

# I-75 Planning & Environmental Linkages (PEL) Study

June 2022



# AGENDA

Introductions

I-75 PEL Overview

Existing Conditions

Draft Purpose & Need

Next Steps

# I-75 PEL Overview

**COORDINATE** the project through a collaborative and integrated approach

**IDENTIFY** future transportation improvement(s) to address the operations of the interchange and the condition of the I-75 bridge over the River Raisin, and:

- Considers environmental, community, and economic goals early in the transportation planning process
- Uses the information analysis, and products developed during planning to inform the environmental review process
- Evaluates the infrastructure and geometric/safety needs, and operational needs

**CONSIDER** traffic impacts from south of LaPlaisance Road to north of Dixie Highway, and on the local network

## RESULT IN THREE CORE DELIVERABLES:

- 1 Purpose and Need
- 2 Evaluation of Alternatives
- 3 PEL Report

# I-75 PEL Overview

➡ Previous study utilized “elements” of FHWA PEL process, including:

- Stakeholder engagement
- Goals/objectives to aid future P&N
- Alternatives based on stakeholder input
- Traffic analysis/modeling
- Worked towards a preferred alternative, now “locally acceptable alternative”

➡ Previous study included two (2) alternatives for future consideration

➡ Previous study recommended coordination with MDOT and the completion of a formal PEL process

