

Designing Connections: A Decisions Making Framework for the U.S. Great Lakes Waterfront Trail

Emily Carra, Xiao Chen, Xingyan Chen, Christine Sit, Roberto Carriedo Ostos

PROJECT DESCRIPTION

The US Great Lakes Waterfront Trail (US GLWT) will connect all eight Great Lake states and become a companion to the Canadian Great Lakes Waterfront Trail (CA GLWT). Inspired by the success of the CA GLWT, the US GLWT initiative aims to expand the outdoor recreation and ecotourism economy along the binational Great Lakes waterfront.

The project covers the complexity of coordinating federal, state, and local agencies with varied geographic gaps in trail coverage and funding. To navigate these multi-state, multi-agency challenges, the US GLWT decision-making framework outlines a process for implementing trail design decisions and what priorities to consider at local and multi-state levels. The framework provides a starting point through easy-to-use tools and resources for Great Lakes trail design.

SEAS SCHOOL FOR ENVIRONMENT AND SUSTAINABILITY
 UNIVERSITY OF MICHIGAN
 Advisors: Lisa Du Russe (Professor of Practice), Isabella Shehab (Doctoral Candidate)

Client Organizations: National Parks Service - Rivers, Trails and Conservation Assistance Program, Council of State Governments (Midwest), PA Department of Environmental Protection

"Imagine you're in the woods somewhere around Ann Arbor, listening to birds chirping above you and the leaves rustling in the wind."

You come across a sign that says, 'U.S. Great Lakes Waterfront Trail (US GLWT).' Nearby is another sign. 'Niagara Falls, 300 miles away.' Imagine that, a trail that connects Ann Arbor all the way to Niagara Falls!"

TRAIL DESIGN TOOLKIT

The Great Lakes Waterfront Trail Design Toolkit (Toolkit for short) helps local stakeholders work on the trail design process. Working through the easy-to-use Toolkit, stakeholders can filter between numerous trail typologies, finding the most appropriate typology for their community's context.

- To achieve these goals, the Toolkit provides the following deliverables:
- **Great Lakes Waterfront Trail Design Guide**
 - **Trail Type Information Cards**
 - **Test Site**
A set of visuals and relevant information for eight trail types.
 - **Resources**
A sample walkthrough of the decision guide using a test site in Erie County, Pennsylvania.
 - **Resources**
A section containing recommendations and best practices for trail design as well as a resources guide for trail plants.

WHAT IS THE PROCESS?

NEEDS AND PRIORITIES
From conversations with Erie County stakeholders and two stakeholder engagement events, several themes came up for local trail design needs and priorities.

STAKEHOLDER PRIORITIES

- TRAIL ACCESS
- EQUITY & INCLUSION
- LOCAL COMMUNITY

STAKEHOLDER NEEDS

- A FRAMEWORK FOR THE TRAIL DESIGN PROCESS
- CONSOLIDATED TRAIL PLANNING TOOLS AND RESOURCES
- ACCESSIBLE LANGUAGE FOR PLANNERS AND NON-PLANNERS

REVIEWING DESIGN DOCUMENTS
Local planning documents, local design and construction standards etc.

DEVELOPING A TOOLKIT
Prioritizing ease of use and consolidating best practices for trail design.

APPLYING LOCAL CONTEXT
Testing Great Lakes sites, determining usefulness to stakeholders.

ENGAGEMENT
From the process and engagements described above, the student team recommends any future GLWT engagements consider the following:

- Connect with local stakeholders and decision-makers to understand the local context (where influence lies, previous and current efforts, local capacity, etc).
- Frame engagements around how they can be most useful to stakeholders, tailoring to the local context.

