



So... What's Coming Soon?

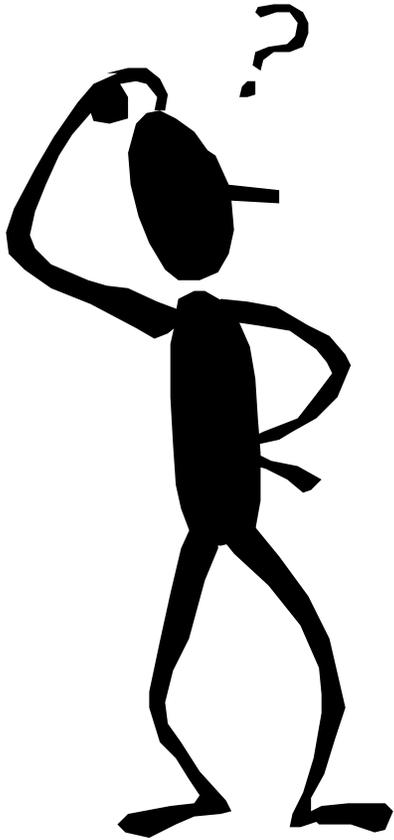
Richard C. Moeur, PE, LCI

Iowa Bicycle Summit 2007

New Developments



-  Revised National Traffic Control Standards & Guidelines
-  Revised US Design Guidelines
-  National network of US Bike Routes



MUTCD?

MUTCD

Manual on **U**niform **T**raffic **C**ontrol **D**eveloped

 Applies to all public roads in US

 Defines standards & guidelines for:

