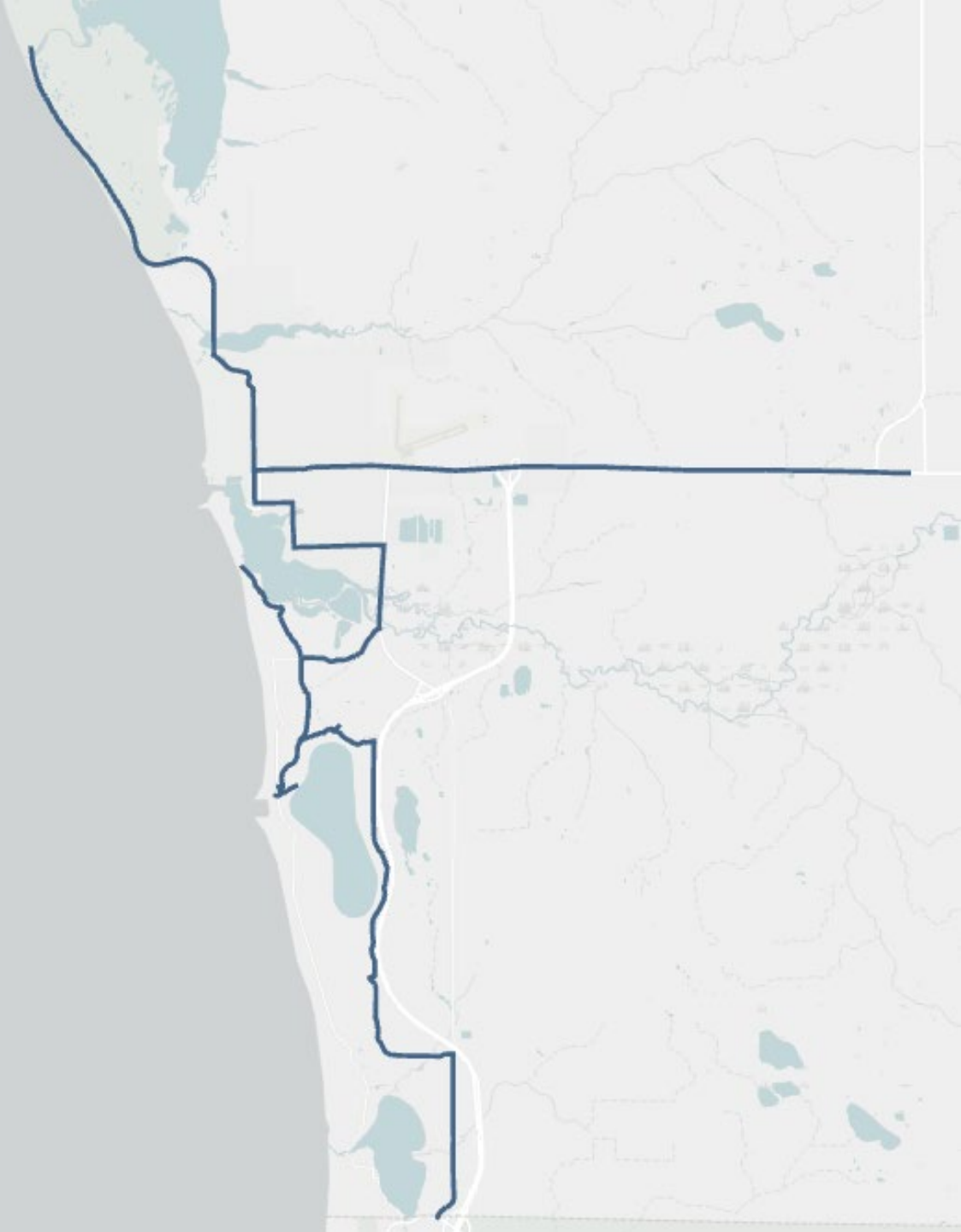


# Mason County Trails Development Plan

## DRAFT Plan Review with Stakeholders

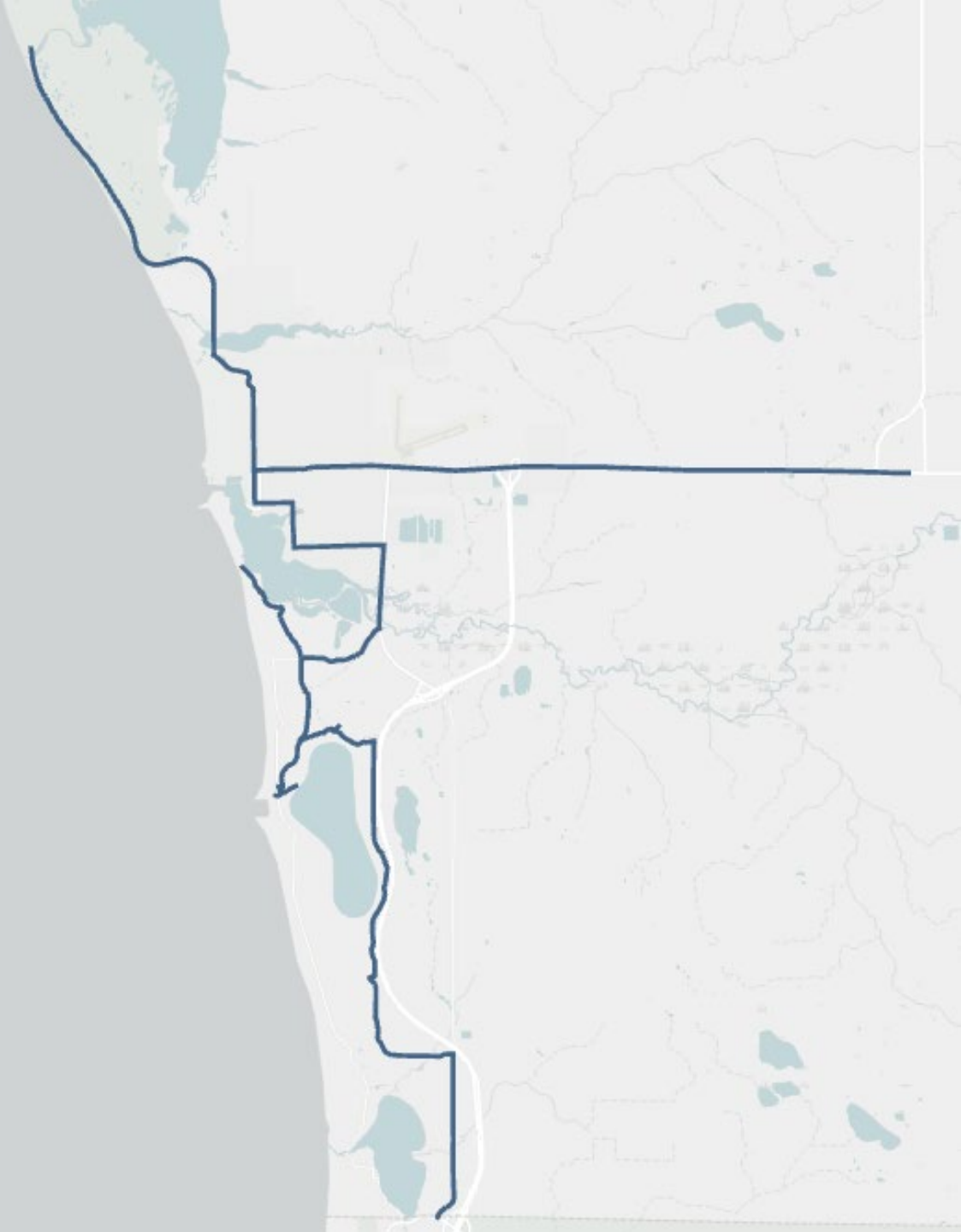
Wednesday, July 9, 2025

2:00 PM via Web Meeting



# Today's Agenda

1. Project Work Plan and Background
2. Work To Date and Project Reset
3. Primary Trail Segments and Evaluation
4. Segment Overviews and Alternatives
5. Proposed Project Phasing
6. Proposed Lead Agencies
7. Management and Maintenance
8. Suggested Immediate Action Items
9. The Big Questions Moving Forward
10. Next Steps

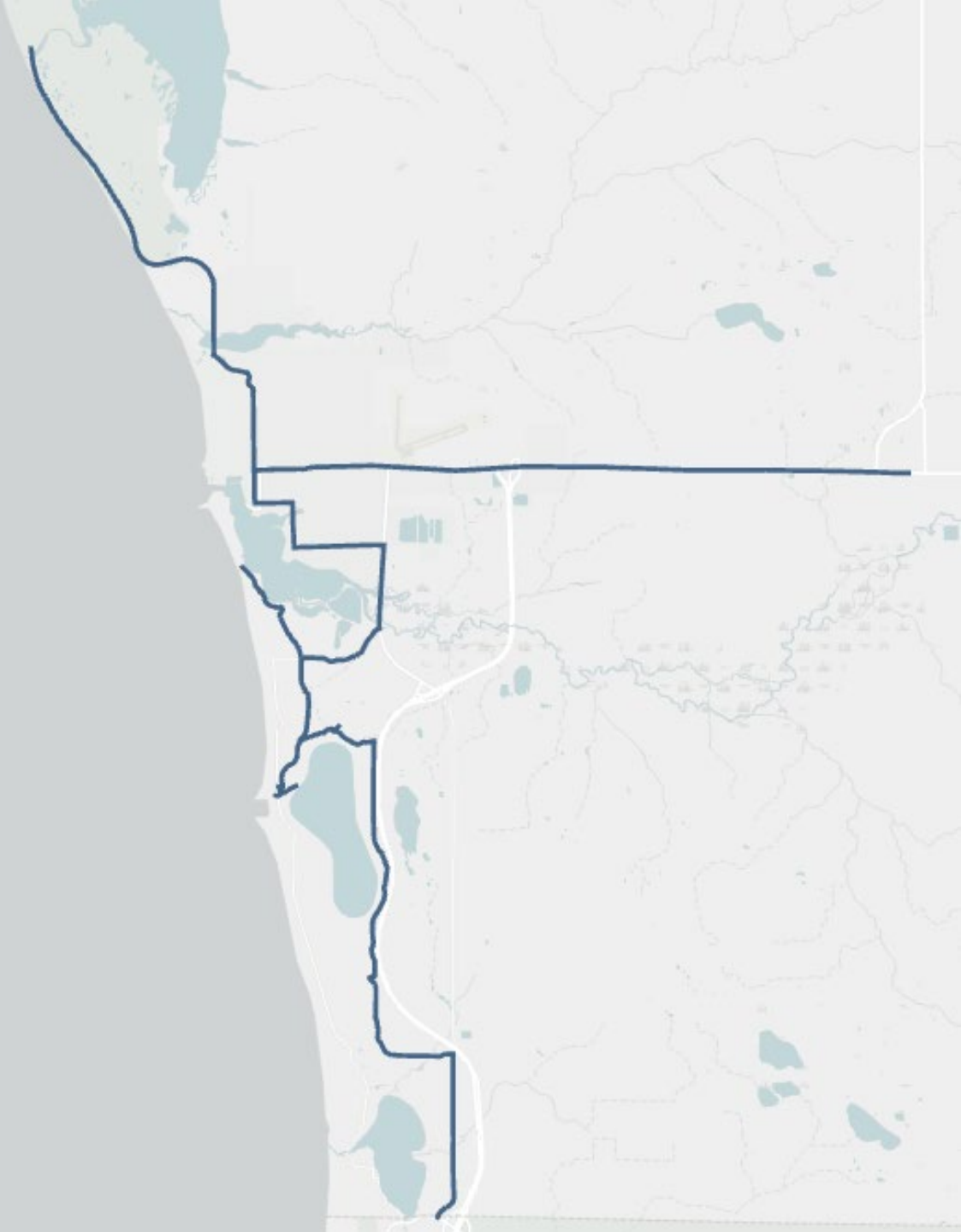


# Project Work Plan

Continuing the work of the Mason County Multi-Use Trails Task Force, the project focused on the **Shoreline Trail** between Bass Lake north to Ludington State Park

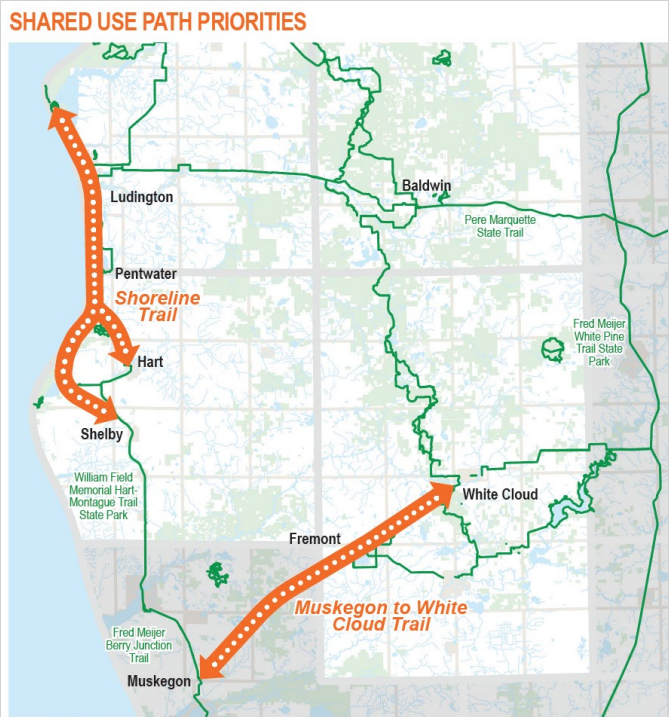
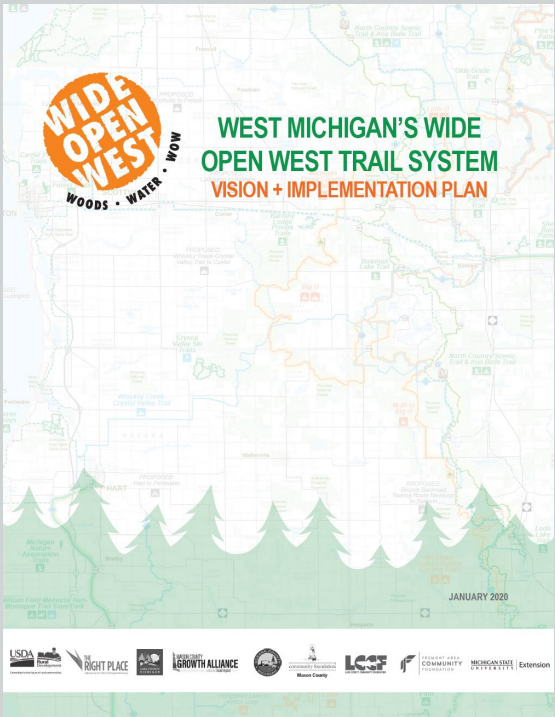
The work was divided into two phases:

1. Prioritize implementation based on near-term feasibility and community impact
2. For the priority projects, establish a road map to implementation



# Project Background

The **Shoreline Trail**, Ludington State Park to Pentwater, is identified as the highest ranking of the three “Big Projects” in the 2020 Wide Open West Trail System Plan