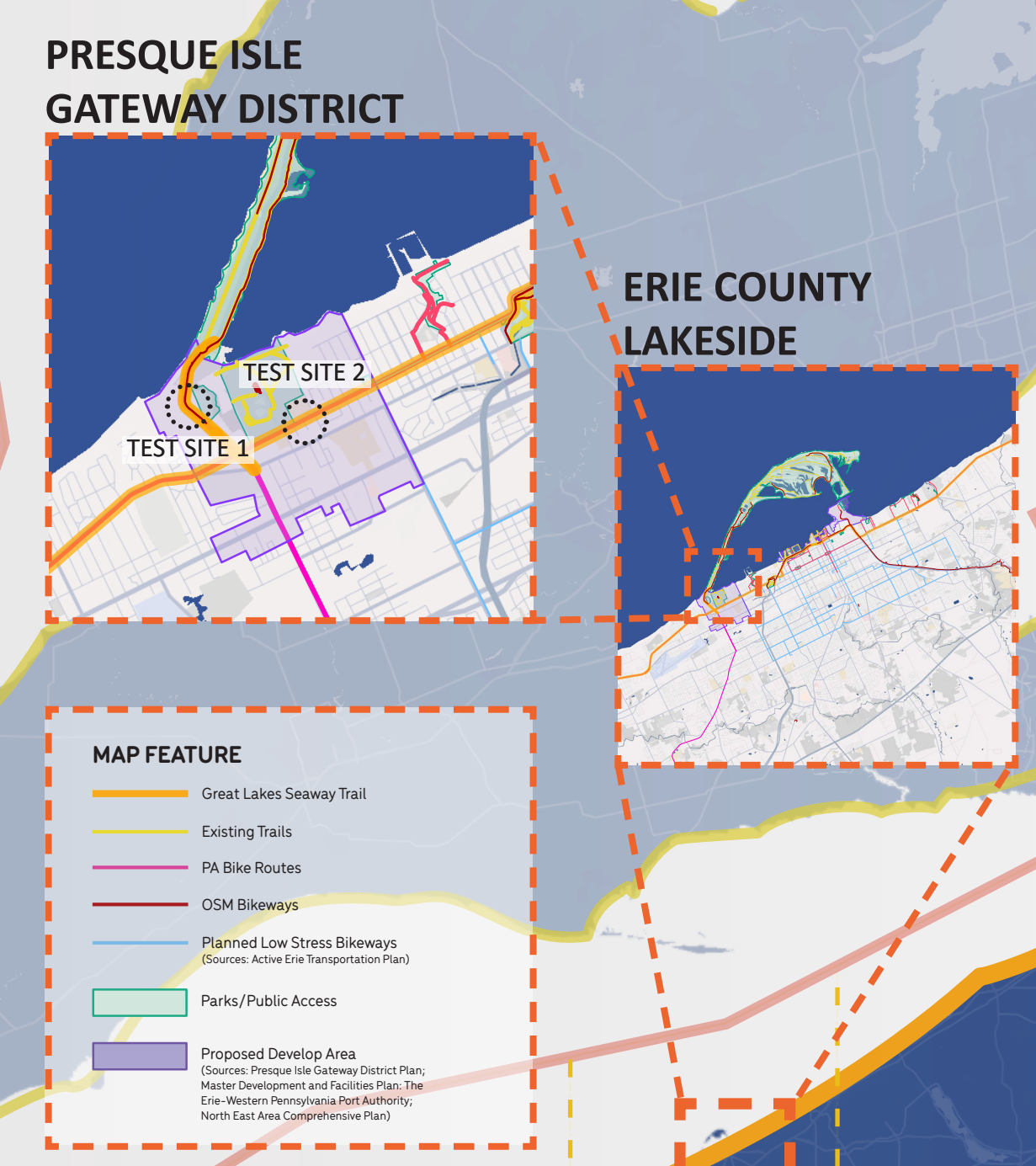
