



GRETCHEN WHITMER  
GOVERNOR

STATE OF MICHIGAN  
**DEPARTMENT OF TRANSPORTATION**  
LANSING

BRADLEY C. WIEFERICH, P.E.  
DIRECTOR

September 13, 2023

Dear Citizens, Stakeholders and Local Officials:

Subject: 1-475 PEL Study – Overview and Moving Forward

The attached planning and environmental linkages (PEL) study addresses the I-475 corridor from Bristol Road north to Carpenter Road. The Michigan Department of Transportation (MDOT) conducted the study to consider alternative ways to rebuild I-475. Public and stakeholder input contributed to the study results. With your help, we learned more about your community and have continued to use that knowledge when developing projects on I-475 and will do so into the future. Since the study was finalized earlier this year, this letter serves as an update on our progress with implementing improvements on I-475.

When you review the attached study, you will see that the Reduced Footprint Freeway Alternative is highlighted as the preferred method of rebuilding I-475 through downtown Flint (See Chapter 5.4 PEL Acceptable Alternative). Upon further refinement, outside of the study, MDOT identified financial constraints making full implementation of this alternative a challenge.

Implementing all aspects of the PEL Acceptable Alternative are estimated to more than double construction costs, from \$300 million to more than \$700 million. Given the impact of inflation on costs and current budget constraints, MDOT is evaluating what items of the PEL have the largest benefits for community connectivity and is seeking alternative funding by applying for federal grants. Availability of federal grant funding will have a direct effect upon which concepts of the PEL Acceptable Alternative will be included in upcoming projects.

Regardless of the amount of funding available, MDOT commits to move improvements forward in the spirit of the PEL study and implement affordable features that focus on connectivity for the community. Throughout the upcoming project development phases, MDOT will continue public engagement to both inform and accept feedback on proposed improvements.

Citizens, Stakeholders and Local Officials  
Page 2  
September 13, 2023

The PEL study was the first step in a process to rebuild the I-475 corridor in a manner that reflects community values. Getting to the finish line will take a large funding commitment based upon combining multiple grant opportunities, community resources, private donations, and city, county, state, and federal funds. If we work together to focus on the goals of the PEL study, we will find ways to reach better outcomes for all.

If you have any further questions, please feel free to contact Brian Ulman, MDOT Davison Transportation Service Center Manager, at 989-233-3466 or [UlmanB@Michigan.gov](mailto:UlmanB@Michigan.gov).

Sincerely,

E-SIGNED by Bradley Wieferich  
on 2023-09-13 10:25:03 EDT

Bradley C. Wieferich, P.E.  
Director

Enclosure

cc: Brian Ulman, MDOT



# I-475 PEL STUDY

Prepared by:  
HNTB Michigan, Inc.  
March 2023

# Table of Contents

## Table of Contents ..... 2

## 1.0 Introduction ..... 4

1.1 Study Area ..... 5

1.2 Study Process and Methodology ..... 5

## 2.0 Purpose and Need ..... 7

2.1 Project Purpose..... 7

2.2 Project Need ..... 7

## 3.0 Previous Studies ..... 9

## 4.0 Existing Conditions and Trends..... 10

4.1 Infrastructure ..... 10

4.2 Vehicular Transportation..... 10

4.3 Transit ..... 11

4.4 Active Transportation ..... 11

4.5 Environmental Resources..... 13

4.6 Present-Day Neighborhoods ..... 13

4.7 Existing and Future Land Use ..... 13

4.8 Social and Economic Factors ..... 16

## 5.0 Alternatives..... 17

5.1 Preliminary Alternatives ..... 17

5.1.1 No-Build Alternatives..... 17

5.1.2 Alternative 1: Modified Existing Freeway..... 17

5.1.3 Alternative 2: Reduced Footprint Freeway ..... 19

5.1.4 Alternative 3: Urban Boulevard ..... 20

5.2 Alternative Evaluation Criteria ..... 21

5.3 Alternatives Evaluation ..... 22

5.4 PEL Acceptable Alternative ..... 23

## 6.0 Coordination and Outreach..... 32

6.1 Local Advisory Council/Business Advisory Council..... 33

6.2 Public Outreach ..... 33

6.2.1 Public Meeting 1 ..... 35

6.2.2 Public Meeting 2 ..... 35

6.2.3 Public Meeting 3 ..... 36

6.3 One-on-One Stakeholder Meetings..... 37

## 7.0 Next Steps ..... 38

7.1 Transition to NEPA..... 38

7.2 Environment, Design, and Construction..... 38

## 8.0 References..... 40



## Figures

Figure 1. Project Study Limits .....	5
Figure 2. PEL Study Process .....	6
Figure 3. Bridge Condition .....	8
Figure 4. Pavement Condition .....	8
Figure 5. Sample Sidewalk Conditions .....	12
Figure 6. Sample Bike Lane Conditions .....	12
Figure 7. Modified Existing Freeway Cross Section .....	18
Figure 8. Enhanced Crossings Example .....	18
Figure 9. Freeway Cap Examples .....	18
Figure 10. Reduced Footprint Freeway Cross Section .....	19
Figure 11. Urban Boulevard Cross Section .....	20
Figure 12. PEL Acceptable Alternative – South Segment, Map 1 .....	24
Figure 13. PEL Acceptable Alternative – South Segment, Map 2 .....	25
Figure 14. PEL Acceptable Alternative – South Segment, Map 3 .....	26
Figure 15. PEL Acceptable Alternative – Middle Segment, Map 1 .....	27
Figure 16. PEL Acceptable Alternative – Middle Segment, Map 2 .....	28
Figure 17. PEL Acceptable Alternative – North Segment, Map 1 .....	29
Figure 18. PEL Acceptable Alternative – North Segment, Map 2 .....	30
Figure 19. PEL Acceptable Alternative – North Segment, Map 3 .....	31
Figure 20. Project Next Steps .....	39

## Tables

Table 1. Project Segments .....	5
Table 2. Environmental Constraints Summary .....	14
Table 3. Local Advisory Council & Business Advisory Council Meetings .....	34

## Appendices

Appendix A: Public Involvement Memorandum .....	A-1
Appendix B: Existing Conditions Memorandum .....	B-1
Appendix C: Environmental Constraints Map .....	C-1
Appendix D: Traffic Alternatives Analysis Memorandum .....	D-1
Appendix E: Letters of Support .....	E-1
Appendix F: Agency Coordination .....	F-1
Appendix G: PEL Questionnaire .....	G-1

# 1.0 Introduction

The Federal-Aid Highway Act of 1952 authorized the funding for the construction of the interstate highway system with the purpose of connecting cities, industrial centers, and metropolitan areas (Federal Highway Administration, 2017). Interstate Highway 475 (I-475) forms an urban loop off of I-75 through downtown Flint and was designated in 1970. The first two sections of the mainline freeway opened in 1973, and the remaining section in the middle, which connected the two existing sections, was finished in 1981 (Interstate-Guide, 2021).

Discriminatory and exclusionary actions were common during the period in which I-475 was designed and constructed. The freeway and renewal programs for Flint's north side worsened issues that Black and other minority residents were already facing, such as poverty and segregation. These renewal plans were announced in 1958, but funding and public housing needed for federal approval were not available until 1970 (Highsmith, 2009).

In reality, the development of I-475 displaced hundreds of people and small businesses, particularly those in the Floral Park and St. John neighborhoods. The appraisal and property acquisition processes made it difficult for residents of St. John to secure acceptable replacement housing. When the acquisition process concluded in 1977, the majority of Black families had been forced out of their homes and into segregated public rental or private housing. Only a handful of families who owned property in St. John prior to 1960 could afford to purchase homes in new neighborhoods. For residents that were able to remain in the areas around Floral Park and St. John, the freeway diminished business, pedestrian traffic, and connections between neighborhoods (Highsmith, 2009).

As part of the Rebuilding Michigan Bond Program, the Michigan Department of Transportation (MDOT) committed \$300 million to reconstruct eight miles of I-475. To address comments and concerns that were received from the community regarding the I-475 reconstruction, MDOT made the decision to begin a Planning and Environment Linkages (PEL) study for the length of I-475. As part of the PEL process, MDOT wishes to recognize the negative effects the construction of I-475 has had on the surrounding community and move forward to provide an inclusive and community first approach to the study.

PEL studies are intended to promote a transparent and collaborative decision-making process that considers environmental, community, and economic impacts early in the transportation planning process. Information from the planning phase is used to inform the environmental review process, minimizing repeat work, and allowing a project to move more efficiently through the National Environmental Policy Act (NEPA) process.

The goal of this study is to identify and evaluate alternatives in order to develop PEL Acceptable Alternative(s) that best meet the Project's purpose and need statement and community goals.

## 1.1 Study Area

I-475 is a bypass route for I-75 near Flint, Michigan. The project study limits include the entirety of I-475, from the interchange with I-75 in Mt. Morris Township to the interchange with I-75 in Grand Blanc Township. There are three segments within the project study limits, North, Middle and South, as shown in **Table 1**. **Figure 1** illustrates the project study limits and project segments.

