


Planning and Signing Bike Routes



The Greenway Collaborative, Inc's 2009 Webinar Series

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Disclaimer

- A Confusing Subject
- It is a Practice in Flux
- There Are Currently Many Different Valid (and Not So Valid) Approaches to Designating and Signing Bike Routes
- The Following Are Our Opinions



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Planning and Designing Bike Routes

Planning



- ❖ Why
- ❖ Target Audience
- ❖ How This Fits In With Other Bike Facilities

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So Why Do We Need Signed Bike Routes?

- Bicyclists Can and Do Ride on Just About Every Road Except Freeways
- Bike Lanes Have Their Own Signs and Markings
- Every Street Should Be a "Complete Street" Suitable for Bicycling
- Does Not Make Sense to Sign Every Road

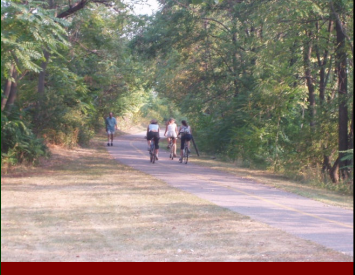


Signs Are Not Always A Good Solution, They Should Be Used With Some Restraint

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Because...

- Some of the Best Ways to Get Between Point "A" and "B" on a Bike Are NOT Obvious
 - Often Neighborhood Streets
 - Utilize Cut Through Paths
- An Increasing Number of Greenways and Trails Are Mix of Facility Types
 - Off-Road Trails
 - Sidepaths
 - Shared Roadways
 - Bike Lanes/Paved Shoulders



Also A Way To Reach Out To A New Group Of Bicyclists

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Four Types of Bicyclists

- Strong & Fearless
 - <1%
 - Always Biking
 - Any Road Regardless of Condition
- Enthusied & Confident
 - 7%
 - Frequently Bike
 - Like Designated Facilities Such As Bike Lanes
- Interested but Concerned
 - 60%
 - Occasional Rider
 - Local Roads and Trails
- No Way, No How
 - 33%

Bicycle Types

Not Really This Clear Cut. There Is Movement Between the Groups.

Developed by Roger Geller, Bicycle Coordinator, Portland Office of Transportation

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The TGC Approach To Bike Routes

- Target the "Interested but Concerned" Bicyclists
- Identify Routes Using Local Low Volume Roads and Trails That Link Key Destinations
- Sign Composite Trails and Urban Greenways
- Don't Need to Assign Numbers for Every Conceivable Route Across A City
- Generally Don't Sign Bike Lanes

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Making The Route Special

- Appropriate for Less Experienced Bicyclists
- Provide Suitable Maintenance
- Give Priority To Bicyclists – Don't Have Lots of Stop Signs
- Discourage Through Motorized Traffic and High Speed Traffic

Signed Bike Routes Should Be Unique

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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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Planning and Designing Bike Routes Signing

- Guidelines and Standards
- Types of Signs
- How This Fits In With Other Bike Facilities

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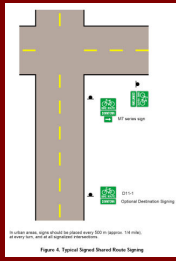
If It Involves Roads, It is Regulated

- AASHTO – American Association of State Highway Transportation Officials
 - Publish "Guidelines"
- MUTCD – Manual of Uniform Control Devices
 - Michigan Version is Known as MMUTCD
 - Set "Standards" for All Signs and Pavement Markings
 - Even An Off-Road Trail Should Conform to MUTCD Standards

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AASHTO Bike Guide - "Signed Shared Roadways"

- A "Facility"
- Link Between Bike Lanes and Off-road Paths
- Common or Preferred Routes Through High Demand Corridors
- Low Volume Roads or Roads With a Paved Shoulder in Rural Areas
- Route Along Local Neighborhood Streets and Collectors that Lead to Internal Destinations
- Can Be Used With Bike Lanes or Shared Use Paths



Criteria Should Include Directness of Travel and Conditions of Route
Designating Sidewalks is "Unsatisfactory"
Indicate Destinations

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Manual of Uniform Traffic Control Devices (MUTCD)


- Painstaking Process To Get A New Sign In The National Version
- Many New Signs Are Proposed in the Next Version Due Sometime Next Year
- Need Permission from the Federal Highway Administration to "Experiment" With Alternative Signs




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MUTCD - Two Types of Bike Route Signage


- Bike Route Guide Signs
 - Placed at Decision Points Along Designated Bike Routes
 - Identify Good Ways Between Key Destinations
- Bike Route Signs
 - Named/Numbered
 - Establish Unique Identity
 - Urban Greenways
 - Bike Boulevards
 - Complex Trails



Add Optional Plaques for Destination and Turns



State and Local Routes







Interstate Bike Routes

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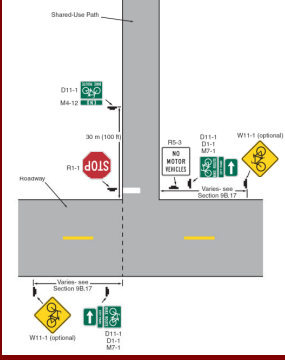
Current Bicycle Route Guide Sign

- Current MUTCD Bike Route Signs are Scaled more for Automobiles than Bicycles
- Can Add Plaques With Destinations
- Provide Directional Arrows At Decision Points

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Current Bicycle Route Guide Sign Application



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Pending Bicycle Route Guide Sign

- Bike Symbol and Text "Bike Route" were Determined to be Redundant
- This Alternative Sign may be Used to Provide Bike Route Direction, Destination, and Route Name in Place of the Typical "BIKE ROUTE" Wording.



