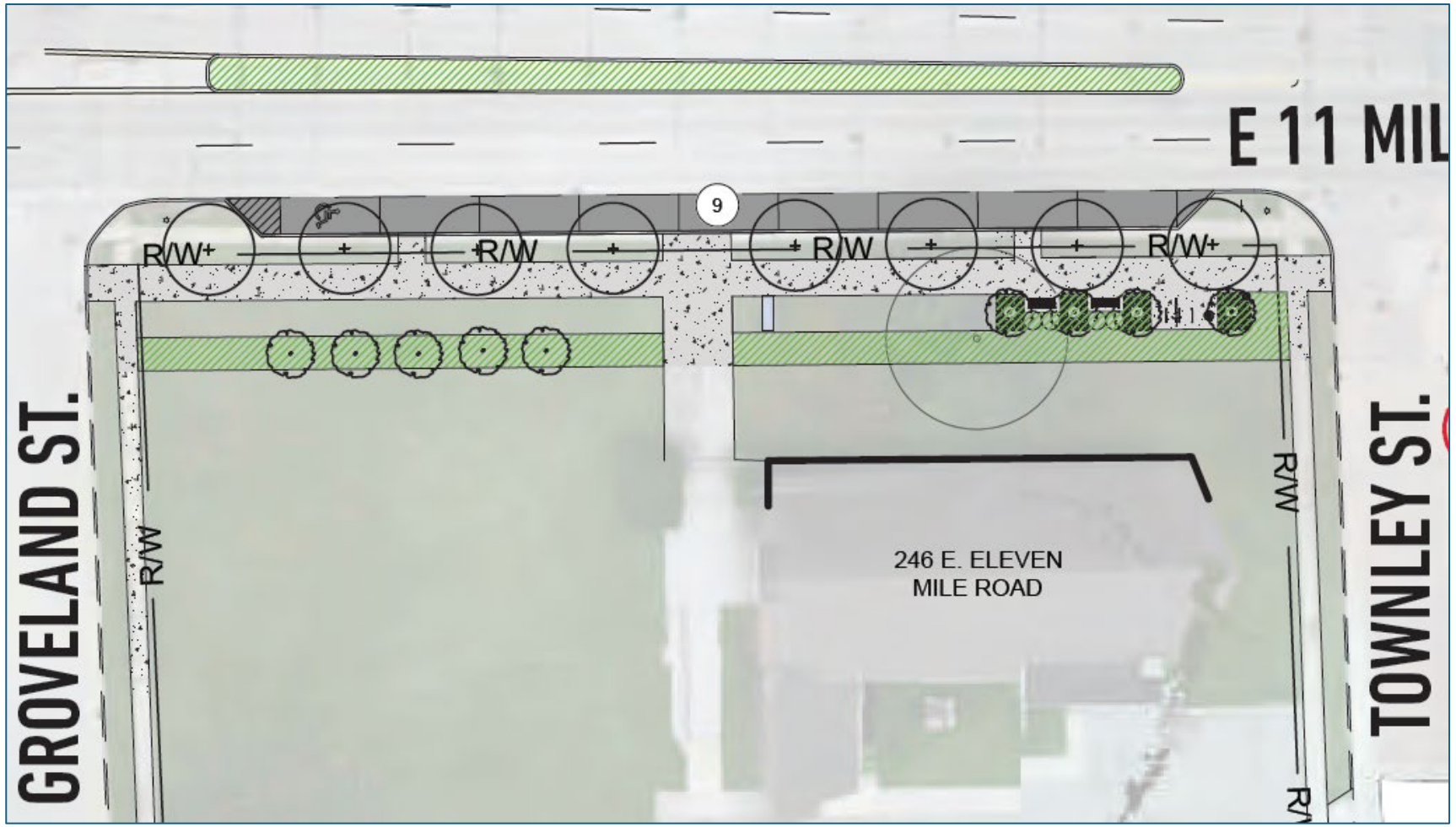


6ft Median narrows the lanes but requires **pavement removal, new curbing**.

3-lanes requires less ROW. This reduces/eliminates costs for **excavation**, **aggregate base** and the relocation of **Streetlights**.

3-lane allows for more ROW for pedestrians & amenities.

