

The MUTCD Revisions are Here



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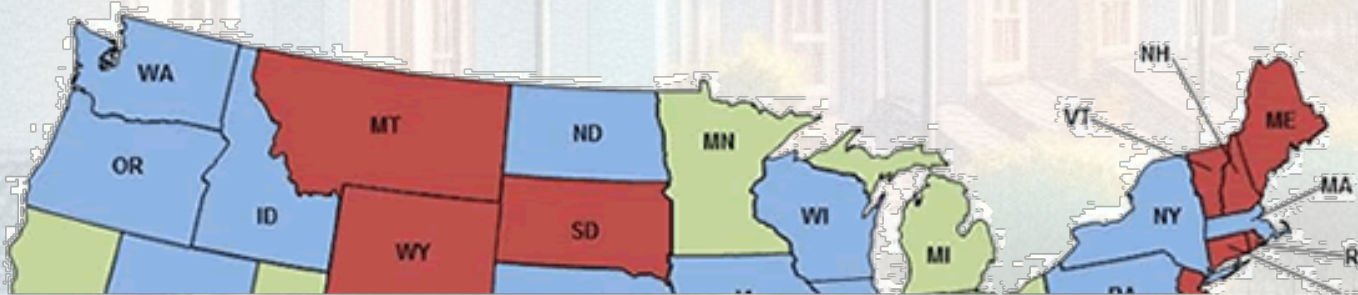
Legislation Requiring

23 CFR 655.603

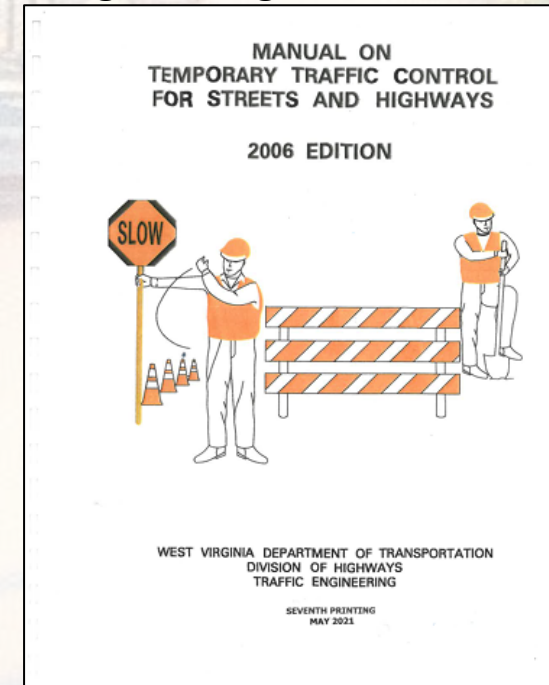
The MUTCD approved by the Federal Highway Administrator is the national standard for all traffic control devices installed on any street, highway, or bicycle trail open to public travel in accordance with

Where State or other Federal agency MUTCDs or Supplements are required, they shall be in substantial conformance with the national MUTCD.