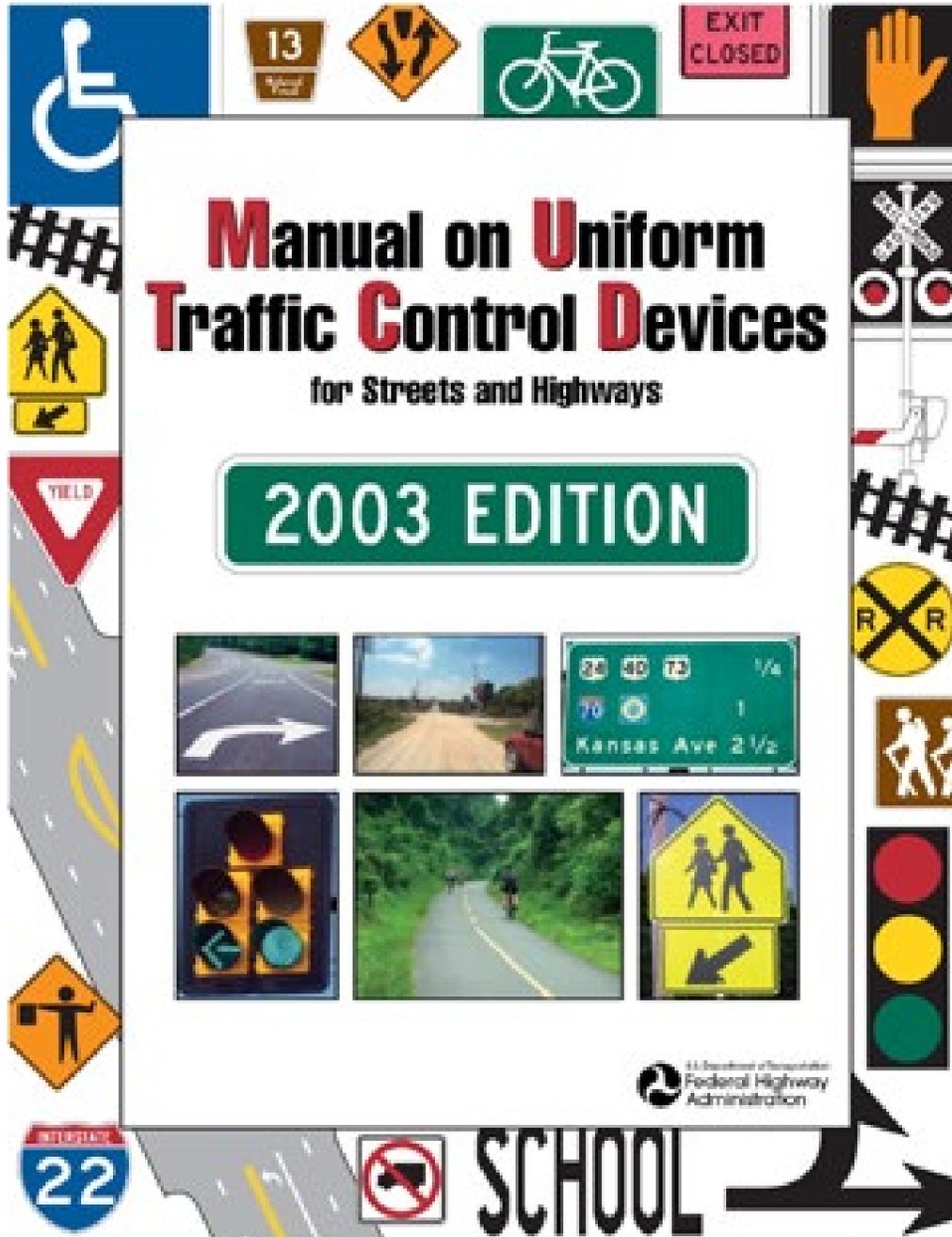
 Signs

 Markings

 Traffic signals

 Work zones & other temporary controls

 Railroad crossings



Manual on Uniform Traffic Control Devices

for Streets and Highways

2003 EDITION



Federal Highway
Administration

SCHOOL

Manual on Uniform Traffic Control Devices

 Ensures similar situations are treated in similar manner for all road users

 Improves traffic flow

 Improves safety

 No "surprises"!

 MUTCD defines uniformity of

 Color

 Shape

 Legend

 Placement



Parts of MUTCD



- 1 - General
- 2 - Signs
- 3 - Markings
- 4 - Traffic Signals
- 5 - Low Volume Roads
- 6 - Temporary Traffic Control
- 7 - School Areas
- 8 - Railroad Crossings
- 9 - Bicycle Facilities
- 10 - Light Rail

MUTCD Part 9 - Bicycle Facilities

 Section that deals specifically with bicyclists

...although the rest of the MUTCD still applies to bicycle traffic as well

 Covers:

 Shared roadways & bike routes

 Bike lanes

 Shared-use paths

NCUTCD

National **C**ommittee on **U**niform **T**raffic **C**ontrol **D**eVICES

-  Nonprofit corporation
-  Provides expert input to FHWA on MUTCD
-  Nearly 300 technical members from across US

<http://www.ncutcd.org/>

NCUTCD



39 voting members from 21 sponsoring organizations

American Association of State Highway & Transportation Officials (8 seats)

Institute of Transportation Engineers (8 seats)

National Association of County Engineers (3 seats)

American Public Works Association (3 seats)

Advocates for Highway & Auto Safety

American Automobile Association

American Association of Motor Vehicle Administrators

American Highway Users Alliance

American Public Transportation Association

American Railway Engineering & Maintenance of Way Association

American Road & Transportation Builders Association

American Traffic Safety Services Association

Association of American Railroads

Human Factors Resources

International Association of Chiefs of Police

International Bridge, Tunnel, and Turnpike Association

International Municipal Signal Association

League of American Bicyclists

National Association of Governors' State Highway Representatives

National Committee on Uniform Traffic Laws & Ordinances

National Safety Council

NCUTCD Technical Committees

-  Regulatory & Warning Signs (RWSTC)
-  Guide & Motorist Information Signs (GMITC)
-  Markings (MTC)
-  Signals (STC)
-  Temporary Traffic Control (TTC)
-  Railroad & Light Rail Crossings (RRLRTC)
-  **Bicycle (BTC)**

NCUTCD Process

- 
-  Technical Committees develop proposed devices & application language
 -  Sponsor organizations review proposals & provide comments & input
 -  Committees revise proposals based on input
 -  Council votes on revised proposal
 -  If approved, proposal is forwarded to FHWA
 -  FHWA then includes proposed device in next MUTCD (usually...)