### SHORELINE TRAIL

Segment 1: Ludington State Park to Ludington

Length	Approximately 7.5 miles
Description	Begins at Hamlin Dam south following wooded edge of dune until meeting with existing drive used by Sargent Sand. Trail follows drive out to 116 and parallels 116 on the north and west of road until Abrahamson Road. At this point, the trail utilizes existing paved shoulder going south on both sides of 116, until connecting with the existing trails within Carter Park. From Carter Park heads south as a shoulder along Rath Avenue until ending at East Dowland Street. At this point becomes a new off-road trail and makes a curve east toward Lake Street, where on-street facilities will continue the connection. At Washington Avenue, trail segment goes south to 6th Street and east along 6th Street.
Notes	Route chosen within Ludington State Park is identified as critical dune. The DEQ produced the reference map from the Atlas of Critical Dunes, Michigan Department of Natural Resources, Land and Water Management Division, February 17, 1989 as referred to in statute Part 353, Sand Dunes Protection and Management of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (NREPA). This route is possible without extensive grading and vegetation removal. For connector to City from Carter Park, multiple alternative routes possible.
Potential Challenges	Issues may arise during design phase within critical dune. Alternative routes could be chosen within the park if obstacles are identified during design. New dedicated pathway bridge may not be financially feasible given the existing wide shoulders on 116. Extensive tree clearing and retaining walls will be required along 116. Private easement may be required near SS Badger dock.
Proposed Cross Section	This trail segment is proposed to be an asphalt paved 10' shared use path/trail on a gravel and sand subbase with 2' shoulder on either side and existing 4' paved shoulder.
Feasibility Contact	Susan Conradson, Water Resources Division, MDEQ (231) 876-4443, conradson2@michigan.gov
Cost Estimate	\$5.28 Million

### SHORELINE TRAIL

Segment 1: Ludington State Park to Ludington

The diagrams show two cross-sections: "SEPARATED PAVED TRAIL" and "WIDENED SHOULDER". The "SEPARATED PAVED TRAIL" shows a 10' asphalt paved trail on a gravel and sand subbase, with 2' shoulders on either side. The "WIDENED SHOULDER" shows a 10' asphalt paved trail on a gravel and sand subbase, with 2' shoulders on either side, and an existing 4' paved shoulder.

West Michigan's Wide Open West Trail System Implementation Plan

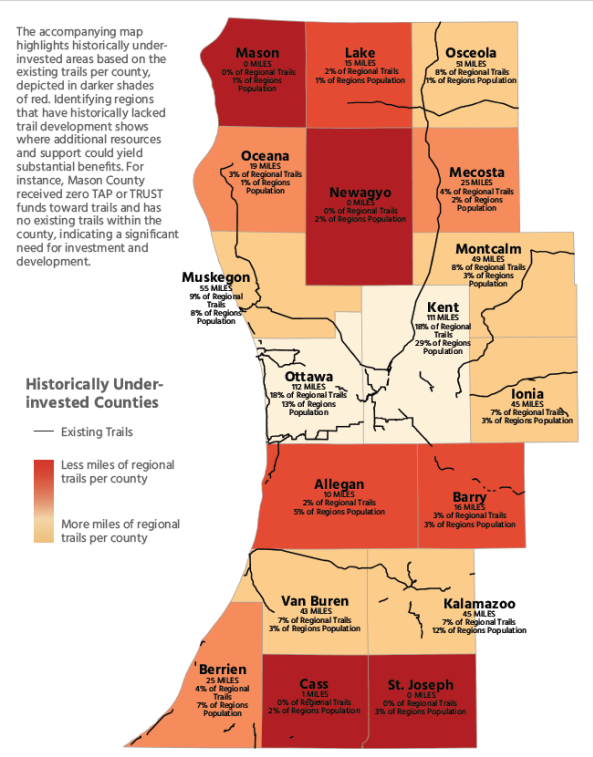
31

This project was the starting point



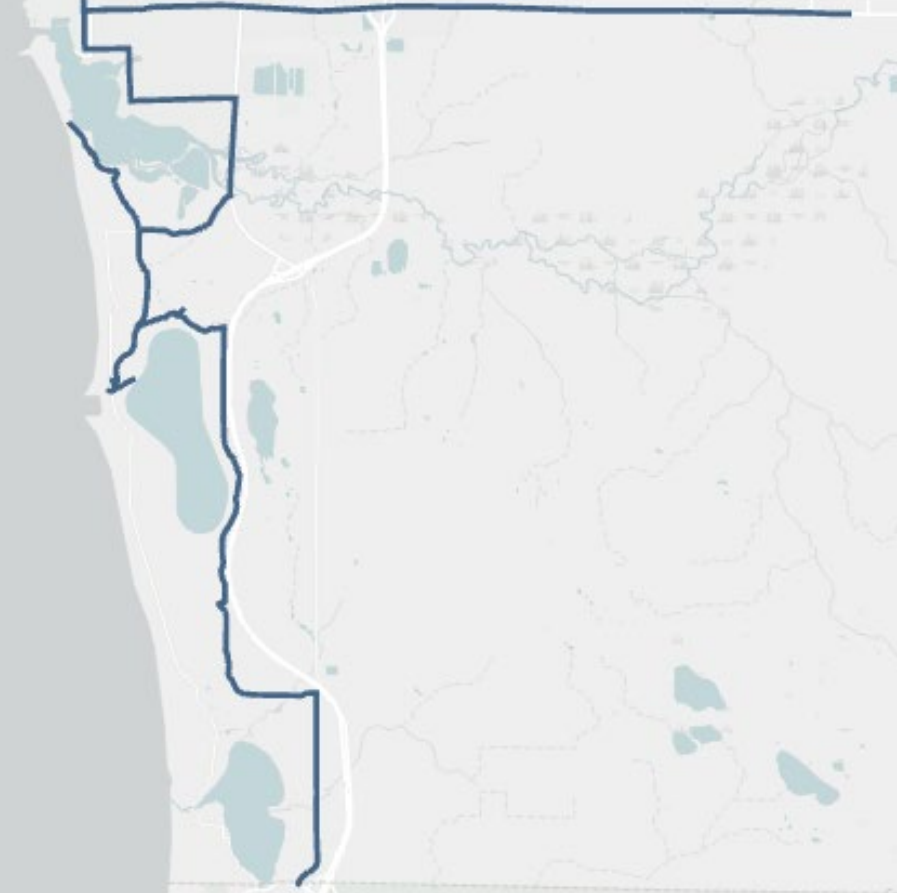
# Project Background

The West Michigan Regional Trails Master Plan reinforced the regional significance of the Shoreline Trail, it being the most logical link to the regional trail system, and Mason County is a historically under-invested county when it comes to regional trails



# Initial Screening and Opportunity

- At the beginning of the project, the segment linking Ludington to Ludington State Park was identified as having the most significant regional economic impact and recreation potential
- This coincided with the MDOT's resurfacing plans for M-116 and the park closing for renovations
- A trail is identified as a priority in the Ludington State Park's General Management Plan. The plan specifically notes working with MDOT regarding non-motorized access and parking along M-116 and including this in the 10-Year Action Goals
- This began a long and convoluted detour seeing if there was an opportunity to incorporate the long-sought after trail link to the state park as part of the M-116 project
- Throughout 2024 and into 2025 many alternatives were explored during meetings with representatives from MDOT, MDNR, and EGLE to explore potentials to integrate a trail into the M-116 construction project



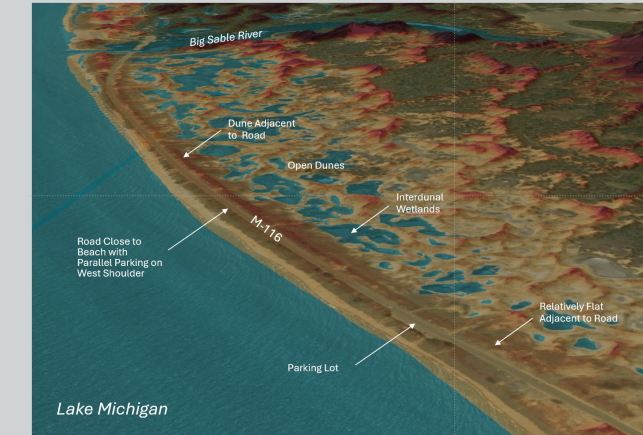


# Ludington State Park Trail Project Detour

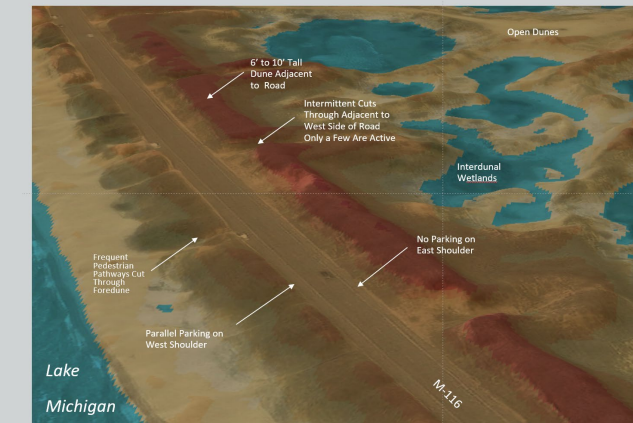
The following summarizes the key findings from meetings with stakeholders:

- M-116's shoulders have a thinner cross section than the motor vehicle travel lanes so motorized vehicle traffic can not be shifted to one side or the other
- Parking on the west side of the roadway is long-standing and popular tradition
- Shoreline erosion at the north and south end of the park threatens M-116
- The north half of the park has an approximately 10' tall dune immediately adjacent to the east side of the roadway making any new facility challenging
- Clearing sand and snow from the roadway requires the use of the intermittent cut throughs of these same dunes – presenting a challenge with any elevated structure
- To protect the critical dunes, ELGE felt any trail, should be immediately adjacent to the roadway with a raised boardwalk being the preferred approach
- M-116 is a state trunkline with a statutory 55 mph speed limit, a state level review required significant setbacks for any construction adjacent to the roadway
- MDOT's, EGLE's, and the Road Commission's requirements became mutually exclusive – any solution needs to work within the constraints of the existing roadway

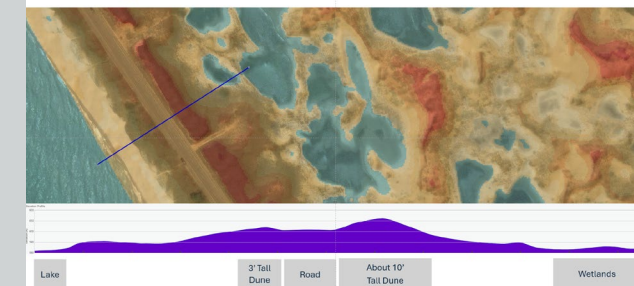
Existing Conditions North Half



Existing Conditions North Half Detail Area

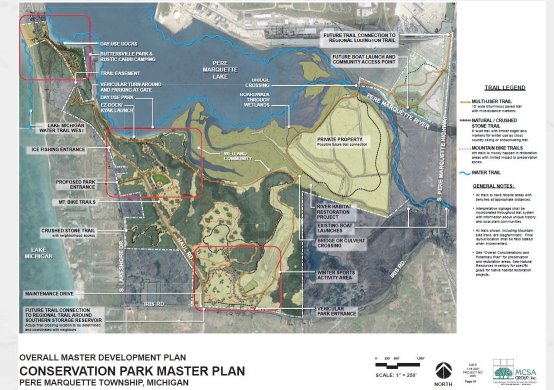


M-116 Typical Cross Section on North Half



# Project Reset

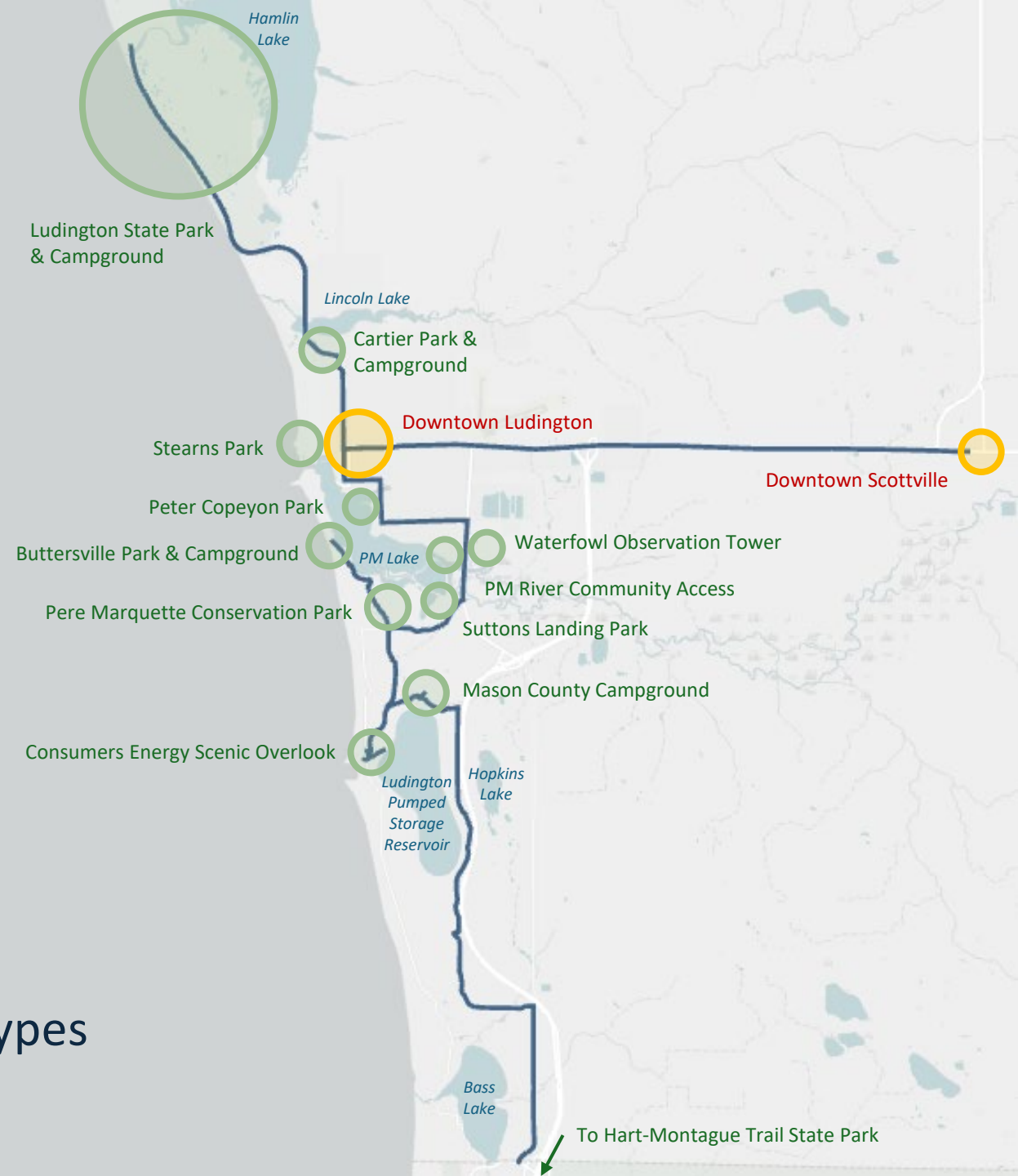
- It was determined that there was not a cost-effective solution to add a separate non-motorized facility adjacent to M-116 through the state park and that this project should change its focus to other portions of the shoreline trail
- While outside of the original scope of work, numerous stakeholders expressed a desire to address the safety concerns on US-10 from Ludington to Scottville so that segment was added to the project
- Early work regarding cost effective road reconfigurations from Cartier Park to Pere Marquette Lake were revisited
- Ways to capitalize on the recent grant for trail projects awarded to Pere Marquette Township and Mason County were explored in more detail
- The entire route was reevaluated, and facility choices were refined working with the project leadership team
- The following is the result of that effort





