

Pentwater – Hart Bike Trail

Overview of Route and Design

August 22 2018



Pentwater-Hart Bike Trail Presentation to Road Commission Outline

A. INTRODUCTIONS- Mark Timmer

- Claudia Ressel Hodan- Chair Pentwater Resident
- John Wilson- Retired Parks and Recreation Director-Pentwater Resident
- David Bluhm- Division Manager, for Flies & VandenBrink, Pentwater Resident
- Steve DeBrabander- Executive Director, Iron Belle Trail Fund, Shoreline Economic Development Assistance

B. OVERVIEW OF ACTIVITIES SINCE OCT.2015

- Timeline Handout Section 1

C. ROUTE EXPLORATION

- Handout Section 2
- -Options Examined
- - WMU Project Contributions

D. TRAIL VISION

- Handout Section 3
- -Description
- -Investigation of Problem Areas

E. WESTERN MICHIGAN CONNECTION



Section I

Time Line of P-H Trail Planning

- October 2015 Public Meeting for Trail Interest in Pentwater
- February 2016 Project Fund Started with Oceana County Community Foundation
- February 2016 Pentwater Village agrees to be Fiduciary
- 2017 Trail Planning, Fund Raising
- May 2018 WMU students present route option analysis-Public Invited
- June 2018 Awarded 1.4 million from Senator Hansen's office for Design and Construction
- August 2018 meeting with Hart Superintendent and Hart City Manger for safe routes to school. Planning in process.
- August 2018 MDOT meeting to plan bike lanes-planning and agreement development in process

WHY BUILD A BIKE TRAIL?

- SAFETY FOR CYCLISTS
- CONTINUE THE TRAIL SYSTEM THROUGHOUT MICHIGAN
- CONNECTIVITY BETWEEN CITIES
- INCREASE TOURISM
- PROVIDE FAMILY SAFE ACTIVITIES
- INCREASES PROPERTY VALUES ALONG TRAIL
- PROMOTE PHYSICAL ACTIVITY, FITNESS AND HEALTH

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Section II

- **ROUTE EXPLORATION**

Civil & Construction Engineering – Western Michigan University

Capstone Project 2017-18

Late summer 2017 the Committee was reviewing route options. The process seemed to go on and on – the leading route candidate was Federal Route 35...but the Committee felt that other route options needed to be vetted before a final route selection was made.

The Committee reached out to several universities to gauge the interest of partnering to assist the Committee's work in determining the most efficient & safe route selection. Western Michigan University Civil & Construction Engineering Department showed interested that lead to the Committee submitting a Capstone Project application to the Department.

Soon to be graduates in the Civil & Construction Engineering Department must undertake a capstone design project which requires students to apply their knowledge and experience toward real-world projects in a team-oriented environment producing a working design, written report, and then an oral presentation.

Early Fall 2017 the Committee received word that out of 11 Capstone Project Applications, 6 were accepted and the Pentwater – Hart Trail was one of them.

The work completed by the WMU design team was a tremendous asset to the Committee. The end results was truly a win – win for both parties. The student design team got their real world experience and the Committee received sufficient information to: 1) select the final route for the Pentwater-Hart Bike Trail, and 2) to make a funding request to State Senator Hansen to assist in the trail construction...the result: \$1.4M state appropriation.

The Trail Route will mainly follow the existing Bike Route 35

- The United States Bicycle Route System is the national cycling route network of the United States. It consists of interstate long-distance cycling routes that use multiple types of bicycling infrastructure, including off-road paths, bicycle lanes, and low-traffic roads.
- Spans 500 miles from Indiana to Canada
- Runs along Michigan's west side shoreline
- Mostly on road



Pentwater – Hart Bike Trail

Project Scope

- Design a bike route from Hart to Pentwater connecting to the William Field Memorial Hart – Montague Trail. The Pentwater – Hart Bike Trail Committee preference is mainly an off road trail.
- Explore and analyze different route options over the nine (9) mile route connection
- Make design cost effective and safe for the Users
- Seek out various sources of funding by applying for state & federal grants and other financial alternatives to construct the bike route

Connecting to the William Field Memorial Hart – Montague Trail

Four Route Options Were Investigated...