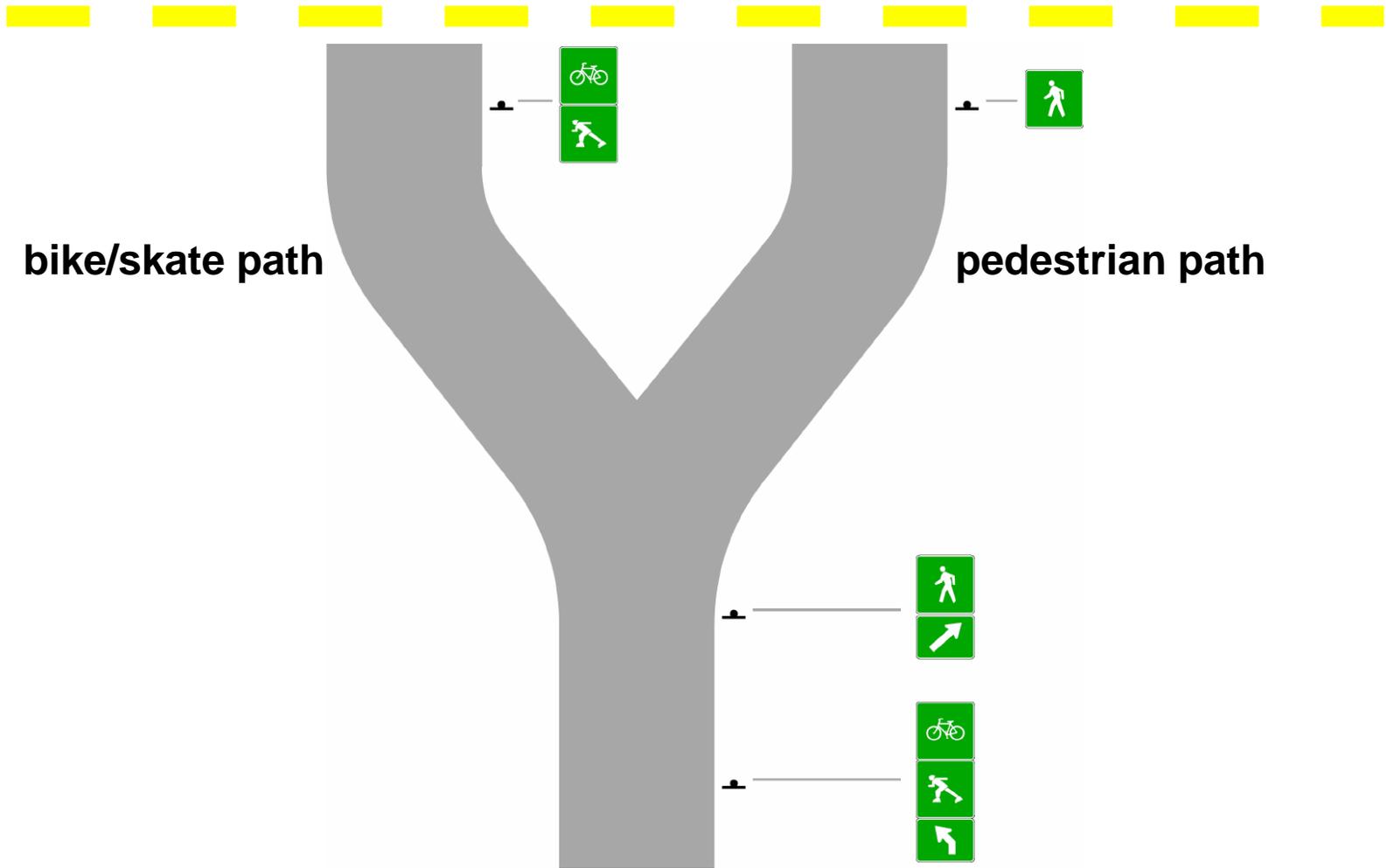
Mode Signs for Paths

Addresses different modes on paths

New prohibition signs for skaters, equestrians



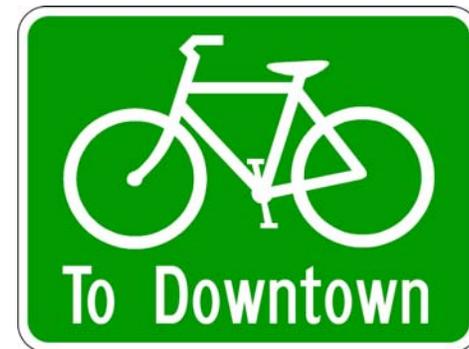
Mode Signs for Paths



Bicycle Guide & Wayfinding Signing

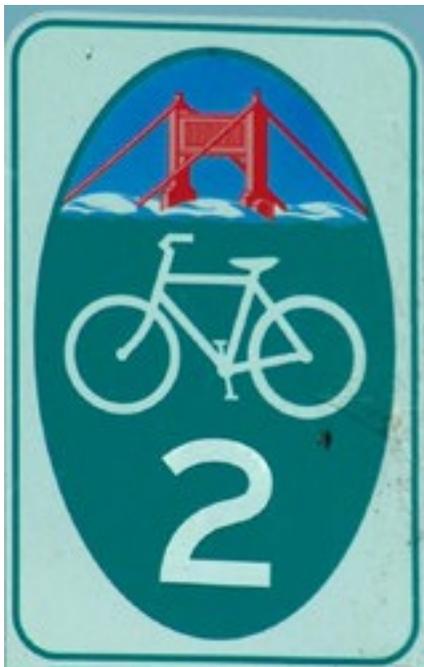
System of bicycle-specific direction /
distance signing

Big improvement from old "BIKE ROUTE"
Based on systems in other countries, but
"Americanized"



New M1-8a

Optional numbered bicycle route marker including local agency symbol or logo

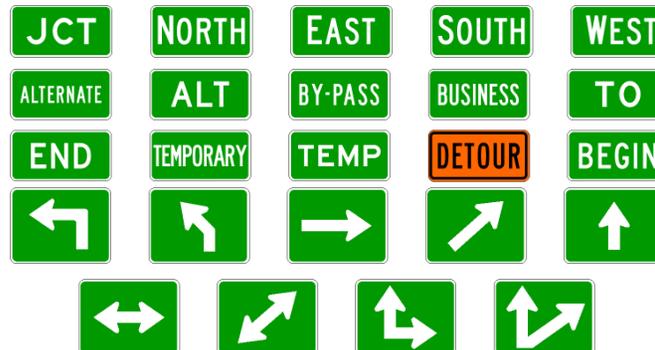


Route Marker Auxiliaries