State Specific Revisions



WVDOH Traffic Engineering Directives



What the MUTCD Is and Is Not



- Prioritize travel modes
- Roadway geometric design
- Planning



- How we communicate with users
- How TCDs look and operate

2009 Edition

Manual on Uniform Traffic Control Devices

for Streets and Highways

2009 Edition



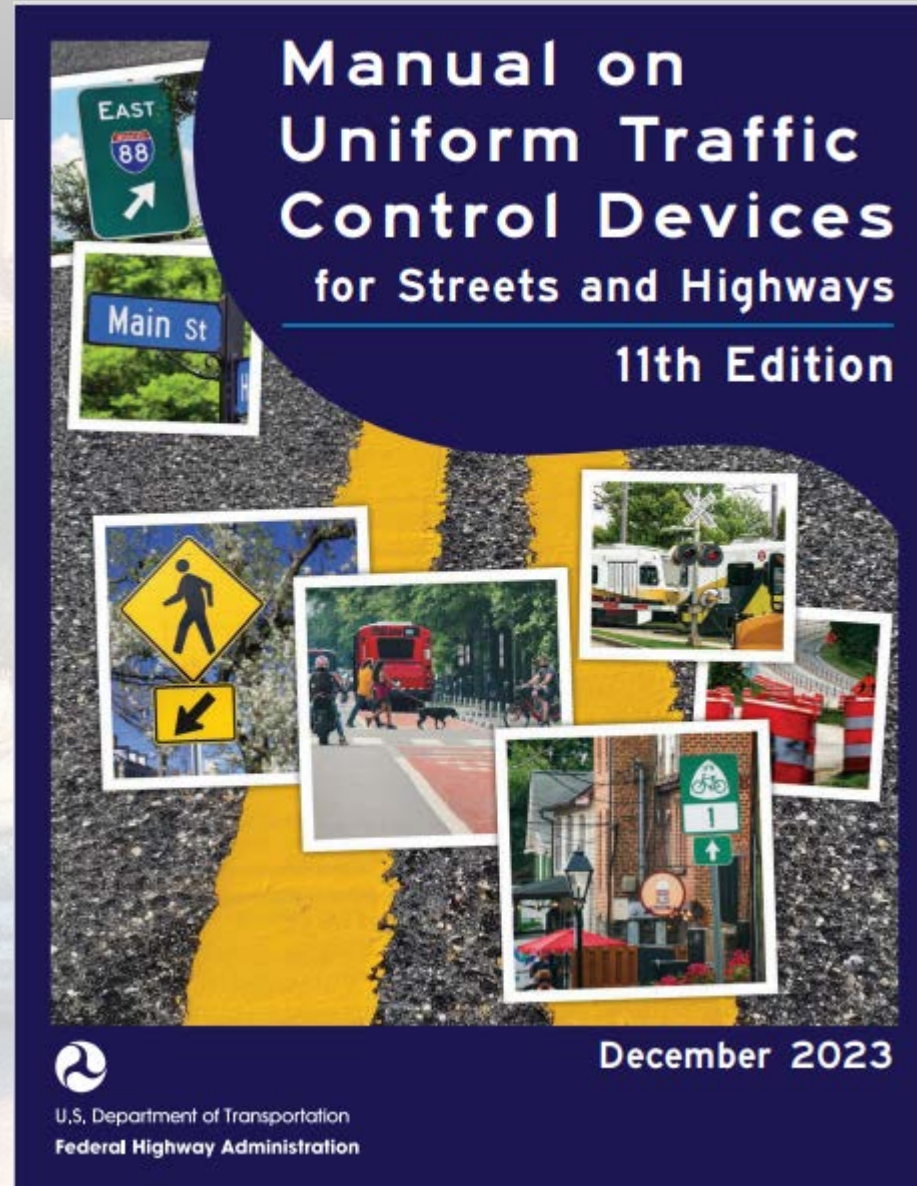
Interim Approvals

- New TCDs
- New ways to Use TCDs
- Requires request to FHWA
- Based on experimentation, studies, or research
- Reset with new MUTCD



LEFT TURN
YIELD
ON FLASHING
YELLOW
ARROW

11th Edition



11th Edition Revision Process

Notice of Proposed
Amendments
published in Federal
Register.
(12/14/2020)

Public comments
closed. Over
100,000 comments
received.
(5/14/2021)

Final rule published.
(12/19/2023)

Final rule effective.
(1/18/2024)

Future Revisions

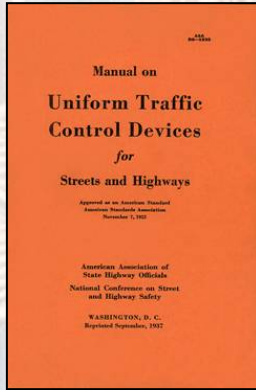


- Infrastructure Investment and Jobs Act set a 4-year update period moving forward.