- ✓ Option 1 - School Right of Way
- ✓ Option 2 - On Street through Hart
- ✓ Option 3 - Hart Public Works Right of Way
- ✓ Option 4 - East Pass around Hart Lake

The Best Option – School Right of Way

Street	Improvement
N Water St – Wood St to Johnson St	Bike Lanes
Johnson St	Bike Lanes / Bridge Widening
South Peach	Bike Lanes
City of Hart & School Property	New Trail
72 nd Ave – School Property to Harrison Rd.	New Trail



SCHOOL RIGHT A WAY

SAFE ROUTES TO SCHOOL MEETINGS

UNDERWAY

Advantages

- Possible Safe Routes to School funding from the school property to the intersection of 72nd & Tyler
- Use of City & School land
- Less exposure to roadway

Disadvantages

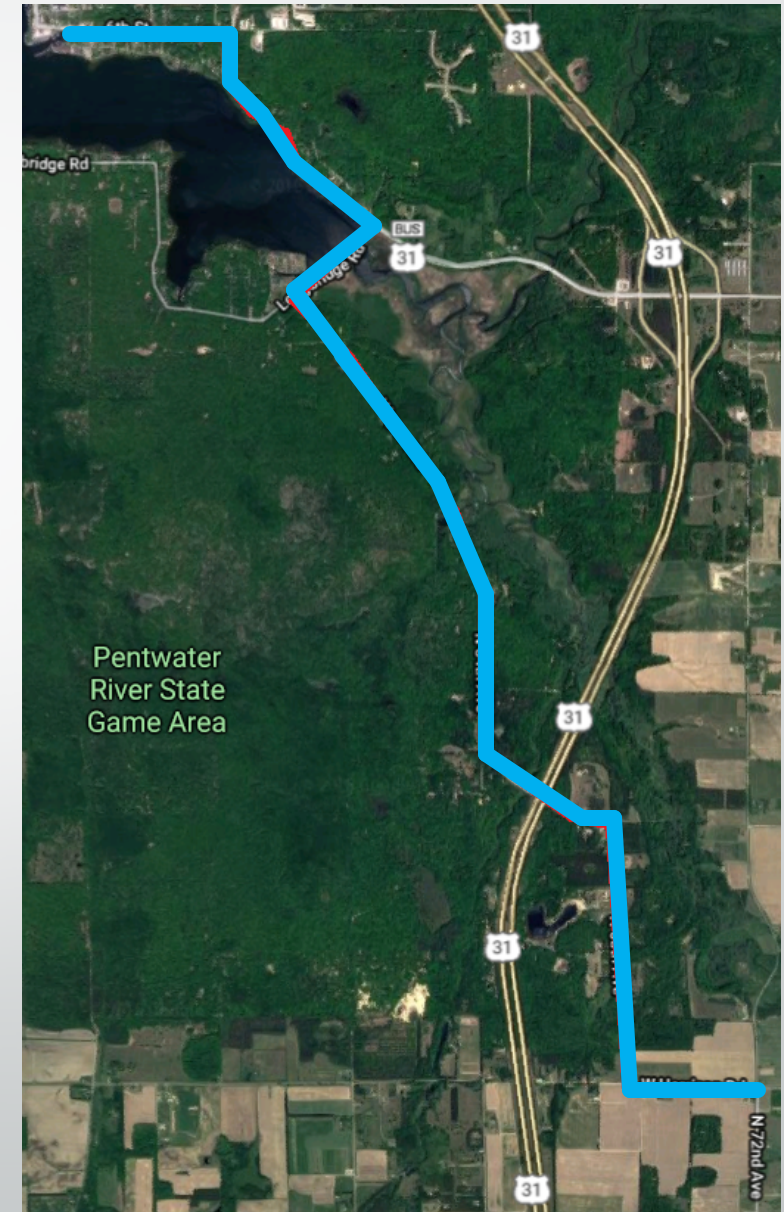
- Cost of new construction
- Distance from downtown Hart