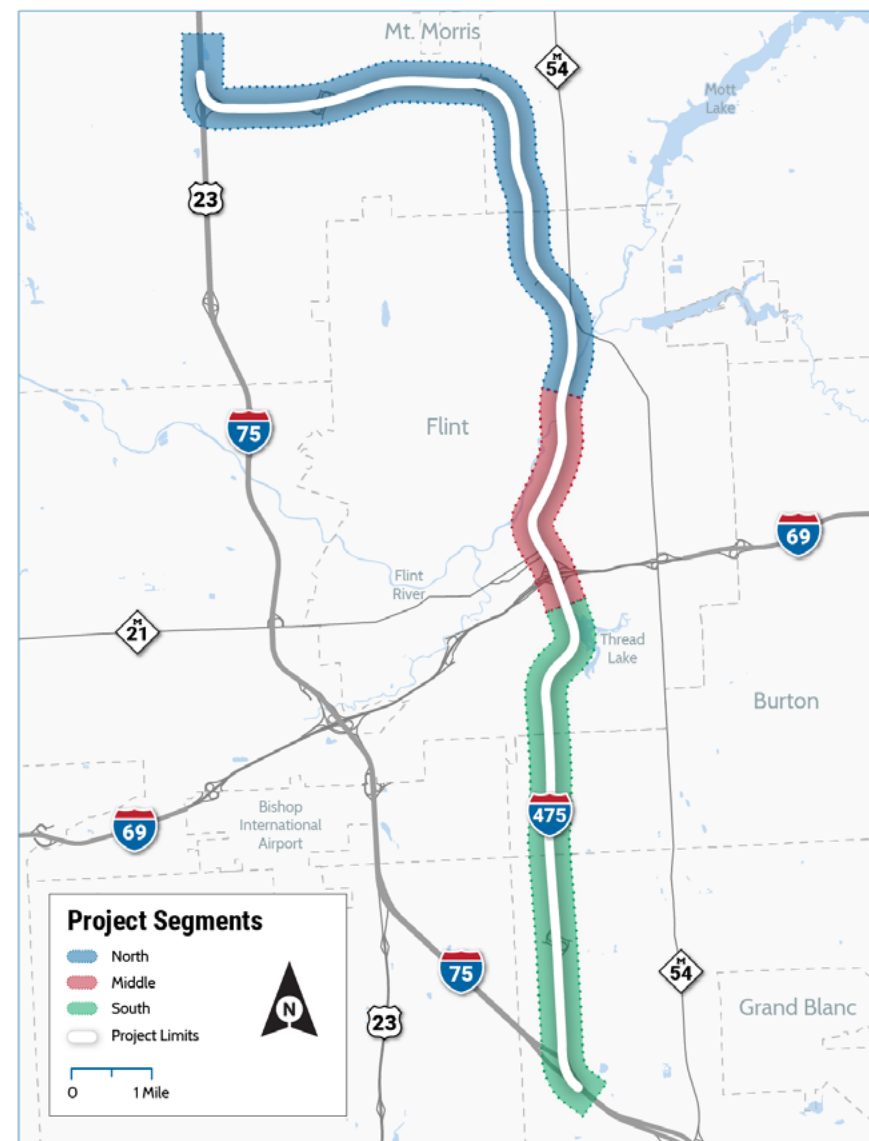
**Table 1. Project Segments**

Project Segment	Primary Roadway	From	To
North	I-475	I-475/I-75 Interchange (Mt. Morris Township)	Flint River
Middle	I-475	Flint River	I-475/I-69 Interchange
South	I-475	I-475/I-69 Interchange	I-475/I-75 Interchange (Grand Blanc Township)

## 1.2 Study Process and Methodology

A PEL study is a planning tool to increase efficiency in transportation development. It lays the foundations for a project to move more smoothly through the NEPA process. The regulations for a PEL study are included in the Statewide and Nonmetropolitan Transportation Planning Programming (23 CFR 450.212) and Metropolitan Transportation Planning and Programming (23 CFR 450.318), which allow decisions or results of transportation planning studies to be used as part of the overall project development process consistent with NEPA.

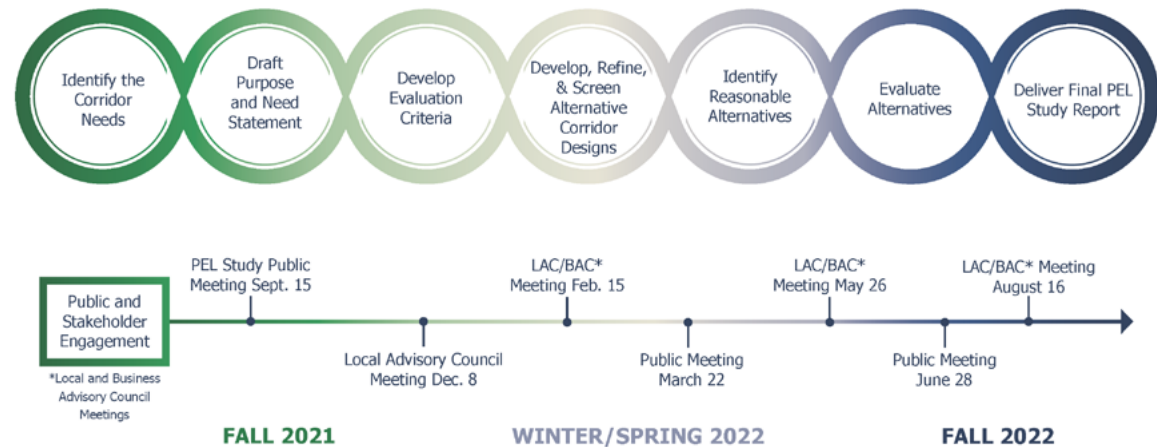
**Figure 1. Project Study Limits**



Data source: State of Michigan GIS Open Data, 2021

The PEL process, shown in **Figure 2**, includes the identification of a purpose and need statement, development of alternatives, and evaluation of alternatives. As part of the I-475 PEL study, the following components were completed:

- Extensive public involvement including public meetings, virtual engagement opportunities, two advisory committees, and one-on-one meetings with stakeholders. See **Appendix A** for a summary of the Project's public engagement.
- An analysis of existing conditions along the corridor including infrastructure, vehicular transportation, active transportation, environmental resources, social and economic factors, and land development. The existing conditions analysis is included as **Appendix B**. A detailed environmental constraints map can be found in **Appendix C**.
- An alternatives analysis evaluating potential traffic impacts, see **Appendix D**.
- Screening of potential alternatives with evaluation criteria.



Road conditions from pedestrian bridge connecting Lindsey Boulevard to Orville Street looking southbound



## 2.0 Purpose and Need

A purpose and need statement defines the transportation problems that a project must solve. The purpose explains the problem the project is intended to address and outlines the goals of the project. The need is the evidence or supporting information that a transportation problem exists. The purpose and need statement is used to compare project alternatives and set the baseline for evaluating the alternatives. A purpose and need statement including the goals and needs of the project was developed using preliminary study results, public feedback, and input from the Federal Highway Administration (FHWA) and stakeholders.

### 2.1 Project Purpose

The purposes of this project are to identify a transportation improvement alternative that will:

- Address the deteriorated conditions of the highway system's infrastructure.
- Prioritize the safe movement of people, including transit and modes of active transportation, such as walking and bicycling.
- Connect neighborhoods with cultural, institutional, and commercial activity centers.
- Support more economic development opportunities.

### 2.2 Project Need

The proposed project will address the following needs:

- Deteriorated bridge and road conditions, some of which are nearing 50 years of age.

The majority of the bridges in the study limits are currently in fair

condition. In the project study limits, there are 59 total bridges on or intersecting I-475, 43 (76.3%) of which are rated fair, with the remainder rated poor (15.3%) or good (8.5%) (MDOT, 2022). See **Figure 3** for a map of bridge condition. Michigan's Transportation Asset Management Council (TAMC) identified 40% of pavement along I-475 to be in good condition, requiring routine maintenance, 25% in fair condition, requiring capital preventive maintenance, and 35% in poor condition, requiring structural improvement (Transportation Asset Management Council, 2021). See **Figure 4** for a map of pavement condition.

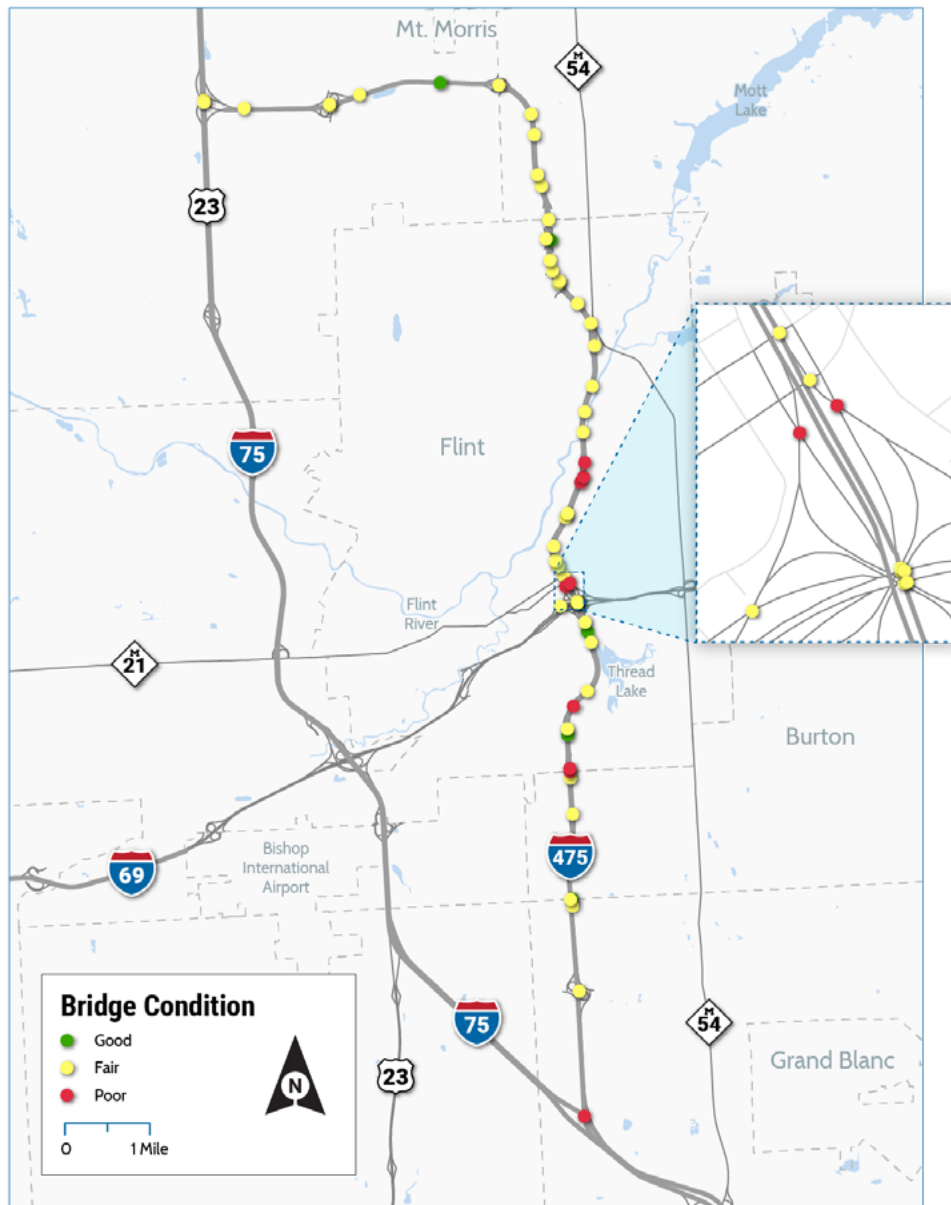
- Right-size infrastructure to match need and declining population. Right-size is the process of modifying infrastructure to better reflect current or future needs.