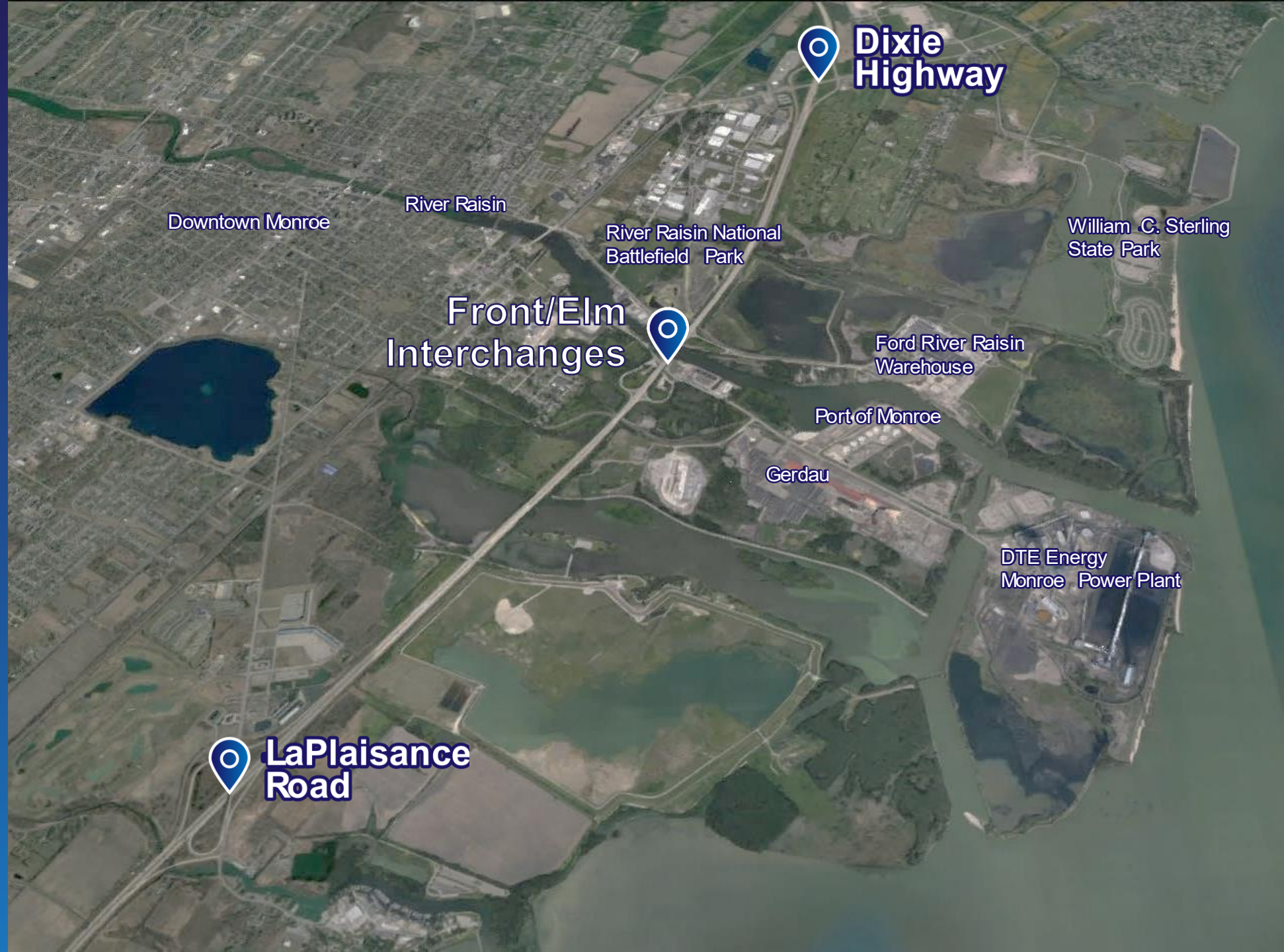
## OTHER PREVIOUS STUDIES

➡ River Raisin Heritage Corridor East Master Plan

➡ I-75 Corridor Conservation Action Plan in Monroe County



# I-75 PEL Overview



# Existing Conditions // Roadway + Traffic

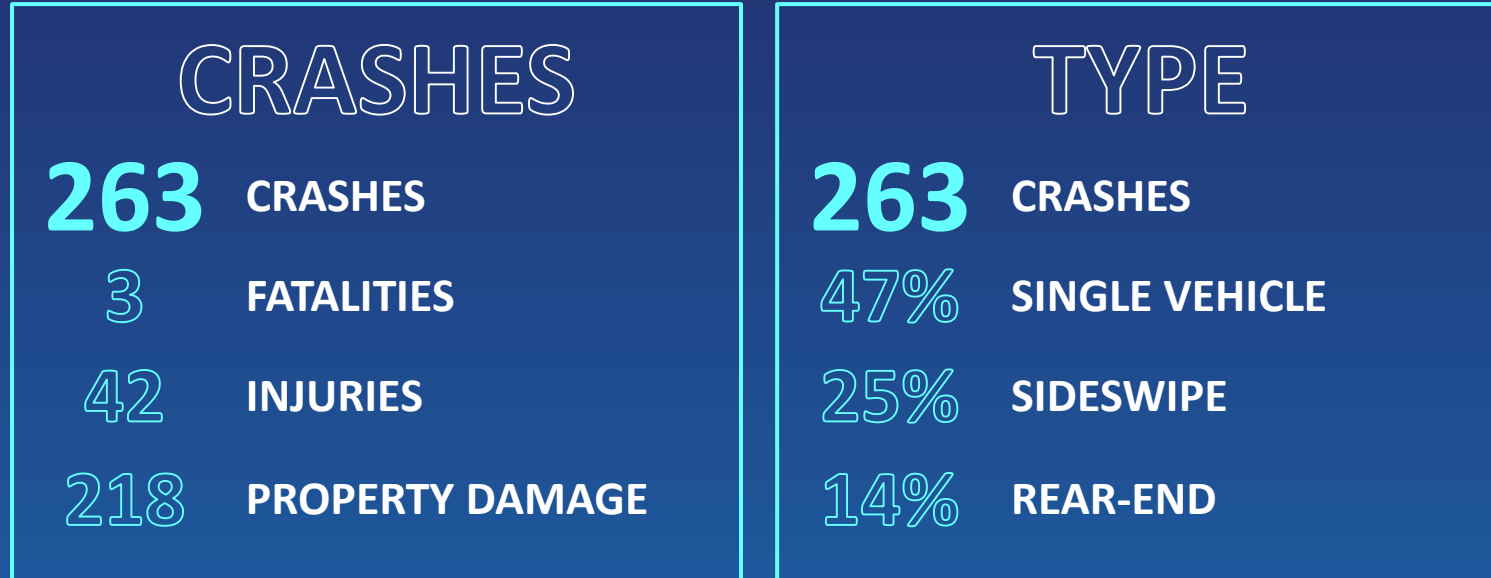
Roadway Characteristics	I-75	Front St	Elm Ave
Speed Limit	70mph	35mph	45mph
Number of Lanes	3	2	2
Pavement Type Roadway	Concrete	Asphalt	Asphalt
Pavement Type Interchange	Various		
Elevated Span Length	1,800'		
Shoulder Width	5' - 13'		
Median Width	8' - 35'		

\*Shoulder and median widths are narrowest at interchanges

- Most individual movements, approaches, and intersections have an **LOS C** or better with acceptable queue length results
- NB I-75/Dixie has movements at LOS E and LOS D, with significant queue lengths
- SB I-75 and LaPlaisance operates at LOS A, but with significant queue lengths in the AM and PM peak

# Existing Conditions // Safety

- Crash data collected in study area between 2017 and 2021



- Primarily caused by speeding, loss of control, careless driving, improper lane changes, slowdowns, and backups

# Existing Conditions // Safety

## ARTERIALS

40% SINGLE VEHICLE

27% SIDESWIPE

20% REAR-END

- Failure to yield
- Unable to stop

## RAMPS

77% SINGLE VEHICLE

10% SIDESWIPE

- Loss of control
- Running of the road
- Careless driving
- Improper backing
- Failure to yield
- Careless driving
- Speeding
- Unable to stop
- Improper lane use
- Improper passing

