



# Mackinaw City Hike and Bike 2015



## **Update August 2011**

Bicycling use in Mackinaw City increased considerably this summer. We attribute this to three things:

- paving of the DNR trail
- increased use of bicycles across America reflecting both healthy life-styles and economy
- increased marketing by Mackinaw City and regional bike groups

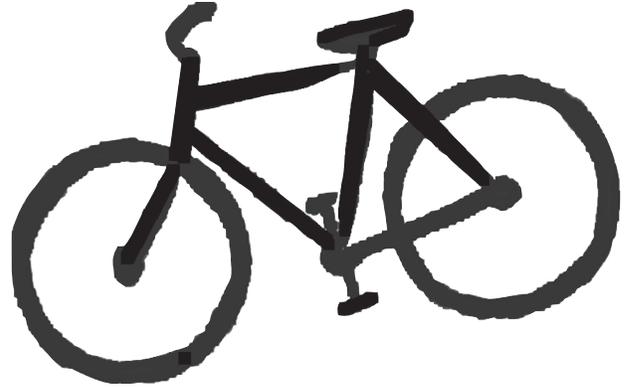
There has been significant progress made on the Bike and Hike Plan. The Trail Committee felt that it was time to update the plan.

Items that have been completed are printed in **red ink**.

Items that are in the process of completion and expected to be finished soon are in **green ink**.

A re-prioritization of items, reflecting work not yet completed and new grant prospects, are included in 2012.

Maps have been moved to the appendix.



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This plan is prepared for Mackinaw City, Michigan  
by Sandra L. Planisek  
November 2009, updated August 2011

# Chapter 1

## Vision, Principles, and Goals

### Vision

Residents and visitors will be able to walk and to bicycle with confidence, safety, and joy. Paths will be scenic, educational and restful. New facilities will eliminate conflict with motorized vehicles and make trips more pleasant and convenient. Barriers to the mobility impaired will be eliminated. Bicycling and walking will become an integral part of the recreation and transportation systems of Mackinaw City.

### Principles

Aesthetics and safety for all types of users will be the prime consideration in all plans. Separated, multi-use paths are the ideal to be strived for. Because cost and land availability will always be factors it is imperative to design the best possible plan and over decades, if necessary, develop that plan.

### Goals

1. To provide a pedestrian, bicycle, ski, and snowmobile friendly community
2. To provide the appearance of being friendly to the above groups by using signage and marketing
3. To encourage recreational bicycling by targeting:
  - visitors who already bicycle on Mackinac Island
  - visitors who arrive for a bicycling event
  - visitors who would bicycle if the facilities were more friendly
4. To encourage walking and bicycling as transportation modes thus reducing the use of automobiles in the village by both residents and visitors
5. To develop separated, multi-use paths for all levels of users including the handicapped



## Chapter 2

### Strategic Items

#### 1. Design a cross-town separated, multi-use loop

This loop will take riders from the DNR Trailhead to the Historic Village, Headlands, and McGulpin Point with a return leg by an alternate route. This path should be designed to be suitable for beginning bicyclists.

#### 2. Design a downtown recreational loop - called the “Downtown Loop”

This loop will circle the downtown providing rides along the waterfront, as much as possible. The trail will be based at the DNR Trailhead and be designed with feeder radii leading to Central Ave.

#### 3. Tourist transportation routes

Add extensions to the Downtown loop to encourage motel visitors and campground users to bicycle to the ferry docks and other tourist destinations. Also develop a plan for bicyclers and snowmobilers to get from the DNR Trailhead to the Mackinac Bridge transport vehicles.

#### 4. Residential transportation routes

Analyze the residential centroids and residential services in town and develop connector routes.

#### 5. Regional bicycle vacation

Meet with Mackinaw’s Chamber and Visitor’s Bureau about the possibility of packaging a week-long family bicycling vacation. A family could arrive in Mackinaw City, unload their bicycles, and leave the car parked for a week. The family could visit Mackinaw City, then ferry to Mackinac Island for a few days, then ferry to St. Ignace for a few days and finally return to Mackinaw City across the Mackinac Bridge. This would take the coordination of all three communities and be truly unique.



# Chapter 3

## Year 2010 - projects completed in red Improvements, bike racks, and signs

### Cross-town loop – \$4,500

Swap land with Hathaway

Get easement through the gravel pit from Darrows

Desy land swap

Bike racks (3)

Recreation Center

Wind Turbine Park

Historic Village

### Downtown loop - \$39,400

Design Arnold Line playground area and alley connector to the DNR Trailhead

Bike racks (5)

Henry and Central

DuCharme and Central

Alexander Henry Park

Conkling Heritage Park

Wawatam park

### Improvements

Sidewalk in front of Sheplers (mark and curb cut on south end)

Sidewalk from Wawatam Park to the sidewalk south of it (too sharp to bicycle)

Entry to Henry Park trail to waterfront, cut curb

Nicolet and N. Huron (E-W) Fort Entry (curb cut)

