

# Public Workshop

# City of East Lansing Non-motorized Transportation Plan September 23, 2009

City of East Lansing's  
**Non-motorized Transportation Plan**



**Preliminary Plan Public Workshop**

Banquet Hall  
Hannah Community Center  
September 23, 2009  
7:00 to 9:00 PM

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**Agenda**

- Project Status
- Review of First Workshop Input
- Draft Non-motorized Network Overview
- Key Area Recommendations
- Policies and Guidelines Overview
- Pedestrian Network Table Exercise
- Bicycle Network Table Exercise
- Prioritization Table Exercise
- Plan Evaluation



Meeting Purpose Is to Refine Key Preliminary Recommendations Prior to Preparing Final Report.

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**Project Schedule**

City of East Lansing Non-motorized Transportation Plan Schedule  
Revised April 1, 2009

|                                 | April                       | May                         | June                        | July                        | August                      | Sept.                       | Oct.                        |
|---------------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|
| 1 Plan Development              |                             |                             |                             |                             |                             |                             | 1:00                        |
| 2 Context and Network Maps      |                             |                             | Draft                       |                             |                             |                             | 1:00                        |
| 3 Trails Map                    |                             |                             | Draft                       |                             |                             |                             | 1:00                        |
| 4 Policies & Guidelines         |                             |                             |                             | Draft                       |                             |                             | 1:00                        |
| 5 Education & Marketing Plan    |                             |                             |                             |                             |                             | Draft                       | 1:00                        |
| 6 Work Sessions with City Staff | Meeting with City Staff (6) | Meeting with City Staff (6) | Meeting with City Staff (6) | Meeting with City Staff (6) | Meeting with City Staff (6) | Meeting with City Staff (6) | Meeting with City Staff (6) |
| 7 Public Workshops              |                             | Public Workshops (3)        |                             |                             |                             | Public Workshops (3)        | Public Workshops (3)        |

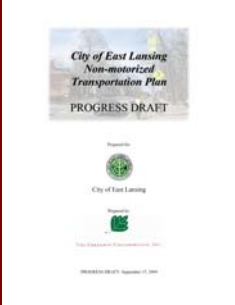
**Legend:**

- Meeting with City Staff (6)  
Wed, Apr 15 1:30-3:30 PM Wed, May 20 1:30-3:30 PM Wed, Jun 17 1:30-3:30 PM Wed, Jul 1 1:30-3:30 PM Wed, Aug 19 1:30-3:30 PM Wed, Sep 16 1:30-3:30 PM
- Public Workshops (3)  
Wed, May 27 7:00-9:00 PM Wed, Sep 23 7:00-9:00 PM Date to be Determined
- Task Duration

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**Report Format**

- Five Sections:
  - Existing Conditions
  - Proposed Facilities
  - Proposed Policies
  - Design Guidelines
  - Education and Marketing
- Currently Over 200 Pages
  - Will Focus on the Proposed Facilities This Evening
- Draft Report Ready for Public Review Late October



There will be an opportunity to review the draft document in its entirety on line as well as comment at a public hearing.

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Non-Motorized Transportation Plan  
**Public Workshop Results**



- ❖ Existing Activities
- ❖ Program Components
- ❖ Phased Implementation

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**Top Project Expectations / Desired Outcomes**

- Easy and Safe Bike/Ped. Transportation System That Connects to Key Destinations in the City (8)
- More/Improved Crosswalks, Especially Along Major Roads (7)
- More Sidewalks, Especially Along Major Roads (6)
- More Accessible Bike Racks / Bike Parking Areas (5)
- Designated Bicycle Routes with Signage (5)
- Cars and Bike/Ped. Coexist (5)
- Make Connection to Lansing River Trail and Other Existing Trails (5)
- Connect Surrounding Outer Communities to the Downtown (4)



About 40 People Attended the May 27<sup>th</sup> Public Workshop

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### Road Crossings and Intersections

- Many Challenges Noted Regarding Crossing Grand River and Saginaw
- Seven Major Intersections Noted

● Challenging Road Crossings Locations  
● Challenging Intersections  
— Difficulty Crossing Entire Stretch of Road  
— Existing Trail