## INTERSECTIONS

38% SINGLE VEHICLE

50% SIDESWIPE

13% REAR-END

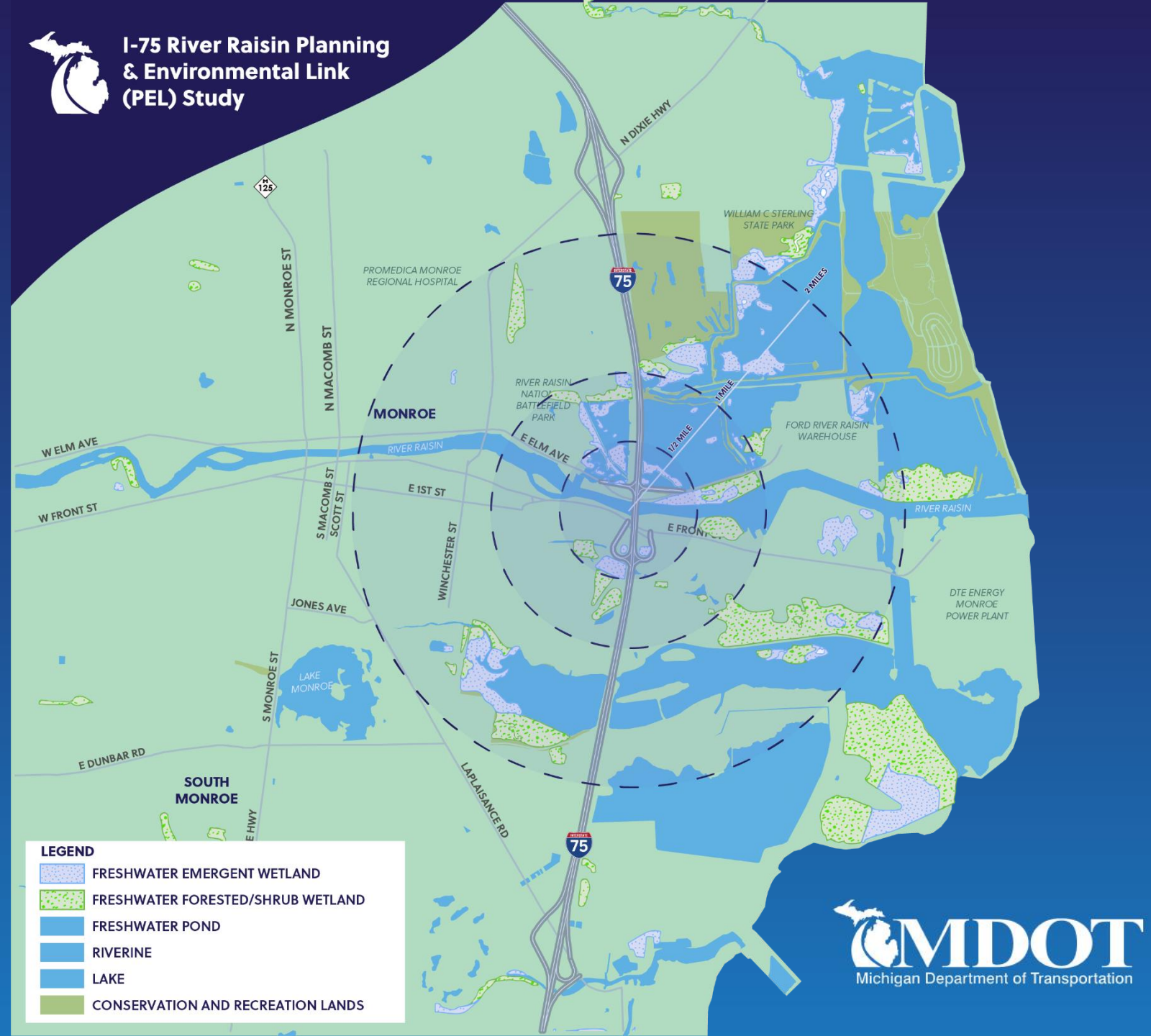
- Failure to yield
- Unable to stop
- Improper lane use
- Improper passing