Grade up from N. Huron to new sidewalk near Old Mackinac Point - needs design

Extend sidewalk on Nicolet from existing to State Trail

South end of Louvigny - extend road to DNR trail

### Trail signs (20 to 30)

Sharrow marks on N. Huron

Staffan working on design

### Tourist transportation

Talk to Bridge Authority about connecting the Trailhead to Bridge entry

Consider a new bicycle parking requirement ordinance for all development

Talk to DNR about cutting paths from the two campgrounds across to DNR trail - talk led to conclusion that considerable private funding would be required

### Residential transportation

Map housing centroids and residential services

### Regional bicycle vacation

Convene meeting to discuss idea



# **Year 2011**

## **Arnold Line Playground**

### **Cross-town loop – \$2,000**

Signs

Place fill on platted road from Historic Village to French Farm -

This needs to be rededicated as a platted road - Chamberlains

### **Downtown loop - \$32,000**

Grade and gravel alley from DNR Trailhead to Arnold Line land

Develop Arnold Line Playground

Major bicycle parking station on Arnold Line property

Trail sign

Louvigny sidewalk from fountain south to connect with existing sidewalk

### **Tourist transportation**

Develop plan for tourist transportation routes

Explain at Chamber breakfast the desire for businesses to have bike parking racks

### **Residential transportation**

Analyze streets for potential traffic calming options vs. stop signs

## **Year 2012**

### **Cross-town trail**

#### **Signage**

- Complete sign design for wayfinding and trails
- Install critical signs (see appendix)
- Produce a sharrow template to be used on future road projects

#### **Bike parking stations - \$4,000 each**

- Complete 3 stations - Mama Mia's, Crossings, Marina

#### **Cross-town trail - \$500,000 (partner with Emmet County)**

- Apply for a DNR Trust Fund grant (April application)
- Enbridge grant
- Dal-Mac grant for signage

#### **Downtown loop**

- Design location of trail in front of Old Mackinac Point lighthouse
- Straighten sidewalk on north end of Shepler's parking lot
- Cut curb coming from east at east end of Henry Park

#### **Trailhead to downtown connector - \$8,000**

- Gravel along alley
- Settle on one of these plans to connect to downtown
  1. Run path east on alley to Crossings
  2. Run through Arnold playground by getting
    - a. long-term lease
    - b. easement
    - c. purchase property
  3. Talk to O'Briens about their property

#### **Planning**

- Talk to Bridge Authority about picking up Bridge transport at trailhead
- Discuss a bicycle parking requirement ordinance
- Ask ferry lines to develop bike parking racks
- Design tourist transportation routes
- Map housing centroids and residential services
- Ask Chamberlains to rededicate the path from Heritage Village to French Farm as a platted road
- Design sidewalk from fountain south to Louvigney sidewalk
- Research traffic calming methods other than stop signs -  
goal to reduce as many stop signs as safely possible



## **Year 2013**

### **Upgrade cross-town loop**

- Grade and limestone cross-town loop \$25,000 or budget for grant
- Signs \$5,000
- Pave DNR trail from Trails End to Wind Turbine Park
- Place fill on path from Heritage Village to French Farm
- Implement bicycle parking ordinance
- Design trail across marina lawn - get south end grade figured out
- Design residential connector routes and make stop-sign-free routes

## Year 2014 Pave marina path

### Cross-town loop

Work on path connecting the three historic properties:  
Heritage Village, McGulpin Point Light, Headlands

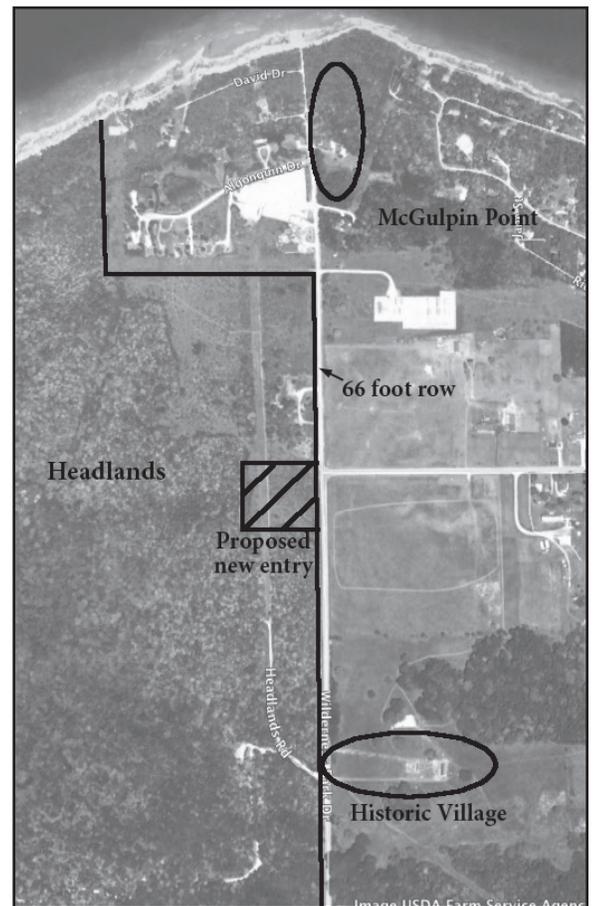
### Downtown loop

Pave path from Shepler's entry to Conkling Heritage Park

Work with Cheboygan County and State to pave DNR trail to Mill Creek

### Residential transportation

Install traffic calming on residential service trails  
Remove as many stop signs as possible