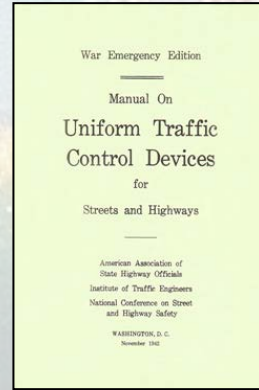


- More timely updates should keep pace with innovation

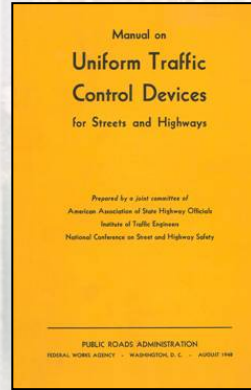
Evolution



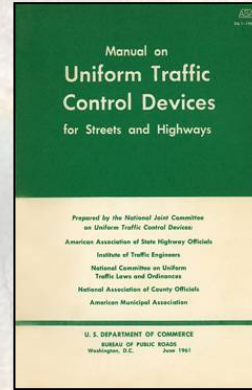
1935



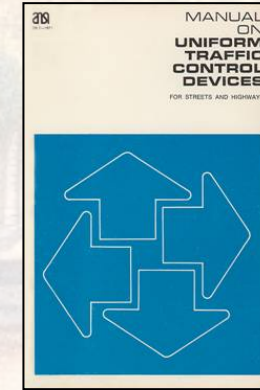
1942



1948



1961



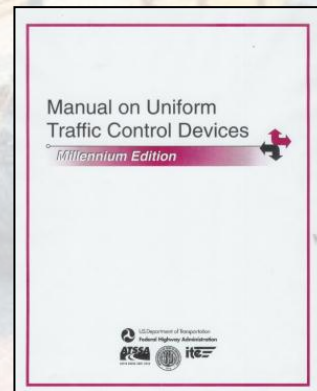
1971



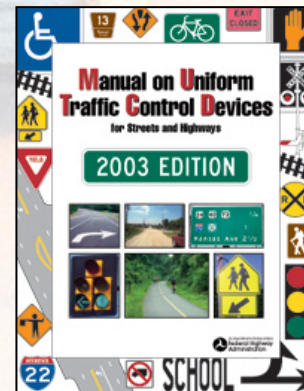
1978



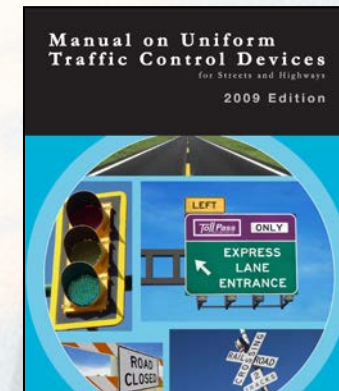
1988



2000



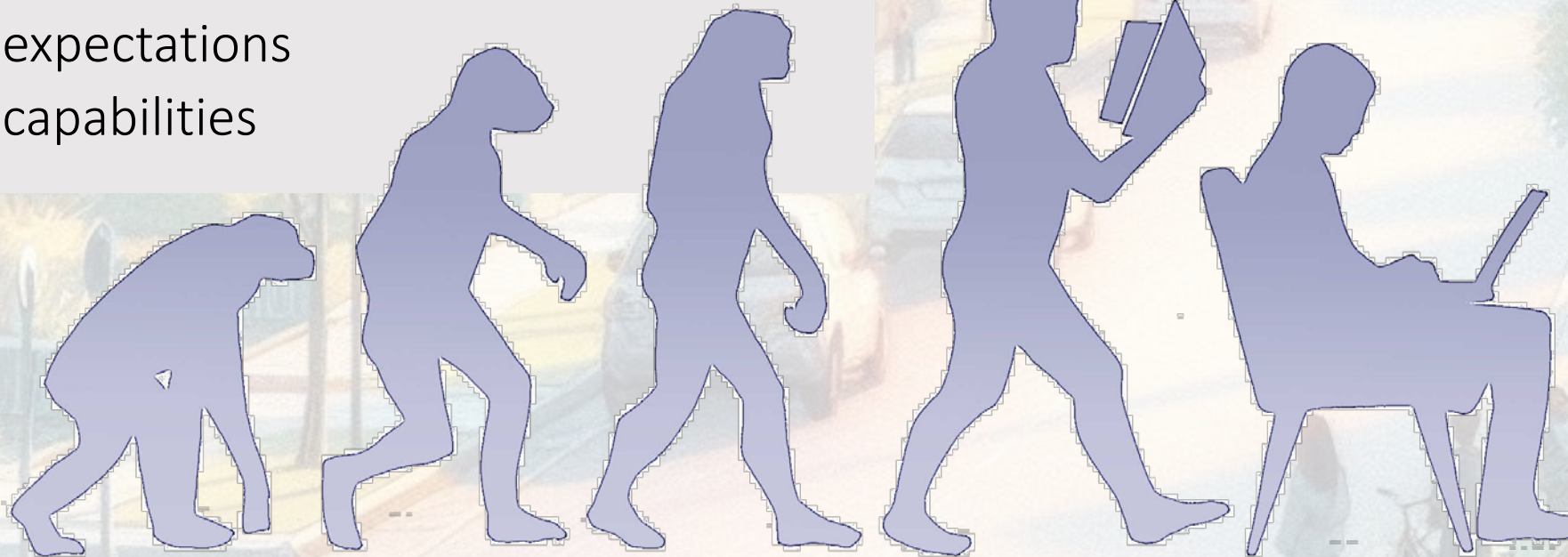
2003



2009

Evolution and Adapting

- Adapt to human factors
- Be concise and easily understood
- Design to meet users'
 - behaviors
 - expectations
 - capabilities



Principles

Traffic Control Devices must:

- Fulfill a need
- Convey a clear and simple meaning
- Command attention
- Command respect
- Provide adequate time for response



What the MUTCD applies to? (1B)

...shall be recognized as the national standard for all traffic control devices installed on any street, highway, bikeway, or site roadway open to public travel

private
roadway



What the MUTCD applies to? (1B)

Included:

- Any public or private street, roadway, or bikeway open to public
- Roadways within shopping centers, office parks, airports, arenas, recreation facilities, schools, etc.
- Public and private toll roads open to the public
- Grade crossings on public roads

Not included:

- Private gated properties with restricted access to the public
- Grade crossings on private roadways
- Parking driving aisles

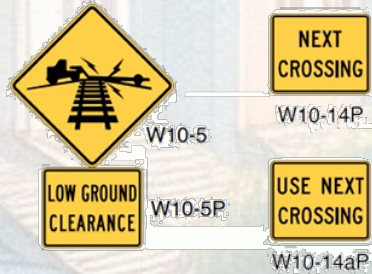


What's new with compliance dates (1B)