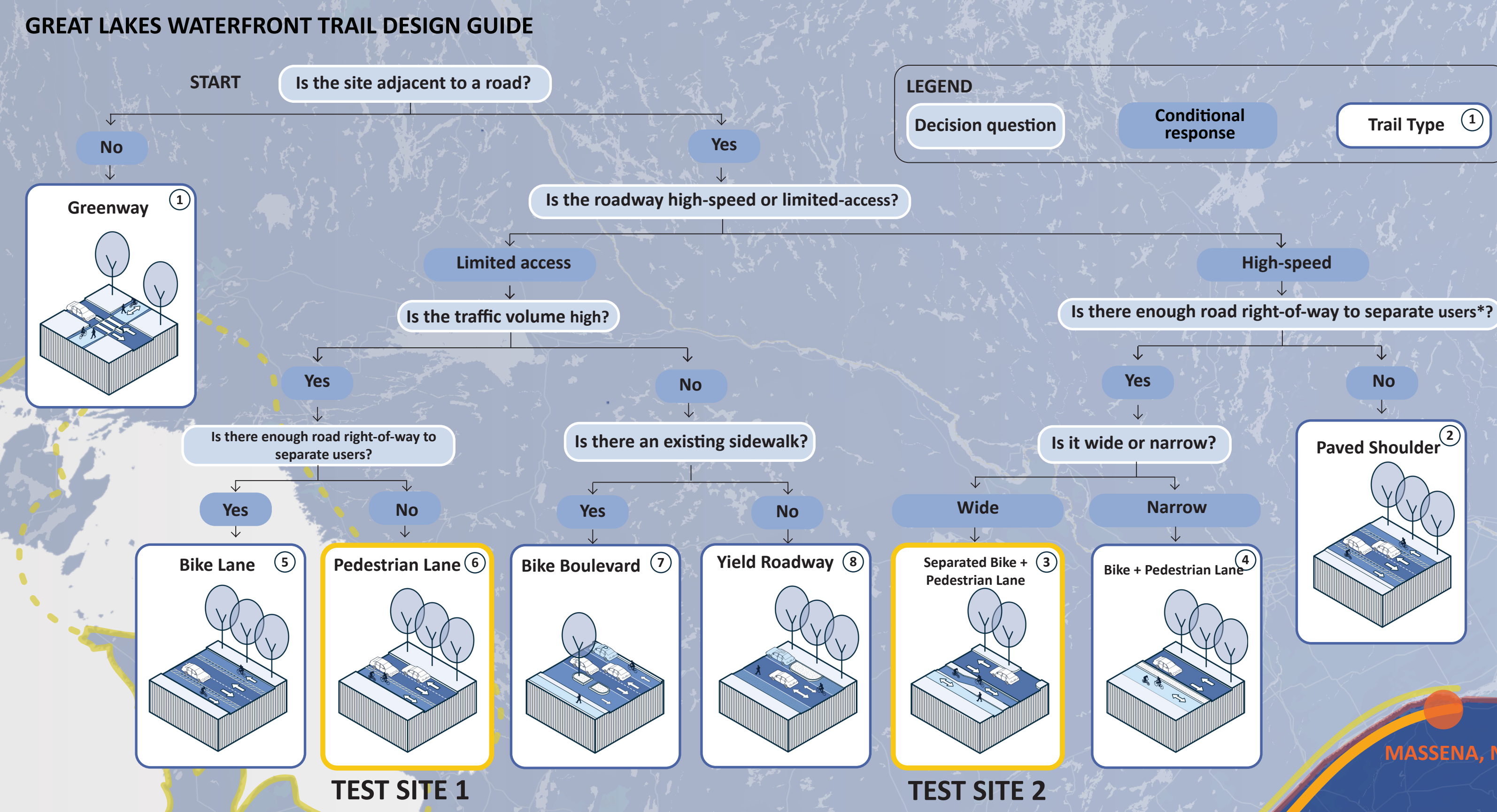