Additional 3-Lane Cost Savings: No Property Acquisition

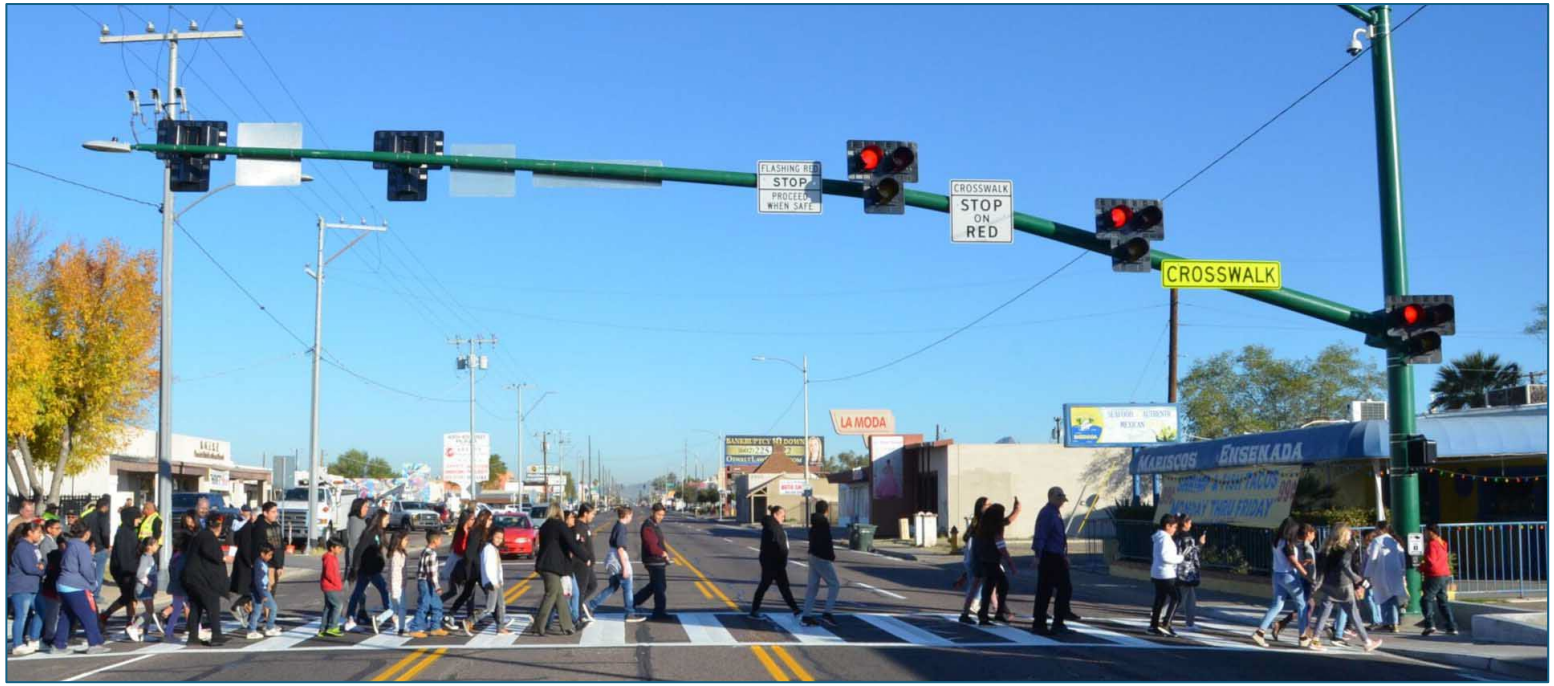


United Methodist Church

Additonal 3-Lane Cost Savings

Average RRFB Signal Cost: $22,250

HAWK Signal Cost: $100,000-150,000



Royal Oak 11 Mile Study (2022)

- Royal Oak evaluated reducing lanes along 11 Mile Rd from 5 and 4 lanes to a 3-lanes from Woodward to Stephenson Hwy to improve safety. Examined (11) intersections for capacity, safety and geometry.
- No formal action will be taken until 2026-2027, but the project has been favorably received by stakeholders thus far.
- Complimenting neighboring communities builds a more cohesive and connected corridor**, strengthening our TAP Grant application.**