Genesee County had 406,211 residents, as of April 2020, down from 425,790 in 2010, a decrease of 4.6% over the decade. According to *2020 Genesee: Our County, Our Future*, a long range plan for transportation, housing, and the environment, between 2014 and 2045, the overall population, population of 18-24 year olds, population of young families, average household size, and number of children enrolled in K-12 education are expected to decrease, while the median age and population of seniors are expected to increase (Genesee County Metropolitan Planning Commission, 2020).

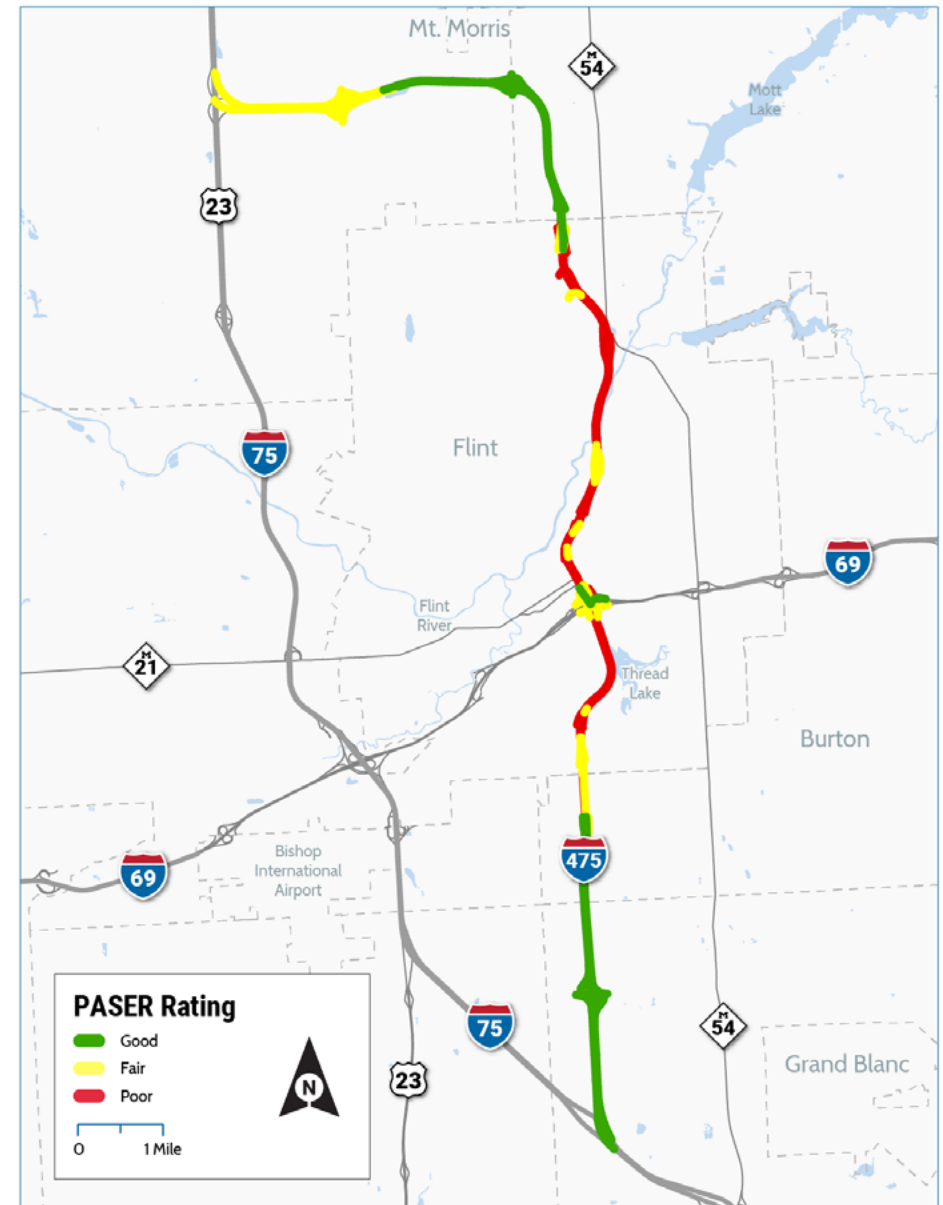
- Lack of safe, direct east-west vehicular and active transportation connections.

East-west connectivity of I-475, specifically in the Middle Segment through downtown Flint, the area around the I-475/I-69 Interchange, and further south of the Interchange through Atherton Street is fragmented. Connections were severed by the construction of I-475, which changed the street grid and negatively affected connectivity and accessibility. As a result, it can be difficult to access activity centers safely, particularly using modes of active transportation.

**Figure 3. Bridge Condition**



**Figure 4. Pavement Condition**



## 3.0 Previous Studies

There have been two recent studies conducted near the study area, including one study done by MDOT and one done by the Charles Stewart Mott Foundation. In September 2021, MDOT completed a corridor study on M-21, which includes a one-way pair in downtown Flint, where M-21 splits into two one-way streets, Court Street and 5th Street (ROWE, 2021).

A recent study, *Transforming I-475: An Economic & Quality of Life Impact Analysis for the Flint Community*, created for the Charles Stewart Mott Foundation, was prepared in November 2021. Its purpose is to consider impacts of changing I-475 from East Court Street to Davison Road to an at-grade boulevard.



Bridge crossing the Flint River

# 4.0 Existing Conditions and Trends

This chapter provides an overview of the existing conditions of the I-475 corridor.

## 4.1 Infrastructure

I-475 from the southern project limits to Bristol Road is a four-lane divided highway with an open median. From Bristol Road to Atherton Road the roadway is a four-lane separated highway. It transitions at Atherton Road to a six-lane separated highway to Russell Avenue, where again the roadway transitions back to a four-lane separated highway.

The condition of the road varies throughout the study limits. I-475 between East Carpenter Road and East Atherton Road is rated in poor condition. The sections of I-475 in good condition are located between the I-475/I-75 Interchange in Grand Blanc Township and Bristol Road, and between East Carpenter Road and the I-475/I-75 Interchange in Mt. Morris Township. The remainder of I-475 in the study limits is rated fair. **Figure 4** illustrates pavement condition along I-475.

In the South Segment, most bridges are in fair condition, though the I-475 bridge over South Grand Traverse Street is considered poor. Inspections of bridges in the Middle Segment in 2020 revealed several needs. The bridge over Chavez Drive must be replaced. A culvert replacement is needed at Gilkey Creek. The bridge over Broadway Boulevard and Davison Road requires full replacement. The other bridges in the Middle Segment are in fair condition, requiring only minor work. Bridges in the North Segment are in fair to good condition (MDOT). **Figure 3** illustrates bridge condition along I-475.

The speed limit for I-475 is 70 miles per hour (mph). On the exit ramps the speed limit is 25 to 35 mph and speeds vary along the service drives.

## 4.2 Vehicular Transportation

To determine vehicular needs within the corridor, a traffic model was developed and calibrated to match existing conditions. Overall, the current layout of I-475 provides more than enough capacity for both current and future traffic. Analysis using traffic models through design year 2045 indicates that removing lanes is possible in some locations to address safety, traffic flow, and the need for more accessibility and connectivity.

The South and North segments of I-475 operate with few to no delays. The Middle Segment of I-475 also has more than enough capacity. A traffic analysis was performed for the Project to study the impacts of potential build modifications to I-475, see **Appendix D**. Results from the analysis show that a reduction of I-475 to two lanes in each direction, as well as ramp removals, would not have a significant impact on mainline speeds and travel times.

Although there is enough capacity along existing I-475 in both directions, there are crash hot spots within the corridor. Several I-475 interchange ramps experience lower speeds and higher crash rates due to short merge/diverge distances for vehicles entering/exiting the freeway. The exit ramps at Hemphill and Atherton Roads experience a higher crash rate because of how close ramps are to the service drive (Grand Traverse Street), as well as the closely spaced signalized intersections and indirect lefts (U-turns). The traffic alternatives analysis shows that removal of the median U-turns creates safer options. In the Middle Segment, a crash pattern has been identified on I-475 near Kearsley Street. Single vehicle crashes during bad weather conditions are more common in this segment than in other similar segments throughout the state. The North Segment includes several interchange ramps located on curves, which can have the potential to increase the number of crashes.



The existing I-475 design limits connectivity on local streets, especially those that run east-west. This is because when I-475 was built, it disrupted the street grid. The areas along I-475 near Atherton Street and around the I-475/I-69 Interchange are divided due to the lack of east-west connectivity, limiting access for all modes of transportation. While the downtown Flint roadway network provides some connectivity and access for vehicles to travel east-west, some neighborhoods do not have a direct connection to downtown.

### 4.3 Transit

The Mass Transportation Authority (MTA) operates fixed-route and demand-response transit in Genesee County. MTA operates 14 fixed bus routes, known as “Primary Routes.” All routes serve stops that are within a half-mile of I-475, which is the distance people will usually walk to access a transit stop. Demand-response services are scheduled by riders in advance and pick them up and drop them off at the rider’s origin and destination. These services are available to people with disabilities within three-quarters of a mile of MTA’s fixed-route service area and the general public outside of this area. Additional information on public transit routes and services can be found in **Appendix B**.