Weight Limit Distance	January 18, 2029	2B.64
Vertical Clearance and Preferred Lane	January 18, 2029	2C.25
Pavement Marking Retroreflectivity Method on road of over 35mph (2022 FHWA ruling)	September 6, 2026	3A.05

What's new with compliance dates (1B)



Low Ground Clearance Signs

January 18, 2029

8B.16

Method for selecting treatment at signals near rail crossings

January 18, 2034

8D

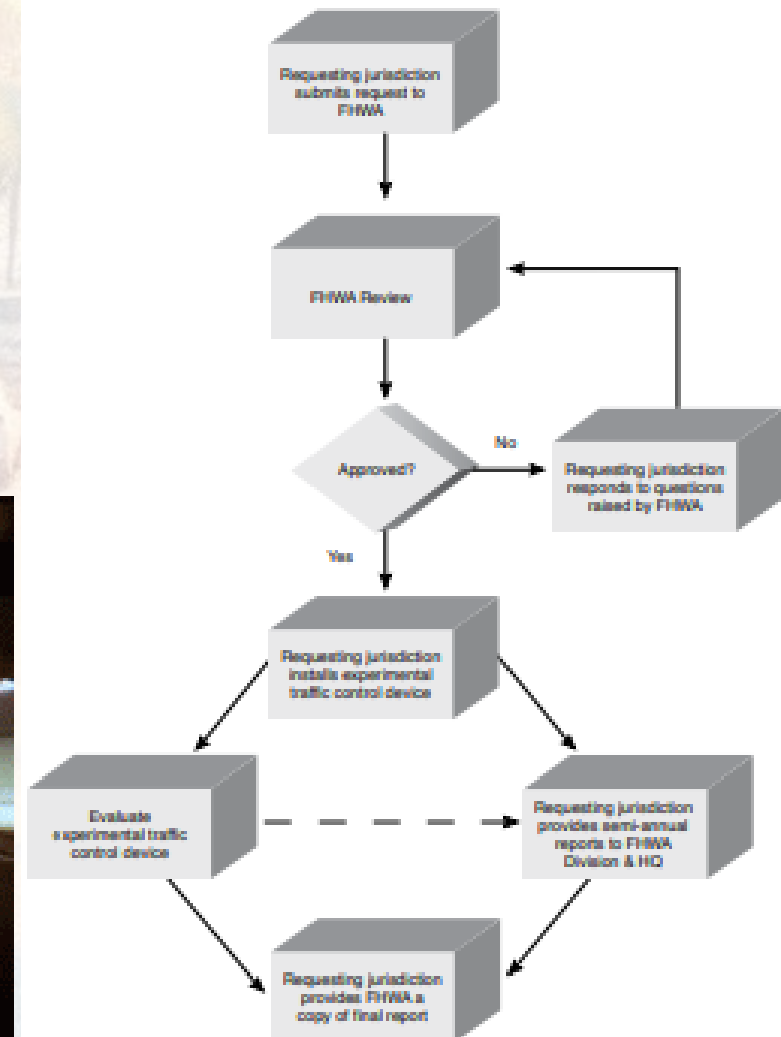
Any new or reconstructed TCDs should meet standards.

Experimentation Streamlined (1B)

- Permission still required
- New streamlined process
- Prohibition remains on patented or proprietary TCDs.



Figure 1B-1. Process for Requesting and Conducting Experimentations for New Traffic Control Devices



Unsignalized Warrants (2B)

- Better guidance in determining between:
 - Uncontrolled
 - YIELD
 - STOP
- New/ revised All-Way STOP warrants
 - Crash experience
 - Sight distance
 - Transition to signal at roundabout
 - More



Speed Limit Determination (2B.21)

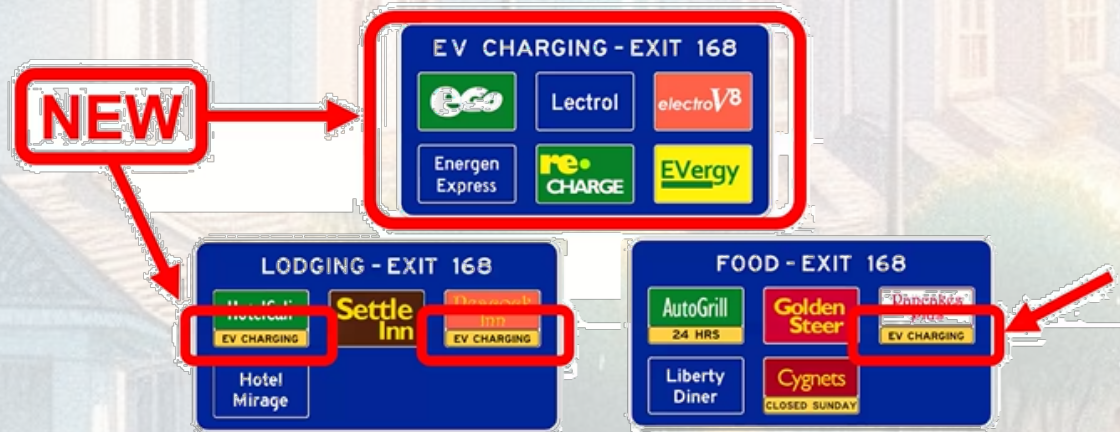
Speed limits set by state or local statute are not affected.