# Existing Conditions //

## Aquatic

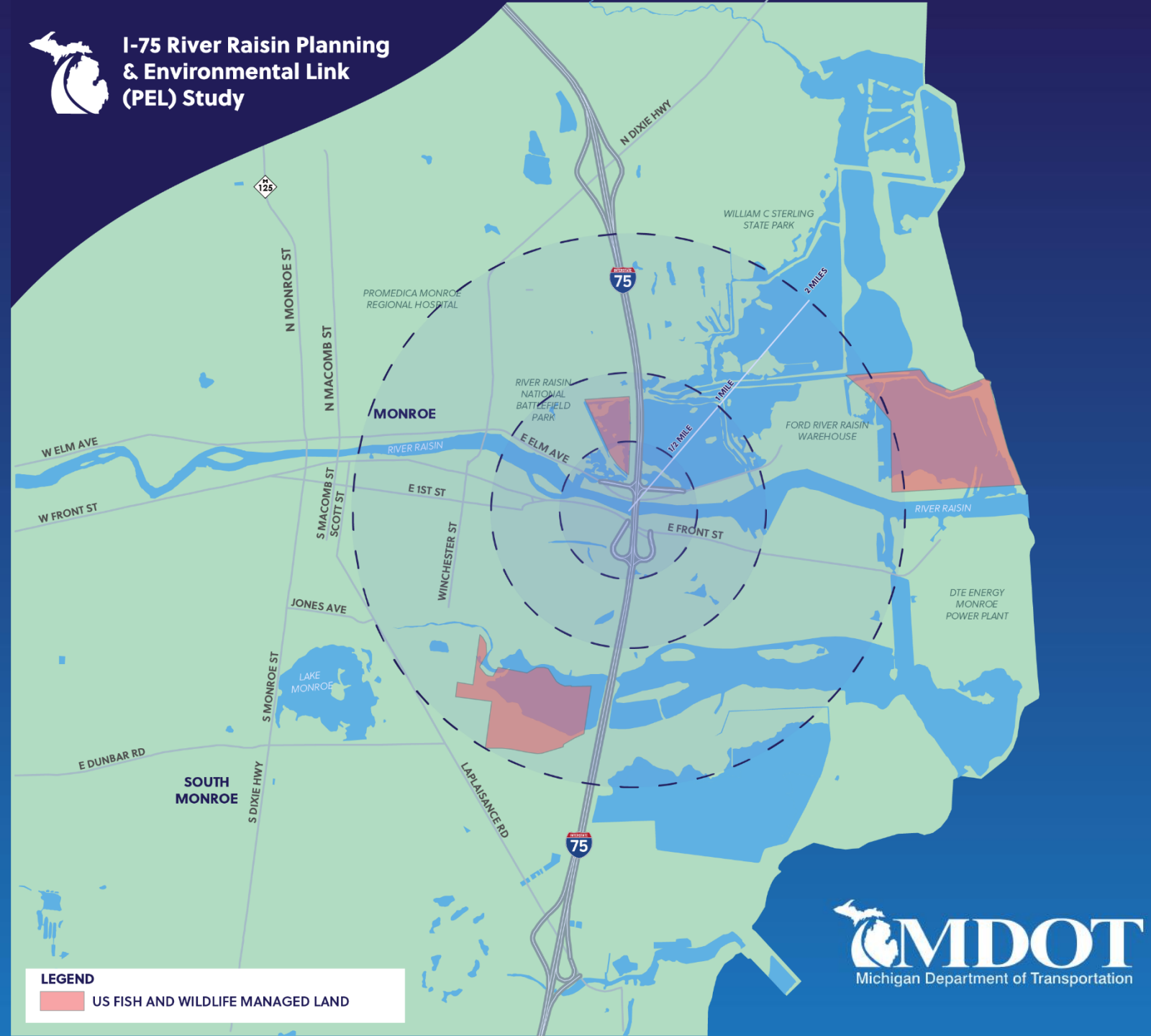
- 27 aquatic resources: 17 wetlands, 2 lakes, 7 ponds, 1 linear water crossing
- 3 receiving waters: River Raisin, Plum Creek, Lake Erie (Monroe Harbor)
- 1 linear surface water crossing – River Raisin
- 8 soil types over 1 watershed – River Raisin