Onward to Pentwater

Current Bike Route 35

Street	Improvement
W Harrison Rd.	New Trail
N 68 th Ave.	New Trail
Van Buren / Wayne Rd.	New Trail / Retaining Wall
N 64th Ave.	New Trail
Wayne Rd.	New Trail
Longbridge Rd.	New Trail / Bridge Crossing
Monroe Rd. – Longbridge Rd. to 6 th St.	Bike Lanes
6 th St.	Bike Lanes



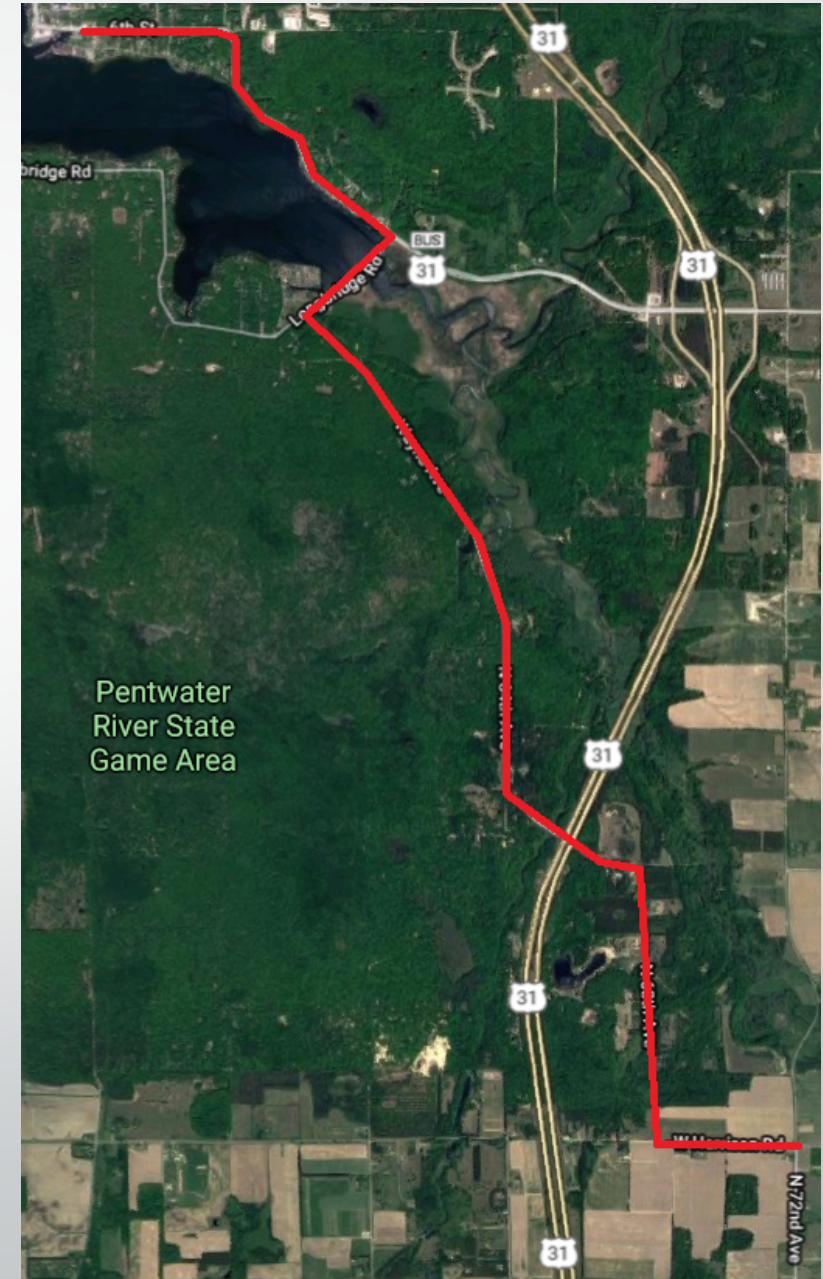
Why Current Bike Route 35?