## Year 2015 Wendell addition

### Cross-town loop

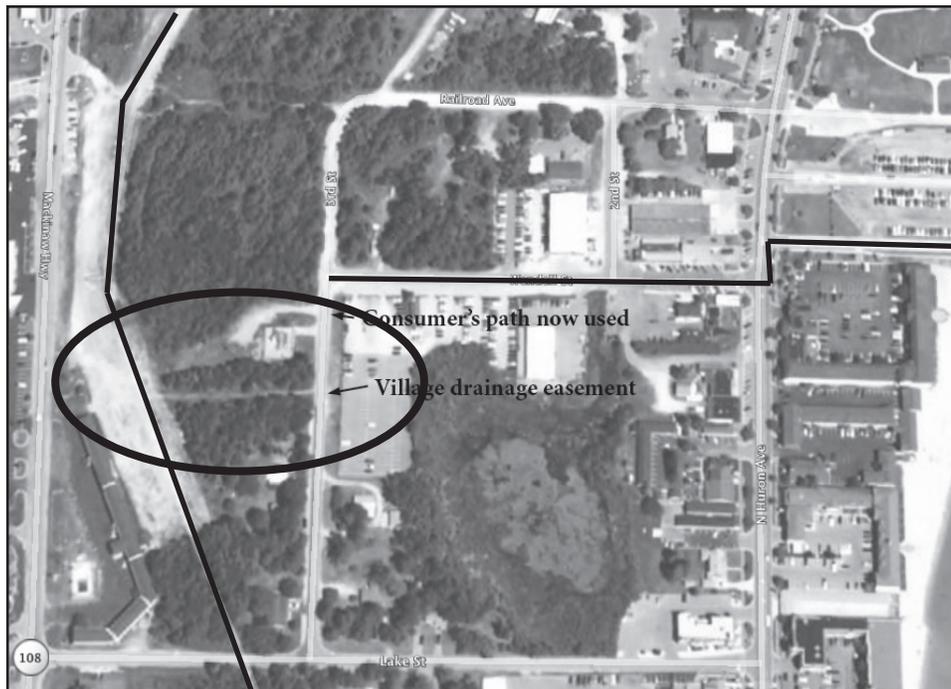
Work on path from McGulpin Point to Valley Drive

### Downtown loop

Open Wendell Drive west to trail

Adopt a design for landscaping Shepler's entry

Adopt a design for the rebuild of N. Huron Ave.



Best trail includes an east-west leg connecting the DNR trail and 3rd street, hence onto Wendell



# Chapter 4

## Design specifications

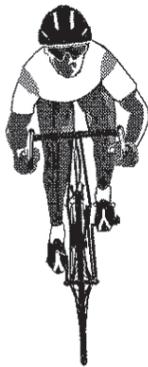
Bicycle users are very diverse:

Some are riding for transportation – direct paths and racks are important

Some are highly experienced road riders looking for exercise first and then scenery – longer trails

Some are family groups with little or no bicycling experience – safety and frequent resting areas

Some are neophyte bicyclists – unclear of bicycling safety principles, provide good signage



Expert



Intermediate



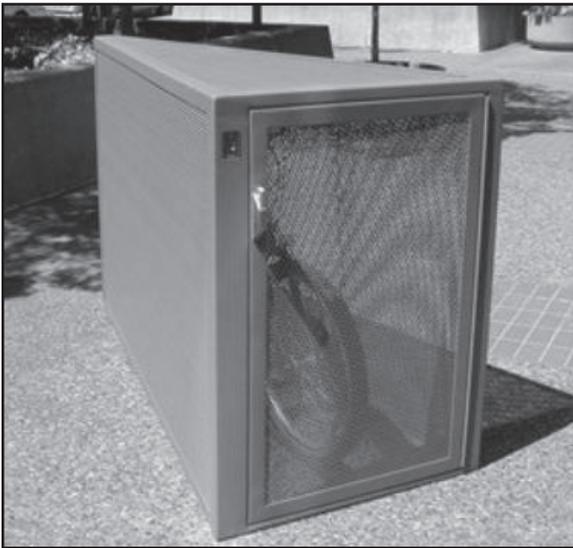
Beginner

Ideally all trails and paths would be suitable for all levels of bicyclists. Initially a ring of paths around the downtown would be suitable for beginners. A larger, more distant ring should be for intermediates and a larger ring, for long-distance rides, should be available for experts.