-  Improve signing consistency
-  Complete revamp of auxiliaries for bikes
-  Replace old M4/M7 plaques with bike-size versions of signs used on other road facilities
-  Includes all relevant auxiliaries



Directions
Route type
Arrows



Revised M1-9

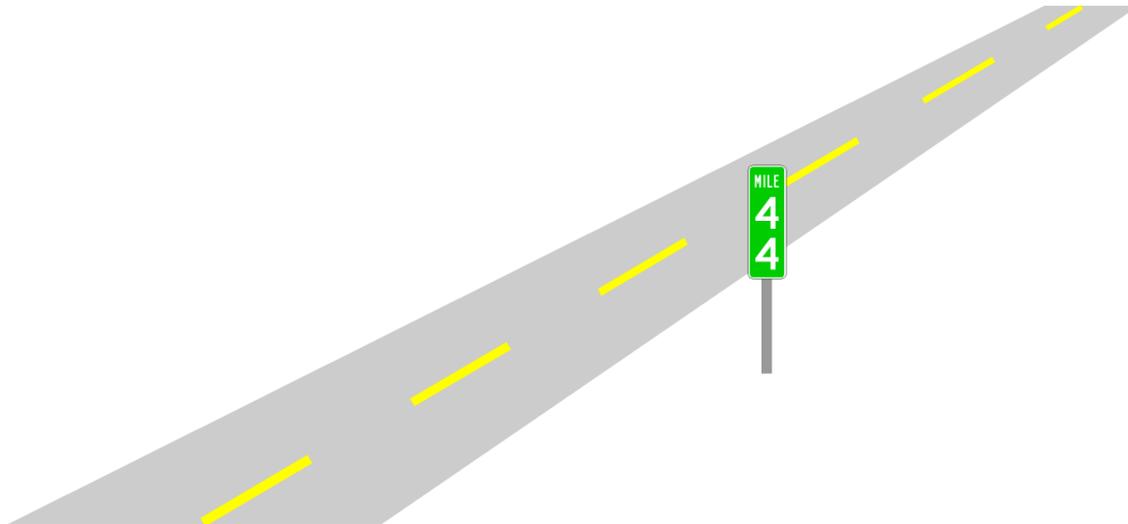
Changed design to emphasize bicycle symbol
Changed name to better reflect application



New name: US Numbered Bicycle Route Sign

Reference Markers (Mileposts) for Paths

-  Similar to standard milepost markers, but scaled appropriately
-  Provides reference points for incidents, maintenance, travel distance, etc.