### 4.4 Active Transportation

The availability and condition of infrastructure for active transportation, such as walking and biking, including sidewalks, crosswalks, trails, and bike lanes, vary widely across the I-475 corridor. The South and North segments generally have less access to active transportation amenities than the Middle Segment. A complete summary of existing active transportation connections can be found in **Appendix B**.

In the South Segment, sidewalks are often not connected, feel unsafe for pedestrians due to existing driveways and traffic, and are fewer than six-feet wide in some places. A pedestrian bridge over I-475 connects East Linsey Boulevard to Orville Street, providing access to Cummings and McKinley Parks and Thread Lake.

The Middle Segment has better pedestrian conditions, though some areas may be challenging to navigate. For example, the I-475/I-69 Interchange creates a large barrier to active transportation by disconnecting the street grid for a half-mile in each direction. Some crossings lack Americans with Disabilities Act (ADA)-accessible and signalized crosswalks. The East Kearsley Street bridge features wide sidewalks, large planters that buffer vehicular traffic, and a decorative railing.

In the North Segment, crossings are more widely spaced. There is a pedestrian bridge connecting W. H. Schwartz Drive on the west with Avon Street on the east, however it can feel unsafe due to its isolation and low visibility. **Figure 5** illustrates sample sidewalk conditions in the South, Middle, and North Segments.

Bicycle infrastructure and shared-use paths are present in all three segments. In the South Segment, a shared-use path in Creasey Bicentennial Park connects to the City of Grand Blanc but lacks connectivity to the larger area. There are bike lanes in the South and Middle Segments. Pavement conditions in bike lanes vary from good to poor. Pavement is not marked or painted for bikes in lanes or at intersections, which reduces the visibility of the bike lanes to other road users. Bike lanes also lack protection from vehicles, and wayfinding is limited. **Figure 6** illustrates sample bike lane conditions. There are no bike lanes in the North Segment, but the Flint River Trail and Kearsley Park Trail/Applewood Trail do provide shared-use paths for pedestrians and cyclists.

**Figure 5. Sample Bike Lane Conditions****Crossing I-475**

Sidewalks end abruptly



Planters and decorative fencing make a more inviting crossing



ADA curb ramps, but uninviting underpasses



Lack of lighting under bridges can feel unsafe



Chain link fencing and no protection from vehicles



Close proximity to 40-mile per hour vehicles

**Figure 6. Sample Sidewalk Conditions****Bike Lanes**

Pavement markings in need of maintenance



Good signage at trail entrances, but no connecting bike lanes



Shared-use lanes on narrow streets

## 4.5 Environmental Resources

A desktop review of environmental resources was completed as part of the existing conditions analysis and is summarized in **Table 2**. More information on the environmental resources and other existing conditions can be found in **Appendix B**. A detailed map of environmental constraints is included in **Appendix C**.

## 4.6 Present-Day Neighborhoods

The project study area is located in six communities. From south to north, they are Grand Blanc Township, the City of Burton, the City of Flint, Genesee Township, the City of Mt. Morris, and Mt. Morris Township.

Neighborhood information was available for the City of Flint and the City of Burton. All three of the project segments are at least partly located within the City of Flint. The neighborhoods located within the study area include South Side, Lapeer Park/Oakwood Park, Grand Traverse District, Fairfield Village, downtown Flint, Central Park, Kearsley Park, Eastside, No Greater Faith, and Foss Avenue (The Neighborhood Engagement Hub, 2020).

The westernmost part of the City of Burton is in the study area. Burton neighborhoods in the study area are South Gateway, West Gateway, Town Center, and North Gateway (ROWE, 2018).

## 4.7 Existing and Future Land Use

There is a mix of land use in the study area, including residential, commercial, industrial, civic, open/green space, vacant land, and others.

A majority of the land within the study area is residential. There are also several commercial parcels along I-475, as well as industrial and vacant properties, especially within the City of Flint, west of I-475. Land use in the study area is further described in **Appendix B**.

There are several public and private open spaces in the study area that offer recreational opportunities. For example, the Flint River, which crosses I-475, is a significant natural feature surrounded by parks and open space. Within the study area, open space/green space land use types are found within the Cities of Burton, Flint, and Mt. Morris.

In the future, the study area is planned to contain a mix of land uses, including residential, commercial, industrial, civic, open/green space, and other land uses. Future land use is consistent with existing land use along the study area, with a majority of land uses being residential. Within the City of Flint, the major future land uses are traditional and green neighborhoods, production center, and green innovation. Green neighborhoods are disinvested residential areas that still contain some housing, production centers are industrial, and green innovation areas are where redevelopment of vacant land is recommended. Community open space/recreation parcels are scattered throughout the study area, and Downtown District and City Corridor uses are found in and around downtown Flint (Houseal Lavigne Associates, 2013).

**Table 2. Environmental Constraints Summary**

Study Parameters	Environmental Constrains
Agricultural resources	<ul style="list-style-type: none"> <li>• None anticipated. Properties zoned for agriculture are adjacent to I-475 in Mt. Morris Township and Genesee Township. However, all proposed work in these areas would take place within existing MDOT Right Of Way (ROW).</li> </ul>
Contaminated Materials	<ul style="list-style-type: none"> <li>• <b>Appendix C</b> identifies the locations of potentially contaminated sites, leaking underground storage tanks, underground storage tanks, and brownfields. Further analysis through a Project Area Contamination Survey (PACS) will be required to identify sites where known or potential contamination exists.</li> </ul>
<b>Natural Resources</b>	
Threatened and Endangered Species	<ul style="list-style-type: none"> <li>• A desktop review performed by MDOT found that Thread Creek and the Flint River are both classified as Group Two designated streams for state listed mussels, meaning they are potentially present.</li> <li>• The I-475 corridor is within the range of the federally endangered Indiana bat and federally threatened northern long-eared bat.</li> <li>• The nest of a bald eagle (<i>Haliaeetus leucocephalus</i>), a species protected under the Bald and Golden Eagle Protection Act, is approximately 1.95 miles west of I-475 in the Flint Cemetery near the Flint River. There is a 2014 record of the peregrine falcon species (<i>Falco peregrinus</i>) 0.4-mile west of I-475, located on top of the Durant Hotel/West Northbank Center on UM-Flint's campus.</li> <li>• Multiple threat exclusion zones exist around I-475, outside of the ROW. These areas are part of the Range-Wide Programmatic Agreement between MDOT, FHWA, and the U.S. Fish and Wildlife Service (USFWS) for the eastern massasauga rattlesnake where wildlife friendly erosion control is required.</li> <li>• No threatened or endangered flora species are found within two miles of the corridor.</li> </ul>
Migratory Birds	<ul style="list-style-type: none"> <li>• Swallows and other migratory birds protected under the Migratory Bird Special Provision Treaty Act may be present in the I-475 corridor, as it crosses multiple waterways. Potential hotspots include Mt. Morris Township in the northern segment where the landscape is rural and open, as well as major stream crossings.</li> </ul>
<b>Water Resources</b>	
Floodplain	<ul style="list-style-type: none"> <li>• A preliminary review conducted by MDOT determined that I-475 is not particularly vulnerable to flooding. According to data from the Federal Emergency Management Agency (FEMA), the 100-year floodplain intersects the I-475 corridor at five locations, as shown in <b>Appendix C</b>.</li> </ul>



Study Parameters	Environmental Constrains
Wetlands	<ul style="list-style-type: none"> <li>A desktop review of National Wetlands Inventory data indicates that wetlands are present in the vicinity of the I-475 corridor, as illustrated in <b>Appendix C</b>. Types of wetlands in the vicinity of the corridor are freshwater emergent wetland, freshwater forested/shrub wetland, freshwater pond, riverine, and lake.</li> </ul>
Lakes, Rivers, Creeks, and Drains	<ul style="list-style-type: none"> <li>I-475 crosses multiple drains, lakes, creeks, and the Flint River and is near three lakes, as shown in <b>Appendix C</b>.</li> </ul>
Water Quality	<ul style="list-style-type: none"> <li>The I-475 corridor is an urban freeway corridor in which runoff within the ROW is captured primarily by storm sewer inlets and routed to storm sewer pipe outfalls located throughout the corridor. No water quality best management practices (BMPs) are present except in locations where roadside ditches provide water quality treatment. For the areas served by storm sewer systems, runoff from the corridor is untreated; contaminants, primarily total suspended solids (TSS), enter receiving water bodies without treatment.</li> </ul>
Air Quality	<ul style="list-style-type: none"> <li>Genesee County is currently in attainment for ozone, meaning that concentrations are below the National Ambient Air Quality Standards (NAAQS) level.</li> </ul>
Noise	<ul style="list-style-type: none"> <li>The existing conditions for noise were not analyzed as part of the PEL study. However, a noise analysis will be completed for the PEL Acceptable Alternative.</li> </ul>
<b>Recreation, Conservation, and Public Community Space</b>	
Section 4(f)	<ul style="list-style-type: none"> <li>Section 4(f) of the U.S. Department of Transportation Act of 1966 requires consideration of certain types of properties during the development of transportation projects. Properties that can qualify as Section 4(f) include significant public parks, recreation areas, wildlife or waterfowl refuges, or any publicly or privately owned historic sites listed or eligible for listing on the National Register of Historic Places (NRHP). To qualify as a Section 4(f) park or recreation area, the land must be publicly owned, open to the public, and intended primarily for park and/or recreation activities.</li> <li>A total of 24 potential Section 4(f) properties are in or next to the I-475 ROW, as shown in <b>Appendix C</b> and described in <b>Appendix B</b>. Properties include parks, publicly owned water resources, publicly owned trails, community gardens, schools, a senior center, and historic properties.</li> </ul>
Section 6(f)	<ul style="list-style-type: none"> <li>Section 6(f) of the Land and Water Conservation (LAWCON) Fund Act requires that a property using LAWCON money be kept and used for public outdoor recreational uses, unless approved otherwise by the National Park Service. The Creasey Bicentennial Park is a potential Section 6(f) property as is Ophelia Bonner Park.</li> </ul>

## 4.8 Social and Economic Factors

As part of a just and equitable transportation planning process, MDOT seeks to avoid or minimize disproportionately adverse human health and environmental effects. As part of the existing conditions analysis, 33 Census tracts within a half-mile of the I-475 corridor were analyzed to identify potential impacts of the Project on low-income and minority populations, or “environmental justice” populations. Data for the State of Michigan, Genesee County, and the City of Flint were also collected for further context and comparison.