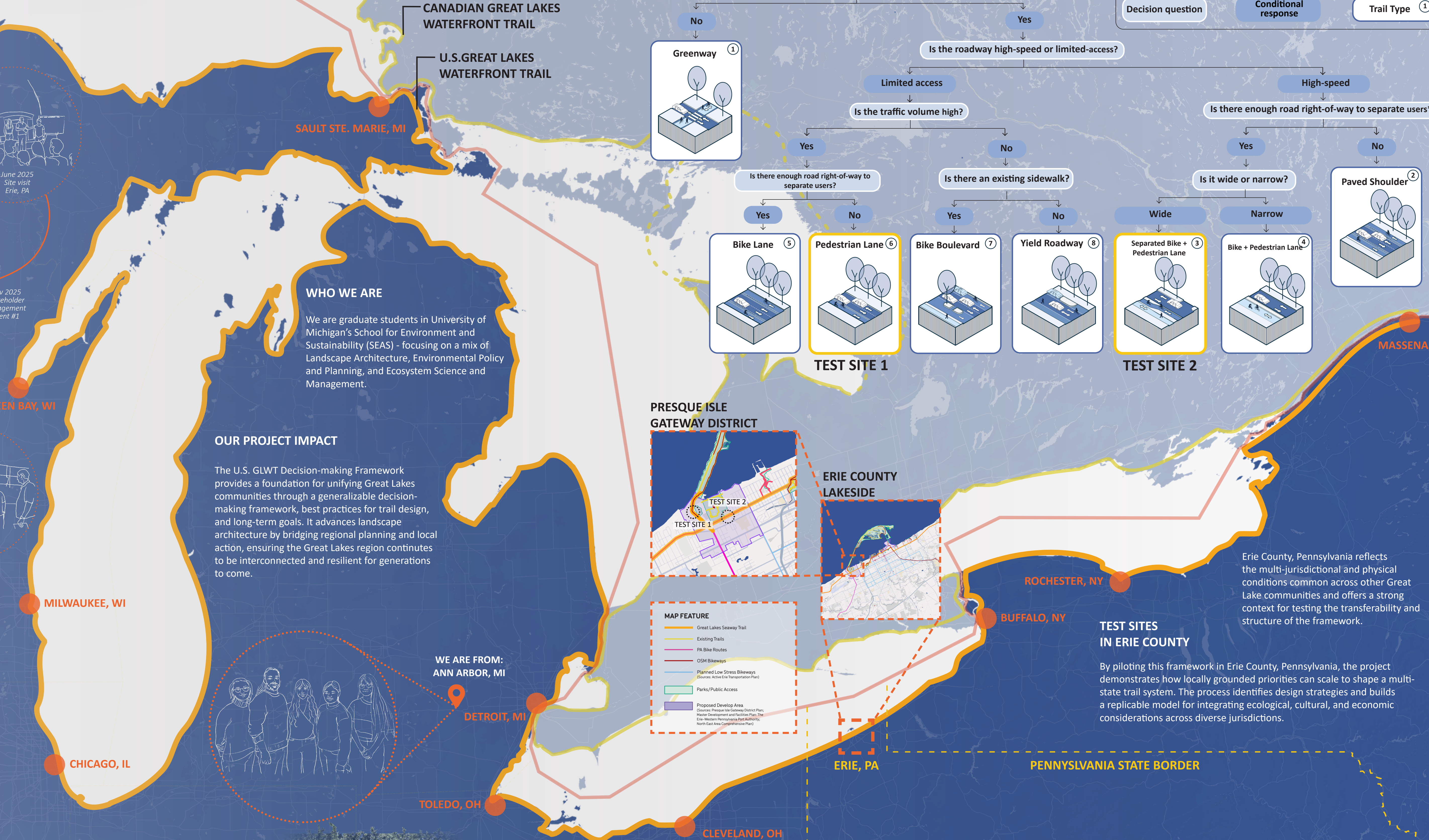
STAKEHOLDERS