Exhibit 1 – Existing Geometry – 11-Mile Road Corridor

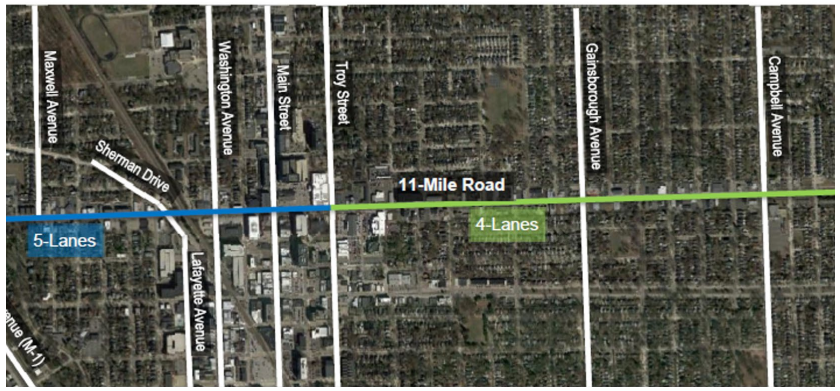
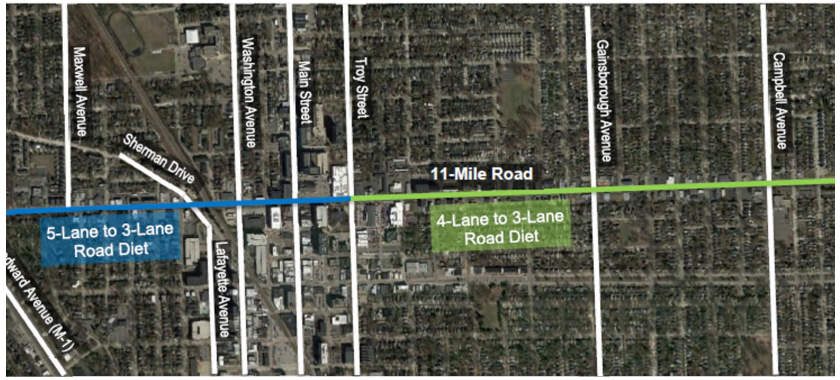


Exhibit 3 – Recommended Geometry – 11-Mile Road Corridor



Royal Oak 11 Mile Corridor Study Cont'd

- **Crashes are expected to be reduced by 15-17%.**
- The maximum movement delay is **less than 10 seconds.**
- Total time increase through entire corridor ranges **between 0.5- 1.8 minutes**
- A reduction to 3-lanes is projected to have a negligible increase in delay over the next twenty years.

Road Diet Delay Summary (2022) w/ Mitigation Measures

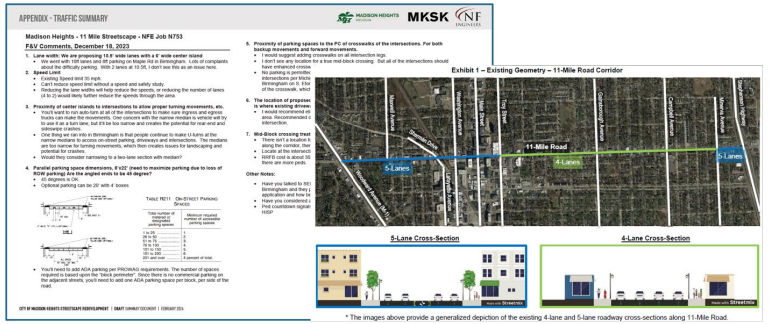
	AM Peak Hour	MD Peak Hour	PM Peak Hour
Max Intersection Increase in Delay	2.6 sec	2.8 sec	3.3 sec
Max Turning Movement Increase in Delay	9.1 sec	5.7 sec	8.3 sec
11-Mile Corridor Travel Time Increase	0.5 min (EB) 0.9 min (WB)	0.4 min (EB) 0.2 min (WB)	1.8 min (EB) 0.8 min (WB)

Road Diet Delay Summary (2042) w/ Mitigation Measures

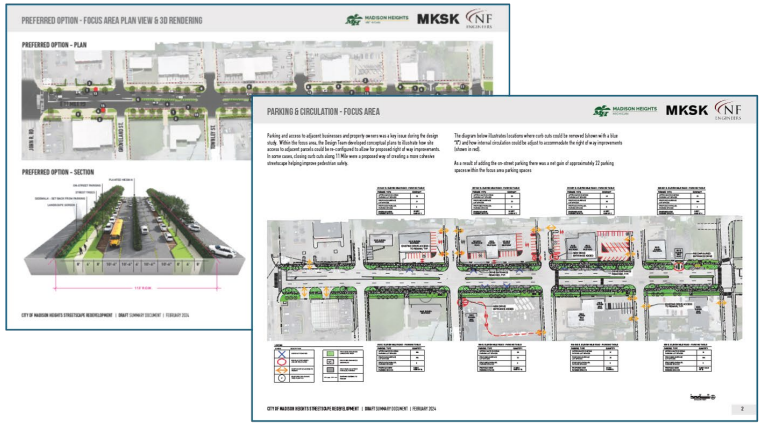
	AM Peak Hour	MD Peak Hour	PM Peak Hour
Max Intersection Increase in Delay	6.3 sec	3.4 sec	1.8 sec
Max Turning Movement Increase in Delay	15.7 sec	7.0 sec	5.8 sec
11-Mile Corridor Travel Time Increase	0.7 min (EB) 1.0 min (WB)	0.5 min (EB) 0.2 min (WB)	2.4 min (EB) 1.2 min (WB)