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### Sidewalk and Pathway Facilities

- Most Sidewalk Improvements Were Missing Sidewalks Along Busy Roads in the Suburban Areas of Town
- Desire to Extend the Northern Tier Trail

● Points of Interest  
- - - Noted On-Road Trail Extensions  
- - - Noted On-Road and/or On-Road Trail Extensions  
— Noted Sidewalk Improvements and Extensions  
— Existing Trail

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### Bicycle Facilities

- Desired Bike Lanes on Most Primary Roads
- Desire to Use a Bike Route or Bike Boulevard to Link Northern Tier Trail to Downtown/Campus

● Noted Roundabouts  
— Noted Bike Lane Expansion or Improvement  
— Noted Bicycle Routes or Boulevard  
— Existing Bike Lanes/Paved Shoulders  
— Existing Trail

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### Top Specific Areas of Concern

- 11 Specific Areas Were Identified Three Or More Times
- Some of These Areas Are An Intersection, Others Refer to An Entire Corridor

■ Areas of High Priority  
— Noted Challenging Corridor  
— Existing Trail

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### Top Specific Areas of Concern

1. State Rd Maintenance
2. Lake Lansing Interchange
3. Northern Tier Trail Extensions
4. Saginaw Street Crossings
5. Harrison / Saginaw Intersection
6. Frandor Connections
7. Michigan Ave Crossings
8. Harrison Road Sidewalks and Bike Lanes
9. Grand River Bike Lanes
10. Grand River Crossings
11. Hagadaorn / Grand River Intersection and Hagadorn Rd

■ Areas of High Priority  
— Noted Challenging Corridor  
— Existing Trail

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### Non-Motorized Transportation Plan Non-motorized Network


- ❖ Near-term Bike Lanes
- ❖ Proposed Long-term Bike Lanes
- ❖ Proposed Bike Route System
- ❖ Proposed Crossing Improvements

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### Bike Lanes / Paved Shoulders

- Designated Travel Lane For Bicyclists
- Delineated by Solid White Stripe, Bike Icon Pavement Markings and Signs.
- Bicyclists Travel The Same Direction as Motorized Vehicles




Target Audience: "Enthusied and Confident" Bicyclists

Context: Used on Primary Roads in All Areas. Busy and High Speed Roadways May Warrant Wider Bike Lanes

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### Existing Bike Lanes

- Approximately 18 Miles Of Existing Bike Lanes or Paved Shoulders in the City
- Not A "System" Yet




Target Audience: "Enthusied and Confident" Bicyclists

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### Near-term Bike Lanes

- No Major Changes to Curbs or Drainage; Reconfiguring Existing Streets
- 11 Miles Of Near-term Bike Lanes Proposed
  - Potential Total of 29 Miles of Bike Lanes in Near-term
- Combination of:
  - Lane Narrowing
  - Lane Reduction
  - 4 to 3 Lane Conversions
  - Contra-flow Bike Lane




Target Audience – Enthusied and Confident Bicyclists

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### Long-term Bike Lanes

- Require Complete Reconstruction of Roadways (Move Curbs and Drainage Structures)
- 17 Miles of Long-term Bike Lanes
  - Potential Total of 56 Miles of Bike Lanes
  - Some Portions Outside Side of City
- All Primary Roads to Have Bike Lanes



Target Audience – Enthusied and Confident Bicyclists

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### Bike Routes

- Most Local Residential Roads Can Provide Key Links Without Special Facilities
- Signs Provide Wayfinding Or Identify Specific Routes
- Can Provide Links Between Trails and Bike Lanes




Target Audience: "Interested But Concerned" Bicyclists


Context: Generally Used on Local Residential Roads and Rural Routes with Moderate Speed and Traffic Volumes.