Speed limits not set by state or local statute consider:

- site context and land use
- roadway type and function
- pedestrian and bicycle activity
- crash history
- roadway geometry
- roadside conditions
- observed traffic volume and speed

85th percentile isn't considered in a vacuum

Electric Vehicle (EV) and Alternative Fuels (2H)



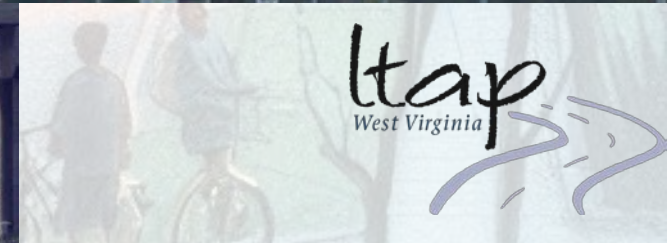
New EV Charging Destination Signs

Alternative Fuels Corridor Signing



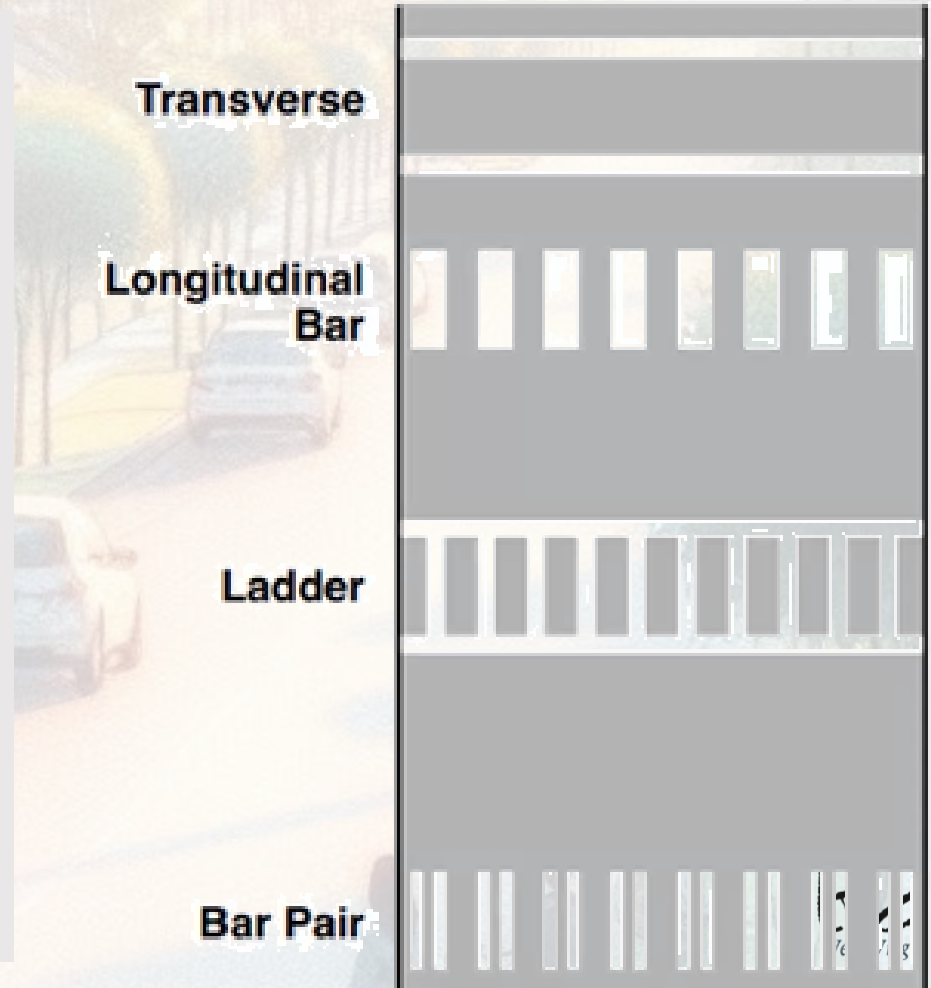
Changeable Message Signs (2L)

- Simple
- Direct
- Brief
- Easy to Understand
- Relevant to the Roadway
- Avoid Statistics
- Safety Campaigns are Allowed
- Avoid (not ban) humor