Advantages

- Already designated US Bike Route 35
- Low traffic
- Scenic

Disadvantages

- Cost of new construction
- Disruption to environment
- More secluded



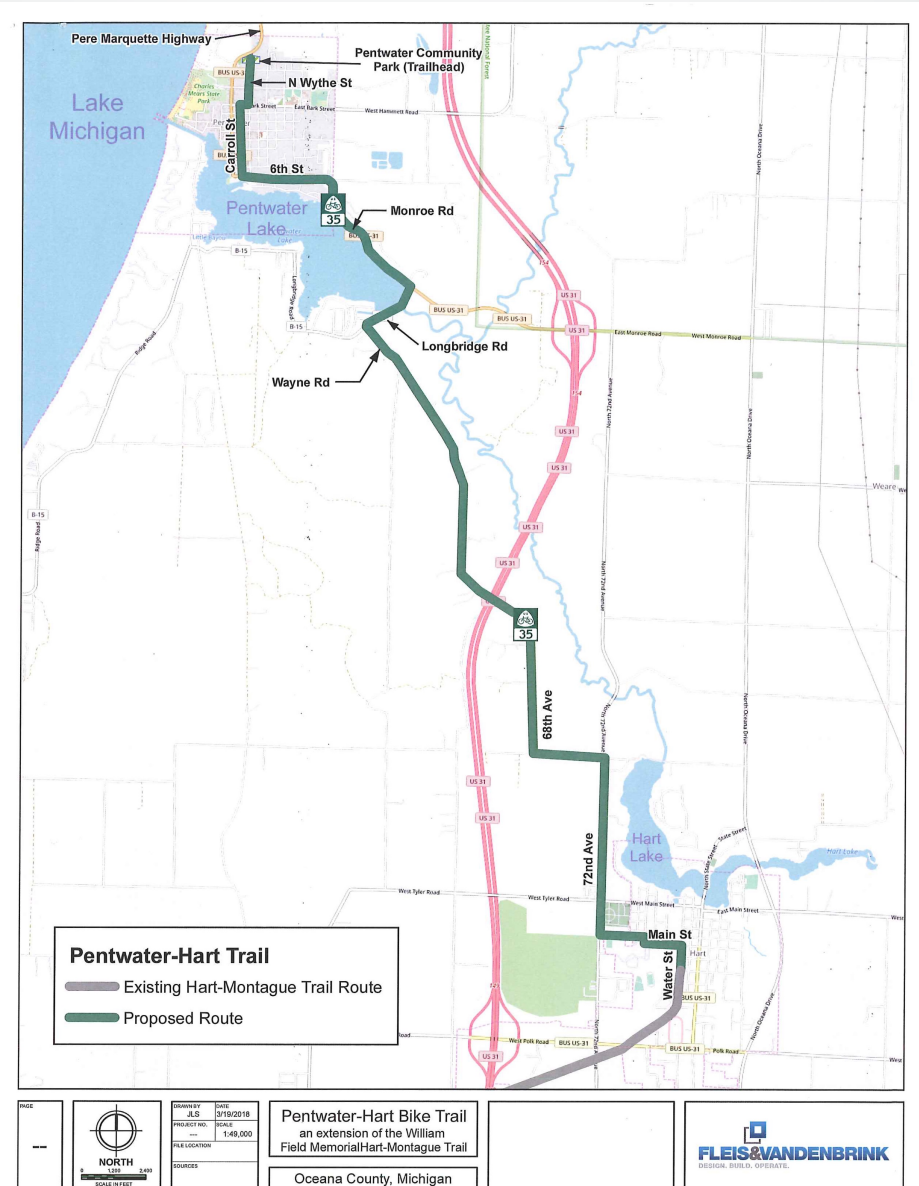
Acknowledgements

For Section-II

- Members of the Western Michigan University Civil & Construction Engineering Department Capstone Project Team: Jarret Geering, Matthew Looby, Eric VanSpronsen, Kristopher Warner