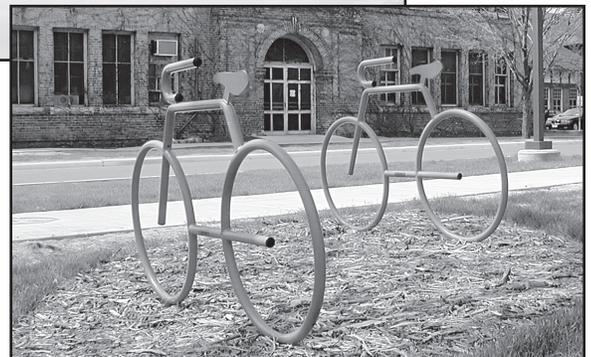
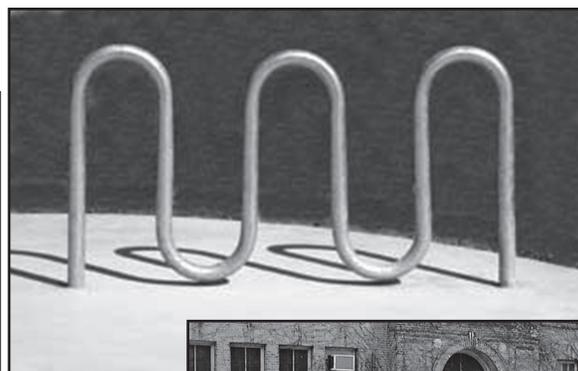
# Bike Parking

People can't be expected to bike if they can't park their bikes. Good parking will encourage newcomers to bike and will legitimize biking. To set a good example the Village should provide parking at all village buildings and parks.

Bicycle parking should be encouraged at all developments. Consider an ordinance that requires secure, Class I parking at motels and retail outlets. Secure parking should be designed to reduce thefts and protect the bike. The requirements can be based on land use and the number of car parking spaces requires. (see page 11)



Class I bike parking facilities

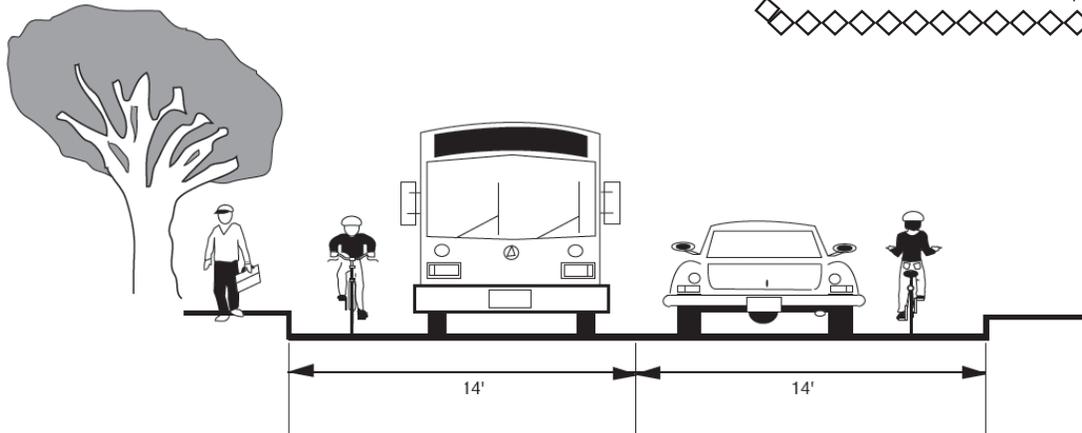
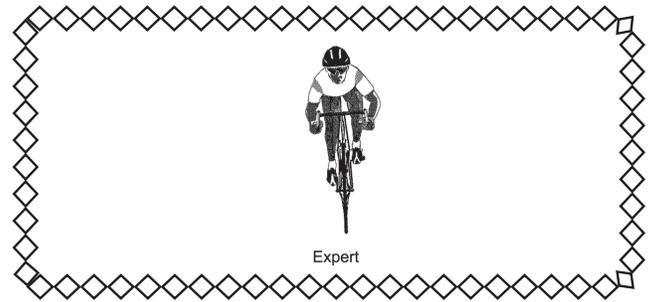


The above type of rack, which Mackinaw has, is suitable for intermediate and beginner bicyclists. Experts, with more expensive bikes, feel that these racks can bend the front wheel and prefer anything which is secure such as the two racks at right.

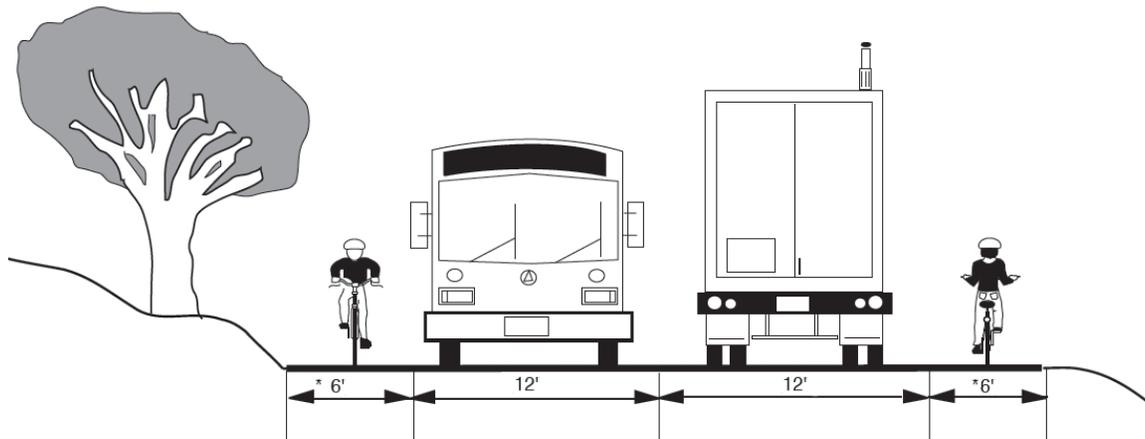
# ROAD DESIGN

## Lowest level of safety

### Shared Lanes



Measured from lane stripe to gutter, not curb face  
Streets with curbs, width is 28 feet gutter to gutter.