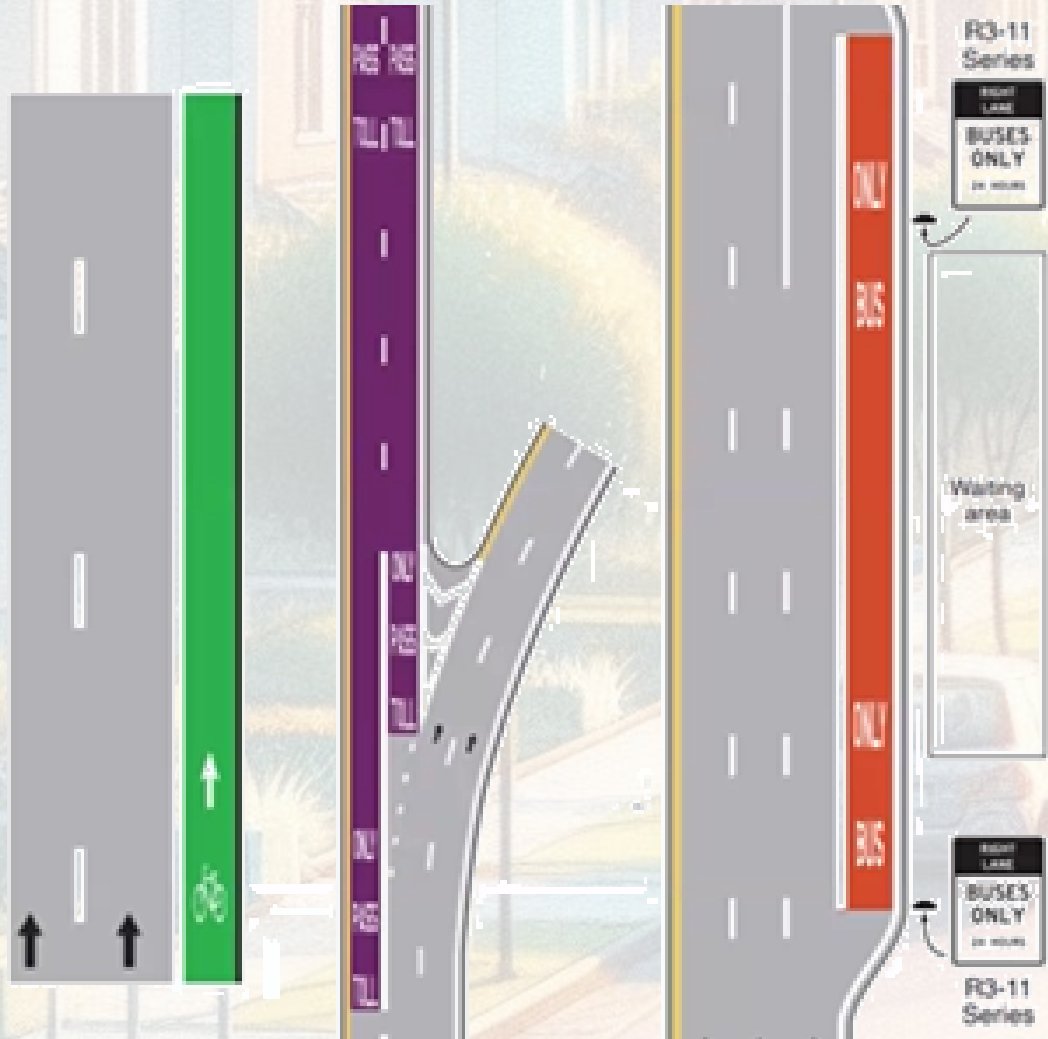


Marked Crosswalks (3C)

- **Recommended** at signalized intersections
 - Previously required engineering judgement
- **Required** at non-intersection crosswalks
 - Previously recommended
- New Bar Pair option
 - less maintenance
 - Reduce slip hazard



Colored Pavements (3H)



- GREEN**—Bicycle lanes
- RED**—Bus lanes
- PURPLE**—Electronic toll collection-only lanes

Aesthetic Surface Treatments (3H)

