



Alternative Bicycle Safety Signage:

An Overview

Agenda

Research Overview

Peer Cities

Promising Practices Nationwide

Research Findings

Next Steps

Summary



Sharrow



W11-1 Sign

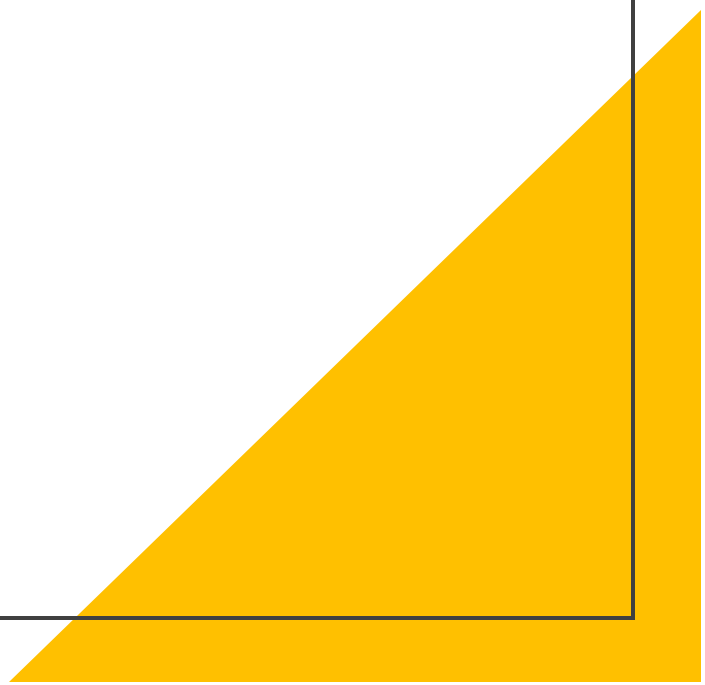


W16-1 Sign



R4-11 Sign




Research Overview



Peer Cities

Not Used

Used

Peer City				Regulatory Signage
Boulder, CO	Used	Not Used	Not Used	Used
Gainesville, FL	Used	Not Used	Not Used	Not Used
City of Grand Rapids, MI	Used	Used	Used	Used
Gresham, OR	Used	Used	Not Used	Used
Madison, WI	Used	Not Used	Not Used	Not Used
Portland, OR	Used	Used	Not Used	Used
Metro, OR	Not Used	Used	Used	Not Used
District of Colombia	Used	Not Used	Not Used	Not Used
San Francisco, CA	Used	Used	Used	Not Used
West Palm Beach, FL	Used	Used	Not Used	Used

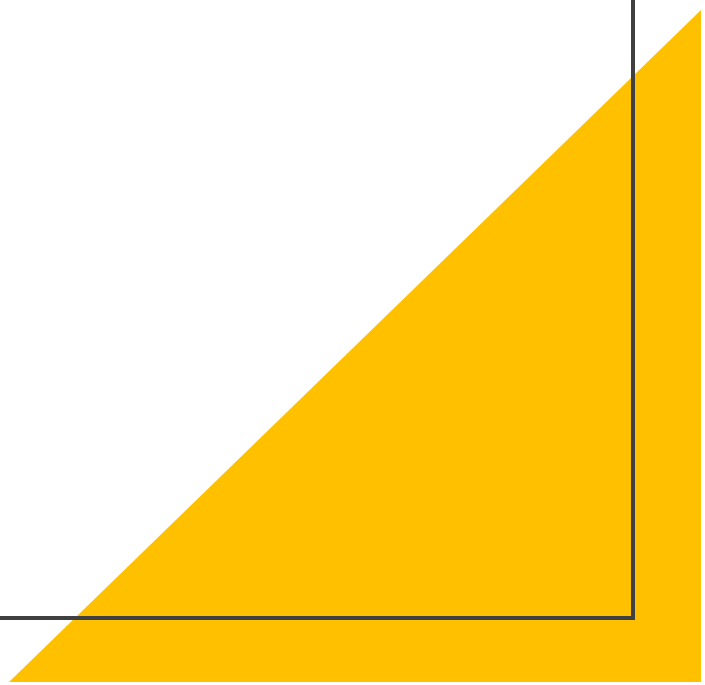
Promising Practices Nationwide

- **National Association of City Transportation Officials (NACTO)**
- **National Center for Transit Research**
- **California Department of Transportation (Caltrans)**
- **Most recent version of Michigan Manual of Uniform Traffic Control Devices (MMUTCD)**
- **League of American Bicyclists**

Research Findings

- **Not much impact-focused research**
- **Need more universally comprehended signage**
- **Behavioral study of “Share the Road” comprehension**
- **Federal Highway Administration (FHWA), National Academics of Sciences Engineering and Medicine (NASEM), and City of San Francisco sharrow studies**

Next Steps



Next Steps – Transportation Team

- Consider Ann Arbor's current signage techniques
 - Discuss with stakeholders
- Super-sharrow experimentation
 - FHWA request
- Identify areas for [bike] May Use Full Lane (R4-11)
- Gather input from Michigan professionals

Next Steps – Pending Project Approval

- Technical documentation
- Installation examples
- Public education
- Implementation

Summary

Alternative signs may
improve biking

Review of current
signage guidelines

Incorporate super-
sharrow & [bikes] May
Use Full Lane



Thank You!

References

- [NACTO design guide for bicycle boulevards](#)
- [Michigan Manual of Uniform Traffic Control Devices](#)
- **Peer Cities**
 - [Smart Cities Collaborative](#)
 - [2017 Boulder](#)
 - [Gainesville, FL](#)
 - [Grand Rapids, MI](#)
 - [Driving Change Education Program](#)
 - [Madison, WI](#)
 - [Portland, OR and Gresham, OR](#)
 - [Phasing Out "Share the Road" Plaque](#)
 - [Metro, OR](#)
 - [District of Columbia](#)
 - [Oregon Bicycle and Pedestrian Design Guide](#)
 - [California Manual of Uniform Traffic Control Devices](#)
 - [San Francisco Municipal Transportation Agency](#)
 - [Bicycling.com](#)
 - [City of West Sacramento](#)

References

- [FHWA Study evaluating sharrows and how they improve safety](#)
- [National Academics of Sciences Engineering and Medicine 2016 study](#)
- [San Francisco Report on Shared Lane Markings](#)
- [League of American Bicyclists](#)
- [North Carolina State University behavioral study of comprehension of road signs](#)
- [League of Michigan Bicyclists 'Bikes May Use Full Lane' Law Change](#)
- [National Association of City Transportation Officials Transit Street Design Guide](#)
- [National Association of City Transportation Officials Urban Bikeway Design Guide](#)
- [National Center for Transit Research: Shared Bicycle/Bus Lanes](#)
- [California Department of Transportation Bike-in-Lane Sign Use and Comprehension](#)
- [California Manual on Uniform Traffic Control Devices](#)