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### Bike Route System

- Link Parks, Major Trails, Schools and Shopping Areas
- Low Stress Facilities Appropriate for Most All Bicyclists
- Signage to Help Navigate Potentially Confusing Routes
- Not As Direct as Bike Lanes in Some Cases



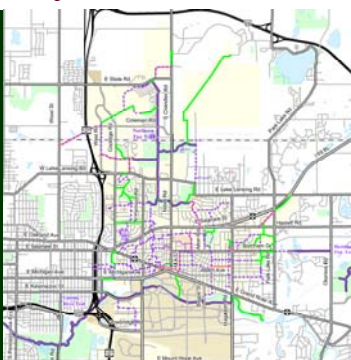
Target Audience – Interested But Concerned Bicyclists

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## Bike Route System Composition

- Existing Major Trails
  - Northern Tier Trail
  - Lansing River Trail
  - Red Cedar Greenway
- Existing Short Pathways
- Proposed New Shared-Use Paths
- Some Bike Lanes On Low Volume Local Roads



Target Audience – Interested But Concerned Bicyclists

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## Bicycle Boulevards


- Can Take Many Forms
- Discourage Through Motor Vehicle Traffic Through Diverter Islands
- Reduce Speed Through Traffic Calming Measures
- Provide for Through Bicycle Traffic Via Median Openings and Exceptions To One-Way Travel
- Residents Benefit from Reduced and Slowed Traffic



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## Bicycle Boulevard

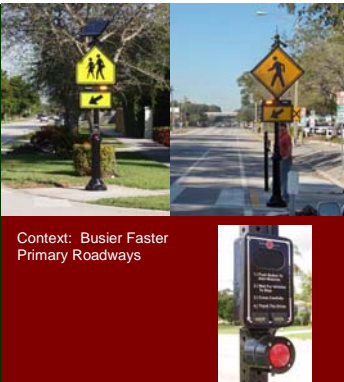
- Links Northern Tier Trail to Downtown, Campus and Red Cedar Greenway
- Bike Route "Plus"
  - Traffic Calming
  - Bike Priority
- Potential to Incorporate "Green Street" Sustainable Elements
- May Be Prototype for Additional Bike Boulevards



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## Actuated Rectangular Rapid Flash Beacon (RFB)

- High Intensity LED Flashers Area Paired With Crosswalk Signs
- Alternating Flashers Get Motorists Attention When Activated
- Can Be Passively or Push-Button Activated
- Solar Power Options
- Can Be Linked to Advance Warning Signs
- 80 to 90% Adherence After 1 Year in Test
- Interim Approval by FHWA To Use



Context: Busier Faster Primary Roadways

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## Crossing Island (CI)

- Provide Storage Area for Pedestrians to Wait for Acceptable Gaps in the Flow of Traffic Before Completing the Street Crossing.
- Zig-Zag Crossing Provide Room for Multiple Bicycles, Trailers and Tandems



Context: 3 Or More Lane Busy And / Or High Speed Roadways

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## Hybrid Pedestrian Beacon (HPS)

- Address Many of the Problems With Traditional Pedestrian Signals
- Minimize Delay to Motor Vehicle Traffic
- Lower Warrants
- Will Be In Next Version of MMUTCD
- Good For Locations Where There Are Few Usable Gaps In Traffic or Crossing Island Is Not Feasible
- Roundabout Applications



Context: High Speed / High Volume Roadways Where A Crossing Island Is Not Practicable



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### Proposed Crossing Improvements

- Many Are Coordinated With Bike Routes (Which Work Well For Pedestrians Too)

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### Proposed Crossing Improvements

- Provide More Safe Alternatives to Cross Busy Roadways

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### Sidewalk (approx 5' wide)

- Should Be Located on Both Sides of the Road
- Ideally Set Back From The Roadway and Barriers Between The Roadway And The Sidewalk
  - Trees
  - Light Poles
  - Parked Cars

Context: Generally In Urban and Close-In Suburban Areas

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### Wide Sidewalk (6-8' wide)

- Allow Two Pedestrians to Comfortably Walk Side by Side
- Suitable For Light Bicycle Use By Novice Bicyclists But Not A Designated Bicycle Facility

Context: Generally In More Suburban and Rural Areas Along Busier Primary Roadways

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### Proposed Sidewalk Improvements

- Complete The Sidewalk System in the Middle and Outer Ring Areas

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### Non-Motorized Transportation Plan Downtown