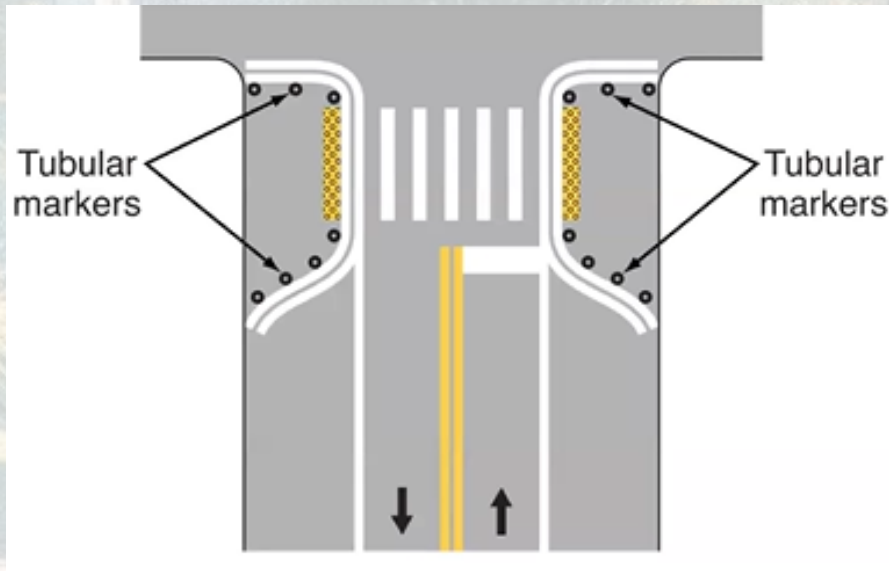
- No traffic control purpose
- Cannot distract from, mimic or obscure TCDs
- Not retroreflective
- No images, symbols or advertising
- Cannot encourage pedestrian to engage/interact/remain in the crosswalk



MUTCD ≠ Permission

Sidewalk Extensions (3J.07)

- Reclaimed portion of pavement
- Reduce crossing distance
- Pavement markings and channelization devices



Pedestrian Hybrid Beacon Warrants (4J)

- More flexibility
- Threshold reductions for slower peds



Pedestrian Signal Heads (4D.02)



- **Recommended** at all traffic signals with crosswalks
 - Previously engineering judgement
- Still required if:
 - Installed because of peds
 - Exclusive ped phase

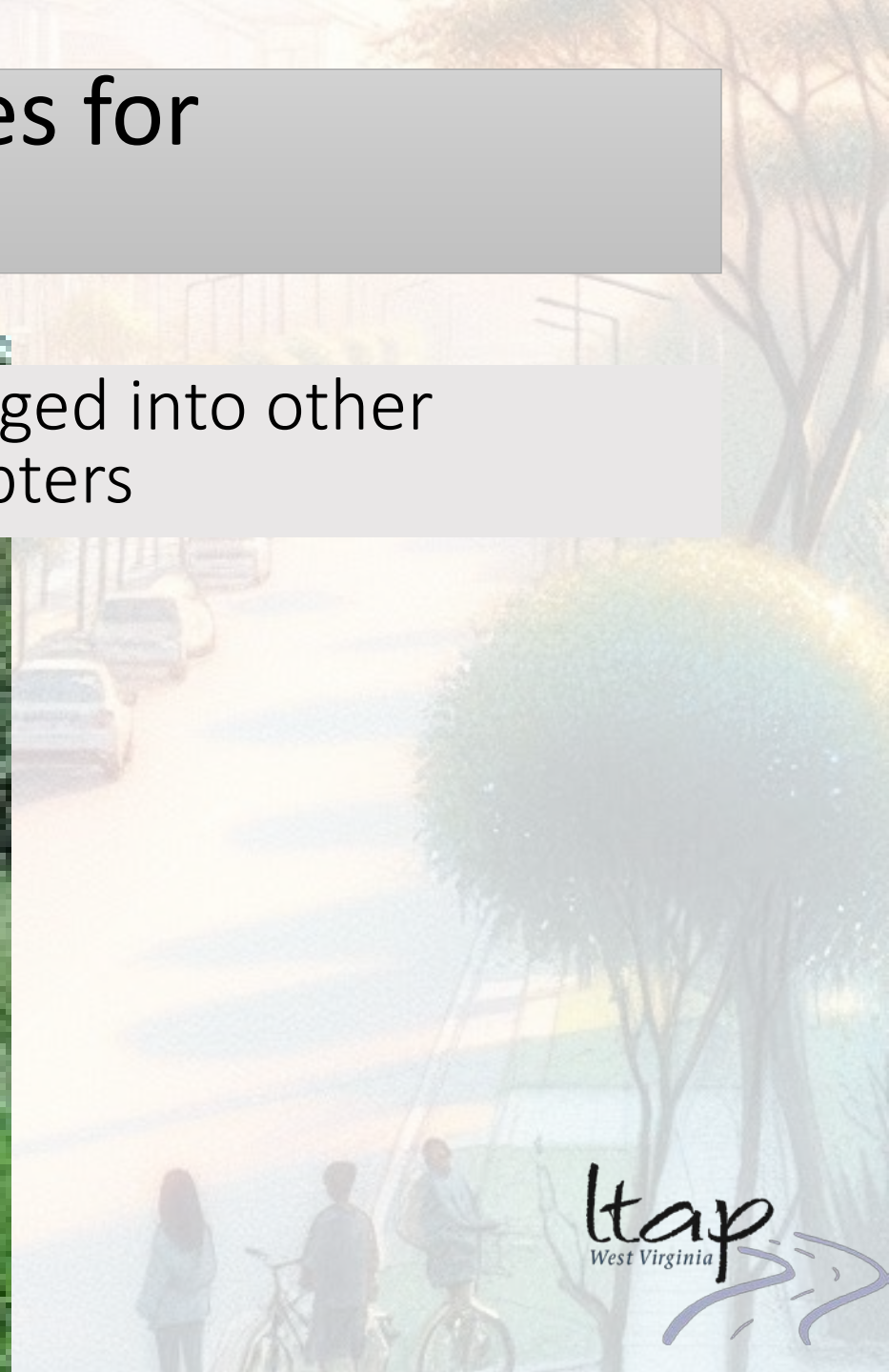
Accessibility Changes (Parts 4 and 6)