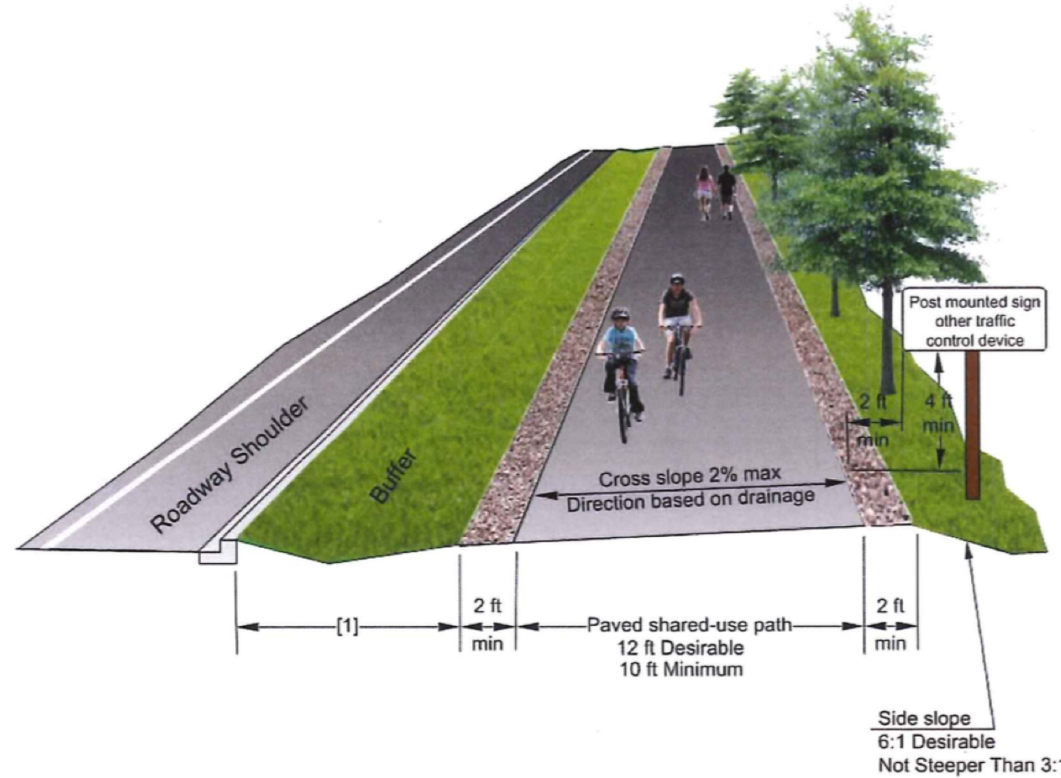
Section III -TRAIL DESIGN

Total 9 Miles



72ND-HARRISION-68TH-WAYNE

TWO-WAY SHARED-USE PATH: ADJACENT TO ROADWAY



Note: 5 ft. minimum. Provide as much separation from the roadway as practicable (AASHTO)



BRIDGES & BOARDWALKS

Note:

- Bridges to be rated for H-10 design vehicle carrying capacity and 90lbs per square foot load (not concurrently) under AASHTO
- Inside clear width of bridges shall be 14'-0" minimum

BIKE LANES – LONGBRIDGE TO CARROLL ST- CONVERSATIONS WITH MDOT IN PROCESS



Note:

- One way traffic moving in same direction as traffic flow desirable
- A two-way cycle track may be configured as a protected cycle track- at street level with a parking lane or other barrier between the cycle track and the motor vehicle travel lane – and/or as a raised cycle track to provide vertical separation from the adjacent motor vehicle lane