The study area is located within several Census tracts that are environmental justice areas, meaning they contain higher proportions of minority or low-income populations. The median income of the population located in the study area is \$40,622, higher than that of the City of Flint (\$28,834) and lower than that of Genesee County (\$48,588) and the State of Michigan (\$57,144). The poverty rates in the City of Flint (40%) and in the study area (27%) are higher than those in Genesee

County (17%) and the State of Michigan (25%). The percentage of the population that is considered to be minority is approximately 37% in the study area, compared to 63% in the City of Flint, 28% in Genesee County, and 17% in the State (United States Census Bureau, 2019).

Title VI of the Civil Rights Act of 1964 (Title VI) prohibits exclusion from participation in federally funded projects, denial of benefits, and discrimination based on race, color, and/or national origin. The FHWA expands protections for nondiscrimination to include sex, age, disability, and low-income individuals. Title VI populations were reviewed as part of the existing conditions analysis, which identified higher proportions of populations under five years, with limited English proficiency (LEP), and populations with a disability in the study area compared to the State of Michigan and/or Genesee County.

Potential impacts on environmental justice populations and Title VI populations will be further assessed during the NEPA process to determine whether the impacts are disproportionately high or adverse. The complete existing conditions analysis can be found in **Appendix B**.



Road conditions from pedestrian bridge connecting Lindsey Boulevard to Orville Street looking northbound

# 5.0 Alternatives

A range of options were considered to develop reasonable alternatives to evaluate as part of the PEL study. Concepts for preliminary alternatives were developed based on data analysis, stakeholder feedback, and public feedback. Three preliminary alternative concepts were identified and presented to the public. These alternatives along with a No-Build Alternative were then screened with evaluation criteria to identify alternatives that best address the Project purpose and need.

## 5.1 Preliminary Alternatives

Four preliminary alternatives were identified, which include the No-Build Alternative, Modified Existing Freeway Alternative, Reduced Footprint Freeway Alternative, and Urban Boulevard Alternative.

### 5.1.1 No-Build Alternative

The No-Build Alternative would maintain the existing I-475 configuration. Analyzing the No-Build Alternative is required by the NEPA process and provides a baseline to compare the preliminary alternatives.

### 5.1.2 Alternative 1: Modified Existing Freeway

The Modified Existing Freeway Alternative would rebuild the existing freeway from Bristol Road to Carpenter Street and address other infrastructure improvements while maintaining the general footprint of the road. Major elements of the Modified Existing Freeway Alternative include reducing the existing six-lane freeway to a four-lane freeway, removing redundant or underutilized ramps, removing unnecessary U-turn structures, and enhancing service drive operations. See **Figure 7** for a cross section of the Modified Existing Freeway Alternative.

This alternative generally maintains the existing right-of-way footprint for I-475. However, it does include the potential to create additional active transportation crossings, enhanced crossings, and sections of caps over the freeway. Enhanced crossings, also referred to as “stitches” or “mini caps,” provide additional bridge width over the freeway on cross streets. They create space for enhanced active transportation facilities and enhanced connectivity across the facility. Caps provide a larger connection, covering the freeway with open space, recreational uses, or other amenities to provide a connection for the community across the freeway. See **Figure 8** and **Figure 9** for examples.

Figure 7. Modified Freeway Cross Section

## SOUTHBOUND I-475 NORTHBOUND I-475

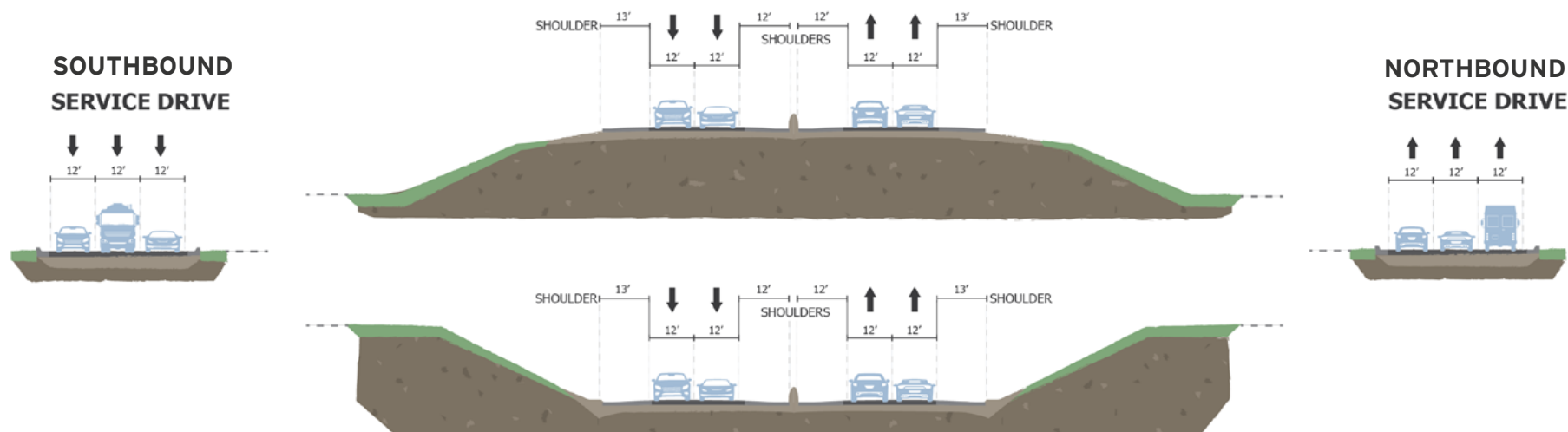


Figure 8. Enhanced Crossings Examples



Proposed 2nd Street Community Bridge in Detroit



Cesar Chavez over I-35 Concept in Austin, Texas

Figure 9. Freeway Can Examples



Cap at Long Street over I-71, in Columbus, Ohio



Klyde Warren Park in Dallas, Texas

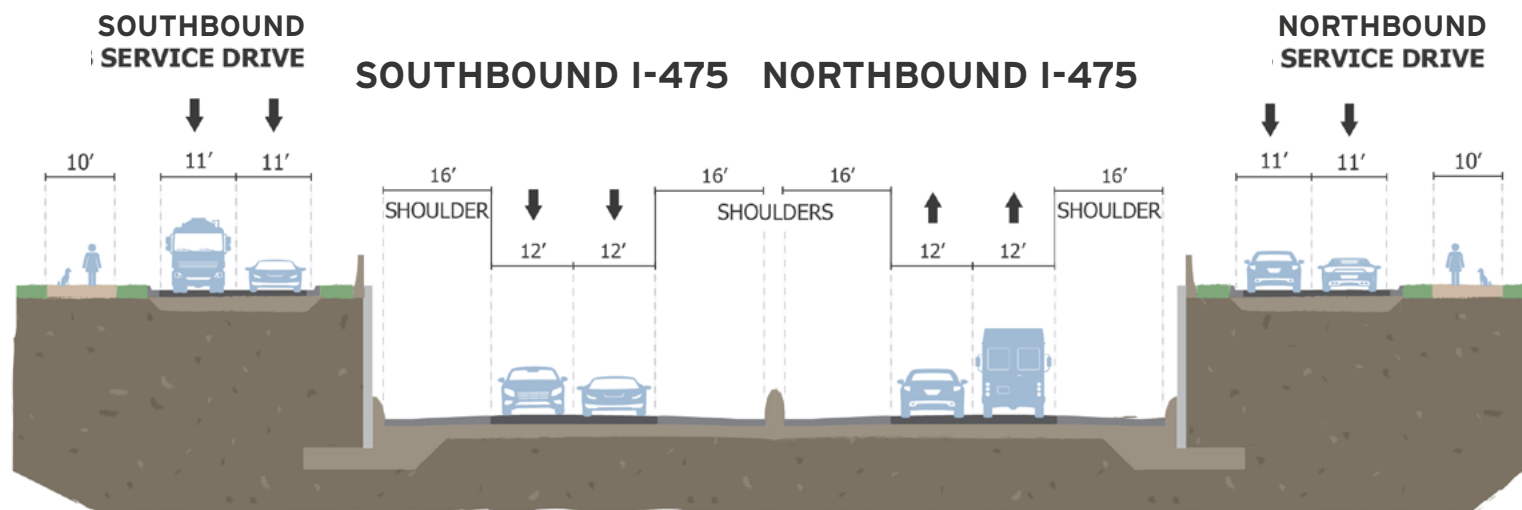


### 5.1.3 Alternative 2: Reduced Freeway Footprint

The Reduced Footprint Freeway Alternative would update the I-475 corridor into a more urban freeway section, with vertical retaining walls instead of the existing grassy slopes to create a narrowed footprint for I-475 from Bristol Road to the Flint River. This alternative would reduce the freeway from six lanes to four lanes, remove redundant or underutilized ramps, remove unnecessary U-turn structures, reduce the service drive lanes to meet current and future traffic needs, and other improvements to better service drive operations. This alternative would also reduce the overall right-of-way footprint of I-475 by approximately 80 to 100 feet from its existing width. The use of any excess ROW

will be decided as the project continues through the development and environmental process. This alternative includes the potential to create additional active transportation crossings and enhanced crossings and/or sections of caps over the freeway. See **Figure 10** for a cross section of the modified existing freeway alternative.