Street without curbs, width is 36 feet.

**WHAT IS IT?** A shared lane is a travel lane shared by bicyclists and motorists and signed with a sharrow mark on the roadbed as well as regular signs.

**WHERE FOUND?**

Shared lanes are found on roads which cannot accommodate the separation of bicycles from automobiles. Roads chosen for shared lanes include in-town streets with narrow rights-of-way and rural roads which cannot be widened.

**WHAT CHARACTERISTICS?**

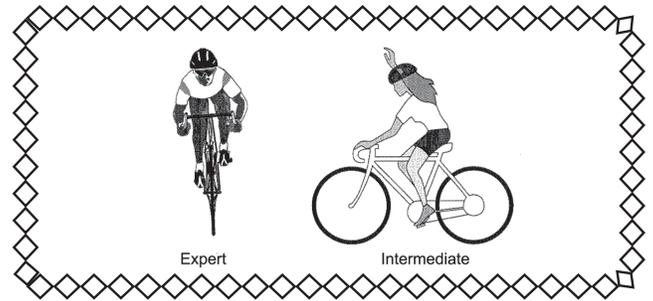
Shared lanes are distinguished from all other roads by the judicious use of signage designed to heighten motorists' awareness of the presence of bicycles.

**FOR WHOM?**

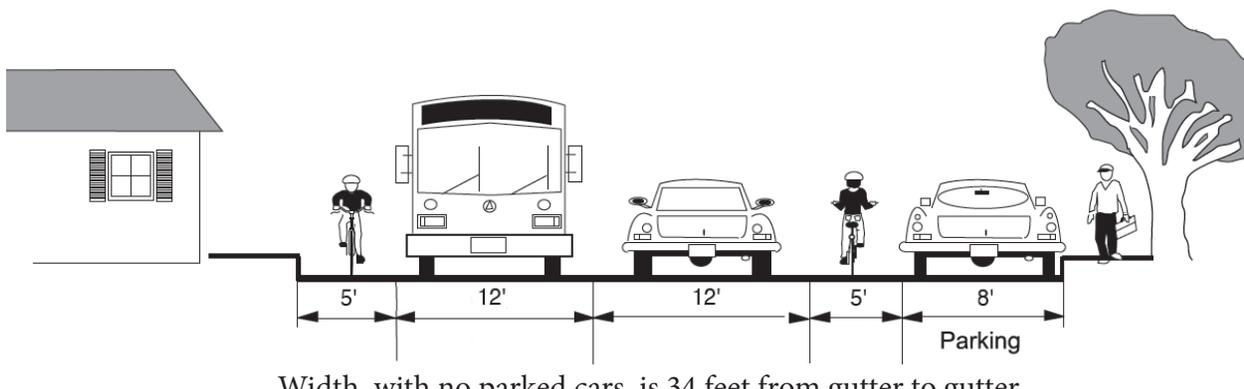
Shared lanes are recommended for experienced cyclists only.

# ROAD DESIGN

## Middle level of safety



### Bicycle Lanes



Width, with no parked cars, is 34 feet from gutter to gutter.  
Add 8 feet for each side with a parked car.

**WHAT IS IT?** A bike lane is a portion of the paved road (min. 4 feet) that is designated by striping, signing and pavement marking for the preferential or exclusive use of bicyclists.

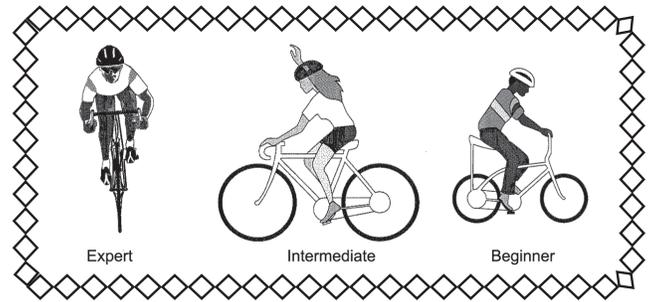
**WHERE FOUND?** Bike lanes are located on both sides of the street. Bike lanes are recommended on roads that are popular with cyclists due to their proximity to dense neighborhoods or popular destinations.

**WHAT CHARACTERISTICS?** Some roads can accommodate bike lanes with the addition of striping and signage while others require pavement widening.