# Revised Route Highlights

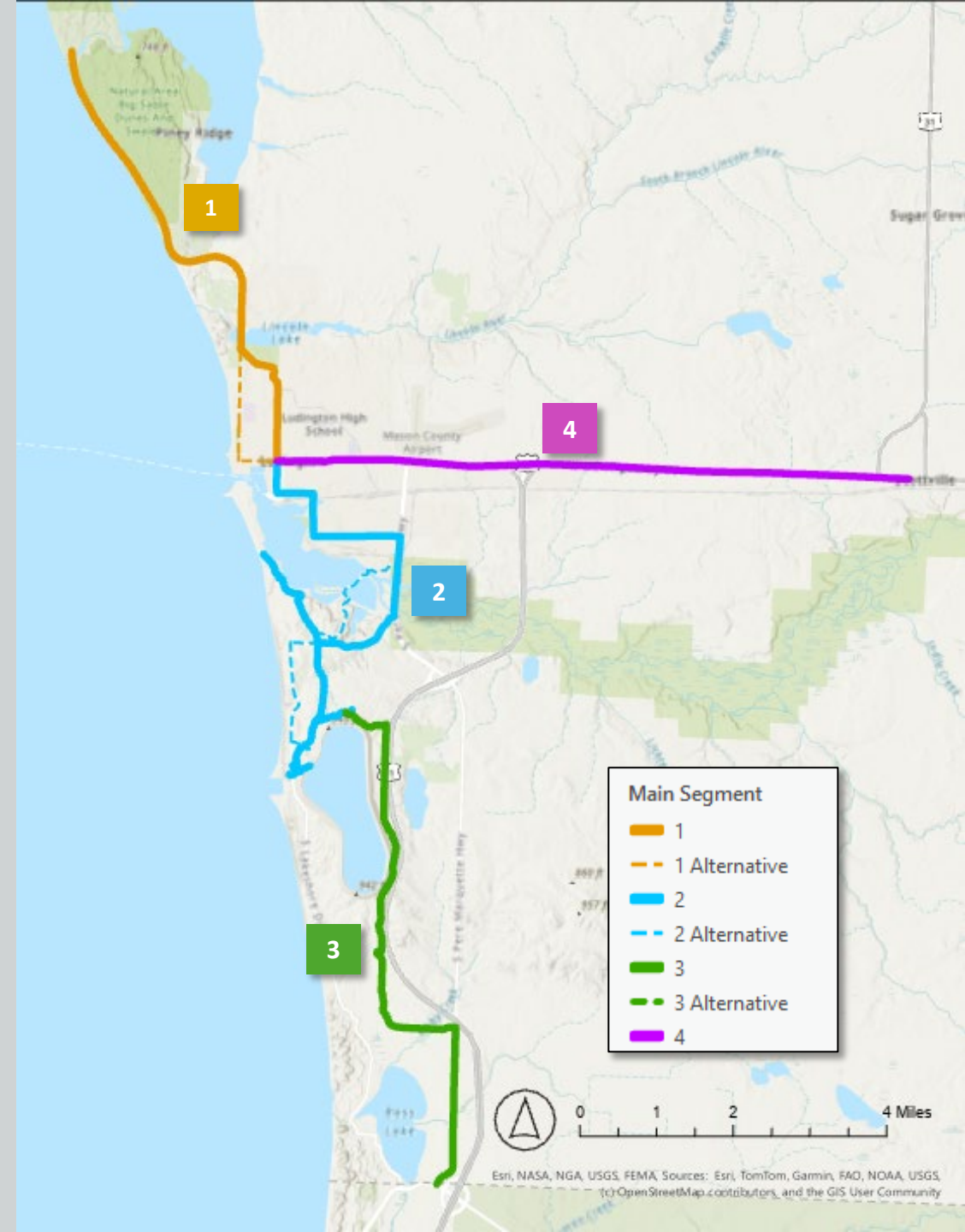
- Approximately 32 Miles
- 3 Campgrounds
- 8 Parks
- 3 Public Beaches
- 3 Scenic Overlooks
- 2 Cities
- 2 US Bike Routes
- Mix of Regional Recreational Trail and Daily Transportation
- A Variety of On-Road and Off-Road Facility Types



# Primary Route Segments

For an Initial Screening, Four Segments were Identified:

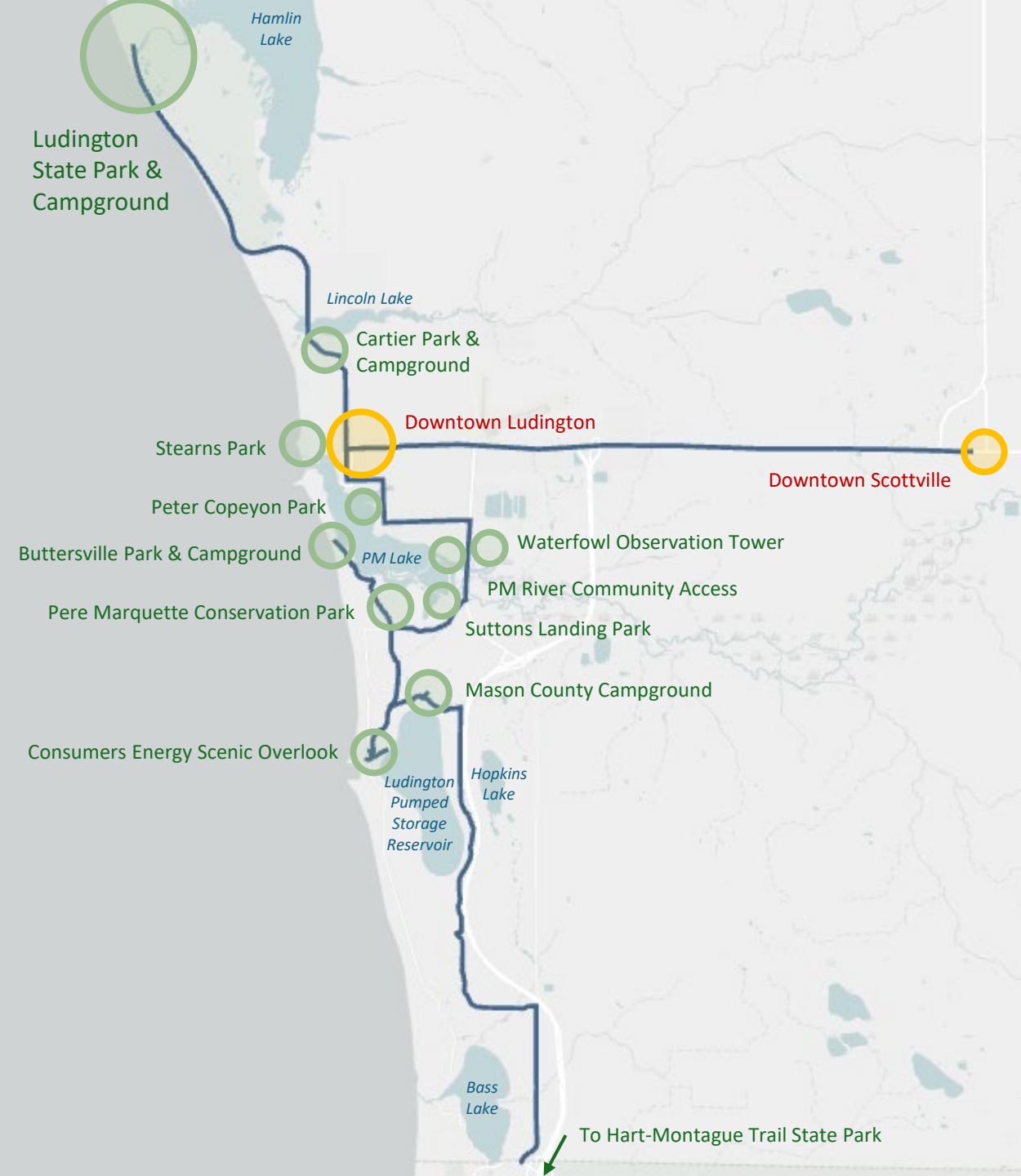
- 1** **Ludington State Park to Downtown Ludington**  
6.8 Miles
- 2** **Downtown Ludington to Consumers Energy Overlooks**  
8.7 Miles
- 3** **Mason County Campground to Oceana County Line**  
7.8 Miles
- 4** **Downtown Ludington to Scottville**  
8.3 Miles



# Initial Screening

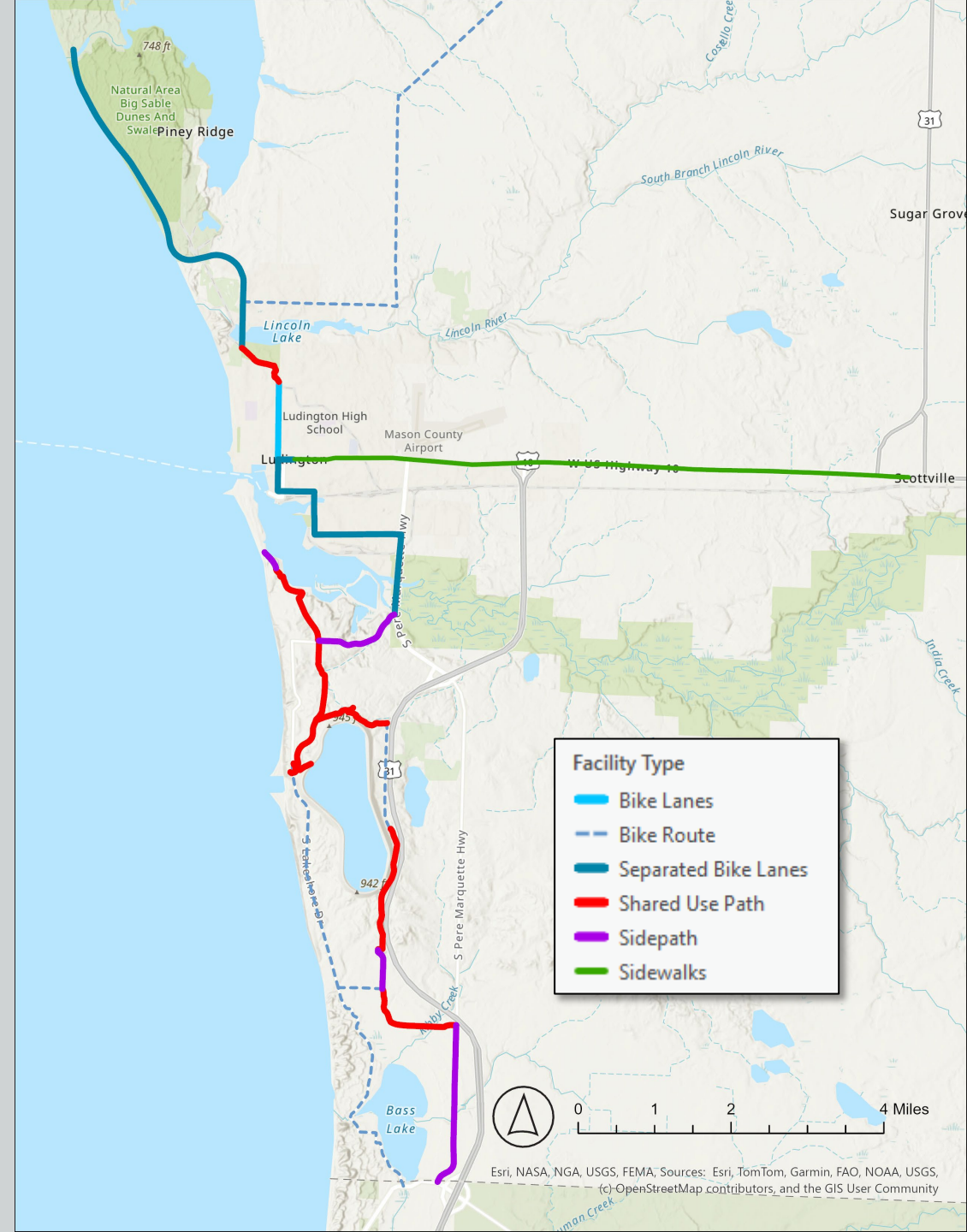
## Evaluation Factors – Potential of 10 points each

1. Access to Parks and Recreation
2. Access to Residential Areas
3. Improvement to Nonmotorized Safety
4. Scenic Quality of the Route
5. Long-term Maintenance Costs
6. Presence of Adjacent Amenities
7. Ease of Necessary Property / Easement Acquisitions
8. Benefits of Facility Compared to Costs
9. Simplicity of Regulatory Requirements
10. Positive Regional Economic Impact



# Facility Type Overview

- Some Evaluation Factors such as Long-term Maintenance Costs, Benefits of Facility Compared to Costs, and Simplicity of Regulatory Requirements change dramatically based on the facility type
- Through meetings with the Steering Committee various approaches were explored with an eye on balancing the user experience, safety, cost benefit, and feasibility
- The facilities shown to the right were used for the analysis and will be explored in more detail at the segment level