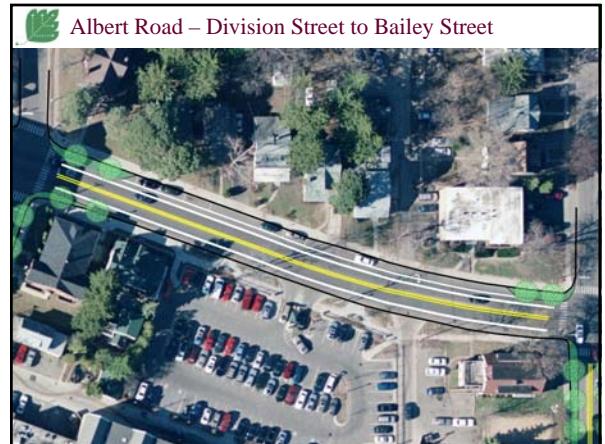
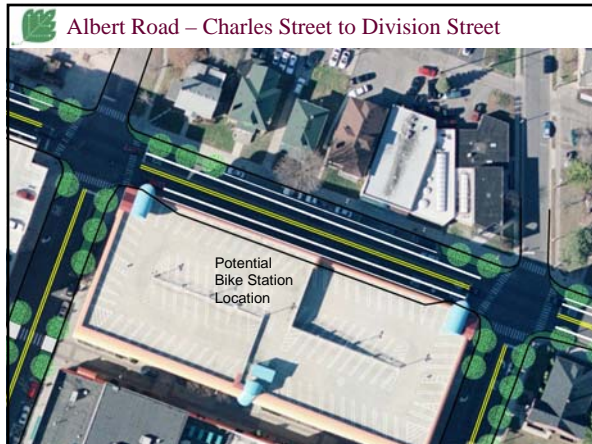
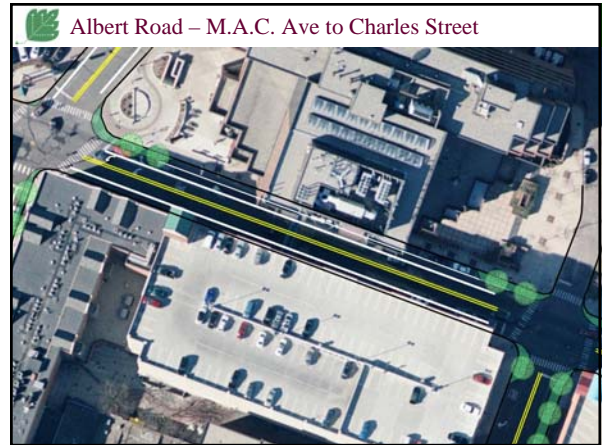
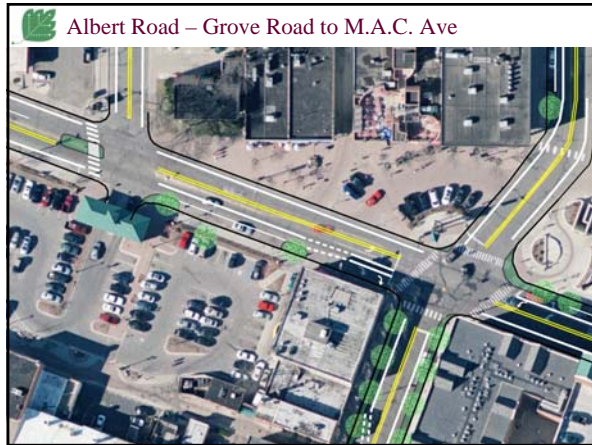
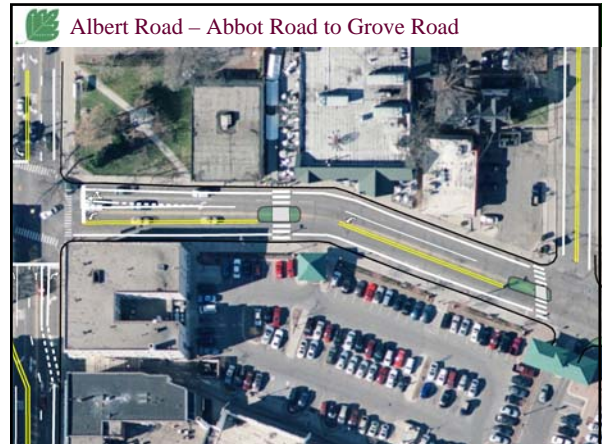
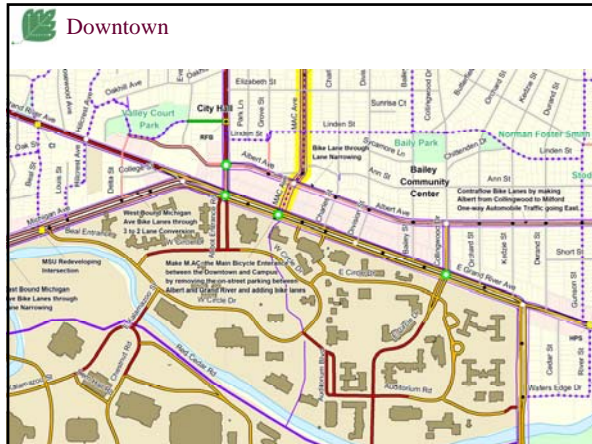
- ❖ Albert Road
- ❖ Town / Gown Links