Shared Lane Marking



-  Originated in Denver in 1990s
-  Intended to show correct cyclist location where bike lanes shouldn't or can't be installed
-  Hoping to reduce or eliminate “dooring” - type crashes
 -  Underreported
 -  High severity

Shared Lane Marking



 Tested in California 2003-2004

 Proposal developed by NCUTCD BTC -
spring 2005

Council did not approve

Held for additional experimental data

 Brought forward again in January 2007

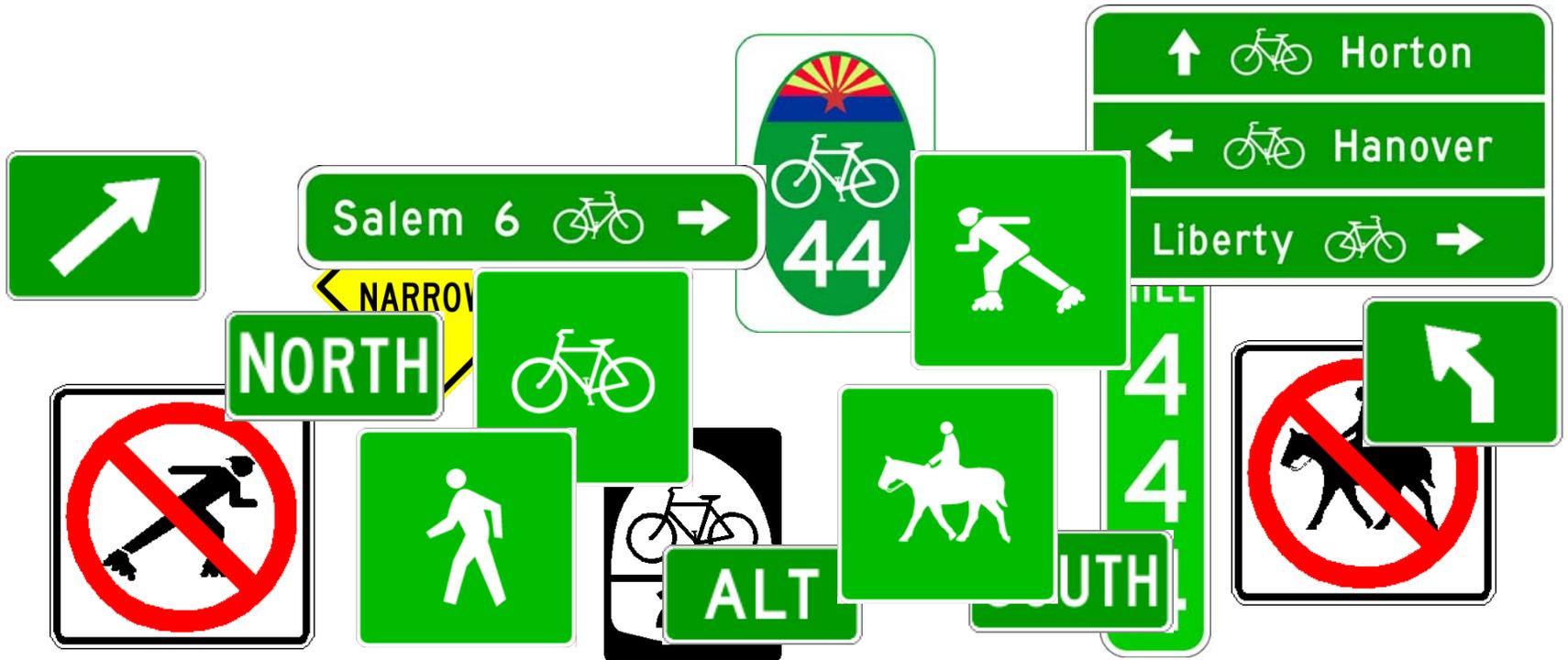
Made some minor modifications

Approved 35-0



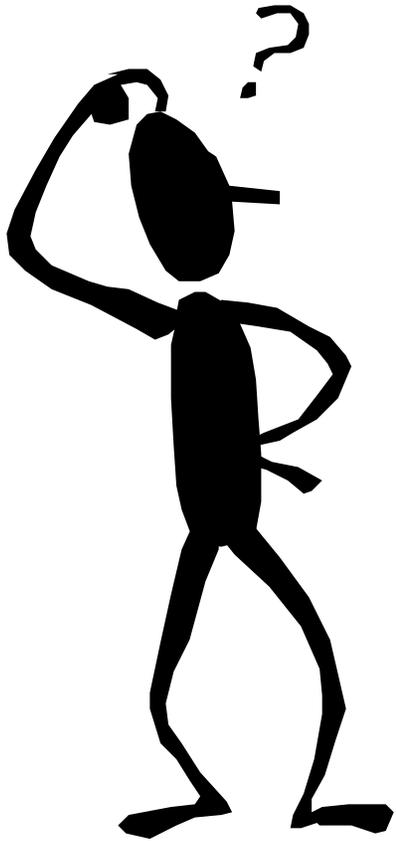
Now What?

Approved items have been forwarded to
Federal Highway Administration



Next MUTCD

- 
-  All content to FHWA by February 2007
 -  Draft MUTCD out for review in late summer or fall 2007
 -  **Public comment** for 6 months
(fall 2007 - spring 2008)
 -  Next edition published sometime in **2009**



A A S H T O ?



AASHTO



American **A**ssociation of **S**tate **H**ighway &
Transportation **O**fficials

-  Umbrella organization of State DOTs
-  Establish national design guidelines for:
 -  Highways
 -  Freeways
 -  Bridges
 -  Bikeways



guide for the development of bicycle facilities



american association
of state highway and
transportation officials

1999

AASHTO Guide

- 
-  Considered the "definitive" US guideline
 -  Consensus-based development process
 -  Only includes accepted best practices
 -  Consistent with MUTCD
 -  Thoroughly reviewed by several AASHTO subcommittees

AASHTO Guide



 Most recent edition: 1999

 Sections on:

- Planning
- Design
- Operation

Need For Update



-  10 years since process initiated for last update of the Guide