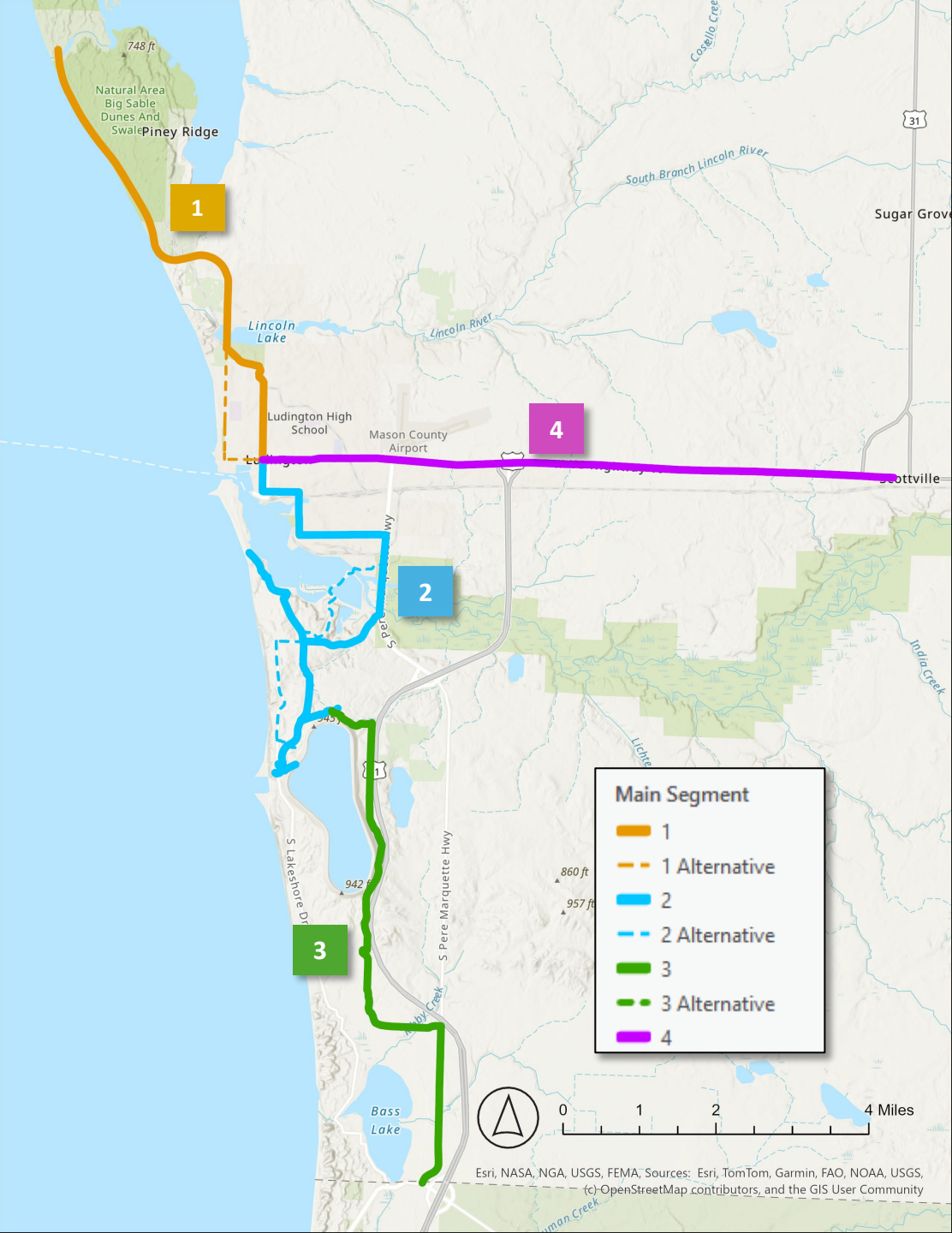






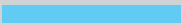
# Initial Screening

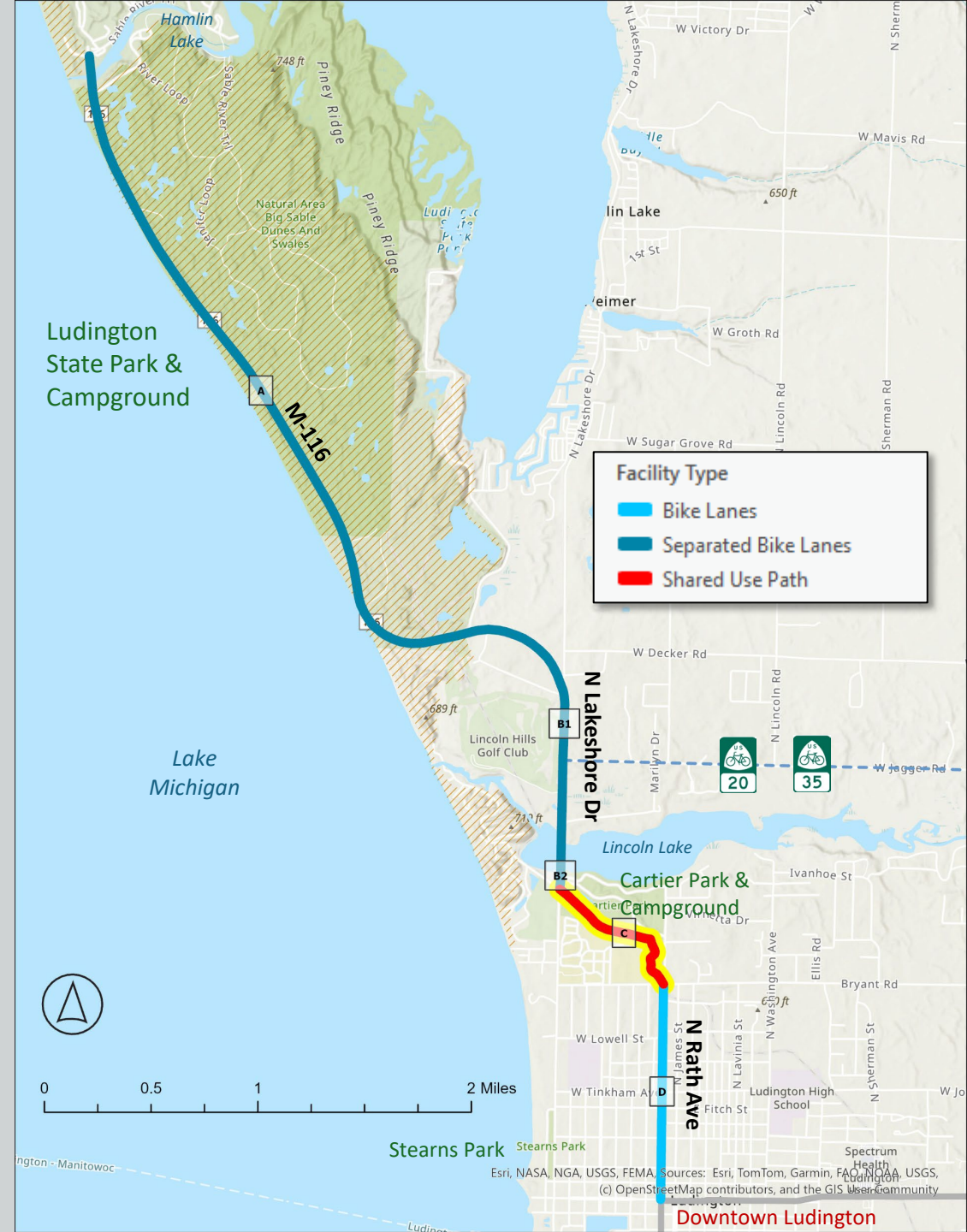
Evaluation Criteria	Analysis Segments			
	1	2	3	4
Access to Parks and Recreation	10	7	2	0
Access to Residential Areas	10	9	1	4
Improvement to Nonmotorized Safety	5	5	5	10
Scenic Quality of Route	9	7	3	0
Long-term Maintenance Viability	3	7	5	3
Presence of Adjacent Amenities	5	7	0	10
Property / Easement Acquisition	8	5	5	5
Cost of Facility Compared to Benefit	10	10	5	10
Complexity of Regulatory Challenges	0	6	10	0
Regional Economic Impact	10	7	3	2
Score	70	70	39	44

With no clear main segment to focus on phasing was developed at a sub-segment level



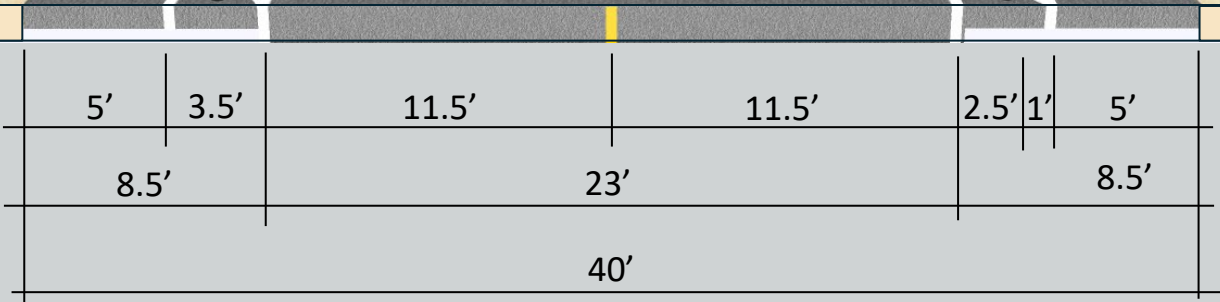
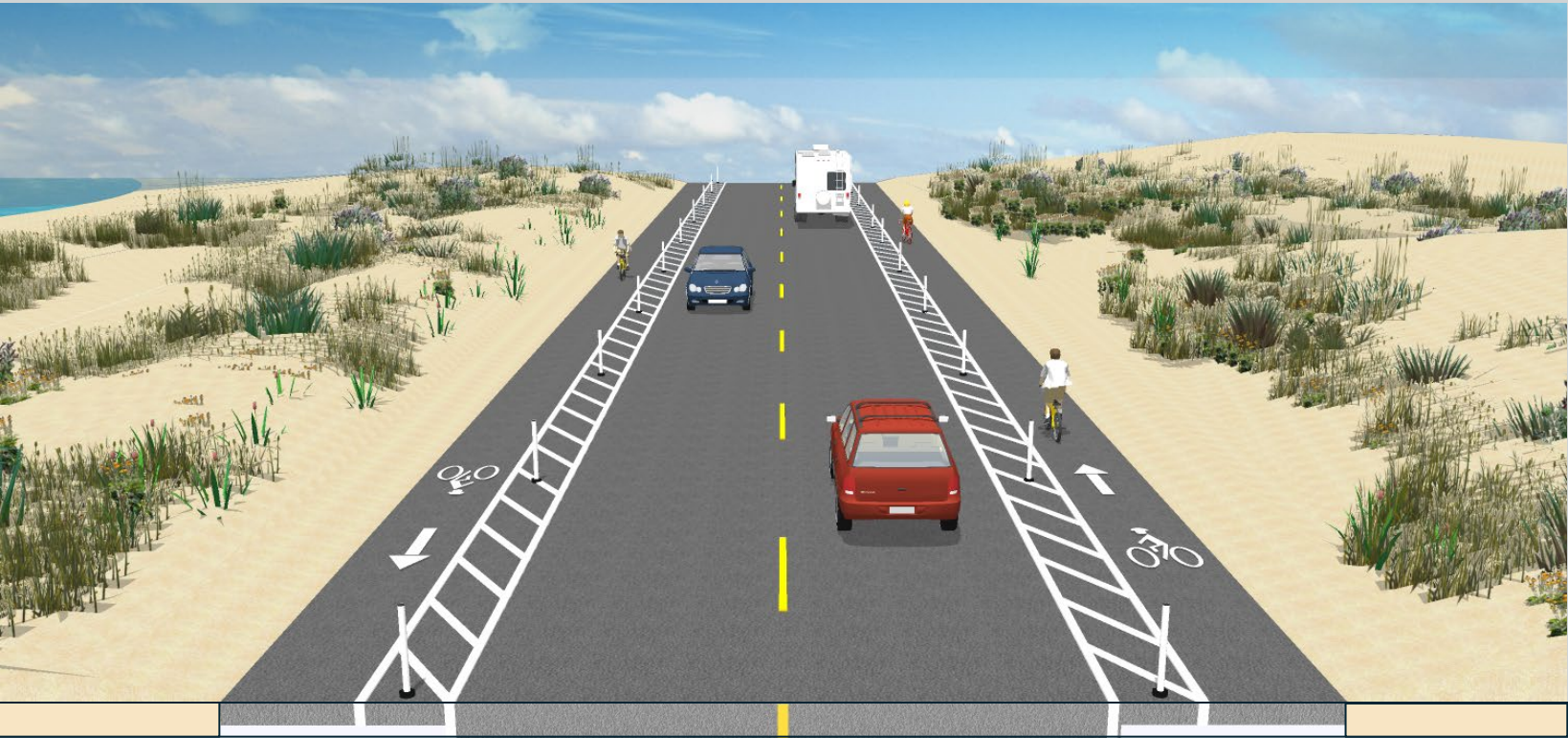
# Segment One Overview

- **6.8 Miles Total**
  - 0.8 Miles Existing Trail in Cartier Park 
  - 6.0 Miles New Facilities Planned
    - Over half, 3.5 Miles, is Within Ludington State Park
- Separated Bike Lane on M-116 / Lakeshore Drive from Big Sable River to Cartier Park 
  - Requires eliminating parking on west shoulder of M-116 within the Park
- Bike Lanes on North Rath Avenue 
  - Requires eliminating parking on North Rath Avenue
- Approximately \$1.7 Million Construction Cost





# One-Way Separated Bike Lanes in Ludington State Park



Preferred Measure

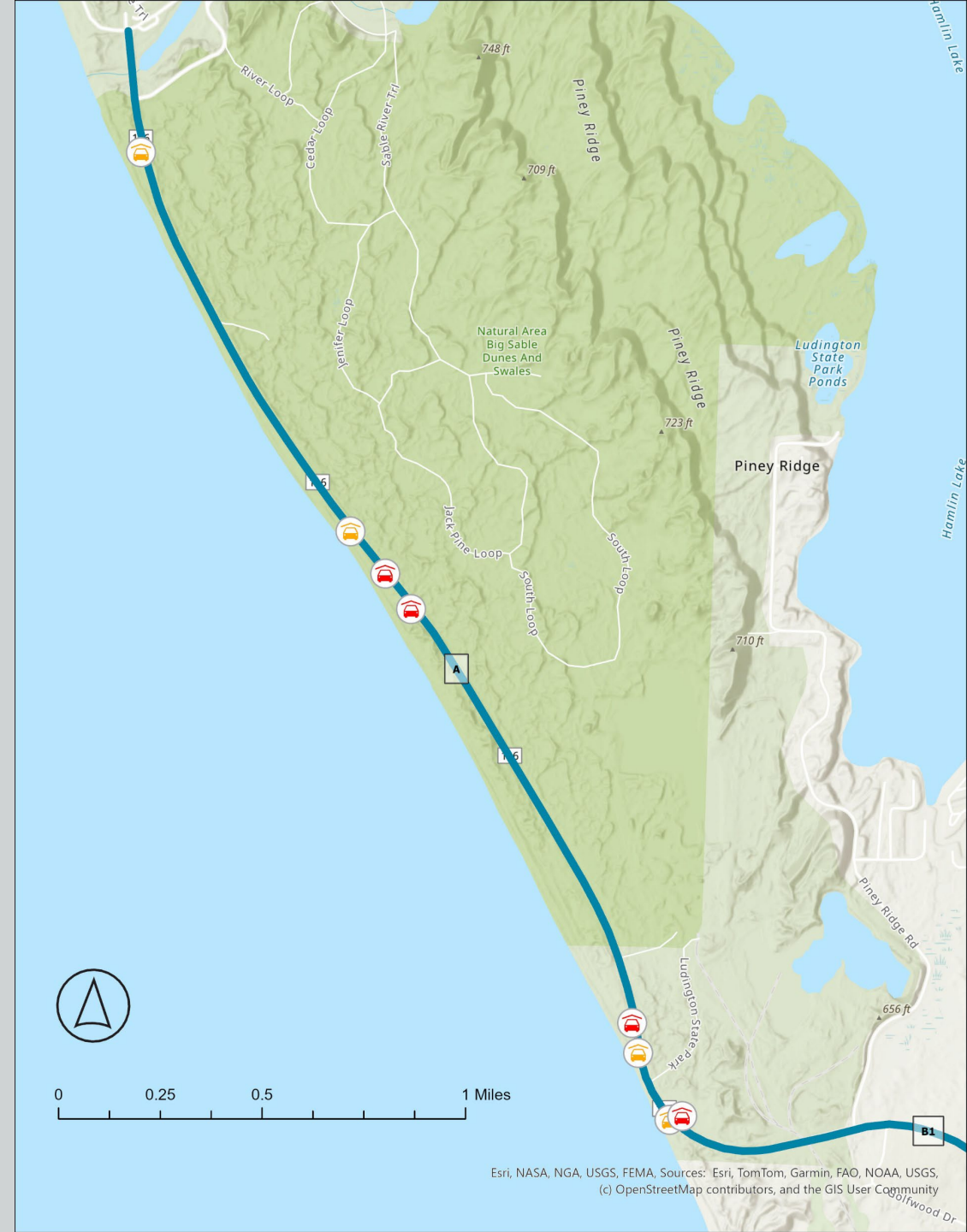


Near-term Measure

- No impact to critical dunes
- Classify M-116 as road “within” a park and subject to a 25-mph speed limit as a park road
- There is no other trunkline in the state that dead ends within the boundaries of a state park
- A 25-mph speed limit will improve pedestrian and bicycle safety and comfort sharing the roadway and may even eliminate the need for delineators
- Can begin with posting a lower advisory speed limit signs
- Delineators may be removed in the winter to facilitate maintenance