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# Public Workshop

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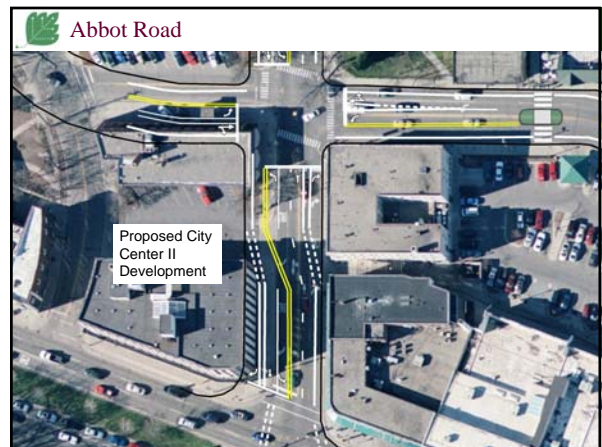
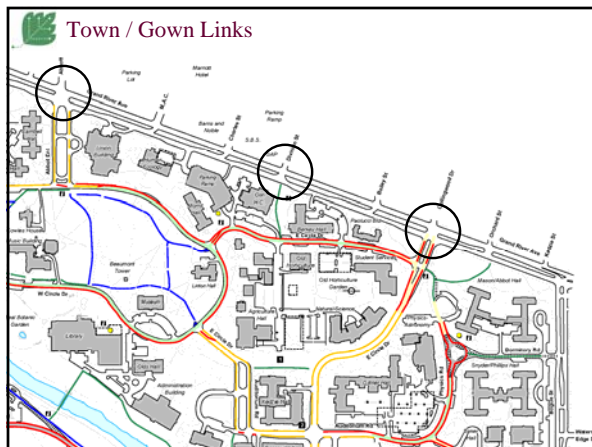
**Contraflow Bike Lane**

- A Two-Way Road for Bicyclists But Restricted To One-Way for Motorists
- Used To Reduce Out-of-Direction Travel Caused By One-Way Roads
- Used to Reduce Motorized Travel on A Roadway
- Generally Done In Short Segments
- Some Issues With Visibility At Intersections