**Figure 10. Reduced Footprint Freeway Cross Section**

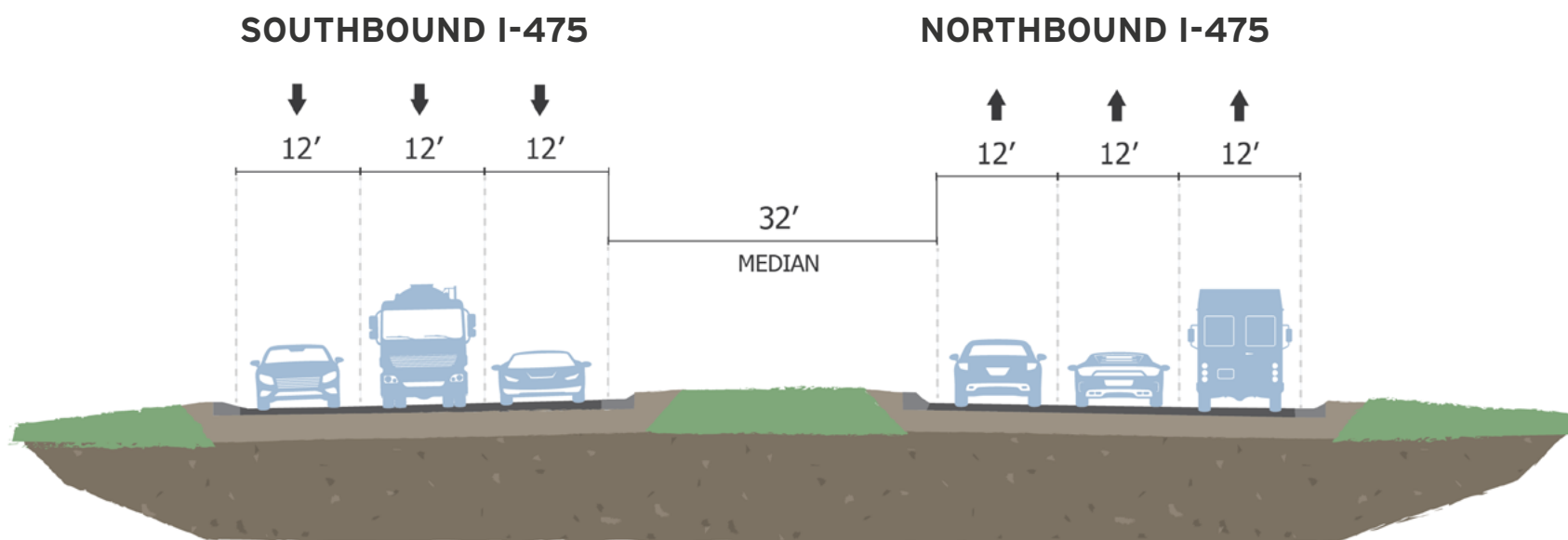


### 5.1.4 Alternative 3: Urban Boulevard

The Urban Boulevard Alternative would replace existing I-475 from north of I-69 to the Flint River with a six-lane at grade urban boulevard, creating at grade intersections with local streets. Additional turn lanes would be required at major intersections, increasing the footprint to 10 lanes in places. This alternative would reduce the ROW footprint by approximately

90 feet. Under this alternative, the Urban Boulevard would be constructed from the I-69 interchange to north of Broadway Boulevard, and the remaining corridor would match the Modified Existing Freeway Alternative. See **Figure 11** for a cross section of the Urban Boulevard Alternative.

**Figure 11. Urban Boulevard Cross Section**



## 5.2 Alternative Evaluation Criteria

Screening criteria were developed to identify which alternative best fits the purpose and need. Criteria also related to the potential for environmental impacts associated with the project. Evaluation criteria were presented for feedback at the second public meeting on March 22, 2022. Criteria for project purpose include:

- Addresses deterioration of bridges
- Addresses deterioration of pavement
- Prioritizes the safe movement of people, including transit and active transportation
- Connects neighborhoods with cultural, institutional, and commercial activity centers
- Supports more economic development opportunities

Criteria for project need includes:

- Right-sizing infrastructure
- Addresses future capacity for I-475
- Enhances the connectivity between communities within the project area
- Mobility, traffic, congestion, and safety for east-west transportation connections: Improves vehicular safety
- Improves active transportation facilities and conditions
- Improves active transportation capacity
- Improves roadway safety for active transportation traffic
- Improves vehicular accessibility and connectivity
- Improves active transportation accessibility and connectivity
- Provides/improves linkages to existing and planned transit services

Evaluation Criteria were also developed related to the environmental, social, and economic impacts associated with NEPA for the project. These criteria include:

- Cultural resources and conditions
- Environmental resources and conditions
- Environmental justice population areas
- Section 4(f)/recreational properties
- Residential properties
- Businesses/community planning

## 5.3 Alternatives Evaluation

Alternatives were screened with the criteria described in **Section 5.2 Alternative Evaluation Criteria**. The No-Build Alternative was eliminated, as it does not meet the Project purpose and need. The alternative that received the most positive feedback from the community and was found to best meet the project purpose and need through the evaluation process was the Reduced Footprint Freeway Alternative. This alternative fits the population and traffic of today and tomorrow's I-475 and has increased safety benefits. The Urban Boulevard Alternative also had some support but much of the community feedback about it was concerned with disruptions to travel, increased crash potential, and noise.

The Reduced Footprint Alternative was the only alternative to meet all criteria for the study purpose. The Reduced Footprint Alternative prioritizes the safe movement of people, including both transit and active transportation, and supports more economic development opportunities. It creates excess ROW, provides opportunities for enhanced crossings, and meets all current traffic needs. The Modified Existing Alternative does not create new economic development benefits or opportunities. The Urban Boulevard Alternative does not meet the purpose criteria for safe movement of people, as it would create more conflict points, locations where crashes are likely to occur, and a wider roadway for pedestrians to navigate.

The Reduced Footprint Alternative also performed better than the other alternatives for the criteria related to the study need. The Reduced Footprint Alternative improves vehicular safety by removing ramps, eliminating conflict points. It also improves active transportation facilities with narrower service drives that reduce the crossing time for pedestrians and frees up excess ROW. The Modified Existing Freeway Alternative and Urban Boulevard Alternative met some, but not all, of the criteria. For example, the Modified Existing Freeway Alternative does not right-size the service drives or the width of the facility based on actual traffic demand.

The Urban Boulevard Alternative would increase the potential for angle crashes and conflict points. It also does not address future traffic capacity needs. The traffic alternatives analysis found that a significant amount of traffic would have to be diverted from I-475 to facilitate satisfactory operation on the proposed boulevard.

The Reduced Footprint Freeway Alternative and the Urban Boulevard Alternative both performed better than the Modified Existing Freeway Alternative for the social, economic, and environmental criteria. Both alternatives would create additional opportunities for green space and free up excess ROW. However, the Reduced Footprint Alternative is favored by residents over the other two alternatives. Additionally, the Reduced Footprint Freeway Alternative would reduce noise by adding vertical retaining walls and encouraging proper speeds by right-sizing the capacity for traffic on the corridor. This is because facilities that have too much capacity can encourage speeding, and faster vehicles create additional noise. The Urban Boulevard Alternative would have the potential to increase noise as the roadway is brought up to street level. The Modified Existing Freeway likely would not cause a substantial increase or decrease in noise.



Public viewing and discussing alternatives



## 5.4 PEL Acceptable Alternative

Based on public feedback and the evaluation of the alternatives with the Project's purpose and need, the Reduced Footprint Freeway Alternative was selected as the PEL Acceptable Alternative.

Following the alternatives evaluation process, the PEL Acceptable Alternative was refined based on public feedback. Refinements include:

- Shifting the service drive towards I-475 from Atherton Road to Grand Traverse.
- Shifting Horton Avenue towards I-475 from East Sherman Avenue to Carpenter Road.
- Shifting Selby Street towards I-475 from East Sherman Avenue to Carpenter Road.

These refinements reduce the footprint of I-475 and create additional space between the neighborhoods and the roadways. **Figure 9** shows examples of freeway caps. The space available for a freeway cap under the PEL Acceptable Alternative is narrower than these examples, requiring improvements appropriate to the specific location. See **Figures 12 - 20** for maps of the PEL Acceptable Alternative.