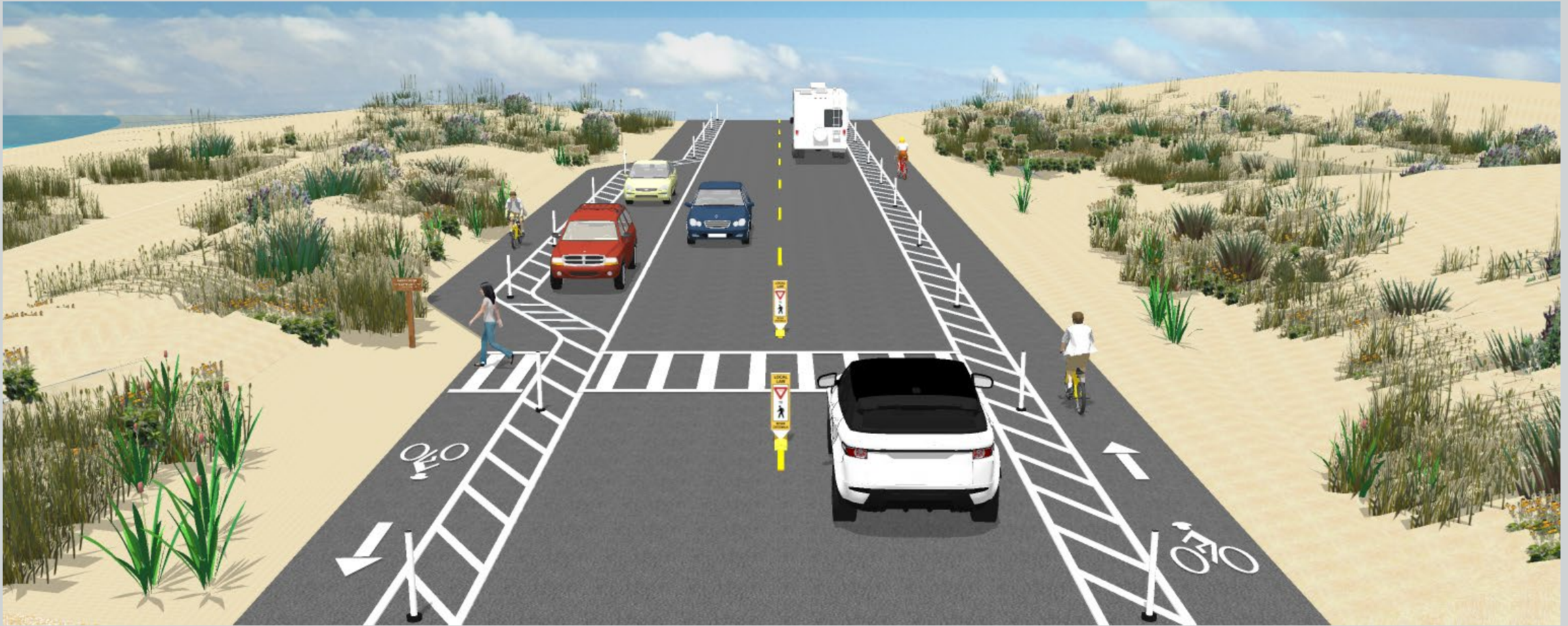
# Parking Along M-116 in LSP

- Improve signage and space delineation for existing paved parking lots
- Potential to add three new parking lots in locations that will have minimal impact on the critical dunes (shown in red)
- This will help protect dunes, and M-116 itself, by decreasing frequent informal pathways across dunes that lead to dune erosion
- A Shuttle Bus / Trolley Service could be employed to transport beach goers from remote parking to designated stops on holidays and summer weekends
- There is also the potential to add a few select bays of parallel parking by moving bike lane towards beach





# Potential New Parking Along M-116 in Ludington State Park



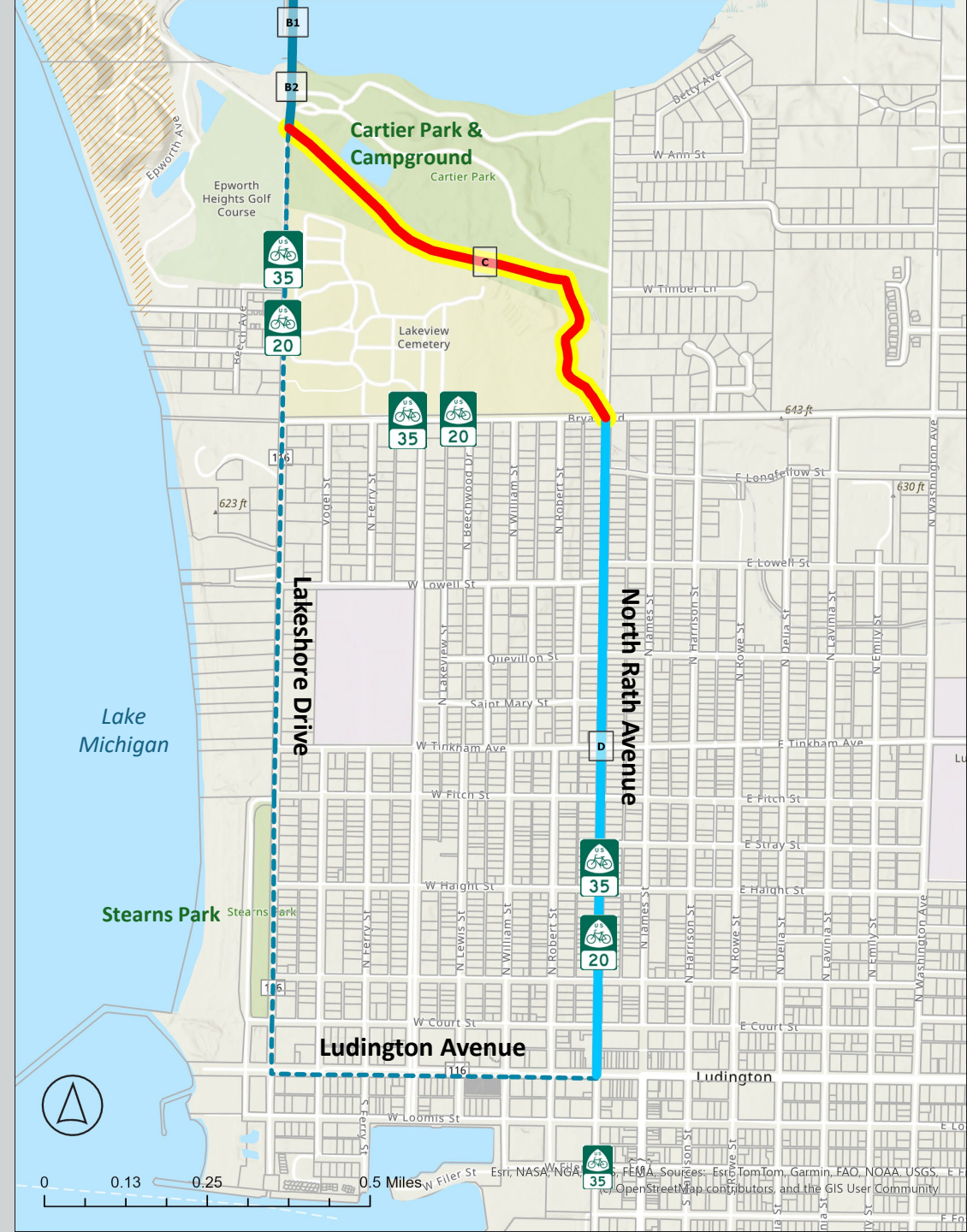
There are some areas where small parallel parking bays could be added that do not have any dunes or vegetation

Crosswalks to beach access points can also function as “gateways” to help moderate motorized traffic speeds



# Segment One Alternatives

- An alternative to the route through Cartier Park and North Rath Avenue, would be to continue the Separated Bike Lanes south on Lakeshore Drive from Cartier Park to Ludington Ave and then east on Ludington Avenue on the south side of boulevard and road
  - This requires coordination with the DDA's current planning effort
- North Rath Avenue Bike Lanes will require removing on-street parking, as an alternative a **Bicycle Boulevard** may be considered





# Potential Bicycle Boulevard for North Rath Avenue



Examples of potential traffic calming measures that could be employed on a Bicycle Boulevard



Elements such as mini-roundabouts could be designed to incorporate public art



# Segment Two Overview

- **8.7 Miles Total**

- 1.8 Miles Grants Awarded and Underway
  - 0.5 Miles Led by Pere Marquette Township
  - 1.3 Mile Led by Mason County Parks
- 6.9 Miles New Facilities Planned

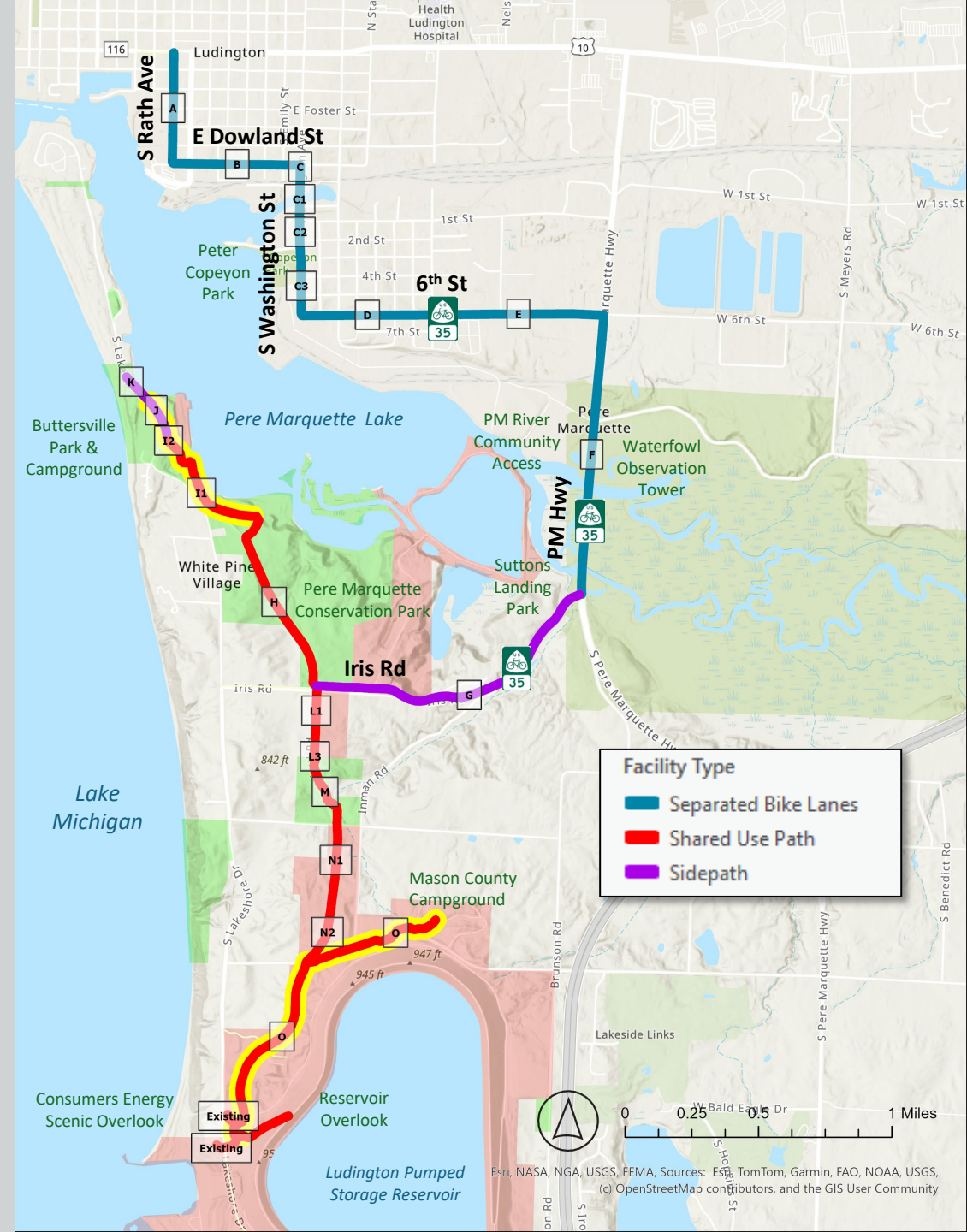
- **Separated Bike Lanes Downtown to Iris Road**

- Two-way on Rath, Dowland, Washington and 6<sup>th</sup> Street
- One-way Bike Lanes on Pere Marquette Hwy

- **Sidepath on Iris Road**

- **Shared Use Path** and **Sidepath**  
From Buttersville Campground to the County Campground and Consumers Energy Overlooks

- **Approximately \$5.1 Million Construction Cost**





# Two-Way Separated Bike Lanes in Ludington



## Parking Opposite Side

- S Rath Ave
  - Bike lanes on east side
  - Maintain parking on west side by marina
- S Washington St, Dowland St to 6<sup>th</sup> St
  - Bike lanes on west side
  - Parking by historic commercial blocks



## Parking Same Side

- E Dowland St
  - Parking and Bike Lanes on North Side
  - Easier transition to bike lanes on Rath
  - Avoids crossing Dowland St by ferry entrance