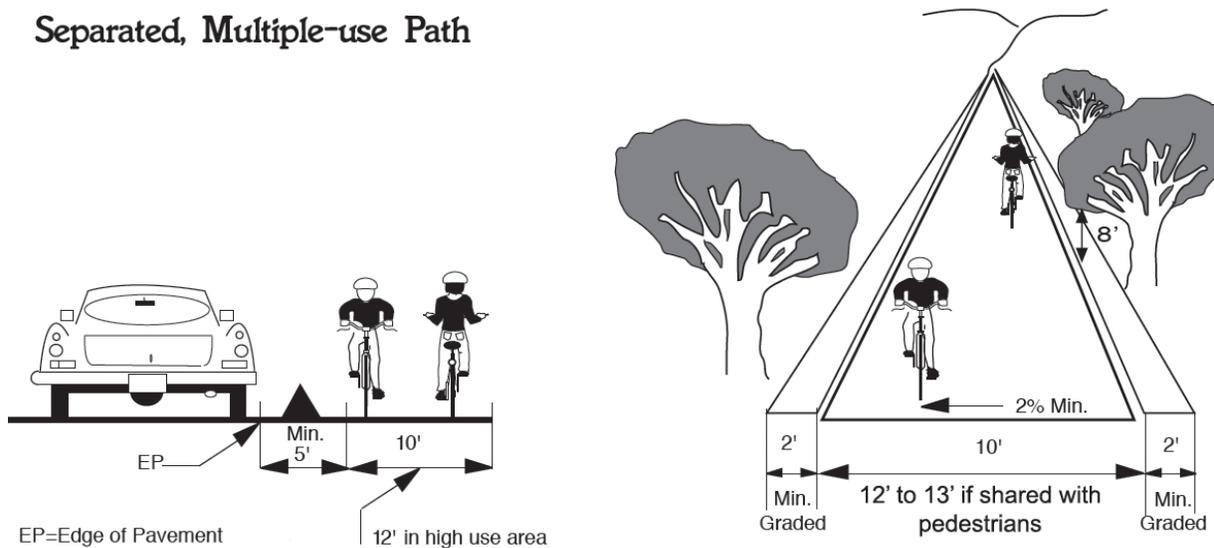
**FOR WHOM?** The presence of bike lanes creates a high level of confidence for the bicyclist that a portion of the road is reasonably safe. Bike lanes are especially recommended for intermediate and expert cyclists.

# ROAD DESIGN

## Safest



### Separated, Multiple-use Path



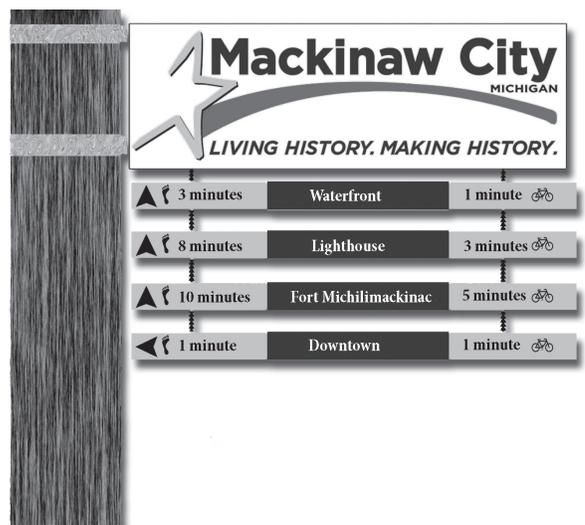
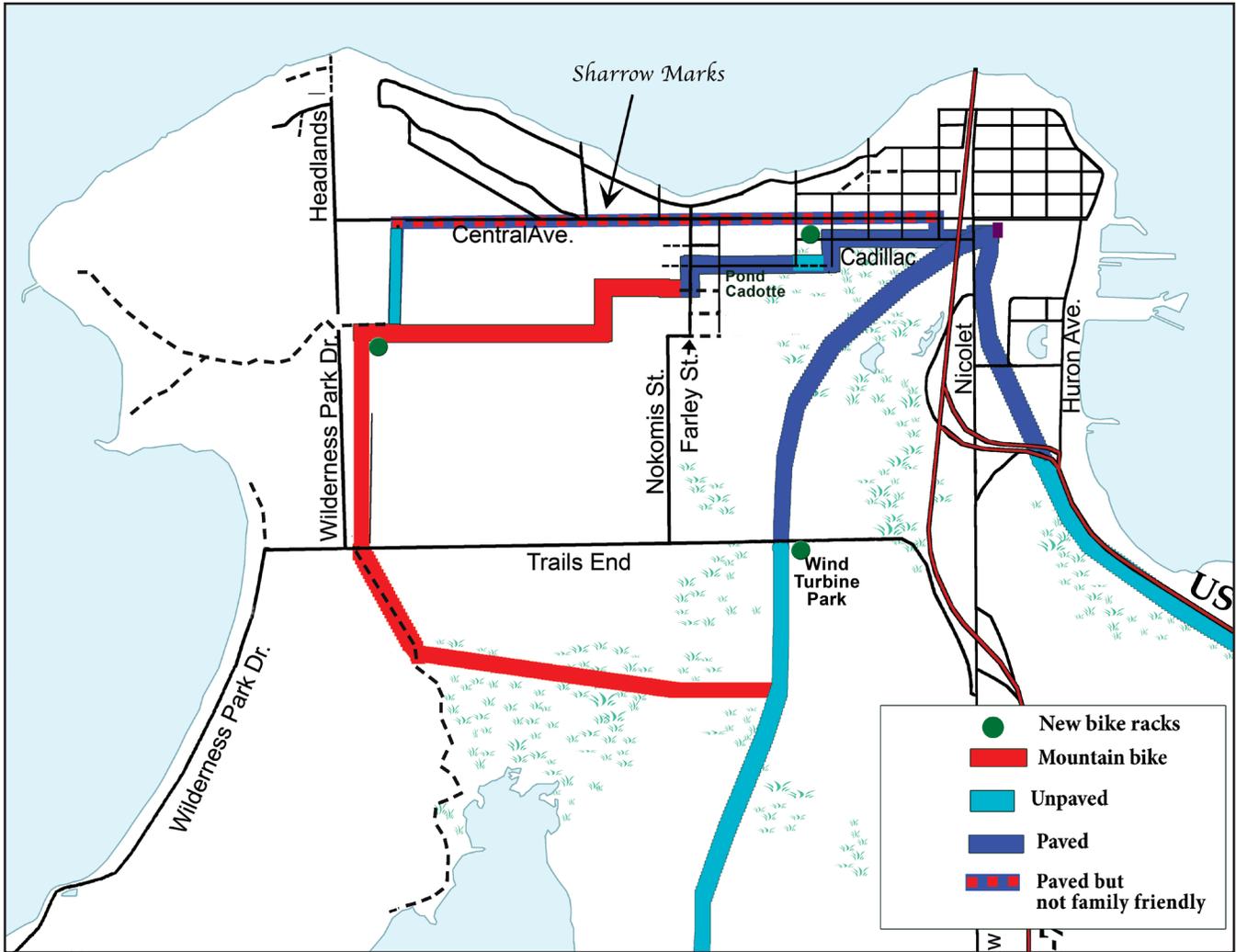
**WHAT IS IT?** A multi-use path is a route, separated from other roads by a barrier or open space that is designed to accommodate a mix of non-automotive users (e.g. walkers, runners, strollers, wheelchair users, roller skaters and bicyclists).