- Federal & State Partners
- Municipalities Local Authorities Planning Agencies
- Local Community Organizations
- Tourism & Trail Agencies
- Conservancy Organizations

WE ARE FROM: ANN ARBOR, MI

OUR PROJECT IMPACT

The U.S. GLWT Decision-making Framework provides a foundation for unifying Great Lakes communities through a generalizable decision-making framework, best practices for trail design, and long-term goals. It advances landscape architecture by bridging regional planning and local action, ensuring the Great Lakes region continues to be interconnected and resilient for generations to come.



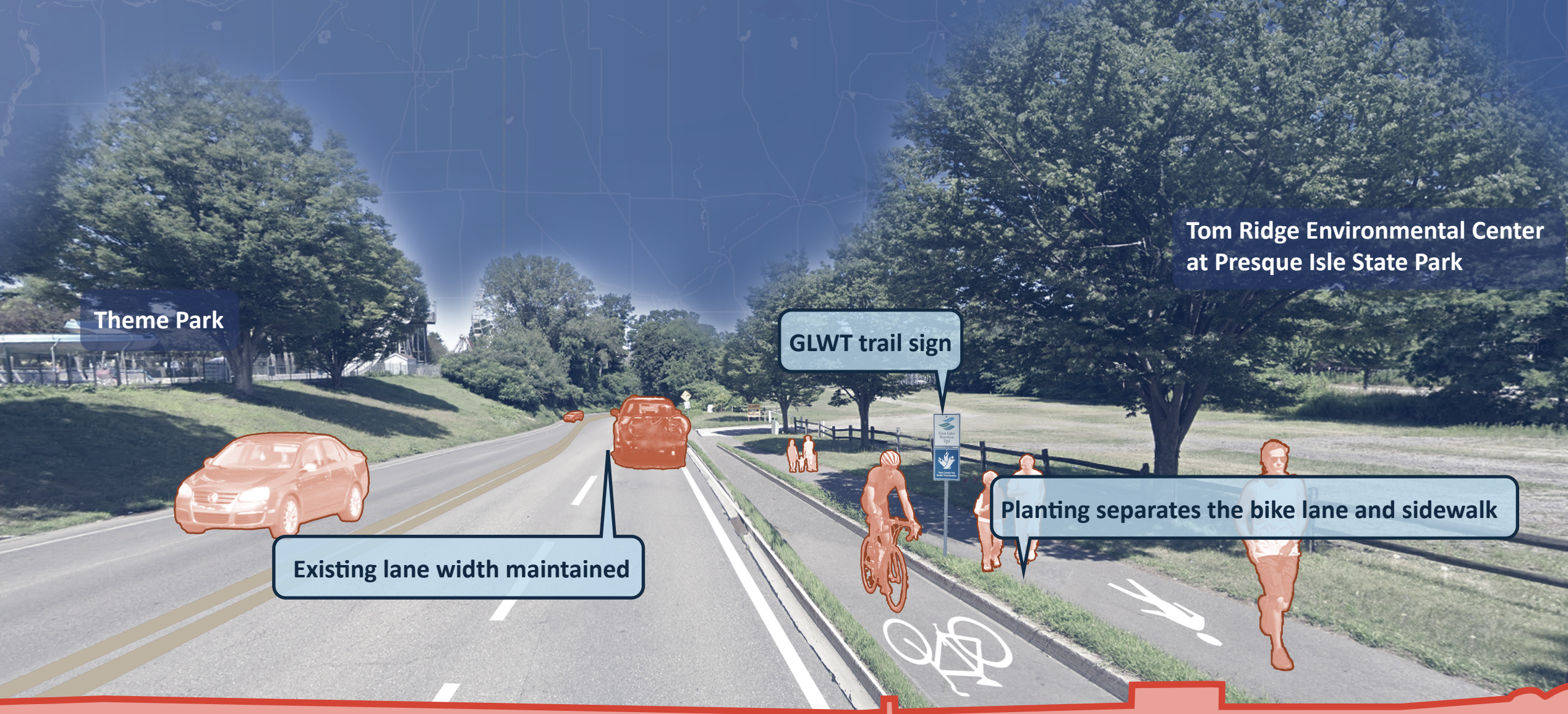
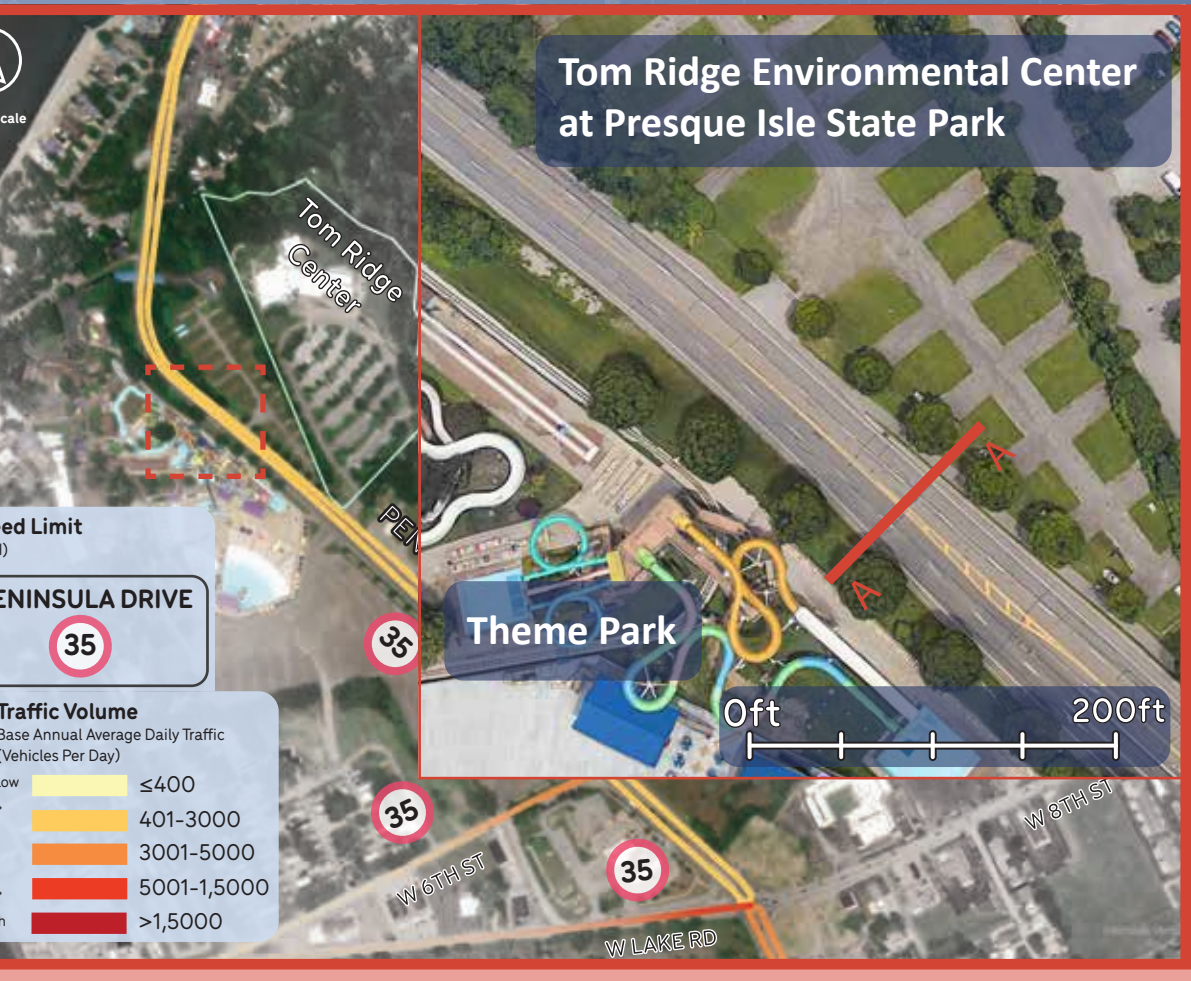
ERIE COUNTY LAKESIDE

TEST SITES IN ERIE COUNTY

By piloting this framework in Erie County, Pennsylvania, the project demonstrates how locally grounded priorities can scale to shape a multi-state trail system. The process identifies design strategies and builds a replicable model for integrating ecological, cultural, and economic considerations across diverse jurisdictions.

Erie County, Pennsylvania reflects the multi-jurisdictional and physical conditions common across other Great Lake communities and offers a strong context for testing the transferability and structure of the framework.

Test Site 1: 6th St in Millcreek Township
Trail Type: Pedestrian Lane



Test Site 2: Tom Ridge Environmental Center (TREC)
Trail Type: Separated Bike + Pedestrian Lane