- Enhanced guidance on pedestrian push buttons near curb ramps
- Audible information devices (AIDs)
 - Recommended:
 - pedestrian signals
 - pedestrian hybrid beacons
 - rectangular rapid flashing beacons (RRFB)
 - Required
 - Sidewalk closure signs
 - Midblock crosswalk closings



Old Part 5 – Traffic Control Devices for Low-Volume Roads

Merged into other chapters



New Part 5 – Traffic Control Device Considerations for Autonomous Vehicles

- Optional not Standards
- Promote National Uniformity
- Criteria:
 - Sign orientation
 - Pavement marking width
 - Work zones
 - Traffic signals



Traffic Signal Warrants (4C)



- Warrants - Standard >> Guidance
- Unwarranted signals can be installed for safety or operations
 - requires engineering study
- Agencies can use localized values for Warrant 7 – Crash Experience

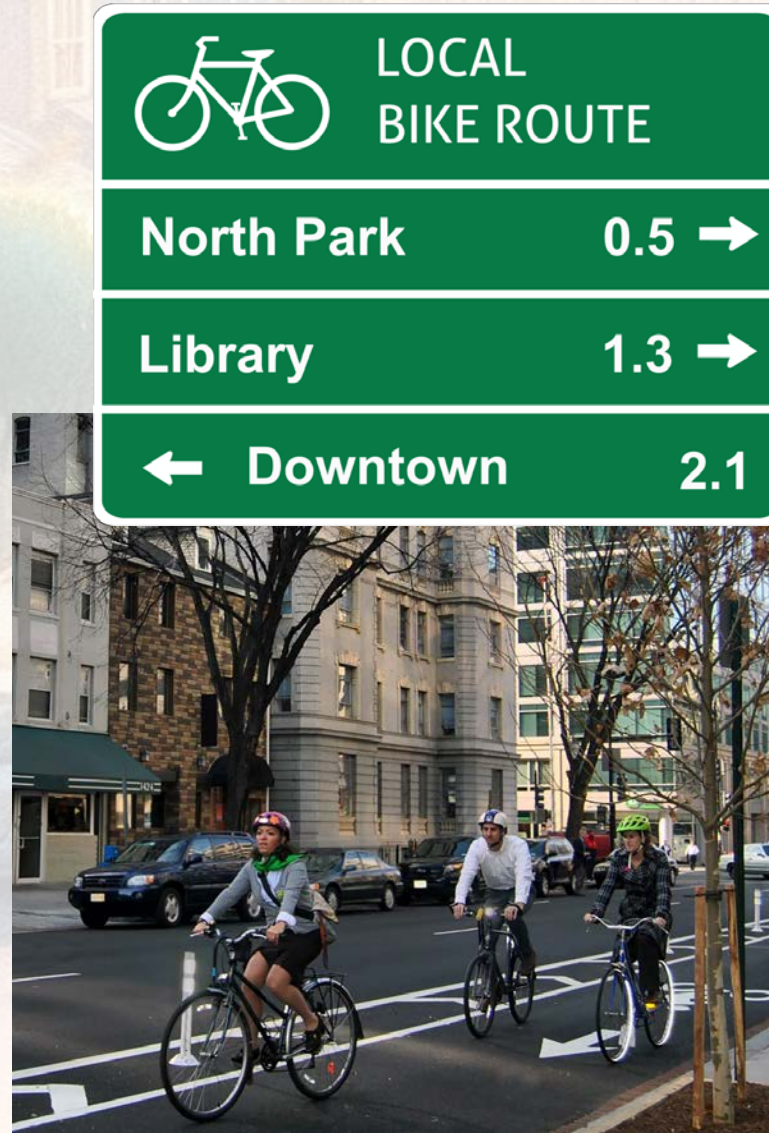
Rail Grade Crossing Diagnostic Teams (Part 8)

- Compliance with Federal Railroad Administration regulation
- Team represent
 - Road Agency
 - Railroad
 - Transit
 - Others
- Select Appropriate TCDs



Bicycles (various)

- Green pavement
- Two-stage turn boxes
- New signs
- Bicycle signal faces
- Buffer separated and counterflow bike lanes





Thank you

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