**WHERE FOUND?** Multi-use paths can be developed in a variety of settings from railroad corridors to open space trail networks.

**WHAT CHARACTERISTICS?** Multi-use paths are extremely popular exercise areas. Multi-use paths must have sufficient width to accommodate the variety of users. When in a wooded area they must have 8-foot height clearance. Dense vegetation near the path edge make it seem unsafe so some clear area is desirable.

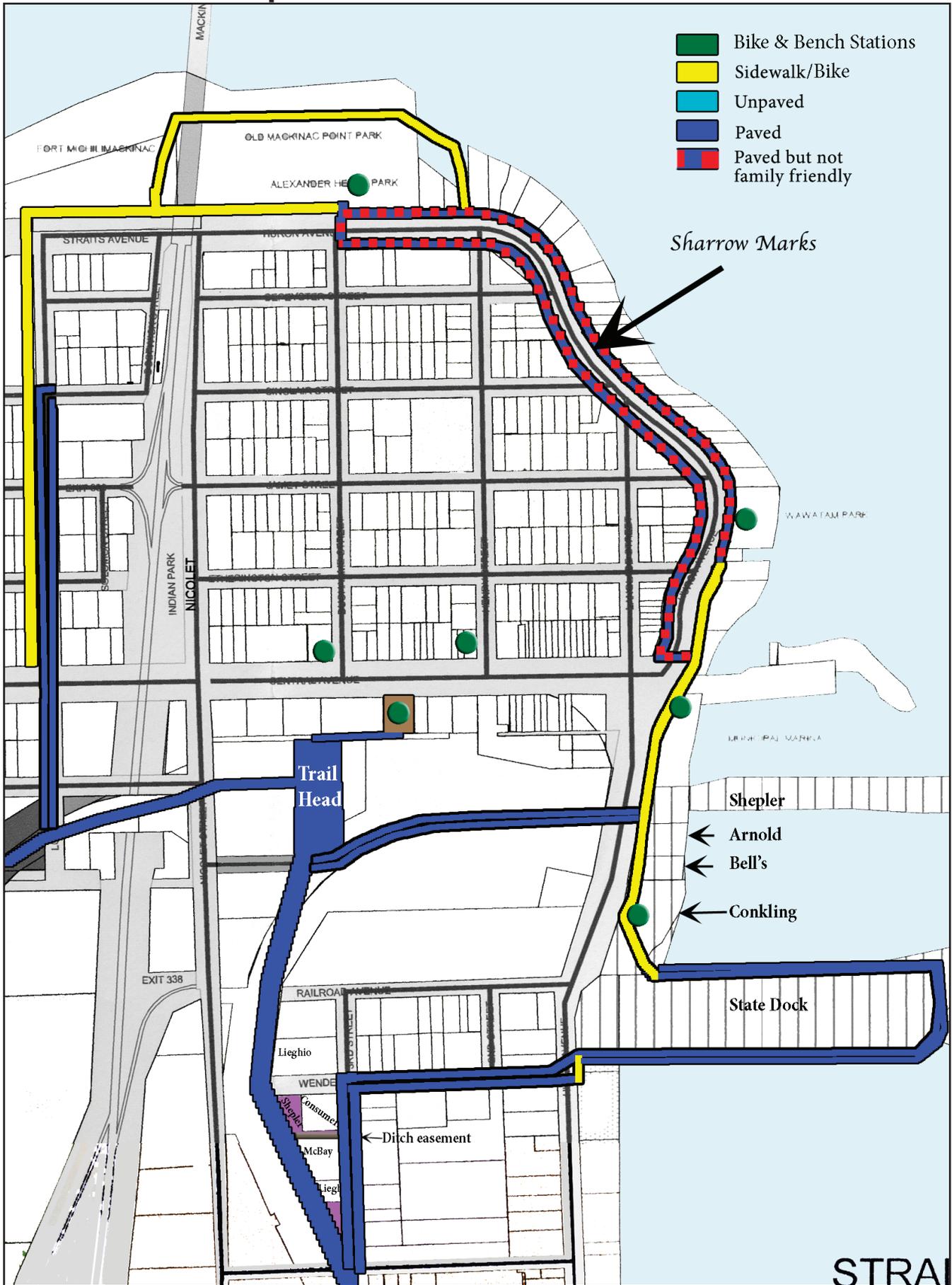
**FOR WHOM?** Education is essential to ensure a successful mix of bicycles, pedestrians and other users.