What would the adding a 3-lane configuration to the 11 Mile Streetscape Plan include?

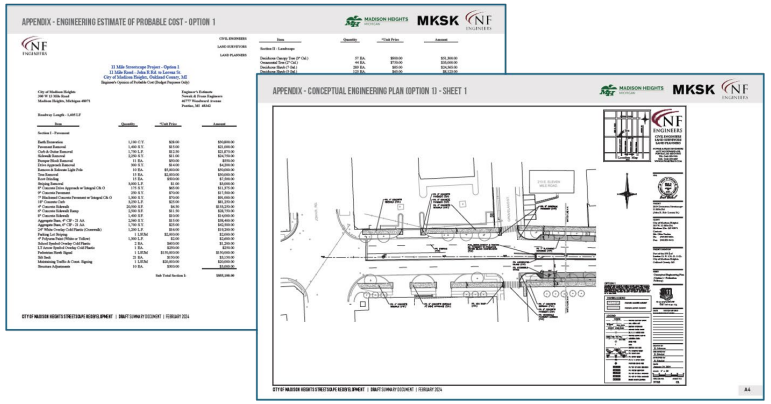
1. Traffic study along 11 Mile Rd from Stephenson to Dequindre examining vehicle delays, queues and crashes.



2. Focus Area Plan View with 3D Rendering and a Focus Area Parking & Circulation Plan.



3. A revised layout with engineers estimated construction costs for the focus area.



What Are the Tradeoffs?

- **Costs $26,000** and savings known only after incurring additional costs.
- Will push TAP Grant Application submittal from **June 19th** to **October 9th 2024.**

Transportation Alternatives Program including Safe Routes to School category

2023-2024 Grant Application Schedule

To assist grant applicants with project timeline planning
Contact the Grant Coordinator for your region BEFORE you submit an application.

COMPLETE applications are accepted in MGS year-round for any future fiscal year. Applicants should use the following schedule to plan project timelines for potential grant applications. When a project is selected for funding, the applicant will normally receive a Conditional Commitment for funding in a future state fiscal year.

Missing or inaccurate information may delay your grant request into a future review cycle. Application completeness and any application resubmission dates are determined by the Grant Coordinator and may normally be earlier than the final resubmission dates listed below.

Please consult the TAP/SRTS Applicant Guide for more details on schedule planning.

Latest Initial Contact with Grant Coordinator for this Review Cycle	Application Due Date	Application Review Committee Meeting	Final Date for Resubmitting Application with Requested Revisions, or Application Moved to Future Review Cycle	Tentative Funding Decision Date (for future fiscal year funds)
at least 12 weeks before Application Due Date	9-10 weeks before ARC	ARC	5-6 weeks after ARC	12 weeks after ARC
7/20/2022	10/12/2022	12/14/2022	01/18/23	3/8/2023
11/29/2022	2/22/2023	4/26/2023	05/31/23	7/26/2023
3/29/2023	6/21/2023	8/23/2023	09/27/23	11/15/2023
7/19/2023	10/11/2023	12/13/2023	01/17/24	3/6/2024
11/29/2024	2/21/2024	4/24/2024	5/29/2024	7/24/2024
3/27/2024	6/19/2024	8/28/2024	10/2/2024	11/20/2024
7/17/2024	10/9/2024	12/11/2024	1/22/2025	3/12/2025

Projected Project Timelines

Adopt Plan as is

- Public Engagement Event: May 21st
- TAP Grant Submitted: June 19th
- Grant Decision: Winter 2024.
- Estimated Letting Date: **May-November 2026**

Include 3-Lane Option in Plan

- Completion of Plan: **End of May 2024**
- Public Engagement & DDA Adoption: **June-September 2024**
- TAP Grant Submitted: **October 9th**
- Grant Decision: **Spring 2024**.
- Estimated Letting Date: **August 2026-January 2027**

Questions?