Second public meeting on March 22, 2022

## South Section

Figure 12. South Section, Map 1





## South Section

Figure 13. South Section, Map 2





## South Section

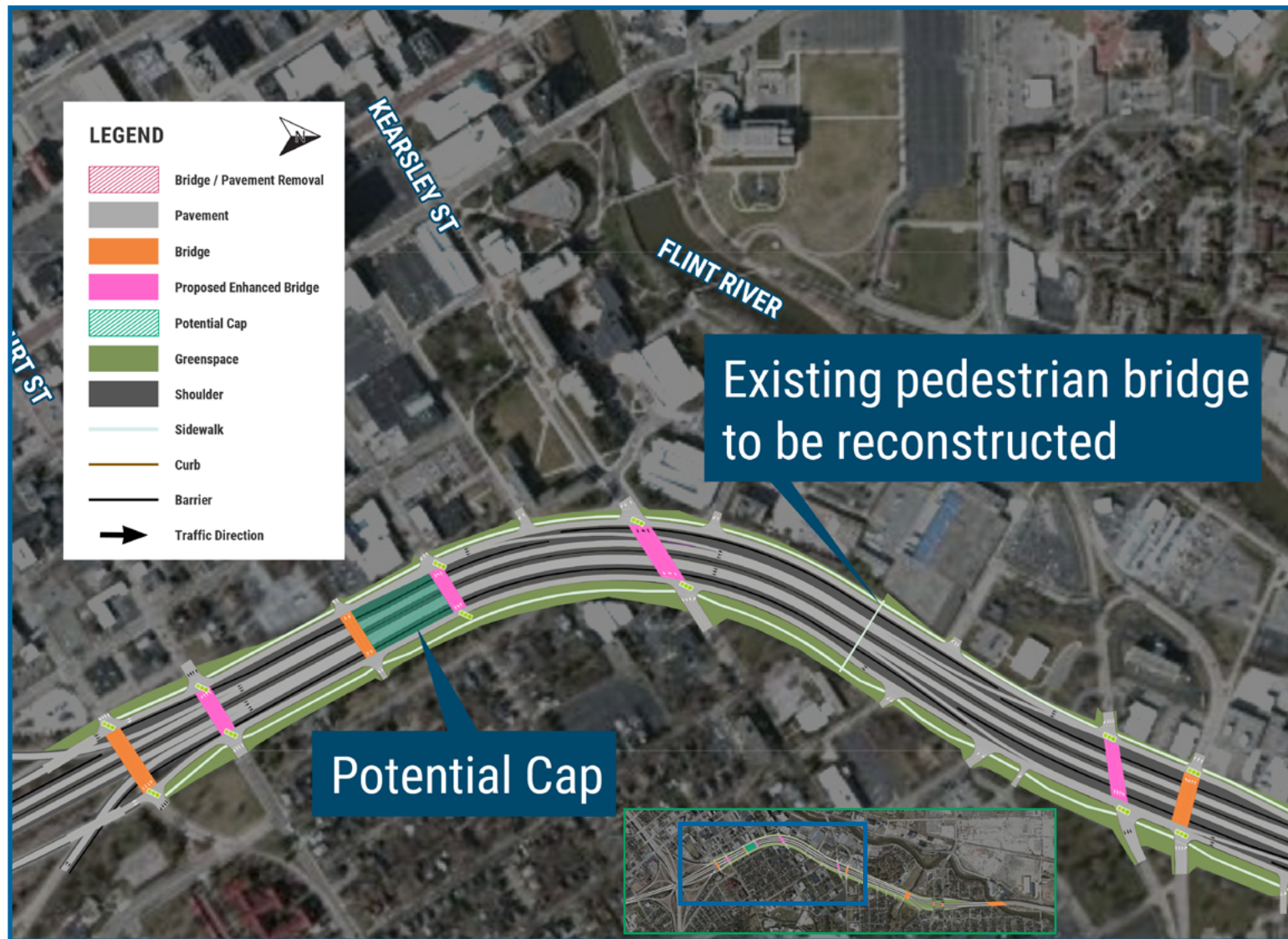
Figure 14. South Section, Map 3





## Middle Section

Figure 15. Middle Section, Map 1



## Middle Section

Figure 16. Middle Section, Map 2





# North Section

Figure 17. North Section, Map 1





# North Section

Figure 18. North Section, Map 2





# North Section

Figure 19. North Section, Map 3



## 6.0 Coordination and Outreach

MDOT is committed to involving the public in the PEL process to produce a PEL Acceptable Alternative that best fits the community. The public, stakeholders, and agencies were engaged in the following ways:

- A Local Advisory Council (LAC) and Business Advisory Council (BAC) were developed to share project updates and obtain critical feedback during important milestones.
- In-person public meetings were held throughout the project to share information and gather feedback on existing conditions and potential alternatives. Each in-person meeting was complemented by an on-demand meeting option.
- Stakeholders were met with one-on-one to provide input and engage throughout the project.
- A Project website hosted past meeting materials, frequently asked questions, option to sign up for e-mail alerts, and an application to submit comments.

Letters of support from local partners as well as local, state, and federal government are included in **Appendix E**.

In addition, MDOT has consulted with all 12 federally recognized Native American Tribes about possible Project-related impacts to Native American archaeological sites. Tribal representatives have not raised concerns about impacts to Native American archaeological sites, see **Appendix F** for tribal responses.



Public providing feedback on maps





Stakeholders viewing alternative around a table

## 6.1 Local Advisory Council/Business Advisory Council

Two committees, a LAC and a BAC were formed to:

- Ensure the community and key stakeholders were actively engaged in the process.
- Provide guidance on engaging neighborhoods and residents.
- Serve as links between MDOT and communities and/or organizations. This included helping to obtain information that may inform the project.
- Share information about the project with residents and organizations.

Members of the LAC and BAC included stakeholders that represent local government, community development organizations, local businesses, and educational institutions. Four LAC meetings and three BAC meetings with both in-person and virtual options were held. LAC and BAC meetings were held around key decision-making milestones to obtain feedback. **Table 3** summarizes these meetings.

## 6.2 Public Outreach

Stakeholders and the public were engaged throughout the process to obtain feedback on existing conditions and alternatives. The project team held three public meetings, all with corresponding virtual on-demand events, had numerous one-on-one meetings with stakeholders, utilized project maps for participants to leave comments, and conducted an online survey. Detailed reports on these can be found in **Appendix A**. Each event was promoted and advertised through traditional and online outreach including press releases, social media posts, stakeholder outreach, and individual postcards mailed to residential and commercial addresses within a half-mile of the project. MDOT's project website was used to share project information and updates, and to collect online comments through the Public Involvement Management Application (PIMA).

**Table 3. Local Advisory Council and Business Advisory Council Meetings**

Date	Committee(s)	Topics Discussed	Summary of Feedback
December 8, 2021	LAC	<ul style="list-style-type: none"> <li>• Overview of the project</li> <li>• Recap of feedback heard from the first public meeting and on demand virtual meeting</li> <li>• Project charter</li> <li>• Purpose and need</li> <li>• Road safety audit</li> </ul>	<ul style="list-style-type: none"> <li>• Overall approval of the project</li> <li>• Request to add or highlight the following in the purpose and need – safety, environmental concerns (noise, pollution, water), and quality of life for people adjacent to the freeway</li> <li>• Need to recognize I-475 as a regional asset</li> </ul>
February 15, 2022	LAC	<ul style="list-style-type: none"> <li>• Overview of the project and feedback heard to date</li> <li>• Draft purpose and need, draft evaluation criteria, and preliminary draft alternatives.</li> </ul>	<ul style="list-style-type: none"> <li>• Concerns about making the service drives safer and ensuring that the Central Park neighborhood is pedestrian-friendly</li> <li>• Concern about Chavez Dr. losing its name, as Flint was one of the first cities in the nation to name a street after Cesar Chavez</li> </ul>
February 15, 2022	BAC	<ul style="list-style-type: none"> <li>• Examples of enhanced crossings and freeway caps</li> </ul>	<ul style="list-style-type: none"> <li>• Attendees inquired if the project team has looked at removing any bridges downtown, however the feedback heard to date suggests that there is a desire to add connectivity to downtown; there are not any bridges being removed or any reduction of connections</li> </ul>
May 26, 2022	LAC/BAC	<ul style="list-style-type: none"> <li>• Final purpose and need, feedback on the preliminary design alternatives, the evaluation criteria for the alternatives</li> <li>• Road safety audit (RSA)</li> </ul>	<ul style="list-style-type: none"> <li>• Concerns about the maintenance of the corridor, including the lighting in the s-curves that have been down and not maintained</li> <li>• Concern that flooding may occur when the construction of concrete retaining walls</li> <li>• Desire for reconnecting neighborhoods and opportunities for development</li> </ul>
August 16, 2022	LAC/BAC	<ul style="list-style-type: none"> <li>• Presentation of the PEL Acceptable Alternative, feedback from the June 2022 public meeting, and next steps for the project</li> </ul>	<ul style="list-style-type: none"> <li>• Lack of enhanced bridges and active transportation connectivity</li> <li>• Safety and aesthetic improvement recommendations for underpasses</li> <li>• Suggestions for solar lighting and aesthetic treatments</li> <li>• Additional comments on project cost, freeway shoulder width, and vibration damages</li> </ul>



### 6.2.1 Public Meeting 1

The first public meeting was held on Wednesday, September 15, 2021, at the Flint Farmers Market. MDOT presented an overview of the PEL study, what the public could expect over the course of the project, the anticipated purpose and need, and requested feedback on the corridor from the public. The meeting also featured a question-and-answer segment, provided exhibits about the PEL study, and roll plots of the project area for the public to directly comment on.

Seventy people attended the meeting. Of the 47 people that provided their zip code, 91% of the people live in zip codes that I-475 goes through and the other 9% were in surrounding communities.

In addition to the in-person meeting, an on-demand virtual meeting was available to the public to participate between November 18 and December 3, 2021. The meeting featured a narrated and closed caption presentation with a comment form. Attendees were able to watch the presentation on their own time and submit feedback to MDOT. The virtual on-demand meeting was attended by 16 people.

Two weeks prior to the September 15th public meeting, MDOT launched a survey that went out on the public meeting invitations. The purpose of the survey was to help MDOT better understand desired community goals of the greater Flint community for the I-475 corridor and how transportation decisions can be better coordinated with future land use and development decisions. There were a total of 81 responses to the survey.

Overall, the first phase of PEL study engagement garnered 138 responses from submitted comments, comments on the roll plots, and submitted survey responses received between September 15 and December 3, 2021. A summary of comments and feedback received is included in **Appendix A**.

### 6.2.2 Public Meeting 2

A second public meeting was held on Tuesday, March 22, 2022, at the Whiting in Flint, Michigan. At the public meeting MDOT presented an overview of the PEL study, the draft purpose and need, and a series of preliminary draft design alternatives for the public to review. The meeting also featured a question-and-answer segment, provided exhibits about the PEL study, and roll plots of the project area for the public to directly comment on. Seventy-three people attended the meeting. Of the 55 people that provided their zip code, 87% of the people live in zip codes that I-475 goes through and the other 13% were in surrounding communities.

An on-demand virtual meeting featuring the same narrated presentation was also available from March 11 to April 4, 2022, for the public to provide feedback. The virtual on-demand meeting had 75 attendees.

Overall, the second phase of PEL study engagement garnered 162 responses from submitted comments and comments on the roll plots received between March 11 and April 4, 2022. A summary of comments and feedback received is included in **Appendix A**.

### 6.2.3 Public Meeting 3

A third public meeting was held on Tuesday, June 28, 2022, at the Flint Public Library in Flint, Michigan. MDOT shared the progress made through the study, and the PEL Acceptable Alternative identified through the PEL process. The meeting also featured a question-and-answer segment, provided exhibits about the PEL study, and roll plots of the project area for the public to directly comment on. Sixty-three people attended the meeting. Of the 43 people that provided their zip code, 74% of the people live in zip codes that I-475 goes through and the other 26% were in surrounding communities.

An on-demand virtual meeting featuring a narrated presentation, that was the same as delivered at the in-person meeting, was also available from Monday, June 27 through July 11 for the public to provide feedback.

Overall, the third phase of PEL study engagement garnered 48 responses from submitted comments. A summary of comments and feedback received is included in **Appendix A**.



Public providing comments at community meeting #3

### 6.3 One-on-One Stakeholder Meetings

The project team met one-on-one with stakeholders throughout the development of the PEL to keep them informed and provide additional opportunities to provide feedback. Twenty-five meetings with LAC member organizations and their constituents were held with stakeholders and their constituents. These included 19 one-on-one meetings with key contacts and six living room meetings with community organizations.