# Existing Conditions //

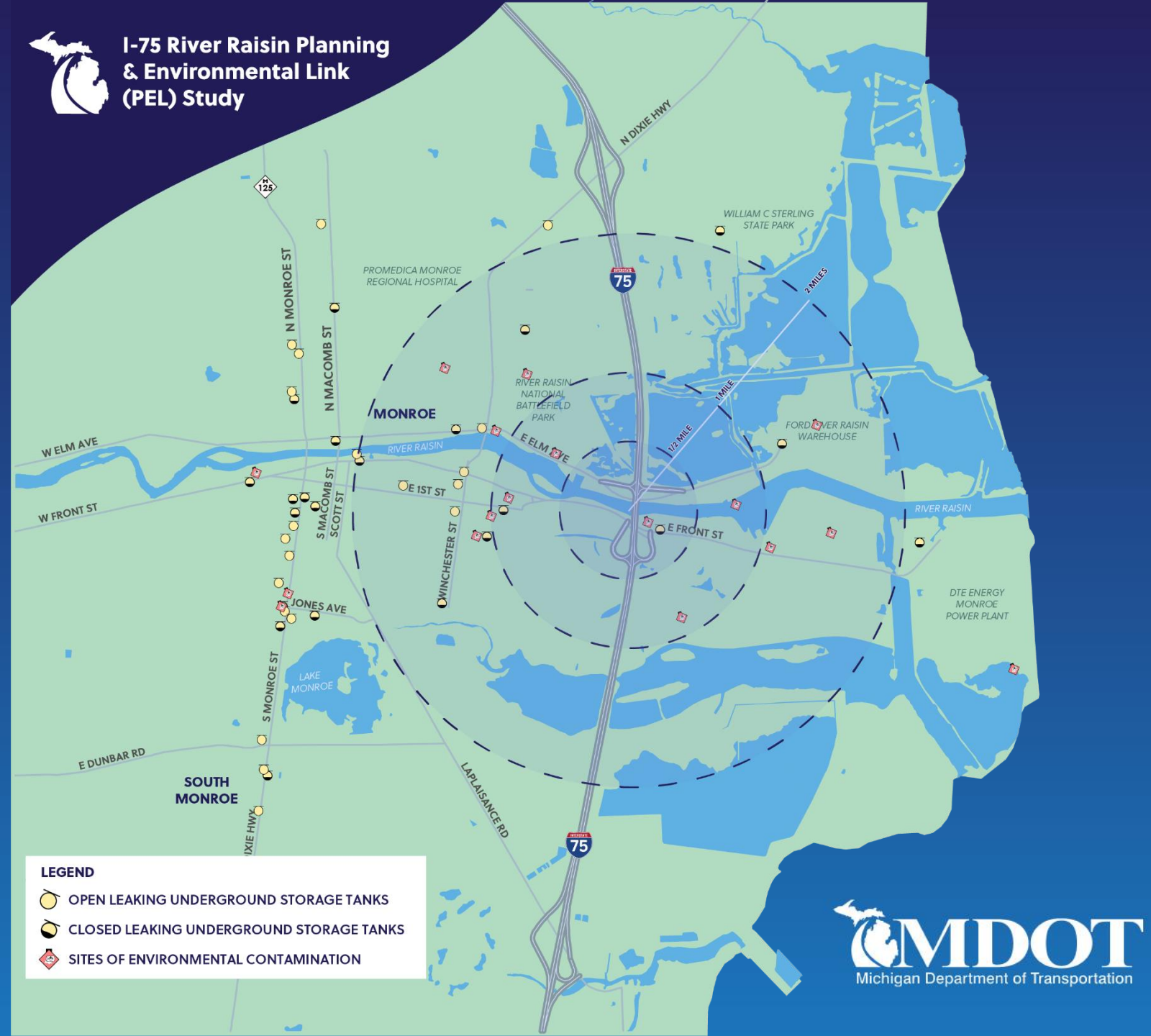
## Biological

- 4 federally-listed endangered species, 4 federally-listed threatened species, and 1 candidate species
- 132 state-listed species within Monroe County
- 10 migratory birds
- USFWS-managed Ford Marsh/Detroit River International Wildlife Refuge, including N of Exit 14 between the CN and I-75, N of Dunbar between NS and I-75



# Existing Conditions // Contamination

- 349 sites of known or potential subsurface contamination and/or Underground Storage Tanks (USTs)



# Existing Conditions // Cultural

## CULTURAL

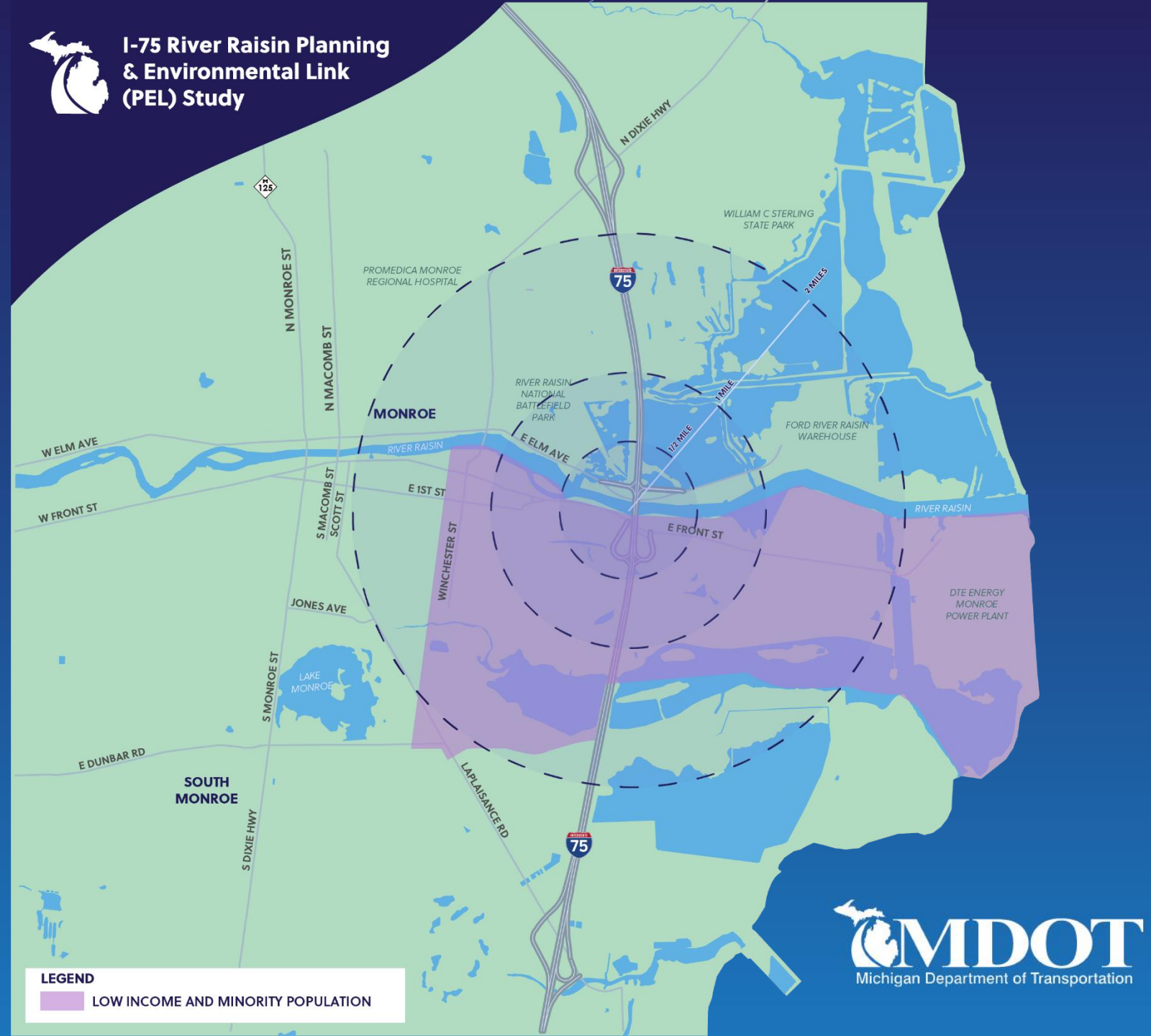
- Most areas potentially impacted by design alternatives **have been extensively disturbed** and have a very **limited potential for the presence of significant archaeological resources**
- Noted disturbances include the **late historic and modern construction of infrastructure** such as roadways, wastewater treatment plant and associated drainage ponds, modern landfills, industrial development, and the distribution of historic swamplands
- **Areas for archaeological investigation include** (a) strip of land W of I-75 between Front St. and the River Raisin, (b) area E of I-75 between Elm Ave. and the River Raisin, (c) area E of I-75 between Front St. and the River Raisin, and (d) area N of Elm Ave. between Detroit Ave. and swamps to the E