-  New & updated research
-  Increasing expertise & experience
-  Proliferation of state/local design guides
-  Inconsistencies in practice
-  New devices & treatments
-  New intersection types

Critical Issues



-  Bicyclists & on-street parking
-  MUTCD changes & updates
-  Shared-use path research
-  ADA conformance / compliance
-  Roundabouts / SPUIs / ramps
-  Rumble strips
-  Safe Routes to School

Survey of Users

-  Intended to identify critical needs & topics
-  Nearly 500 users responded
-  Over 3,500 individual comments
-  Broad spectrum of viewpoints
-  Readily identifiable "state of the practice" based on comments

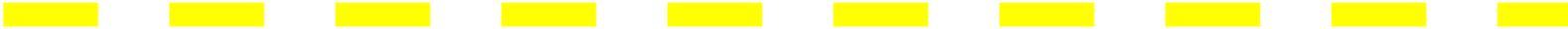
AASHTO Guide Update

-  Panel will review content & progress
-  AASHTO committees will review & vote on draft final document
 -  Geometric Design
 -  Traffic Engineering
 -  Non-Motorized Transportation
-  Approval by AASHTO after (successful) balloting sometime in 2009-2010

US Bicycle Route System



US Bicycle Route System



-  Initial concept of transcontinental bicycle routes established in 1970s
-  First AASHTO policy on US Numbered Bike Routes developed in 1979
-  Current AASHTO policy in place since 1982

US Bicycle Route System



 Two US numbered routes established by state DOTs & AASHTO in 1982

76 - Illinois to Virginia

1 - North Carolina to Virginia

 Then - system went dormant

 No new routes or extensions established for nearly 25 years

US Bike Routes Task Force



-  Bicycle groups wanted to get system up & running again
-  AASHTO created task force in 2004
-  Mission: Develop a plan for a nationwide network of long-distance bicycle routes