Living room meetings are informal meetings hosted by community groups. These were held by request with the following stakeholder organizations at various times throughout the PEL study:

- LatinX Technology and Community Center
- Flint Neighborhoods United
- Evergreen Block Watchers
- St. Johns Street Memorial
- Communities First
- Carma Lewis, Office Manager/Constituent Services Aide for U.S. Representative Dan Kildee, and Community Program Director, Flint Neighborhoods United

One-on-one touchpoints were also held with the following stakeholder organizations at various times throughout the PEL study:

- Crim Foundation
- Flint Mayors Office
- City of Flint (Mayor, Planning, Department of Public Works, Economic Development, Transportation, City Attorneys, and Engineering)
- City of Flint Planning Commission
- City of Burton (Mayor and Department of Public Works)
- Mott Foundation
- Flint MTA
- Mott Community College
- University of Michigan – Flint
- Representative John Cherry
- Flint Public Schools
- Court Street Village
- Richard Ramsdale
- FACT Outpost

Additional personal outreach was done through phone and email to all LAC and BAC organizations to encourage participation in committee meetings, and public meetings, and assist with spreading the word about the public meetings and on-demand online meetings.



# 7.0 Next Steps

The I-475 PEL process helped to establish working relationships between agencies and stakeholders. These relationships will be critical as the project moves into the NEPA process, through design, and ultimately into construction.

## 7.1 Transition to NEPA

The FHWA PEL Questionnaire summarizing the planning process was completed and is included as **Appendix G**. This document will be used to support the transition from the planning process to a NEPA analysis. The analyses completed as part of the PEL study will be incorporated into the NEPA process as described under 23 USC 168. The NEPA process will build upon the findings of the PEL study, including the purpose and need, the environmental, social, and economic existing conditions, alternatives screening, and public outreach and coordination. The analysis of the existing land uses, infrastructure conditions, transportation elements, environmental resources, and social and economic factors will be re-examined during the NEPA process to determine classification.

Based upon the minimal anticipated impacts, it is expected that these projects will meet the requirements for a Categorical Exclusion (CE). A CE is prepared for actions that do not individually or cumulatively have a significant effect on the human environment (Council on Environmental Quality, 2010). The PEL Acceptable Alternative will stay within the existing footprint of the freeway, reducing the overall footprint of I-475 by approximately 80 to 100 feet and minimizing potential impacts. The preliminary analysis of existing conditions evaluated during the PEL study also indicate that there will likely be no significant impacts.

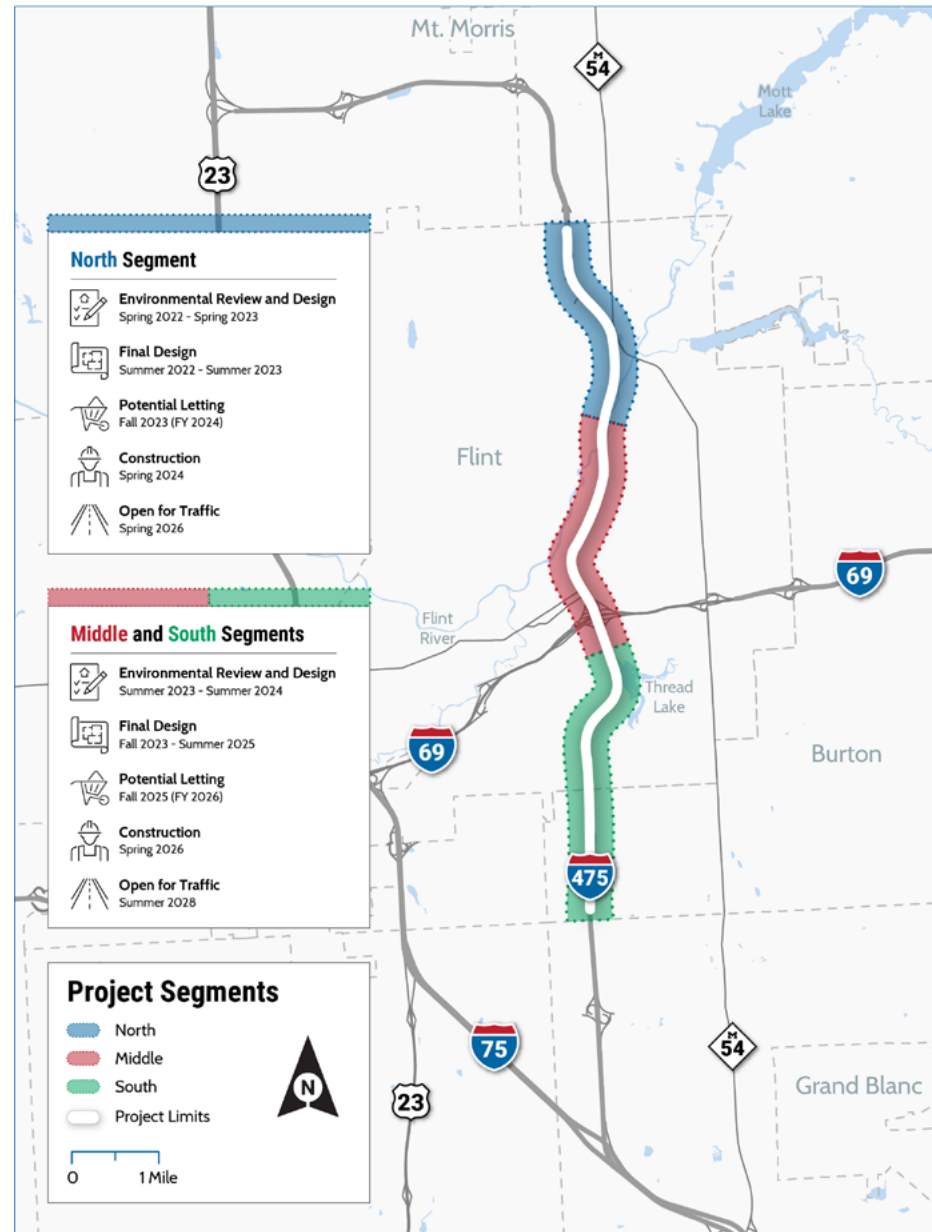
## 7.2 Environmental, Design, and Construction

Following the completion of the NEPA process, the north, middle, and south projects will move into design. Stakeholders and the public will continue to be engaged throughout the design and construction phases. The anticipated next steps are shown in **Figure 19** and include both the North Segment opening for traffic in 2026 and the Middle and South Segments opening for traffic in 2028. The North Segment of the Project will move forward as a separate project under its own environmental review process.

Reconstruction of I-475 from Bristol Road to Thread Creek and Flint River to Carpenter Road and Thread Creek to Flint River is included in MDOT's draft *2023-2027 Five Year Transportation Program* as job numbers 210886 (middle segment) and 210054 (north and south segments) and is funded by Governor Gretchen Whitmer's Rebuilding Michigan Bond Program. The original budget of Rebuilding Michigan Program funds for roadway improvements was based on a reconstruction of I-475 in the same configuration as the existing freeway. Throughout the PEL process, several changes were made to the overall concept for the project, modifying or adding elements such as a cap over I-475, the narrowed freeway with retaining walls, enhanced bridge crossings, additional active transportation crossings, and related improvements such as reconstructed service drives and aesthetic elements.

The cost of the PEL Acceptable Alternative is more than double the cost of the original Rebuilding Michigan bond project. The elements of the PEL Acceptable Alternative will be evaluated for financial and environmental factors during the NEPA process.

**Figure 20. Project Next Steps**



Data source: State of Michigan GIS Open Data, 2021

## 8.0 References

- Council on Environmental Quality. (2010, November). *Categorical Exclusions*. Retrieved from <https://ceq.doe.gov/nepa-practice/categorical-exclusions.html>
- Federal Highway Administration. (2017, June 27). *The Dwight D. Eisenhower System of Interstate and Defense Highways*. Retrieved from <https://www.fhwa.dot.gov/highwayhistory/data/page01.cfm>
- Genesee County Metropolitan Planning Commission. (2020). *Genesee: Our County, Our Future*. Retrieved from <http://ourfuturegenesee.org/wp-content/uploads/2021/03/Main-Document-Updated-3-2-21.pdf>
- Highsmith, A. R. (2009). Demolition Means Progress: Race, Class, and the Deconstruction of the American Dream in Flint, Michigan.
- Houseal Lavigne Associates. (2013). *Imagine Flint: Master Plan for a Sustainable Flint*. Retrieved from <https://app.box.com/s/pmnylov9ysvcvjkwzp81qgla816hcast>
- Interstate-Guide. (2021, July 26). *Interstate-Guide*. Retrieved from <https://www.interstate-guide.com/i-475-mi/>
- MDOT. (2022, May 19). BridgeConditionExport. Retrieved from <https://gis-mdot.opendata.arcgis.com/datasets/mdot::bridgeconditionexport/about>
- MDOT. (n.d.). Michigan Bridge Conditions. Retrieved from <https://mdot.maps.arcgis.com/apps/MapSeries/index.html?appid=fb70725b2be04dc7b01703d0b6c91bb6>
- ROWE. (2018, January 19). Burton: At the Heart of It All. Retrieved from [https://cms1files.revize.com/revize/burton/departments/department\\_of\\_public\\_works/docs/City%20of%20Burton-%20MP%20Adopted%202018.pdf](https://cms1files.revize.com/revize/burton/departments/department_of_public_works/docs/City%20of%20Burton-%20MP%20Adopted%202018.pdf)
- ROWE. (2021). *M-21 Corridor Study*.
- The Neighborhood Engagement Hub. (2020). *The Flint Neighborhood Map*. Retrieved from The Neighborhood Engagement Hub: <https://www.neighborhoodengagementhub.org/neighborhood-mapping-project>
- Transportation Asset Management Council. (2021). TAMC Interactive Map. Retrieved from <https://www.mcgi.state.mi.us/tamcMap/>
- United States Census Bureau. (2019). 2015-2019 American Community Survey 5-year Estimates.