# Initial Cross-town Loop - ultimately this will include McGulpin



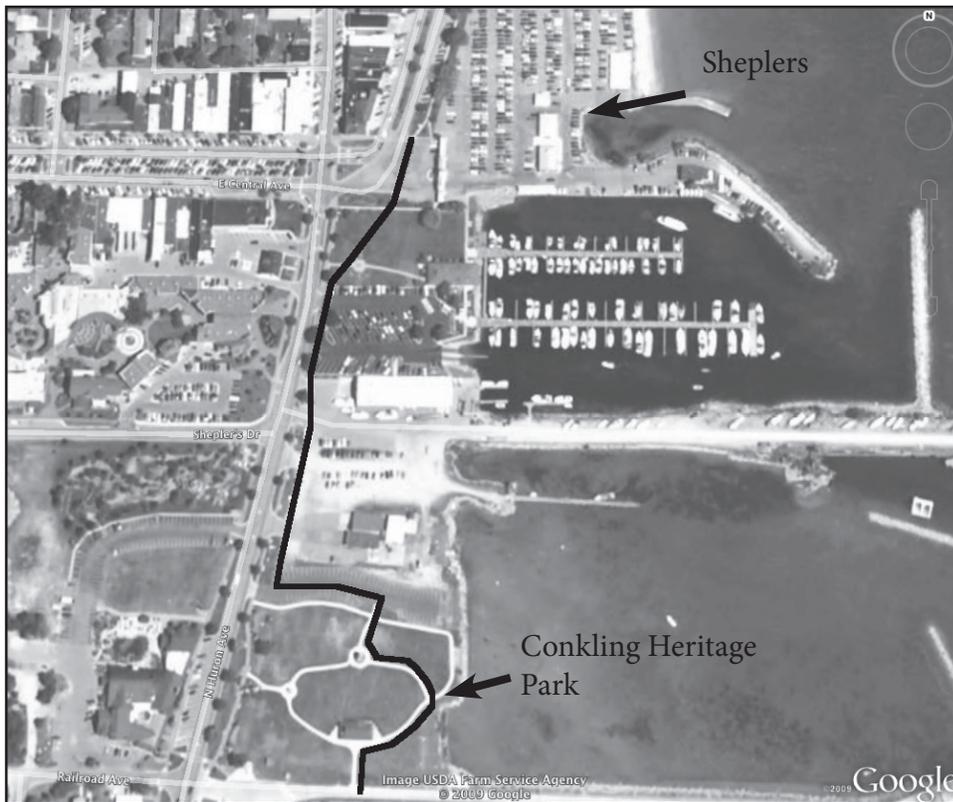
Concept design of decorative signs

# Downtown Loop





# Conkling Heritage Park to north of Shepler's



Bike Parking Rules  
from a survey of 9 communities done in 1999

Land Use	Bicycle Spaces Required	Type
<b>RESIDENTIAL</b>		
Apartment building	1 per unit plus 6 space rack at each building entrance	Class I 100% Class II 6 space
<b>COMMERCIAL</b>		
Hotel/Motel	1 per 15 rooms. In addition when motel has greater than 75 rooms, a 6-space visitor rack shall be provided.	Class I 60% Class II 40%
Retail sales and food	1 per 2,500 sq. ft. for first 5,000 sq. ft. of GFA then one for any additional 5,000 sq. ft. of GFA	Class I 50% Class II 50%
<b>INSTITUTIONAL</b>		
Schools	1 per 10 employees, 1 for 8 students	Class I employees Class II students
Library	1 per 1,000 sq. ft.	Class I 20% Class II 80%
Nursing or group home	1 per 15 dwelling units	Class I 75% Class II 25%
<b>CULTURAL</b>		
Stadium, hockey rink, pool, exhibition hall	1 per 1,000 sq. ft.	Class I 20% Class II 80%
Community center	1 per 800 sq. ft. of GFA	Class I 20% Class II 80%
Class I parking provides complete protection for bicycle, covered and total security.		
Class II facilities are racks that a bicycle can be securely locked to.		