US Bike Routes Task Force



Richard Moeur, Arizona DOT - Chair

David Bachman, PennDOT

Ken Briggs, Maryland DOT

Tim Crouch, Iowa DOT

Wes Dean, Mississippi DOT

Tom Dodds, South Carolina DOT

Terry Eastin, Mississippi River Trail

Ed Fischer, Oregon DOT

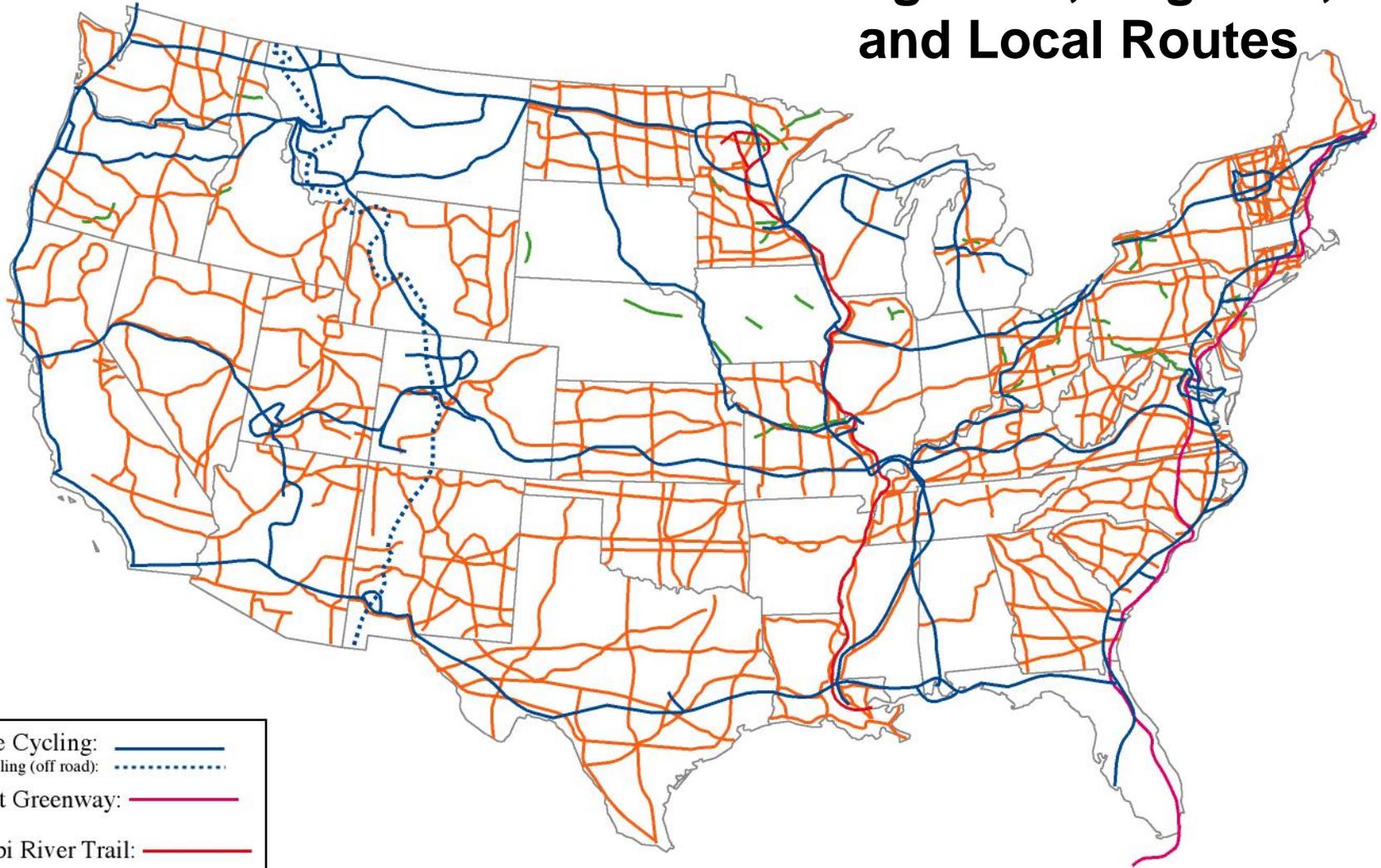
David Hutchison, Springfield MO

Ginny Sullivan, Adventure Cycling Association

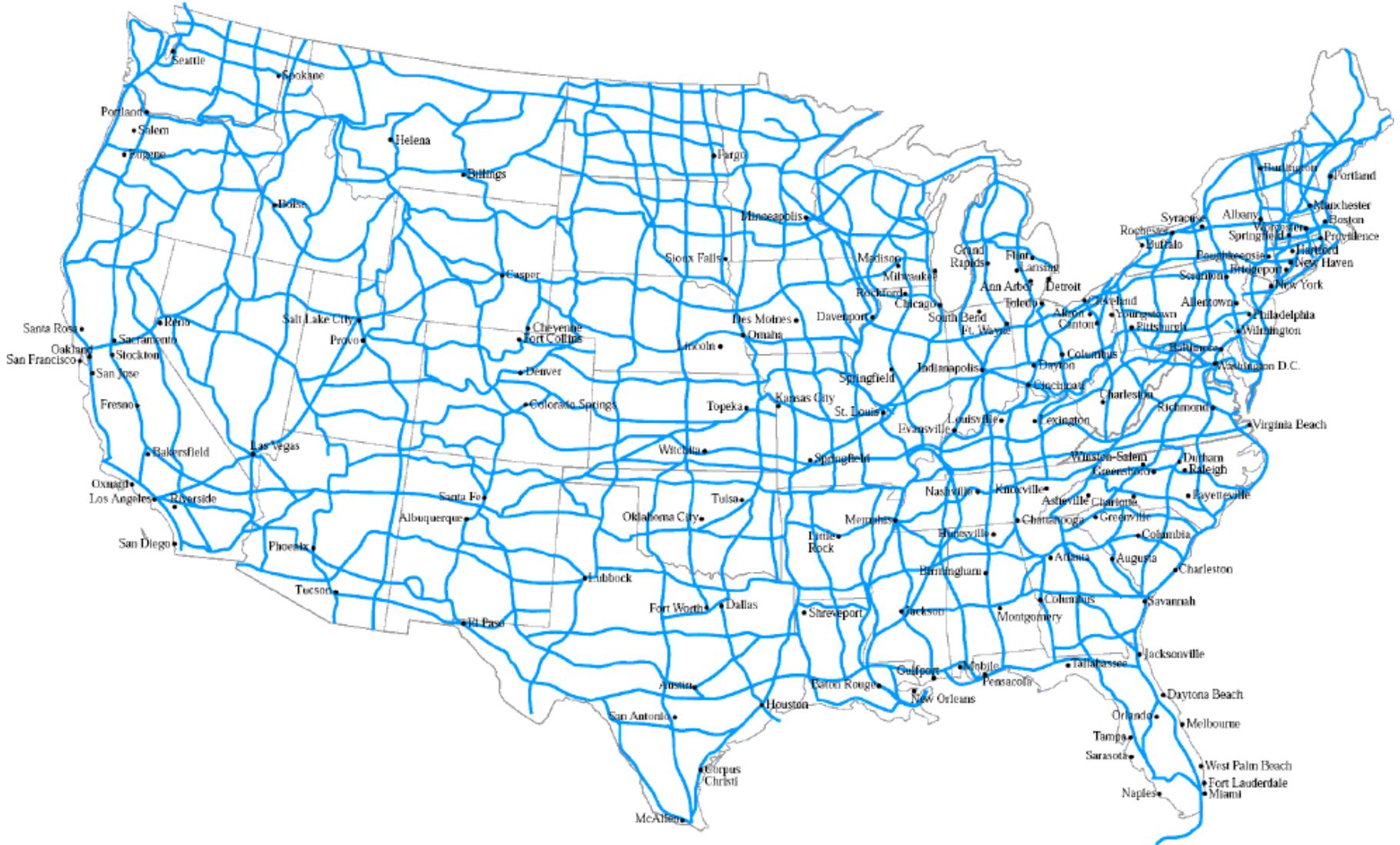
Karen Votava, East Coast Greenway

Barry Warhoftig, West Virginia DOT

Phase 1 - Collection of Data on Existing State, Regional, and Local Routes



Phase 2 - Identification of Candidate Corridors



Upcoming Phases



-  Final selection of corridors
-  Establish route designations
 - Numbers?
 - Letters?
 - Something else?
-  Review by AASHTO Committees
-  Approval & distribution

Implementation

- 
-  Coordination between route organizations, AASHTO, bicycle advocacy groups, and local jurisdictions on implementation
 -  Coordinated application to AASHTO by DOTs for routes across multiple states
 -  AASHTO review and approval of applications
 -  Sign installation by state DOTs and/or local agencies

And then ...

...many
happy
bicyclists
following
these
routes
across
the
United
States