Target Audience: "Enthusiated and Confident" Bicyclists

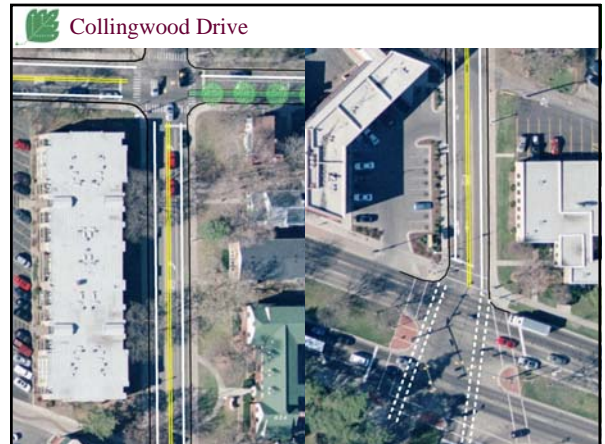
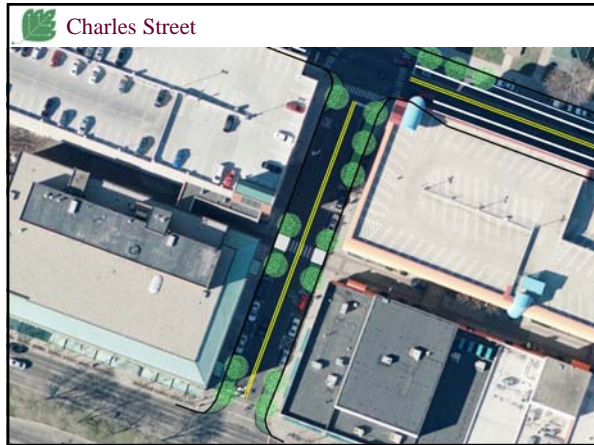
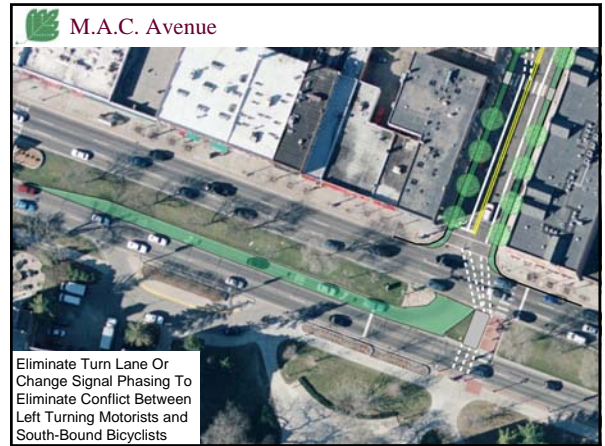
Context: Generally Used on Low Volume and Low Speed Collectors and Arterials In Urban Areas

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## Non-Motorized Transportation Plan Specific Areas



- ❖ Lake Lansing Road / US-127 Interchange
- ❖ Harrison Road
- ❖ Hagadorn Road / Grand River Intersection

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## Lake Lansing Road / US-127 Interchange

Two Near-term Options:

- Replace Northern Most Lane With Separated Shared Path
- Remove Center Raised Median and Provide Bike Lanes and Sidewalks On Both Sides (Preferred)
- In Both Cases Cross Free-flowing Ramps at 90 Degrees and Provide Rapid Flash Beacons
- Long-term: Realign the Free-flowing Ramps to Meet Lake Lansing Road at 90 Degrees and Treat As Normal Urban Intersection



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## Harrison Road Between Michigan and Grand River Ave

- Three Lanes With Bike Lanes (Like Grand River)
- Expand Sidewalk To Road R.O.W.
- Place Street Lights and Other Furnishings Between Sidewalk and Road
- Combination of the Bike Lane and Street Furnishings At the Curb Line Will Help Separate the Sidewalk from the Roadway

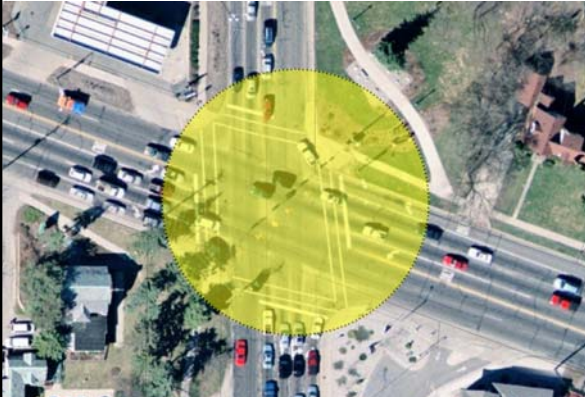


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## Hagadorn Road / Grand River Ave Intersection