# Existing Conditions //

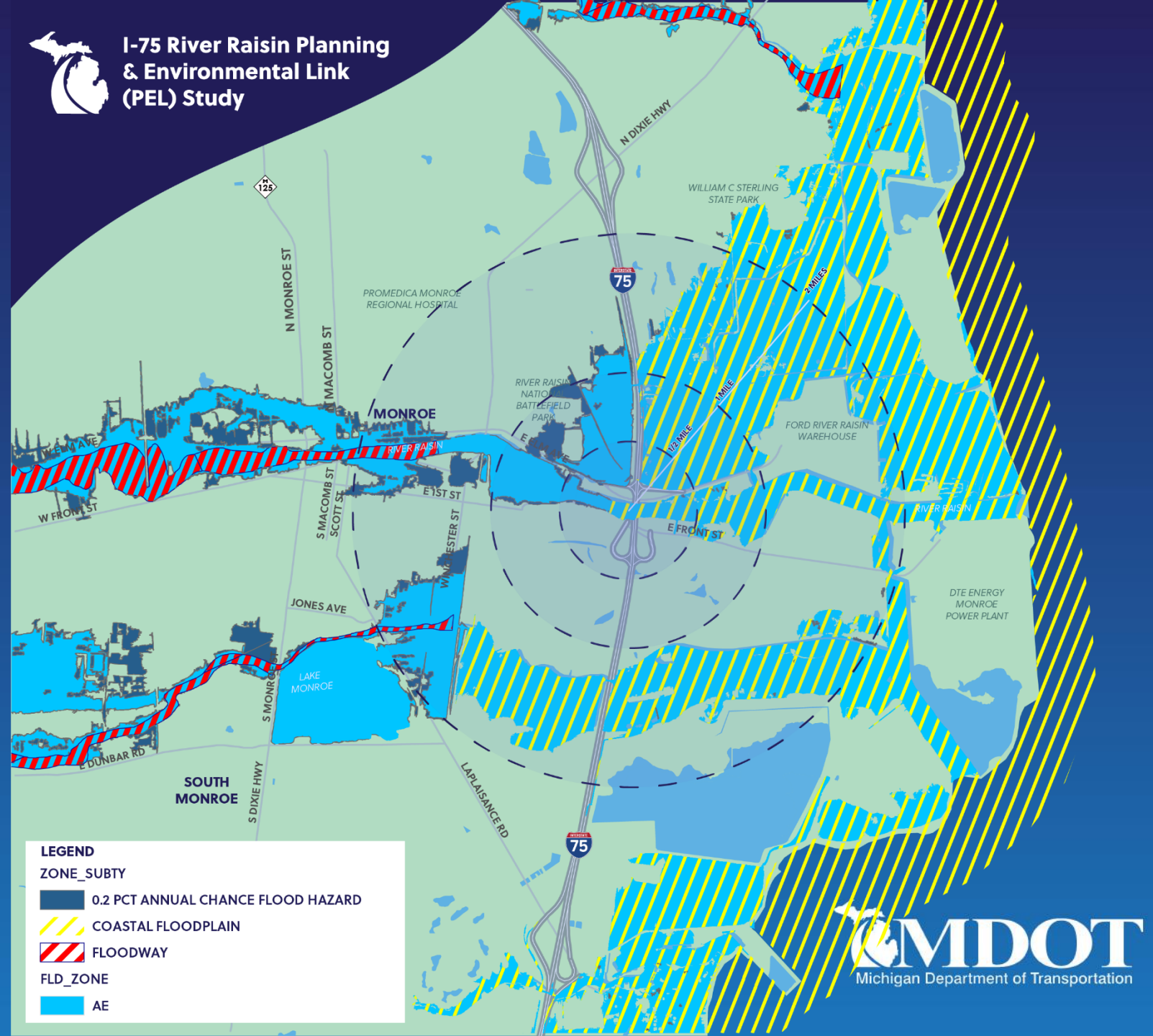
## Equity

- Environmental Justice (EJ) is the fair treatment and meaningful involvement of all people, regardless of race, ethnicity, income, national origin, or educational level with respect to the development, implementation and enforcement of environmental laws, regulations and policies (USDOT)
- Census Tract 8318 contains larger minority populations compared to the respective Monroe City and Monroe County average (12% and 7%)
- Census Tract 8318 contains larger low-income populations compared to the respective Monroe City and Monroe County average (16% and 10%)