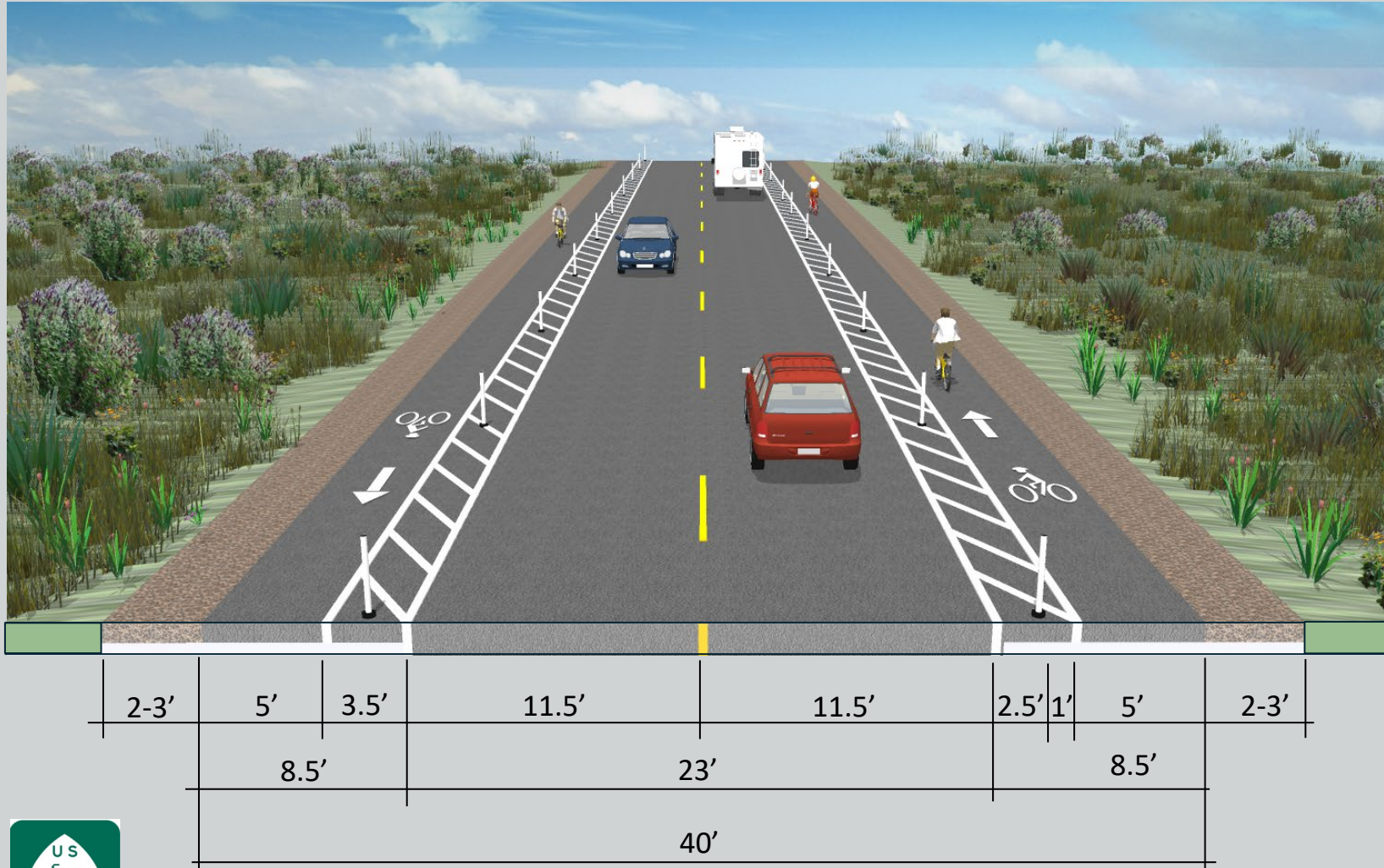


## No Parking

- S Washington St, 2<sup>nd</sup> St to 6<sup>th</sup> St
  - Bike lanes on the west side
- 6<sup>th</sup> Street
  - Bike lanes on the south side
  - 4 to 3 lane conversion from S Sherman St to PM Hwy



# One-Way Separated Bike Lanes on PM Hwy Twin Bridges



- A boardwalk was considered but deemed cost prohibitive
- This is part of US Bike Route 35, these enhancements will help with a particularly busy stretch of the route
- There are two pinch points on the bridges where the road is slightly narrower and where bicyclists will shy away from the concrete bridge railing, but they are manageable
- Will need to have a crossing with appropriate beacons on either end of the segment

# Segment Two Alternative A

- A Shared Use Path that crosses Pere Marquette Lake via settling pond berms on the Occidental Chemical Corporation (Oxy) property is the preferred route
- While Oxy has been receptive to this idea, the question is how long the settling ponds will remain active and after closing the ponds the length of time required to remediate them
- The Alternative Route is consistent with the Conservation Park Master Plan
- If the Alternative Route becomes feasible after the proposed routes is constructed, a trail linking Suttons Landing Park to Conservation Park is still desirable as would a Separated Bike Lanes on Pere Marquette Highway





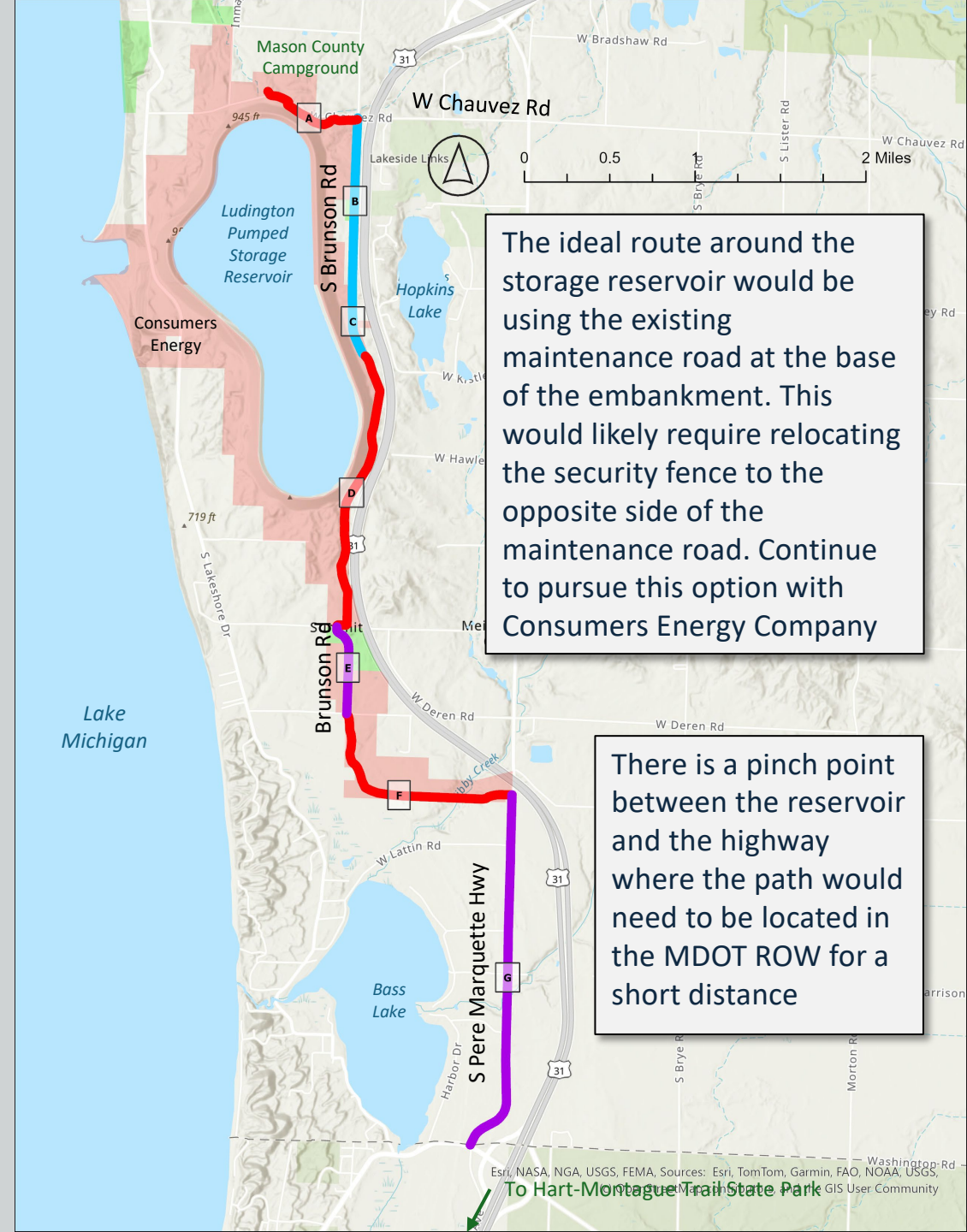
# Segment Two Alternative B

- The Preferred Route generally following old Haul Road requires easements from four private landowners and an expansion of the license with Consumers Energy
- If easement negotiations are not fruitful, pursue bike lanes along Lakeshore Drive and Iris Road
- Alternative route is part of US Bike Route 35
- Lakeshore Drive is scheduled to be reconstructed in 2027
  - Paved shoulders were considered as part of the construction project but are not currently included
  - A separate funding source to pave the shoulders would likely be required
- Connect Lakeshore Bike Lanes to trail underway via a new Shared Use Pathway on Consumers Power Property



# Segment Three Overview

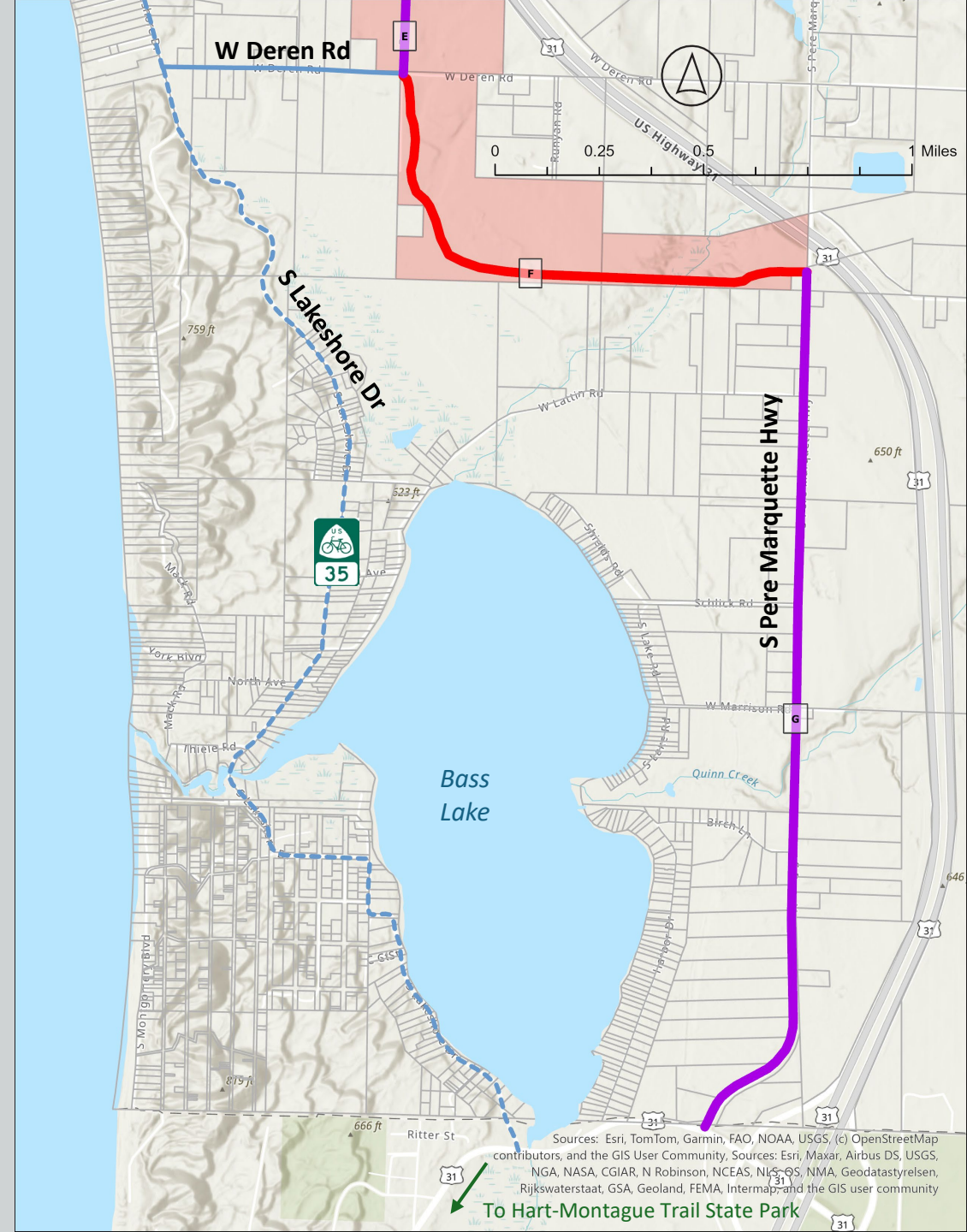
- **7.8 Miles Total**
  - 1.4 Miles Existing
  - 6.4 Miles New Facilities Planned
- Shared Use Pathway would link Mason County Campground to S Brunson Road, a dead-end road with two residences and a small farm along it that would be signed as a bike route
- A Shared Use Pathway would continue south on Consumers Energy Property to Pere Marquette Hwy with a Sidepath along Brunson Road. The trail would be located on the edge of the transmission corridor
- A Shared Use Pathway would be located along S Pere Marquette Hwy to the Oceana County Line
- Approximately \$7.1 Million Construction Cost





# Segment Three Near-term

- US Bike Route 35 follows S Lakeshore Drive on the west side of Bass Lake
  - Scenic 25 MPH Roadway with lots of twists and turns
- Given the choice between a Sidepath along Pere Marquette Hwy and US Bike Route 35 along Bass Lake, the majority of adult bicyclists will likely choose the bike route
- North of Deren Road, Lakeshore Drive becomes straighter and speed increases
- A signed bike route on Deren Rd would offer a link to an off-road alternative to US BR 35 continuing north
- If the sidepath on Pere Marquette Highway will not be constructed until far into the future, adding a paved shoulder to Deren Rd would be beneficial