## Hagadorn Road / Grand River Ave Roundabout



## Hagadorn Road / Burcham Drive Roundabout




### Saginaw Street / Harrison Road Intersection

- "Pork Chop" Islands to Reduce Crossing Distance and Scale of Intersection
- Crosswalk to Island May Incorporate Speed Table As Below

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### Saginaw Street / Abbot Road Intersection

- "Pork Chop" Islands to Reduce Crossing Distance and Scale of Intersection
- Crosswalk to Island May Incorporate Speed Table As Below

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## Non-Motorized Transportation Plan Proposed Policies

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### Proposed Policies

- Complete Streets Policy
- Americans with Disabilities Act and Access Plan
- Safe Routes to Schools
- Bike Parking
- Maintenance

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## Non-Motorized Transportation Plan Design Guidelines

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### Design Guidelines

- Road Cross Sections
- Intersection Design
- Bike Route Signs
- Shared Use Paths
- Bike Boulevards
- Neighborhoods
- Commercial Center
- Land Use Planning
- Downtown Streetscapes

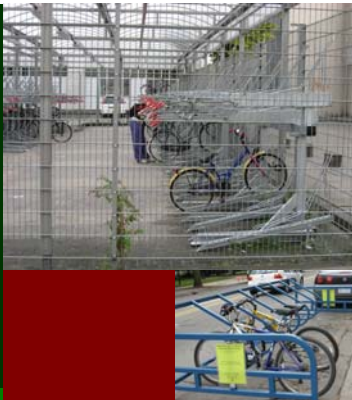
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## Bike Parking

Spectrum of Solutions:

- Uncovered Racks
- Covered Bicycle Parking
- Bike Lockers
- Enclosed and Secured Parking
- Bike Station
- Seasonal On-Street Parking



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## Non-motorized Transportation Plan Education and Marketing Plan




- ❖ Existing Activities
- ❖ Program Components
- ❖ Phased Implementation

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## Public Outreach and Education Program

- Need to Overcome The Inertia of The Familiar
- Targeted Marketing Towards Specific Groups
- Take Advantage of Existing Events
- Utilize Existing City and Regional Resources
- Person to Person Contact



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## Public Outreach and Education Program

**Year One:**

- Establish the Program

**Year Two - Three:**

- Targeted Marketing and Outreach:
  - Residents
  - Students

**Year Four - Six:**

- Targeted Marketing and Outreach to:
  - Employers
  - Employees
  - Youth

**For Each Phase Recommendations For:**

- Program Management
- Programs and Services
- Promotion
- Advocacy
- Evaluation



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## Pedestrian Network Table Exercise

- Use RED Marker
- Mark Any Suggestions on Large Map
- Review Proposed Sidewalk
- Review Proposed Crossing Improvements
- You Have 15 Minutes



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## Bicycle Network Table Exercise


- Use BLUE Marker
- Mark Any Suggestions on Large Map
- Review Proposed Bike Lanes
- Review Proposed Bike Routes
- You Have 15 Minutes



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## Non-Motorized Transportation Plan Phasing




- ❖ Three Near-term Phases
- ❖ Long-term Improvements

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## Near-term Improvements, First Priority


- Complete East-West Bike Lane System Through Downtown
- Construct Bicycle Boulevard Linking Downtown to Northern Tier Trail
- Extend Left "Leg" of Northern Tier Trail
- Improve Lake Lansing Road Overpass



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## Near-term Improvements, Second Priority


- Complete Remainder of Bike Lanes that Can Be Accomplished By Road Conversions



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## Near-term Improvements, Third Priority


- Complete Bike Route System



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## Long-term Improvements

- To Be Coordinated With Road Reconstruction
- Much More Economical To Coordinate With Larger Road Project
- Not Likely to Happen Otherwise



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## Phasing Table Exercise

- Use GREEN Marker
- Highlight Top Three Crossing Improvements
- Highlight Top Three Proposed Sidewalks
- Highlight Top Three Bike Lane Segments
- Highlight Top Three Bike Routes
- You Have 15 Minutes



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## Questions or Comments



Please Contact:

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