# Existing Conditions // Floodplains

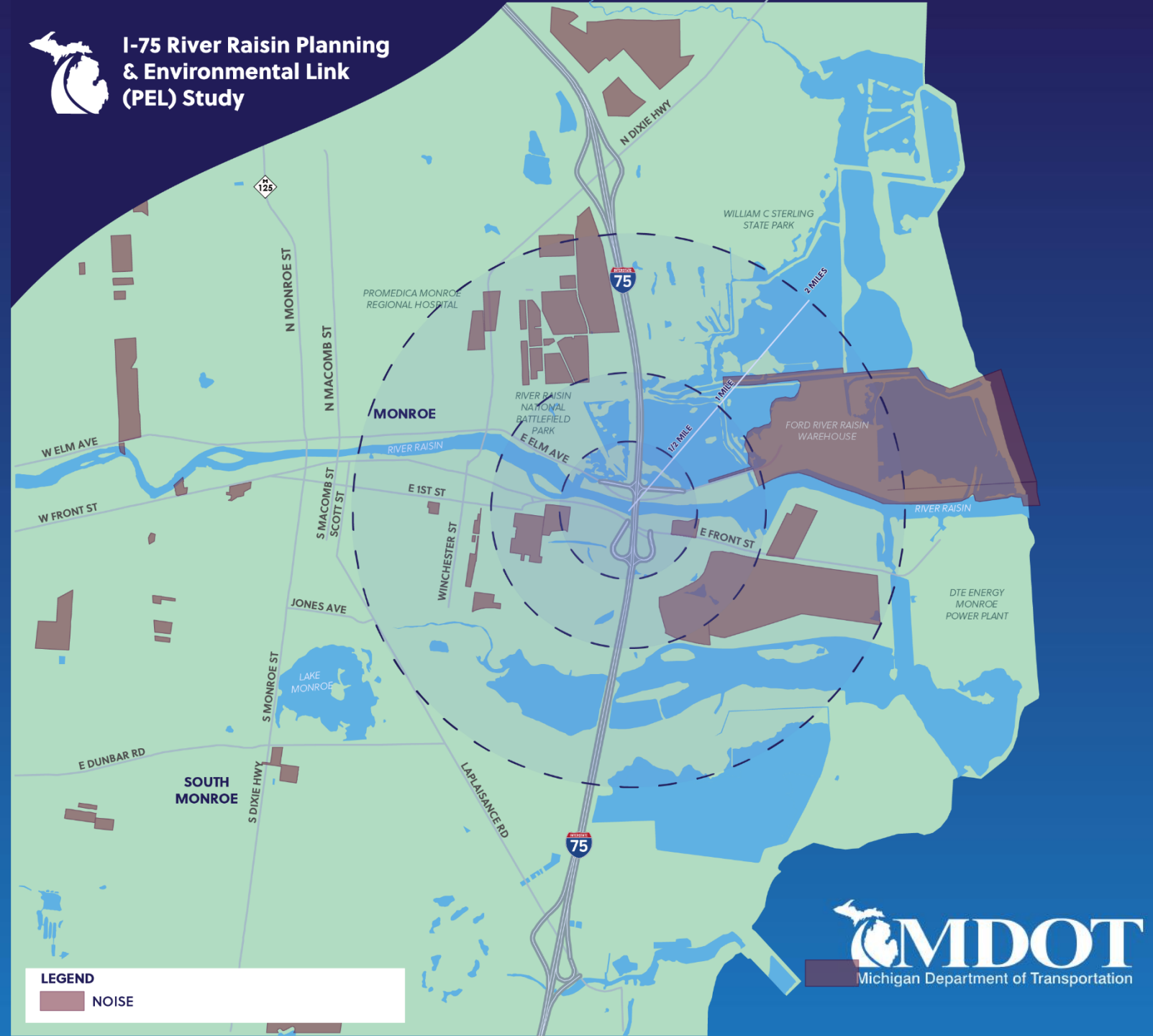
- River Raisin 100-year floodplain (Zone AE) continues on both the east and west sides of I-75 for approximately 0.75 miles to the north of the river crossing