24" x 18"
Pending MUTCD Bike Route Guide Sign D11-1c

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Pending Bike Route Guide Signs

- This Signage Would be used at Intersections to Show the Distance to the Nearest Town or City.






MUTCD D11-1b
Pending Bike Route Signage

Current Bike Route Signage

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Pending Route Guide Sign Options

- A Named Route Can Be Used
- Kind of A Hybrid of Bike Route Guide Sign and Bike Route Sign



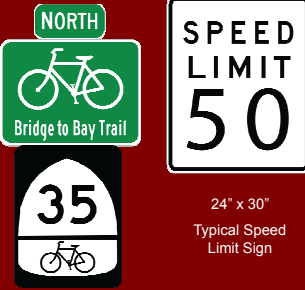
24" x 18"

Alternative MUTCD Bike Route Sign D11-1c

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Bicycle Route Guide Sign Assemblies

- The Sign is Still very Large and when you Start Incorporating Additional Signage such as Directional Arrows or Route Identifications, the Sign Assemblies Become Ungainly



24" x 30"

Typical Speed Limit Sign


30" x 48"

Total Assembly

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Bicycle Route Guide Sign Assemblies

- An Alternative Bike Route Guide Sign to D11-1 is M8-1.
- This Option Identifies the Route with a Number and Indicates That it is a Bike Route.



Scale Reference

12" x 24"

(Total Assembly)

M8-1



24" x 30"

Typical Speed Limit Sign

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Pending Custom Logo Option

- The MUTCD M1-8a sign will be Included in the Next Version of the MUTCD
- This Option Provides for a Custom Logo at the Top of the Sign

Pending M8-1a Variant with Custom Logo

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Bicycle Route Guide Sign Around the Nation

- Currently There Seems to be a lot of Variations on Current and Pending MUTCD Signs
- The Challenges are Identifying the Route and Providing Wayfinding
- Many Solutions May be Unintelligible to a New Comer
- Some Solutions Combine Separate Plaques into One Sign





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Condensed Bicycle Route Guide Sign

- There are Multiple Ways to Combine the Signs Approximately Following the Existing or Proposed MUTCD Standards
- A Combination of Named Routes and Route Numbers were used

12" x 32"

These Custom Bike Route Guide Sign Identify the Name and Direction of the Route Along with Route Numbers Where Shown

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Named Routes

- Number and Lettered Routes May be Uninformative to People who are not Familiar to the Area or Without A Map






The Route Name "Bridge to Bay Trail" is Identified along with the Route Number

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Condensed Bicycle Route Guide Sign

- Another Option is to Replace the Numbered or Lettered Route with the Route Name

Directional Text made Slightly Smaller

Text Replaces Numbered Route



12" x 24"

A Different Variation of the M1-8a Bike Route Guide Sign that Replaces the Numbered or Letter Route with the Route Name "Bridge to Bay Trail".

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Bike Route Identification Signage


- Placement Along Roadway Bike Route

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Bike Route Identification Signage

- Placement Along Pathway



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Trail/Road Intersection Treatment




Additional Route Signs Could be Placed Below the Bridge to Bay Trail Route Sign Where Applicable

Road View

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Double Bicycle Route Identification Signage

Current Bike Route Sign Pending Bike Route Sign Custom Bike Route Sign

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Change in Direction Bicycle Route Signage

Current Bike Route Sign Pending Bike Route Sign Proposed Bike Route Sign

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Bicycle Route Mile Marker Signage

No Current Signage for Bicycle Route Mile Markers

Pending Bike Route Sign Custom Bike Route Sign

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Shared Roadway Bicycle Route Signage

- This sign treatment would be located in area where the paved shoulder or path is not present and cyclist and motorist must share the road.

Current Bike Route Signage

Custom Bike Route Sign Added to Assembly

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Bike Route Junction

- The Pending MUTCD D2-2b Directional Sign Would be Placed in Advance of Intersections where Alternative Bike Paths are Available for the Same Route
- A Custom Sign Stating "Information Ahead" is Placed Below the Route Directional Sign to notify users that there is more detailed information available

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Bike Route Junction

- 10' x 10' concrete pull-off area with an Information Board Displaying a Map of the Bike Route.
- A Seating Area and Trash Receptacle could be Available

Custom "Information" Sign

MUTCD M1-8a Variant Sign

Bicycle Route Map Displaying Detailed Information Regarding the Particular Segment of the Route

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Questions or Comments



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