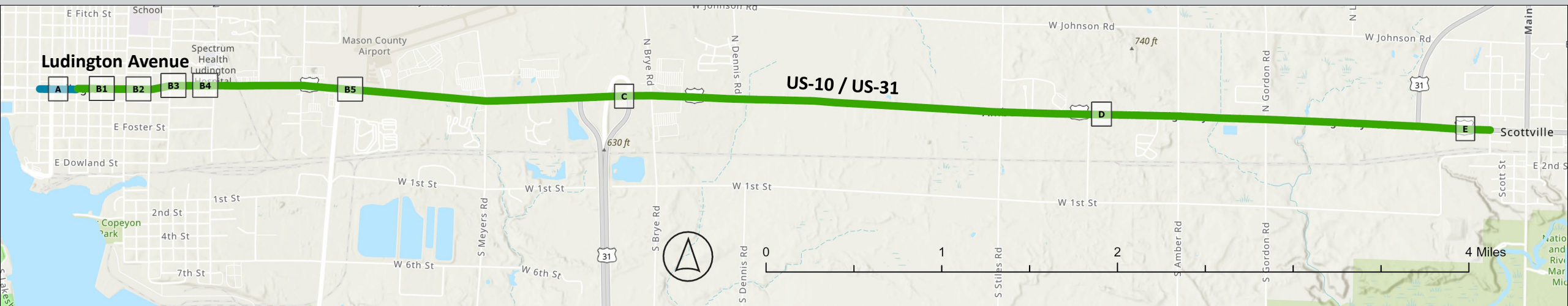
# Segment Four Overview

- **8.3 Miles Total**

- 0.3 Miles Existing
- 8.0 Miles New Facilities Planned

- Significant number of pedestrian and bicycle crashes including fatalities along the corridor due to the many destinations and lack of facilities
- This would address everyday bicycle and pedestrian transportation

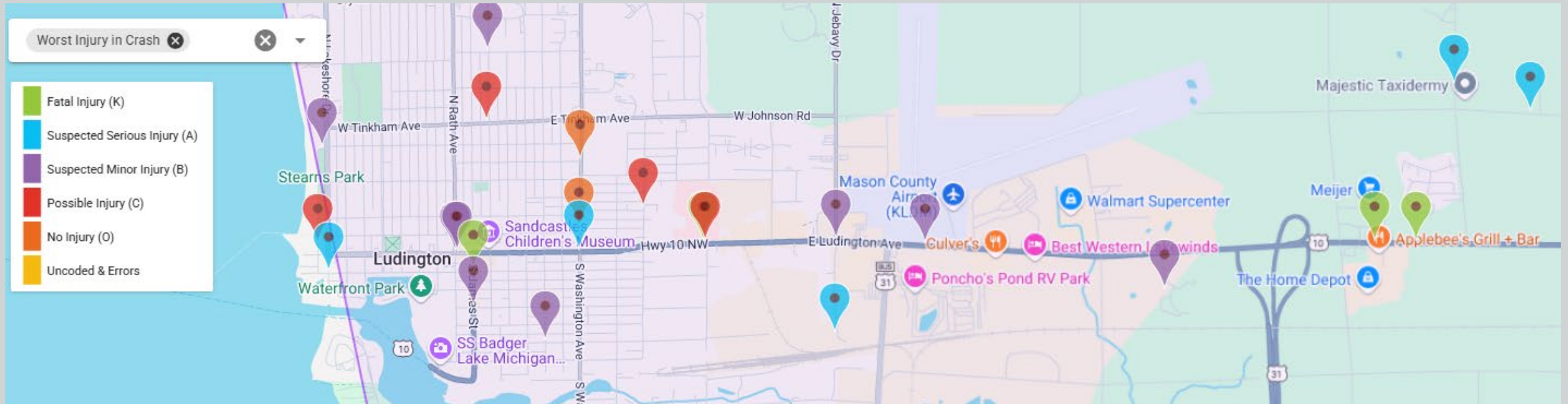
- Wide Sidewalks are proposed on both sides of US-10
- Remove the raised paved shoulders to enhance buffer between the sidewalk and the roadway
- Improve existing and add new pedestrian facilities at existing signalized intersections
- Add Pedestrian Hybrid Beacons with crossing islands between signals as needed
- A Sidepath may be an option west of US-31
- Improvements should include access consolidation
- Approximately \$10 Million Construction Cost





# Pedestrian Crashes on US-10

## Past 10 Years



- 9 Crashes
- **3 Fatalities**
- 1 Serious Injury

## The Economic and Societal Impact of Pedestrian Crashes

- \$5,134,723 Economic Cost – over a half million dollars each year
- \$22,492,030 Comprehensive Cost – \$2.25 million dollars each year



# Proposed Project Phasing

## Phase One

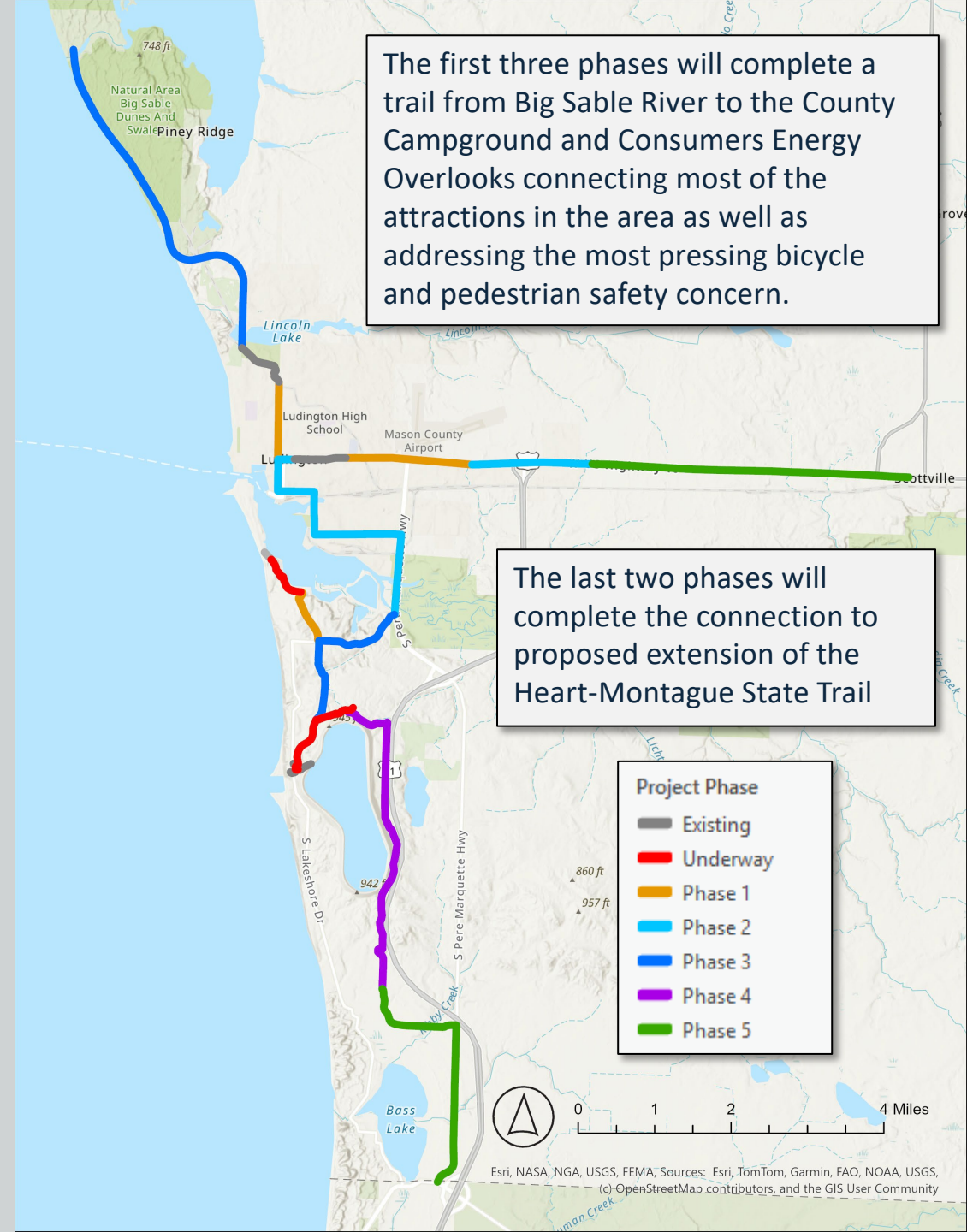
- N Rath Ave – Ludington Ave to Cartier Park
- Wide Sidewalks on US-10 – Staffon St to to Meyers Rd
- PM Conservation Park Trail Extension – to Iris Rd

## Phase Two

- Separated Bike Lanes – Ludington Ave to Iris Rd
- Sidewalks on US-10 – Meyers Rd to Dennis Rd

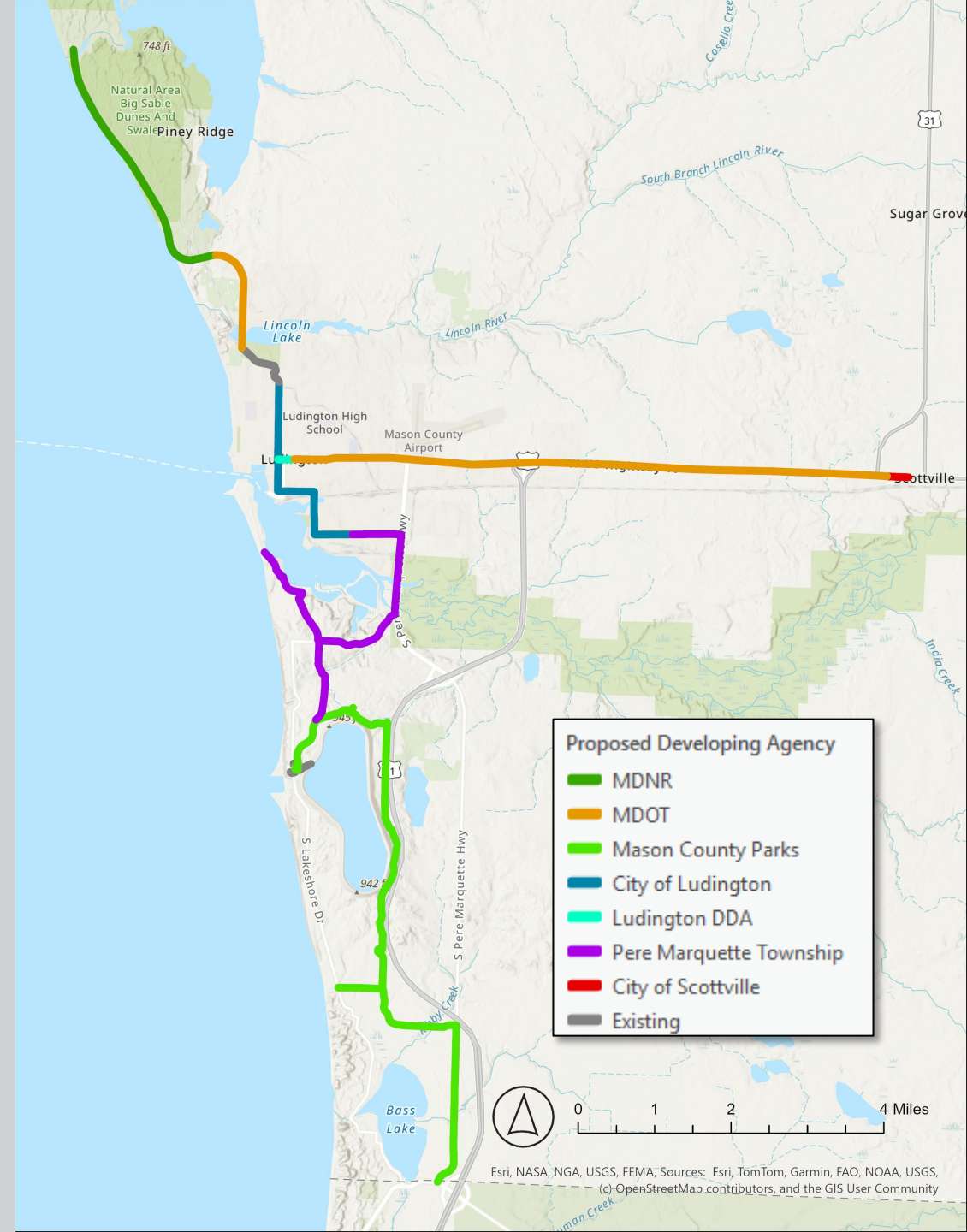
## Phase Three

- Separated Bike Lanes – Cartier Park to Big Sable River
- Iris Rd Sidepath – PM Hwy to Conservation Park Trail
- Shared Use Path – Iris Rd to Chauvez Rd



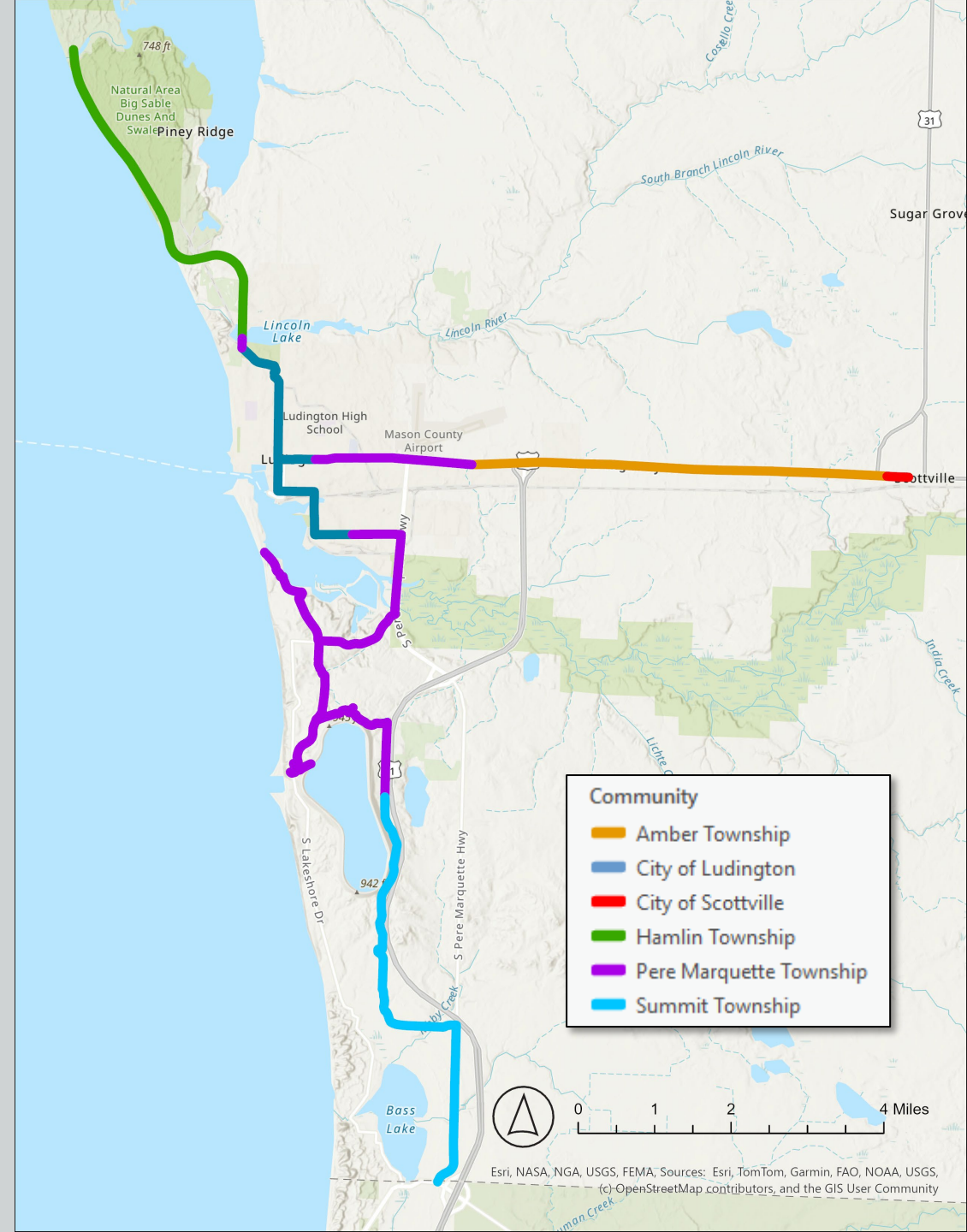
# Proposed Lead Agencies

- **MDNR** focus on M-116 in State Park with MDOT
- **MDOT** focus on Separated Bike Lanes on M-116 from the State Park to Cartier Park in with Hamlin and PM Townships and on the Wide Sidewalks along US-10
- **City of Ludington** focus on road conversions through town coordinating with the DDA
- **PM Township** focuses on road conversions on 6<sup>th</sup> St and PM Hwy with assistance from Mason County Road Commission and MDOT and off-road trail linkages between parks with assistance from Mason Co Parks
- **Mason County Parks** focuses on trail and route linkages to Oceana County line and assisting PM Twp with trails through County and Consumers Energy Property
- **Ludington DDA** focuses on non-motorized links in the downtown and coordinates on US-10 / Rath intersection