BIKE LANES



Retaining Wall

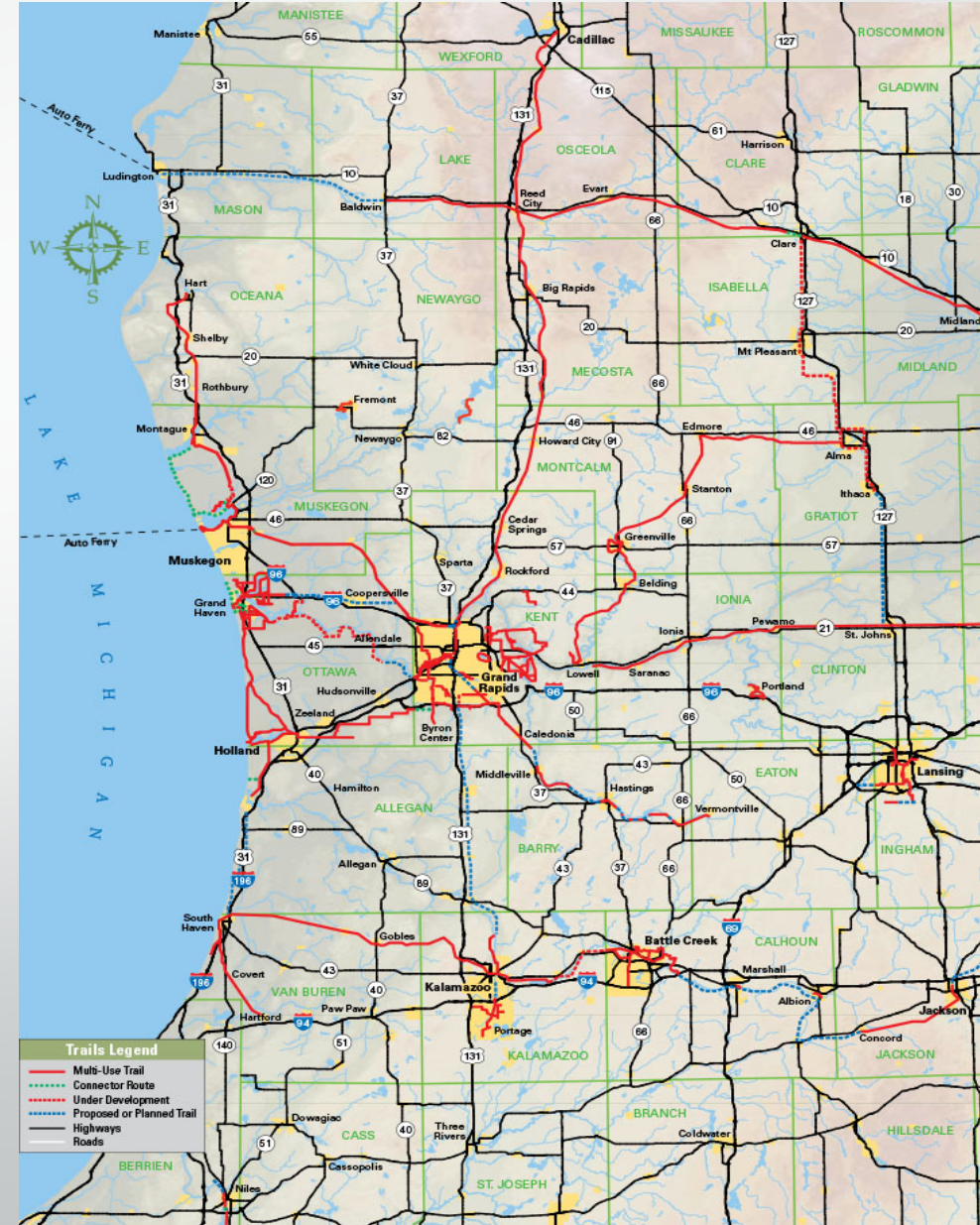
- Under US 31 on Wayne Rd.
- Current layout to narrow for path construction



Design Vision

Continuing the Connections....

- Michigan is the #1 Trails State in the nation, and boasts more than 12,500 miles of designated land trails
- The Pentwater-Hart Trail will embrace *Connecting Michigan* which is committed to a statewide trailways vision and an action plan to bring that vision to life. This project of nine (9) miles will decrease the existing trail gap between Pentwater and the Pere Marquette State Trail in Baldwin.
- Regional support for this trail connection/expansion has been received from Leaders in Economic Alliance Development in regards to their vision of connecting Mason, Oceana, Lake & Newago counties.
- MDOT Grand Region has included the Pentwater- Hart Bike Trail in their Regional Non-Motorized Plan of 2017
- The Pentwater-Hart Trail will promote connectivity in the County with the use of non-motorized transportation; safe access to new leisure offerings; promote new economic opportunities; boost property values along the designated route; increase tourism and improve the quality of life to local residents.



Looking to the The Future.....

- A Trail Maintenance Fund will reside with the Oceana County Community Foundation. All funds remaining, following construction, will be placed in the fund.