# Existing Conditions //

## Noise

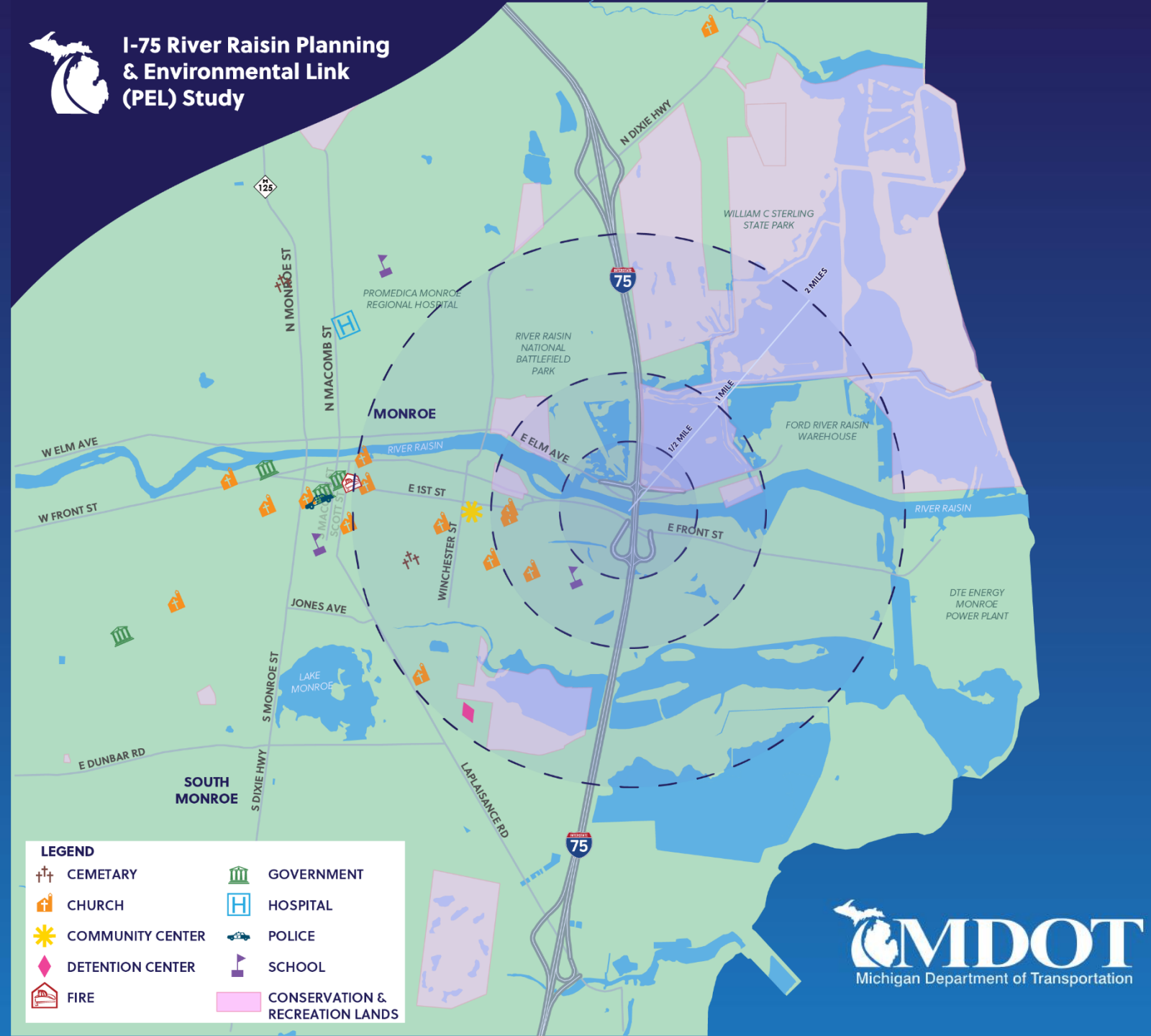
- Sensitive noise receptors identified within the project area include recreation and park areas (activity category C uses), and industrial areas (activity category F uses); and identified adjacent to the project area include residential areas (activity category B uses)





# Existing Conditions // Recreational

- River Raisin Heritage Trail System runs through the project area
- 5 recreational resources are adjacent to the project area, including William C. Sterling State Park, Hellenberg Park, River Raisin National Battlefield Park, Heck County Park, South Monroe Townsite





# Draft Purpose & Need

The purpose of the I-75 Monroe Planning and Environmental Linkages (PEL) is to **IMPROVE SAFETY AND OPERATIONS** for all users of this segment of freeway and associated interchanges (Front Street and Elm Avenue) while **MINIMIZING IMPACTS** to the natural environment and adjoining properties while **ENHANCING POSITIVE BENEFITS** to the community, businesses, and users of the corridor and will:

- Replace the aging I-75 infrastructure (roadway and bridge)
- Improve interchange and intersection traffic operations at Front Street and Elm Avenue by modifying the geometry of key elements (weave/merge distances, ramp grades, etc.)
- Provide safe pedestrian facilities at cross streets and along the River Raisin Heritage Trail
- Enhance the entrance/gateway to the City of Monroe through branding and aesthetics

# Next Steps

- Continue meeting with stakeholders (i.e. COTE, others?)
- Finalize Existing Conditions Report
- Finalize P&N
- Begin alternatives development



# Questions?