# Management and Maintenance

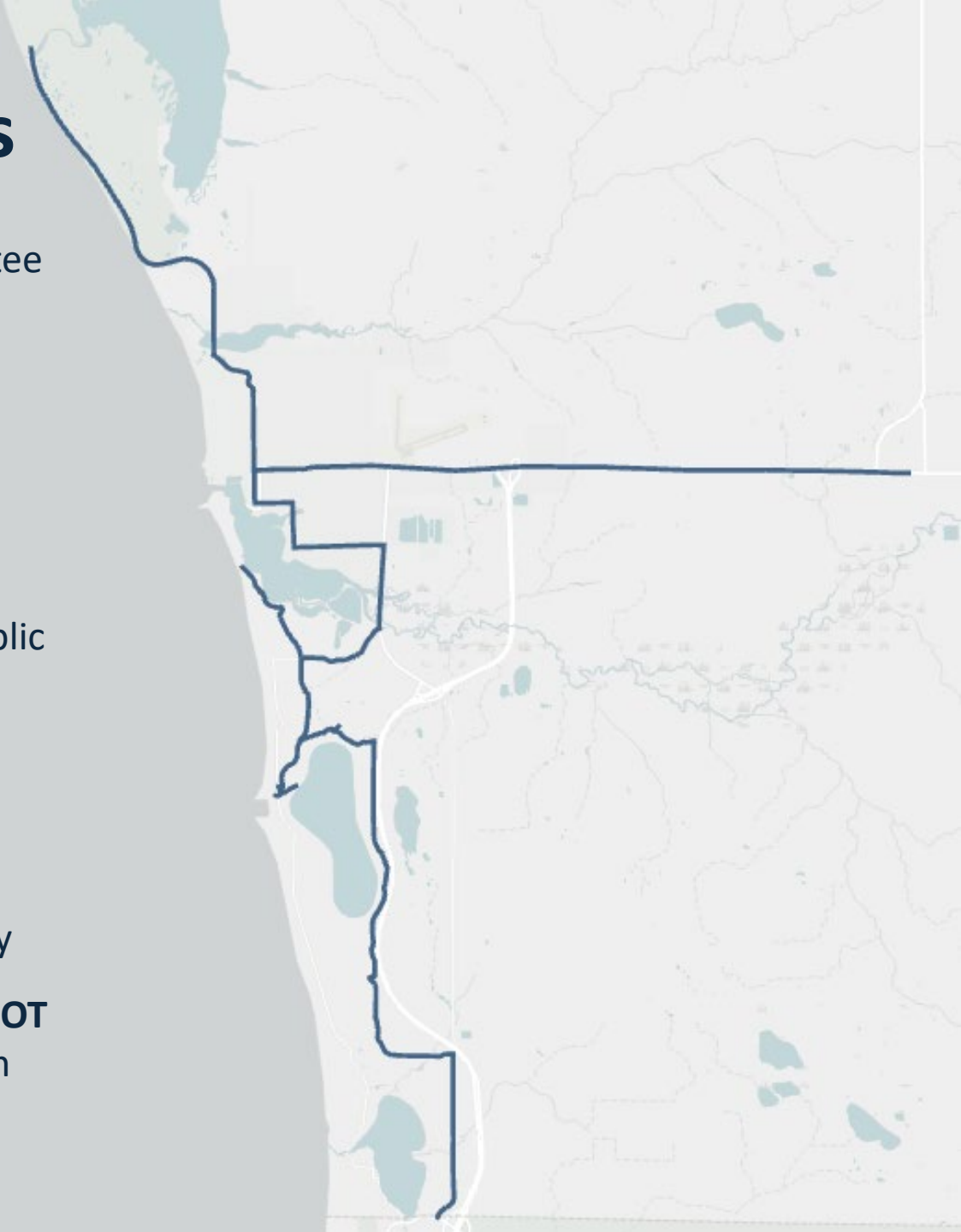
- A substantial portion of the most expensive segments of the route fall within Pere Marquette Township and Summit Township
- Mason County Parks currently maintains trails within Pere Marquette Township located on land licensed from Consumers Energy property – consider extending that management to part, or all, of the trail between Iris Rd and Chauvez Rd and in Summit Township
- The Amber Township and Mason County Road Commission should coordinate on a maintenance agreements for the proposed US-10 Sidewalks
- Separated bike lanes will require specialized equipment for sweeping and snow clearance, interjurisdictional maintenance agreements should be explored to minimize the maintenance costs for contiguous facilities





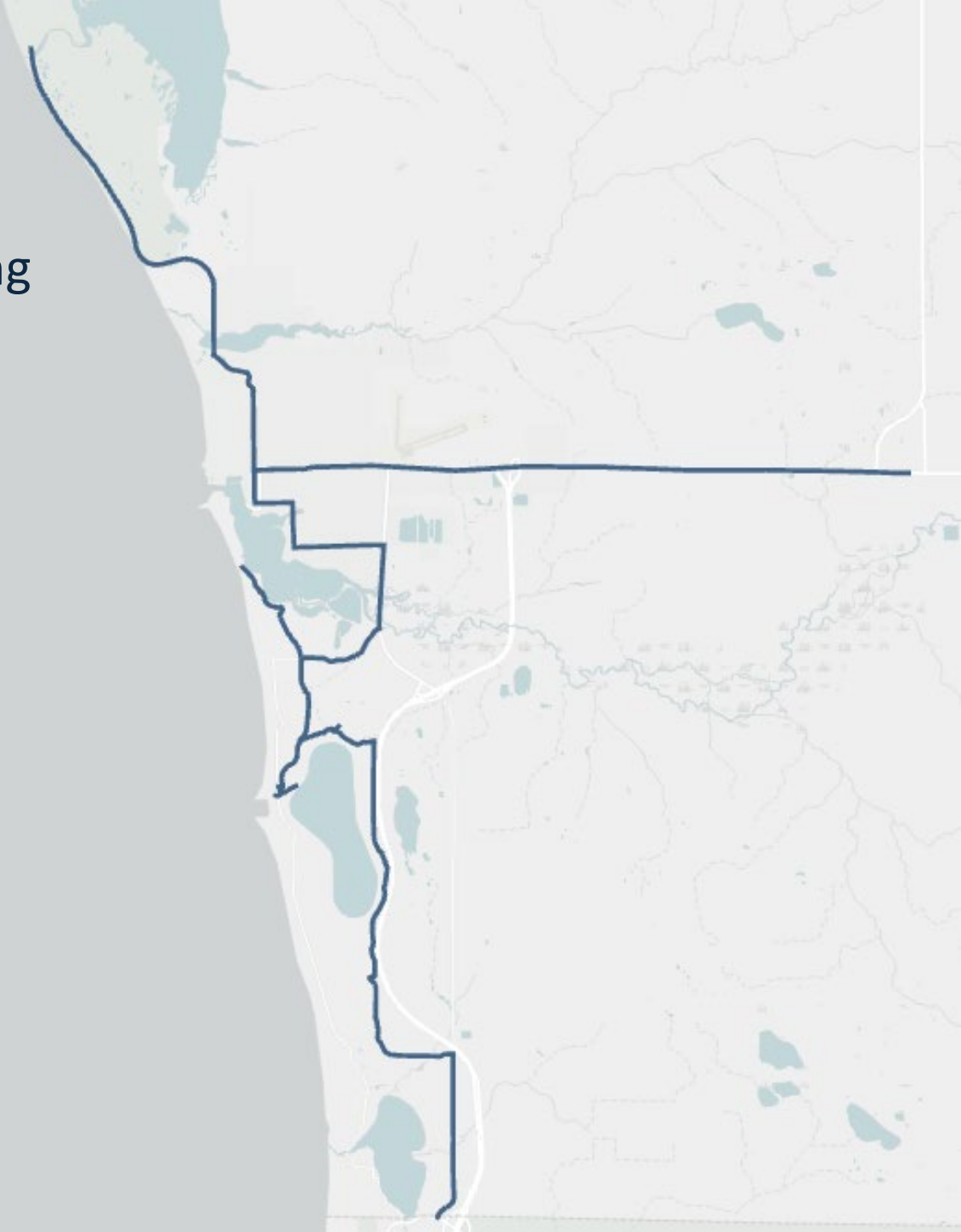
# Suggested Immediate Action Items

- **MDOT** – Initiate Road Safety Audit for US-10 east of Ludington to tee up future sidewalk, crosswalks, and access consolidation projects
- **MDNR** – Initiate parking and beach access study with MDOT and EGLE
- **Pere Marquette Township** – Secure easements from private land holders for proposed trail route between Iris Rd and Chauvez Rd
- **City of Ludington** – Prepare alternatives for Rath Ave and hold public workshop with residents to determine preferred approach
- **Ludington DDA** – Determine bicycle facility through downtown
- **Mason County Parks** – Secure easements for the trail around reservoir and in the transmission corridor from Consumers Energy and secure an easement from MDOT for portion along the freeway
- **City of Ludington, PM Township, Ludington DDA, MDNR, and MDOT** jointly seek funding for a two-phase quick-build project going from Big Sable River to Iris Road



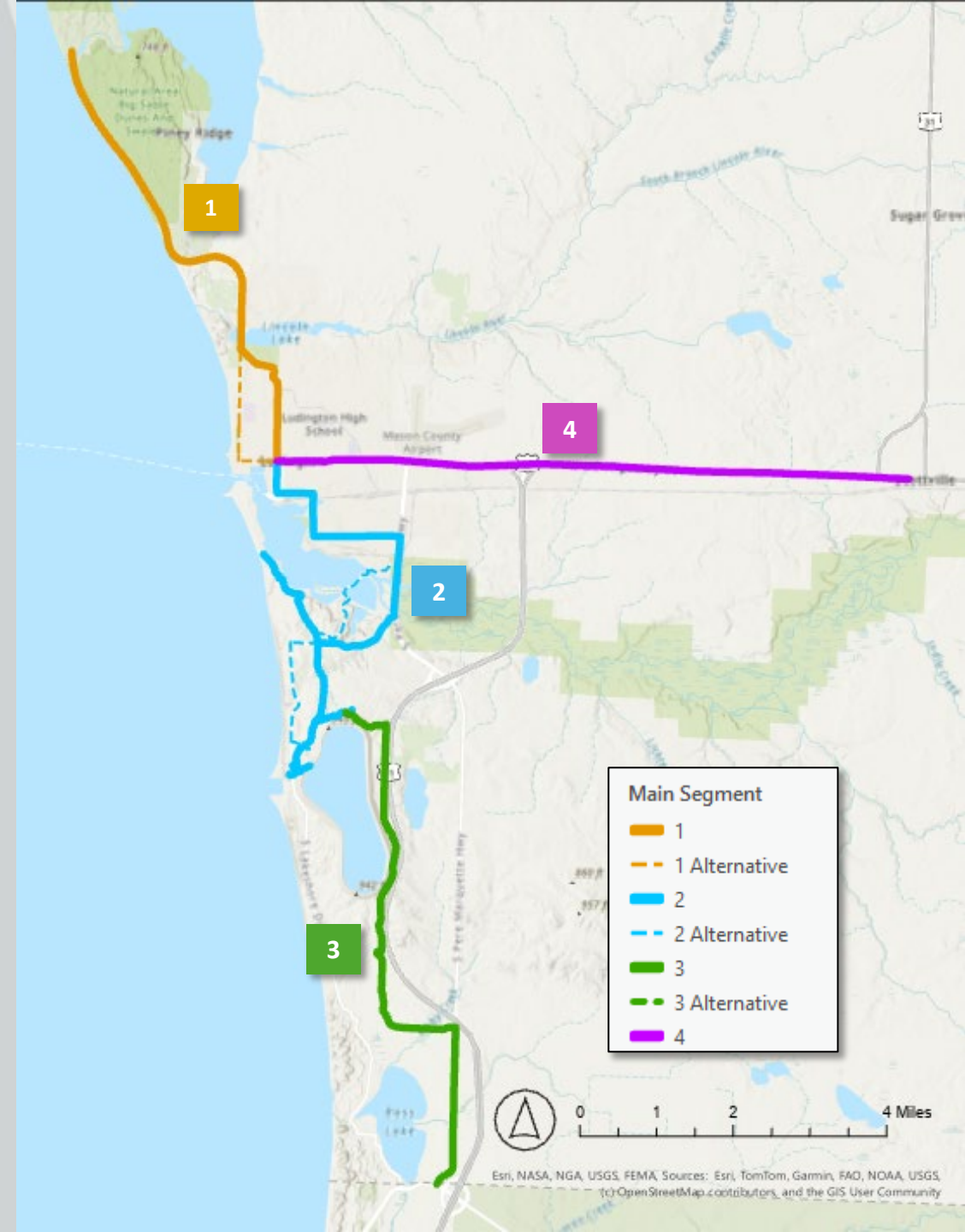
# Big Questions Moving Forward

- Are you on-board with the general idea of building this regional trail link?
- Should we convene sub-committees to work on particular sections of the trail and/or topics?



# Organizational Framework

- We suggest using the four main segments to organize subcommittees
- The Task Force will help facilitate these meetings
- These groups could address issues such as:
  - Lead Agencies
  - Management and Maintenance
  - Community Engagement
  - Funding / Grants
  - Construction
  - Promotion





# Next Steps

- Set Next Stakeholder Meeting Date
  - We are recommending every two months
  - A Doodle Poll will be sent out shortly with a copy of the presentation
- Setting Subcommittee Meeting Dates
  - Meet between Stakeholder meetings and report the entire group
  - Let us know what groups that you would like to be a part of
- Others to Engage in the Process

Thank You!

